Department of AGRICULTURE FISHERIES & FORESTRY AUSTRALIA

PBR

Plant Varieties Journal

Quarter Four 2000 Volume 13 Number 4

'Kornafiro' – A new cut flower variety

ADVERTISE YOUR NEW VARIETY OR SERVICES IN THE

Plant Varieties Journal

Plant Breeders and their agents are invited to take this opportunity to promote their new plant varieties by advertising in the Plant Varieties Journal. Consultant Qualified Persons are also invited to advertise their services. The Journal is well circulated throughout the horticultural and agricultural industry. Advertising in the Journal will promote the commercialisation of new plant varieties and the services offered by the qualified persons. Our policy is to promote the varieties which are currently in the PBR scheme and the services of those who are currently accredited by the PBR office.

The Journal also has a Service Directory. This Directory is suitable for advertising the services provided by Consultant Qualified Persons, Agents, Patent Attorneys, CTC sites or photographers.

Advertising is available at a casual space rate as well as a four times rate, attracting a considerable discount of 25%! Advertisements will be published on the back cover or inside front and back covers. The front cover is restricted to full colour photographs of a PBR variety.

Advertising Rates (incl GST)

			Casual	**4 issues**
Front Cover	(Full Page only)	Colour	$1193.00	$3579.00
Back Cover	(Full Page)	Colour	894.00	2684.00
	(Full Page)	Mono	596.00	1790.00
Inside Front Cover	(Full Page)	Mono	477.00	1431.00
	(Half Page)	Mono	298.00	894.00
Inside Back Cover	(Full Page)	Mono	357.00	1073.00
	(Half Page)	Mono	239.00	716.00
Service Directory	(6cm x 6cm)	Mono	60.00 per spot	

For bookings or further information please contact Kathryn Dawes-Read on 02 6272 4338, fax 02 6272 3650 or email Kathryn.Dawes-Read@affa.gov.au

Plant Varieties Journal

Official Journal of Plant Breeders Rights Australia

QUARTER FOUR, 2000 **VOLUME 13 NUMBER 4**

Part 1 – General Information

Part 2 – Public Notices

SUBSCRIPTION ENQUIRIES AND ADVERTISING SHOULD BE ADDRESSED TO:
PLANT BREEDERS RIGHTS AUSTRALIA
Department of Agriculture, Fisheries and Forestry – Australia
GPO Box 858, Canberra ACT 2601
Telephone: (02) 6272 4228 Facsimile: (02) 6272 3650
Website: http://www.affa.gov.au/pbr

CLOSING DATE FOR ISSUE VOL 14 NO 1: March 15, 2001.
Anticipated closing date for Vol 14 No 2 June 15, 2001.

Citation: Anon (2000). *Plant Varieties Journal*. Editors, Hossain T, Hulse N, Prakash K, Costa H, Waterhouse D, Dawes-Read K, Kingdom S, Blazey B. December 2000, **13**(4).

Plant Breeders Rights Australia (PBRA) is an agency within the Commonwealth Department of Agriculture, Fisheries and Forestry – Australia

Doug Waterhouse
Registrar

Nik Hulse
Deputy Registrar

Bob Blazey
Policy Development

Katte Prakash
Examiner

Tanvir Hossain
Examiner

Helen Costa
Examiner

Kathryn Dawes-Read
Administration Officer

Nadia Giorgi
Resource Co-ordinator

Carol Atkinson
Administration Officer

ISSN: 1030–9748 Printed by National Capital Printing, Fyshwick, ACT

Part 1 – General Information

Objections to Applications and Requests for Revocation of a Grant or of a Declaration that a Plant Variety is Essentially Derived from Another Plant Variety

The Plant Breeder's Rights scheme is administered consistent with the model law of *the International Convention for the Protection of New Plant Varieties 1991 (UPOV 91)*, that is, applicants are entitled to protection, in the absence of proof to the contrary.

The Plant Breeder's Rights Office (PBRO) is not required to prove the views, assertions, and opinions of persons challenging protection for plant varieties. Those objecting to/commenting on applications or requesting/commenting on revocation of a grant or declaration that a plant variety is essentially derived from another plant variety must provide conclusive supporting evidence why their objection/comment/-request should be upheld. It cannot be stressed too strongly that conclusive argumentation should be provided from the outset.

Objections to Applications

A person may make objections to applications for PBR if (i) their commercial interests would be affected adversely, and (ii) the application will not fulfil all the conditions required by the *Plant Breeder's Rights Act.*

Objections to applications must be lodged with the Registrar no later than six months after the date the description of the variety is published in this journal. The objector must provide evidence of adverse affect on their commercial interests and that the application should not be granted.

The Registrar of the Plant Breeder's Rights Office (PBRO) is required to give a copy of the objection to the applicant. The objection is also available to the general public on request. The applicant has the opportunity to respond to the evidence presented. The Registrar then decides whether or not the objection will be upheld and, subsequently, whether the application will be granted. The PBRO is under no obligation to enter into further dialogue regarding an objection or to communicate reasons why an objection is not upheld. If an objection is upheld it will be notified in this journal.

A payment of $100 is required on lodgement of the objection. Additional costs of $75 per hour for work undertaken in relation to the objection will be billed to the objector.

Comments on Applications
The PBRO accepts comments on applications. However, the scheme is managed on normal risk management lines and with an emphasis on the requirement that challengers with a commercial interest must demonstrate conclusively that an application should not be granted.

All written comment will be acknowledged. The PBRO is under no obligation to enter into further communication regarding comments. If an application does not proceed to a grant it will be notified in this journal.

Requests for Revocation, (where an individual's interests are affected) of:

- a Grant
- a Declaration that a Plant Variety is Essentially Derived

A person may, when their interests are affected adversely, apply for the revocation of:
- a grant of PBR; or
- a declaration that a plant variety is essentially derived from another plant variety.

The person requesting revocation is required to lodge a revocation payment fee of $500. The person seeking revocation of a grant or declaration that a plant variety is essentially derived from another plant, must provide conclusive evidence of adverse affect on their interests and that the grant should be revoked.

The PBRO also accepts information regarding revocation of grants and declarations of essentially derived plant varieties. Such information must demonstrate conclusively that a grant or declaration should not have been made. All written information will be acknowledged. The PBRO is under no obligation to enter into further communication regarding information provided.

New Location for Plant Breeders Rights Website

The PBR website has moved to new a location. The current URL is http://www.affa.gov.au/pbr All previous information is retained in this new site. Please visit this site for important information on PBR in Australia, list of protected varieties and all relevant PBR forms. Remember to update the bookmark of your browser with the new PBR address.

Cumulative Index to Plant Varieties Journal

The editorial committee of *Plant Varieties Journal* has decided that the cumulative index will no longer be published in the journal. However, it will be electronically published as a downloadable document in our new PBR website in the location given above. Instead of publishing the cumulative index once in a year it will be updated on a quarterly basis and our clients will be able to easily download the document into their computers. Electronic copy will make the searching easy in this large document and facilitate the exchange of information as quickly as possible. If you do not have a computer or Internet facilities then we will be able send you a hard copy free of charge. Please contact our office if you require further information.

Call for Public Comment on the Proposal to Change Australia's Stability Testing Requirement for Some Varieties/Taxa

The New Zealand Plant Breeding and Research Association has proposed that the Australian requirement for testing stability be 'lowered' for the granting of breeder's rights for new plant varieties. It is proposed that, for a trial period of 12 months, Australia receive requests from applicants seeking to waive the requirement that 2 generations of the candidate be included in DUS trials for seed propagated varieties. This proposal would further harmonise breeder's rights procedures between Australia and New Zealand, facilitating investment and technology flows and is entirely consistent with Australia's commitments under the International Convention for the Protection of New Varieties of Plants 1991 (UPOV). One of the effects of adopting the proposal would be that the "granting of a waiver" in respect of a particular variety could be expected to flow on to other contracting parties to UPOV.

Varieties from taxa known to be relatively stable and/or breeding methods that intrinsically produce stable varieties would be considered for exemption from the stability testing on a case by case basis.

Applicants wishing to use this concession would be required to apply to the Australian Plant Breeder's Rights Office at the time the Australian application is lodged, and include argumentation as to why their variety is stable and why further PBR stability testing is unnecessary. Details of the request would be published in the *Plant Varieties Journal* and a 3-month period allowed for public comment.

It is envisaged that the Australian application would be lodged before the trial in New Zealand is designed, thereby avoiding the possibility of extra work if the case made to waive stability testing is not approved. Where stability is not tested, more emphasis would be placed on demonstrating uniformity in all the important Technical Guideline characteristics. This may include, if specified, testing of the candidate over 2 similar growing periods.

If the stability of a variety is questioned at any time (for example through the lodgment of an objection or application for revocation) then it is likely that a demonstration of stability would be required or the grant would be revoked.

Comments (both for or against) this proposal should be addressed to:

The Registrar
Plant Breeders Rights Office
PO Box 858
CANBERRA ACT 2601
Fax (02) 6272 3650

Closing date for comment: 18 May 2001.

Applying For Plant Breeders Rights

Applications are accepted from the original breeder of a new variety (from their employer if the breeder is an employee) or from a person who has acquired ownership from the original breeder. Overseas breeders need to appoint an agent to represent their interests in Australia. Interested parties should contact the PBR office and an accredited Qualified Person (Appendix 3) experienced in the plant species in question.

Requirement to Supply Comparative Varieties

Once an application has been accepted by the PBR office, it is covered by provisional protection. Also it **immediately** becomes a 'variety of common knowledge' and thus may be required by others as a comparator for their applications with a higher application number.

Applicants are reminded that they are required to release propagative material for comparative testing provided that the material is used for no other purpose and all material relating to the variety is returned when the trial is complete. The expenses incurred in the provision of material for comparative trials is borne by those conducting the trials.

As the variety is already under provisional protection, any use outside the conditions outlined above would qualify as an infringement and would be dealt with under section 53 of the Plant Breeder's Rights Act.

Applicants having difficulties procuring varieties for use in comparative trials are urged to contact the PBR office immediately.

UPOV Developments

Information on UPOV and its activities is available on the INTERNET located at http://www.upov.int

The adopted UPOV Technical Guidelines (TG) for testing different plant species are now available from this website at www.upov.int/eng/document/index.htm

The complete list UPOV member states with their address and current status of ratification is given in Appendix 5.

Obligations under the International Convention for the Protection of New Varieties of Plants 1991 (UPOV 91)

Consistent with Australia's membership of UPOV 1991, the criteria for the granting of protection under the *Plant Breeder's Rights Act 1994* (PBRA) is that the variety: has a breeder; is new, distinct, uniform and stable; has an acceptable name; and that application formalities are completed and relevant fees paid.

Applicants for protection need to be aware of the existence of any other Australian legislation, which could impact on their intended use of the registered variety. Relatedly, administrators of other Australian legislation may have an interest in applications for registration notified in this journal.

It is feasible for a new variety to be registered under the PBRA, but, as the PBRA co-exists with other laws of the land, the exercise of the breeder's right may be restricted by such legislation. For example, current legislation may prohibit the use of that variety in food, or, the growing of that variety as a noxious weed.

The Plant Breeder's Rights Office (PBRO) advises that it is the responsibility of the applicant and of administrators of legislation to take these matters up directly between the responsible parties and not with the PBRO.

Instruction to Authors: Format for Preparing Detailed Description for *Plant Varieties Journal*

A detailed description for the *Plant Varieties Journal* must be prepared under following headings:

- **Details of the Application**
- **Characteristics**
- **Origin and Breeding**
- **Choice of Comparator(s)**
- **Comparative Trial**
- **Prior Applications and Sales**
- **Name of the person who prepared the description**
- **Comparative Table**
- **At the discretion of the QP/Applicant, scientific papers and other relevant information/publications can be appended to the detailed description**

Please note that the PBR office retains editorial control for all published material. Accordingly there may be instances when non-critical portions of a description (eg particularly verbose methodologies or appendices) are not published, although they do remain part of the detailed description. In some cases some non-distinct characteristics presented in a table may be omitted for publication.

Following are some notes for preparing the descriptions under the above headings with some examples of style and format:

Details of the Application
This will include the correct botanical name; the common name of the species; name and synonym (if any) of the variety; application number and the acceptance date; details of the applicant; details of the agent (if any)**.**

For consistency, botanical and common names should follow those of: *Hortus Third*, Staff of the LH Bailey Hortorium, Macmillan Publishing Company, 1976; *Census of Australian Vascular Plants*, RJ Hnatiuk, AGPS, 1990; *The Smart Gardeners Guide to Common Names of Plants*, M Adler, Rising Sun Press, 1994; *A Checklist of Economic Plants in Australia*, CSIRO, 1994; *Australian Plant Name Index,* Australian Biological Resources Study, AGPS, 1991.

Example 1

Genus species

Common name of the species
'Variety' syn **Synonym** (if applicable)
Application No: xxxx/xxx Accepted: dd month year.
Applicant: **Applicant's Name,** Town, State (abbreviation) and Country (if not Australia).
Agent: **Agent's Name,** Town, State (abbreviation).

Characteristics
Characteristics should be described in the following order: Plant, Stem, Leaf, Inflorescence, Flower and flower parts, Fruit and fruit parts, Seed, Other characters (disease resistance, stress tolerance, quality etc). Characters within subheadings should generally be in the following order: habit, height, length, width, size, shape, colour (RHS colour chart reference with edition), other. Use a concise taxonomic style in which subheadings are followed by a colon and characters are separated by a comma. Where there is a UPOV technical guideline available make sure that the asterisk characteristics are included in the description.

Example 2

Characteristics (Table nn, Figure nn) Plant: habit narrow bushy, height medium, early maturing. Stem: anthocyanin absent, internodes short. Leaf: length long, width narrow, variegation present, predominant colour green (RHS 137A), secondary margin colour pale green-yellow (RHS 1A). Inflorescence: corymb. Flower: early, pedicel short, diameter small (average 12.5mm), petals 5, petal colour yellow (RHS 12A), sepals 5 … etc (Note: give the reference for the edition of RHS colour chart used, eg. all RHS colour chart numbers refer to 1986 edition)

Origin and Breeding
Indicate how the variety was originated, ie. controlled pollination, open pollination, induced mutation, spontaneous mutation, introduction and selection, seedling selection etc. Give the name of the parents. Also give the characteristics of the parental material by which they differ from the candidate variety . Briefly describe the breeding procedure and selection criteria used in developing the new variety. Also indicate the mode of propagation used during breeding. Give the name(s) of the breeder.

Example 3

Origin and Breeding Controlled pollination : seed parent S90-502-1 x pollen parent S90-1202-1. The seed parent was characterised by early flowering, dark green non-variegated leaves and compact bushy habit. The pollen parent was characterised by late flowering, variegated leaves and narrow bushy habit. Hybridisation took place in <location>, <country> in <year>. From this cross, seedling number S 3736 was chosen in 1993 on the basis of flowering time. Selection criteria: variegated leaves, compact bushy habit and early flowering. Propagation: a number mature stock plants were generated from this seedling through tissue culture and were found to be uniform and stable. The 'Variety' will be commercially propagated by vegetative cuttings from the stock plants. Breeder: <name>, <location>, <country>.

Example 4

Origin and Breeding Introduction and selection: 5 cycles of selection within <accession number> originating from <originating country> and supplied by the <company name> under a materials transfer agreement. When grown CI2204 was heterogeneous with both hooded and non-hooded types and differences in seed colour. Repeated selection for hooded types produced seven breeding lines (726.1-726.7) which were evaluated for forage and seed production potential. From these lines, an uniform single line known as 726.2.1 was selected to become 'Variety'. Selection criteria: seedling vigour, dry matter yield, uniformly hooded (awnless), seed colour (black). Propagation: by seed. Breeder: <name>, <location>, <country>.

Choice of Comparators

As choosing the most appropriate comparators may be the most crucial part of the trial, we suggest the QPs do more research and record their decisions before making the final selection. Under this heading briefly indicate what factors you have considered in choosing the comparator(s) for the trial. It is strongly recommended that the parental materials or the source germplasm is included in the trial for comparison purposes. If the parents are excluded indicate the reason(s).

Example 5

Choice of Comparators 'Comparator 1', 'Comparator 2' and 'Comparator 3' were initially considered for the comparative trial as these are similar varieties of common knowledge. 'Comparator 1' is a widely available commercial variety of the same species, however it has non variegated leaves. Therefore it was excluded from the trial. 'Comparator 2', was chosen for its variegated leaves and 'Comparator 3' was chosen for its compact growth habit and variegated leaves. The parents were not considered for the trial because the 'Variety' is clearly distinguishable from the seed parent by its variegated leaves and from the pollen parent by flowering time and growth habit.

Example 6

Choice of Comparators 'Comparator 1' was chosen because it is the original source material from which the variety was selected. Comparator 2' was selected for its similarity with the 'Variety' in seed colour. No other similar varieties of common knowledge have been identified.

Comparative Trial

State the location and date of the trial. Give relevant details on propagation, pot/plot size and type, growing medium, chemical treatments, lighting, irrigation, or management which may be necessary to repeat the trials. State the type of trial design used, the total number of specimens in the trial and how they were arranged. State the number of specimens from which measurements/observations were taken. Also indicate how the specimen was selected and the sampling regime.

Example 7

Comparative Trial Location: Carrum Downs, VIC (Latitude 38º06′ South, elevation 35m), summer-autumn 1996/97. Conditions: trial conducted in a polyhouse, plants propagated from cutting, rooted cuttings planted into 210mm pots filed with soilless potting mix (pine bark base), nutrition maintained with slow release fertilisers, pest and disease treatments applied as required. Trial design: fifteen pots of each variety arranged in a completely randomised design. Measurements: from ten plants at random. One sample per plant.

Prior Applications and Sales

Indicate the prior overseas applications with Country, Year of lodgement, Current status and Name applied in the following format.

Example 8

Country	Year	Current Status	Name Applied
Germany	1994	Granted	'Variety'
Denmark	1994	Granted	'Variety'

Also indicate date and country of first sale and date of first sale in Australia.

Example 9

First sold in Germany in 1994. First Australian sale Nil.

Name of the person who prepared the description

Name and address of the person who prepared the description. It is preferable that the description be prepared by the Qualified Person or at the very least the draft has been seen and approved by the QP before final submission. Please note that it is a responsibility of the QP under the PBR Act to verify the particulars of the detailed description are accurate.

Example 10

Description: **Name**, Company (optional), Town/suburb, State (abbreviated)

Comparative Table
While preparing the table **NEVER** use the "table creating features" of word processing packages as they insert hidden formatting blocks that are difficult to remove before publication. Instead, use a single tab mark to align columns. NEVER use drawing objects to create lines, boxes or shading. Instead use the underscore character (_) to create lines for tables. Tables should normally be either 8.5cm wide (half page) or 17.5cm wide (full page). If necessary a very wide table can be presented in landscape orientation.

Please note the following points when preparing the comparative table:

- The candidate variety is always on the left of the table. If the same table is used for two or more candidate varieties, the candidate varieties are arranged in order of application numbers, higher application number to the left of the table. Comparators are always to the right of the candidate(s).

- Arrange the characteristics in order – this should be the same as the order in the UPOV technical guidelines for the species. Please ensure that each characteristics marked with an asterisk is included.

- If a UPOV technical guideline is not available use the order same as in the text part: Plant, Stem, Leaf, Inflorescence, Flower, Flower parts, Fruit, Fruit parts, Seed, special characters etc.

- For measured characteristics Mean, Standard Deviation, Least Significant Difference (LSD)*at P≤0.01 is mandatory.

- When quoting significant differences please give the level of probability in the following format: P≤0.001, P≤0.01, or ns.

- For discrete characters do not use scores. Please give a word description. eg. round, medium, tall etc.

- For ranked characteristics just give the numbers, do not use 'normal' statistical analysis. Non- parametric statistical procedures may be used in such cases.

- Use only the number of significant decimal places appropriate to the level of accuracy of the observations.

- If there are two or more candidate varieties, use range tests rather than an LSD, such as Duncan's Multiple Range Test or any other appropriate multiple range test. Enter the grouping characters as alphabet superscripts.

Completed Part 2 Applications should be sent to:

Plant Breeders Rights Australia
Department of Agriculture, Fisheries and Forestry – Australia
GPO Box 858 CANBERRA ACT 2601

To facilitate editing, descriptions may also be sent via e-mail to: Tanvir.Hossain@affa.gov.au or PBR@affa.gov.au

Note: a signed copy of the Part 2 application along with the examination fee, one slide or photograph must also be sent by post.

Important Changes

Website Address
The new website address for Australian PBR office is http://www.affa.gov.au/pbr

Herbarium Specimens
It is a requirement of the PBR Act that, for all native species, a suitable specimen be sent to the Australian Cultivar Registration Authority (ACRA). The processing of these specimens attracts a fee from the ACRA (currently $50). Payment of the fee should be sent directly to the ACRA along with the specimen and a completed Herb1 form. This form has recently been updated. The current form Herb 1(03/00) has three components: SUBMISSION OF SPECIMEN OF AUSTRALIAN NATIVE VARIETY TO THE ACRA, ACRA HERBARIUM SPECIMEN and CONFIRMATION OF SUBMISSION OF SPECIMEN TO THE ACRA. Please use the current version of the Herb 1 form for any future submission to the ACRA.

Despite the introduction of GST the herbarium fee for PBR specimens will remain at $50. To minimise administrative costs it is proposed that applicants continue to send the fee with the specimen, rather than wait for an invoice. So that the applicant does not have to withhold tax, it is necessary to be aware that the ACRA's ABN is 37410355117. A receipted tax invoice will be sent to applicants.

Current PBR Forms
The official forms for PBR purposes are periodically updated. A list of current PBR forms with their numbers and date of last update is given below. When a form is updated, the month and the year of the last update follow the form number within parentheses. For example, Form P1 was last updated in September 1998 and therefore this form gets a designation of Form P1 (9/98). We also encourage you to consult the 'Guidelines for Completing Part 1 Application Form' before filing in the Part 1 Application. To avoid delays we suggest that you use the latest version of the forms.

The Part 2 form has been updated in May 1999 to include the information on the "Confirmation of Submission of Propagating Material to a Genetic Resource Centre". Previously this was a separate form to be filled in at the time of final granting of PBR. We now encourage that the information on Genetic Resource Centre is given at the time of the Part 2 submission to avoid any delay to process the application at the final granting stage.

When lodging an application we only need **one** copy of the Part 1 and Part 2 form.

If you do not have the latest version of the form(s), please contact the PBR office. Alternatively, forms can be downloaded from the PBR web site at http://www.affa.gov.au/pbr

Name of Form	Form Number	Last Updated
Application for Plant Breeders Rights Part 1 – General Information	Form P1	September 1998
Guidelines for Completing Part1 Application Form	Part1ins	September 1998
Application for Plant Breeders Rights Part 2 – Description of New Variety	Form P2	May 1999
Nomination of a Qualified Person	Form QP 1	April 1999
Certification by a Qualified Person	Form QP 2	April 1999
Proposed Variety Names	Form DEN1	December 1995
Update on the Progress of an Application	Form EXT2	November 2000
Exemption of a Taxon from Farm Saved Seed	Form ET1	September 1998
Status of Application	Form STAT 1	November 1995
ACRA Herbarium Specimen	Form Herb 1	March 2000

Overseas Testing/Data

The PBR Act allows DUS data produced in other countries (overseas data) be used in lieu of conducting a comparative trial in Australia provided certain conditions relating to the filing of applications, sufficiency of the data and the likelihood that the candidate variety will express the distinctive characteristic(s) in the same way when grown locally. Briefly the overseas data could be considered where:

- The first PBR application relating to the candidate variety has been lodged overseas, and
- the variety has previously been test grown in a UPOV member country using official UPOV test guidelines and test procedures, (ie. equivalent to a comparative trial in Australia) and
- either, all the most similar varieties of common knowledge (including those in Australia) have been included in the overseas DUS trial, or
- the new overseas variety is so clearly distinct from all the Australian varieties of common knowledge that further DUS test growing is not warranted, and
- sufficient data and descriptive information is available to publish a description of the variety in an accepted format in Plant Varieties Journal; and to satisfy the requirements of the PBR Act.

The Qualified Person, in consultation with the agent/applicant, and perhaps other specialists and taxonomists, will need to evaluate the overseas data, test report and photographs to see if the application does fulfil all PBR Office requirements, and then advise the agent/applicant:

- either, to submit Part 2 incorporating a description for publication, any additional data and photographs and to pay the examination fee;
- or, to conduct a DUS trial in Australia, recommending to the applicant/agent which additional varieties of common knowledge to include;
- or, submit Part 2 including additional data (information about similar varieties in Australia to show that they are clearly distinct from the candidate variety that a further DUS test growing including the similar varieties is not warranted and that the variety displays the distinctive characteristics when grown in Australia)

Please note that the PBR office does not obtain overseas DUS test reports on behalf of applicants. It is the sole responsibility of the applicants to obtain these reports directly from the relevant overseas testing authorities. Where applicants already have the report they are advised to submit a certified true copy of the report with the Part 1 application. Applicants, or those duly authorised, may certify the copy.

If you do not have the test report available at the time of Part-1 application then you are advised to submit the Part-1 application without the test report. However, you should make arrangements to procure the DUS test report directly from the relevant testing authority. When the report becomes available, a certified copy should be supplied to the QP and the PBR office.

When the trial is based on an UPOV technical guideline and test report in an official UPOV language (English, German or French), it can be lodged in support of the application. In other cases the test reports must be in English.

The applicant/agent and Qualified Person should use the overseas test report to complete Part 2 of the application, making a decision on how to proceed in view of the completeness of the information, the comparators (if any) used in the overseas DUS trial and their knowledge of similar Australian varieties that may not have been included in the overseas test report.

If a description is based on an overseas test report, Australian PBR will not be granted until after the decision to grant PBR in the country producing the DUS test is made. The final decision on the acceptability of overseas data rest with the PBR office.

Descriptions from the Voluntary Cereal Registration Scheme

The *Plant Varieties Journal* now includes descriptions of cultivars registered under the Voluntary Cereal Registration Scheme. Please note that the publication of these descriptions in the *Plant Varieties Journal* does not qualify the cultivars to be protected under Plant Breeder's Rights (PBR). PBR is an entirely different scheme and there are certain requirements under the *Plant Breeder's Rights Act 1994*, which must be satisfied to be eligible for registration under PBR. However, it is possible that some cultivars published under the voluntary scheme are also registered under PBR. When a cultivar is registered under both schemes, the current PBR status of the cultivar is indicated in the descriptions. For information on registering a new cereal cultivar under the voluntary scheme please refer to the 'Cereal Registration Scheme' section at the back of this issue. Please note there is no descriptions from the Voluntary Cereal Registration Scheme in this issue.

Staff

We would like to welcome Ms Nadia Giorgi and Ms Carol Atkinson in the PBR team. Ms Giorgi will work as the Resource Co-ordinator replacing Ms S. (Angie) Kingdom. She has experience in financial and resource management. Ms Atkinson will work as a part-time Administration Officer within the PBR scheme. She has experience in office administration.

Part 2 – Public Notices

Varieties Included in this Issue

An index reference for common names with botanical names is published in Appendix 9.

Acceptances

The following varieties are under provisional protection from the date of acceptance.

Agonis flexuosa nana
Willow Myrtle

'Grace'
Application No: 2000/310 Accepted: 14 Nov 2000.
Applicant: **Ken Jackson**, Bentley, WA.

Aster hybrid
Easter Daisy

'Suncoast'
Application No: 1999/394 Accepted: 17 Nov 2000.
Applicant: **Danziger – 'Dan' Flower Farm**.
Agent: **Yates Botanicals Pty Limited,** Somersby, NSW.

'Sunsimon'
Application No: 2000/011 Accepted: 17 Nov 2000.
Applicant: **Danziger – 'Dan' Flower Farm**.
Agent: **Yates Botanicals Pty Limited,** Somersby, NSW.

'Sunspring'
Application No: 1999/395 Accepted: 17 Nov 2000.
Applicant: **Danziger – 'Dan' Flower Farm**.
Agent: **Yates Botanicals Pty Limited,** Somersby, NSW.

Avena sativa
Oat

'PO 555'
Application No: 2000/299 Accepted: 6 Nov 2000.
Applicant: **NDSU Research Foundation**.
Agent: **Pacific Seeds Pty Ltd,** Toowoomba, QLD.

'TAMO 397'
Application No: 2000/298 Accepted: 30 Nov 2000.
Applicant: **The Texas A & M University System**.
Agent: **Pacific Seeds Pty Ltd,** Toowoomba, QLD.

Boronia heterophylla
Red Boronia

'Ice Charlotte'
Application No: 2000/334 Accepted: 7 Dec 2000.
Applicant: **Anthony & Karyn Ward**.
Agent: **Greenhills Propagation Nursery,** Tynong, VIC.

Bougainvillea hybrid
Bougainvillea

'Arora'
Application No: 2000/345 Accepted: 20 Dec 2000.
Applicant: **Jan and Peter Iredell**, Moggill, QLD.

'Bilas'
Application No: 2000/343 Accepted: 20 Dec 2000.
Applicant: **Jan and Peter Iredell**, Moggill, QLD.

'Kikori'
Application No: 2000/348 Accepted: 20 Dec 2000.
Applicant: **Jan and Peter Iredell,** Moggill, QLD.

'Maudi'
Application No: 2000/344 Accepted: 20 Dec 2000.
Applicant: **Jan and Peter Iredell**, Moggill, QLD.

'Ningili'
Application No: 2000/349 Accepted: 20 Dec 2000.
Applicant: **Jan and Peter Iredell**, Moggill, QLD.

'Wabag'
Application No: 2000/347 Accepted: 20 Dec 2000.
Applicant: **Jan and Peter Iredell**, Moggill, QLD.

Bracteantha hybrid
Everlasting Daisy

'Wanetta Gold'
Application No: 2000/309 Accepted: 20 Nov 2000.
Applicant: **FD Hockings and OB Hockings**, Maleny, QLD.

Brassica napus var *oleifera*
Canola

'BLN 1999'
Application No: 2000/218 Accepted: 14 Nov 2000.
Applicant: **Department of Agriculture for and on behalf of the State of New South Wales,** Orange, NSW and **Grains Research and Development Corporation**, Barton, ACT.

'Surpass 402CL'
Application No: 2000/319 Accepted: 17 Nov 2000.
Applicant: **Pacific Seeds Pty Ltd**, Toowoomba, QLD.

'Surpass 501TT'
Application No: 2000/318 Accepted: 17 Nov 2000.
Applicant: **Pacific Seeds Pty Ltd**, Toowoomba, QLD.

'Surpass 603CL'
Application No: 2000/320 Accepted: 17 Nov 2000.
Applicant: **Pacific Seeds Pty Ltd**, Toowoomba, QLD.

Corymbia maculata
Spotted Gum

'Jessica's Jewel'
Application No: 2000/325 Accepted: 20 Nov 2000.
Applicant: **Mark Andrew Hartley**, Shanes Park, NSW.

Gossypium hirsutum
Cotton

'Sicala V-3RRi'
Application No: 2000/324 Accepted: 17 Nov 2000.
Applicant: **CSIRO Plant Industry**, Narrabri, NSW.

'Sicot 9111'
Application No: 2000/323 Accepted: 17 Nov 2000.
Applicant: **CSIRO Plant Industry**, Narrabri, NSW.

Impatiens wallerana
Impatiens

'Golden Delight'
Application No: 2000/215 Accepted: 7 Nov 2000.
Applicant: **John Churchus**, Devon Meadows, VIC.

Lavandula angustifolia
Lavender

'Coconut Ice'
Application No: 2000/165 Accepted: 27 Nov 2000.
Applicant: **Lavenite Enterprises**.
Agent: **Greenhills Propagation Nursery,** Tynong, VIC.

'Lavenite Petite'
Application No: 2000/166 Accepted: 27 Nov 2000.
Applicant: **Lavenite Enterprises**.
Agent: **Greenhills Propagation Nursery,** Tynong, VIC.

Lupinus angustifolius
Narrow-Leafed Lupin

'Jindalee'
Application No: 2000/297 Accepted: 6 Nov 2000.
Applicant: **Department of Agriculture for and on behalf of the State of New South Wales,** Orange, NSW, **Grains Research and Development Corporation,** Barton, ACT and **Minister for Primary Industries and Resources**, Adelaide, SA.

Malus domestica
Apple

'Pinova'
Application No: 2000/300 Accepted: 20 Nov 2000.
Applicant: **GEVO mbH**.
Agent: **Fleming's Nurseries and Associates Pty Ltd,** Monbulk, VIC.

'Roda'
Application No: 2000/328 Accepted: 17 Dec 2000.
Applicant: **Rodney Gorden Atherton**.
Agent: **Erimus International Pty Ltd,** Applecross, WA.

Mangifera indica
Mango

'Blushing Nam Dok'
Application No: 2000/301 Accepted: 30 Nov 2000.
Applicant: **Herminia and Jacinto Lay**.
Agent: **Dr Vinod Kulkarni,** Darwin, NT.

Medicago littoralis
Strand Medic

'FEH-1'
Application No: 2000/336 Accepted: 17 Dec 2000.
Applicant: **Minister for Primary Industries and Resources**, Adelaide, SA.

Nemesia foetens
Nemesia

'Ice Pink'
Application No: 2000/313 Accepted: 20 Nov 2000.
Applicant: **Frank Hammond**, Narre Warren East, VIC.

Osteospermum ecklonis
Cape Daisy

'Aksinto'
Application No: 2000/308 Accepted: 27 Nov 2000.
Applicant: **Carl Aksel Kragh Sorensen**.
Agent: **Koala Blooms Australia,** The Patch, VIC.

'Aksis'
Application No: 2000/303 Accepted: 27 Nov 2000.
Applicant: **Carl Aksel Kragh Sorensen**.
Agent: **Koala Blooms Australia,** The Patch, VIC.

'Aksullo'
Application No: 2000/304 Accepted: 27 Nov 2000.
Applicant: **Carl Aksel Kragh Sorensen**.
Agent: **Koala Blooms Australia,** The Patch, VIC.

'Bamba'
Application No: 2000/307 Accepted: 27 Nov 2000.
Applicant: **Carl Aksel Kragh Sorensen**.
Agent: **Koala Blooms Australia,** The Patch, VIC.

'Beira'
Application No: 2000/305 Accepted: 27 Nov 2000.
Applicant: **Carl Aksel Kragh Sorensen.**
Agent: **Koala Blooms Australia,** The Patch, VIC.

'Pemba'
Application No: 2000/306 Accepted: 27 Nov 2000.
Applicant: **Carl Aksel Kragh Sorensen**.
Agent: **Koala Blooms Australia,** The Patch, VIC.

Pelargonium peltatum hybrid
Ivy Pelargonium

'Pennea' syn **Nealit 2**
Application No: 2000/331 Accepted: 4 Dec 2000.
Applicant: **Elsner pac Jungpflanzen**.
Agent: **Geranium Cottage Nursery,** Round Corner, NSW.

'Pensyb' syn **Red Sybil**
Application No: 2000/332 Accepted: 4 Dec 2000.
Applicant: **Elsner pac Jungpflanzen**.
Agent: **Geranium Cottage Nursery,** Round Corner, NSW.

Prunus persica var *nucipersica*
Nectarine

'August Pearl' syn **August Ice**
Application No: 2000/268 Accepted: 6 Nov 2000.
Applicant: **Lowell G Bradford and Norman G Bradford**.
Agent: **Buchanan's Nursery,** Tenterfield, NSW.

'Fire Sweet' syn **Fire Gold**
Application No: 2000/269 Accepted: 6 Nov 2000.
Applicant: **Lowell G Bradford and Norman G Bradford**.
Agent: **Buchanan's Nursery,** Tenterfield, NSW.

'Kay Pearl' syn **Kay Ice**
Application No: 2000/271 Accepted: 6 Nov 2000.
Applicant: **Lowell G Bradford and Norman G Bradford**.
Agent: **Buchanan's Nursery,** Tenterfield, NSW.

Prunus persica
Peach

'Ivory Princess' syn Ivory White
Application No: 2000/270 Accepted: 6 Nov 2000.
Applicant: **Lowell G Bradford and Norman G Bradford**.
Agent: **Buchanan's Nursery,** Tenterfield, NSW.

Rosa hybrid
Rose

'Intertrogol' syn Sun City
Application No: 2000/337 Accepted: 8 Dec 2000.
Applicant: **Interplant B.V.**
Agent: **Grandiflora Nurseries Pty Ltd,** Cranbourne, VIC.

'Meivanthou'
Application No: 2000/212 Accepted: 27 Nov 2000.
Applicant: **Meilland Star Rose**.
Agent: **Selection Meilland Australia,** Rosevears, TAS.

'Tanaran'
Application No: 2000/293 Accepted: 20 Nov 2000.
Applicant: **Rosen Tantau, Mathias Tantau Nachfolger**.
Agent: **Sovereign Nurseries Pty Ltd,** Catherine Field, NSW.

'Tanarua'
Application No: 2000/294 Accepted: 20 Nov 2000.
Applicant: **Rosen Tantau, Mathias Tantau Nachfolger**.
Agent: **Sovereign Nurseries Pty Ltd,** Catherine Field, NSW.

'Tanedaj'
Application No: 2000/295 Accepted: 20 Nov 2000.
Applicant: **Rosen Tantau, Mathias Tantau Nachfolger**.
Agent: **Sovereign Nurseries Pty Ltd,** Catherine Field, NSW.

'Tanotika'
Application No: 2000/296 Accepted: 14 Nov 2000.
Applicant: **Rosen Tantau, Mathias Tantau Nachfolger**.
Agent: **Sovereign Nurseries Pty Ltd,** Catherine Field, NSW.

Solanum tuberosum
Potato

'Admiral'
Application No: 2000/291 Accepted: 7 Nov 2000.
Applicant: **Cygnet Potato Breeders Ltd**.
Agent: **Wrightson Seeds (Aust) Pty Ltd,** Laverton, VIC.

'Kuroda'
Application No: 1999/368 Accepted: 20 Dec 2000.
Applicant: **Agrico**.
Agent: **Technico Pty Ltd,** Moss Vale, NSW.

'Maranca'
Application No: 2000/060 Accepted: 20 Dec 2000.
Applicant: **Agrico**.
Agent: **Technico Pty Ltd,** Moss Vale, NSW.

'Midas'
Application No: 2000/292 Accepted: 7 Nov 2000.
Applicant: **Cygnet Potato Breeders Ltd**.
Agent: **Wrightson Seeds (Aust) Pty Ltd,** Laverton, VIC.

Stenocarpus sp (Hinchinbrook Is. FD Hockings AQ229860)
Tully River Stenocarpus

'Forest Gem'
Application No: 2000/322 Accepted: 30 Nov 2000.
Applicant: **Yuruga Nursery Pty Ltd**, Walkamin, QLD.

'Forest Lace'
Application No: 2000/321 Accepted: 30 Nov 2000.
Applicant: **Yuruga Nursery Pty Ltd**, Walkamin, QLD.

Syzygium leumannii x *Syzygium wilsonii*
Lilly Pilly

'Cascade'
Application No: 2000/302 Accepted: 20 Nov 2000.
Applicant: **Russell and Sharon Costin**, Limpinwood, NSW.

Syzygium francisii
Giant Water Gum

'Little Gem'
Application No: 2000/326 Accepted: 27 Nov 2000.
Applicant: **Russell and Sharon Costin**, Limpinwood, NSW.

Trifolium pratense
Red Clover

'Genband'
Application No: 2000/197 Accepted: 30 Nov 2000.
Applicant: **University of Western Australia**, Nedlands, WA.

'Genstar'
Application No: 2000/196 Accepted: 30 Nov 2000.
Applicant: **University of Western Australia**, Nedlands, WA.

'Genwest'
Application No: 2000/198 Accepted: 30 Nov 2000.
Applicant: **University of Western Australia**, Nedlands, WA.

Trifolium repens
White Clover

'Trifol Sweet'
Application No: 2000/122 Accepted: 7 Nov 2000.
Applicant: **Belair Technology Pty Ltd**, Belair, SA.

Triticum aestivum
Wheat

'Babbler'
Application No: 2000/143 Accepted: 6 Nov 2000.
Applicant: **Department of Agriculture for and on behalf of the State of New South Wales,** Orange, NSW and **Grains Research and Development Corporation**, Barton, ACT.

'M5631'
Application No: 2000/141 Accepted: 6 Nov 2000.
Applicant: **Department of Agriculture for and on behalf of the State of New South Wales,** Orange, NSW and **Grains Research and Development Corporation**, Barton, ACT.

'Thornbill'
Application No: 2000/142 Accepted: 6 Nov 2000.
Applicant: **Department of Agriculture for and on behalf of the State of New South Wales,** Orange, NSW and **Grains Research and Development Corporation**, Barton, ACT.

Verbena hybrid
Verbena

'Vertis'
Application No: 2000/228 Accepted: 27 Nov 2000.
Applicant: **Novartis Seeds B.V.**
Agent: **Ramm Pty Ltd,** Picton, NSW.

Verticordia plumosa hybrid
Feather Flowers

'GW2'
Application No: 2000/329 Accepted: 8 Dec 2000.
Applicant: **West Australian Wax Farm**, Post Office Floreat Forum, WA.

Variety Descriptions

Key to definitions/symbols/words used in the detailed descriptions

*	=	Variety used as comparator
Agent	=	Australian agent acting on behalf of an applicant (usually where application is from overseas).
ca.	=	about
DMRT	=	Duncan's Multiple Range Test
DUS	=	Distinctiveness, Uniformity and Stability
Hyphened colours	=	A hyphen (-) between two different colours (eg. greyed-green) designates an intermediate colour between those two colours, where possible the RHS colour chart reference is also given.
LSD	=	Least Significant Difference
LSD/sig	=	The numerical value for the LSD (at P≤0.01) is in the first column and the level of significance between the candidate and the relevant comparator in subsequent columns
PVJ	=	Plant Varieties Journal
n/a	=	Not available
ns	=	Not significant
RHS	=	Royal Horticultural Society Colour Chart (Chip Number). The year following RHS indicates the edition.
std deviation	=	Standard deviation of the sample
syn	=	synonym
UPOV	=	International Union for the Protection of New Plant Varieties
+	=	When used in conjunction with an RHS colour, '+' indicates a notional extension of a colour series when a precise match can not be made. It is most commonly used when the adjacent colour chip(s) are of a different sequence
#	=	Values followed by the same letter are not significantly different at P≤0.01
Origin	=	Unless otherwise stated the female parent of the cross precedes the male parent
S-N-K test	=	Student-Newman-Keuls test
Ⓟ	=	Variety(s) for which PBR has been granted

Acacia cognata
Bower Wattle

'Limelight'
Application No: 2000/034 Accepted: 24 Feb 2000.
Applicant: **Phillip Dowling**, Native Plant Wholesalers Pty Ltd, Mt Gambier, SA.
Agent: **Gail Barth**, Oakbank, SA.

Characteristics (Table 1, Figure 30) Plant: dwarf, bushy dense shrub, 1m x 1m with pendulous lime green foliage and mounding habit. Stem: many prostrate to arching stems supporting willowy branchlets. Foliage: narrow linear phyllodes, with indistinct venation and slightly acuminate apices, thin, average size 50 x 1.7mm, predominant colour green (RHS 143C) with lime-green (144B-C) highlights. (Note: all RHS colour chart numbers refer to 1995 edition.)

Origin and Breeding Open pollination followed by seedling selection: high numbers of seedling *Acacia cognata* are regularly grown from purchased seed each year at applicant's nursery and observed for variations. 'Limelight' was selected as a distinct variant from one batch of over 300 seedlings grown in Oct 1997. Selection criteria: dwarfness, tight mounding habit and attractive lime green colouration on new growth. This seedling was also distinctly smaller in habit and leaf form and lighter in colouration from other known dwarf cultivars of *Acacia cognata*. Propagation: by vegetative cuttings from the selected seedling followed by establishment of stock plants over several generations which were found to be uniform and stable. 'Limelight' is commercially propagated by vegetative cuttings taken from containerised stock plants. Breeder: Phillip Dowling, Native Plant Wholesalers Pty Ltd, Mt Gambier, SA.

Choice of Comparators Two other dwarf varieties of *Acacia cognata* ('Green Mist' and 'Mop Top') were chosen as comparator varieties. *Acacia cognata* seedlings were originally considered for the comparative trial but were rejected because the height, internode lengths and growth rates were so much greater than the dwarf varieties.

Comparative Trial Location: Native Plant Wholesalers, Mt Gambier West, SA, Jun-Oct 2000. Conditions: cuttings were taken in Dec 1999 from stock plants of the three varieties and rooted under mist followed by potting into 75 mm tubes. At the start of the trial, 12 plants from each variety were potted on into 140 mm pots in pinebark/sand media, individually labelled and height and width measurements taken. Plants were grown in a polyhouse tunnel and nutrition was maintained with controlled-release fertilisers, pest and disease treatments applied as required. Trial design: twelve pots of each variety arranged in a completely randomised design and re-randomised after 3 months of growth. Measurements: data was taken and analysed on all plants (one sample per plant) with the exception of internode length, which was taken from 10 plants at random.

Prior Applications and Sales
First sold in Australia in 2000.

Description: **Gail Barth,** Oakbank, SA.

Table 1 *Acacia* varieties

	'Limelight'	*'Green Mist'	*'Mop Top'
PLANT HEIGHT (cm)			
mean	9.59	12.30	23.68
std deviation	1.22	1.12	2.62
LSD/sig	6.2	ns	P≤0.01
PLANT SIZE height x width (cm^2)			
mean	190.8	291.3	647.5
std deviation	25.4	29.9	100.2
LSD/sig	69.32	P≤0.01	P≤0.01
LEAF WIDTH (mm)			
mean	1.69	2.32	4.20
std deviation	0.0865	0.2103	0.4508
LSD/sig	0.36	P≤0.01	P≤0.01
LEAF LENGTH (mm)			
mean	54.1	75.3	70.8
std deviation	6.85	7.39	15.44
LSD/sig	13.19	P≤0.01	P≤0.01
INTERNODE LENGTH (mm)			
mean	7.23	6.87	8.93
std deviation	0.20	0.64	1.31
LSD/sig	1.55	ns	P≤0.01
FOLIAGE COLOUR (RHS, 1995)	green	medium green	medium dark green
	143C	141A	137B
NEW GROWTH COLOUR (RHS, 1995)	lime green	green	maroon
	144 B-C	141C	59A

DESCRIPTIONS

Alstroemeria hybrid
Alstroemeria, Peruvian Lily

'Savannah'

Application No: 1999/350 Accepted: 17 Dec 1999.
Applicant: **Ivan Novosel,** Lenswood, SA.
Agent: **Scholefield Robinson Horticultural Services,** Adelaide, SA.

Characteristics (Table 2, Figure 11) Plant: stem length long, stem thickness thick, density of foliage medium dense. Leaf: shape ovate, longitudinal axis of blade recurved, length long, width medium. Inflorescence: umbel branch number medium, length long, pedicel length long. Flower: apricot pink, size medium, tepal spread medium, outer tepal shape round to obovate, depth of emargination medium, stripes absent, pink at margins RHS 64D and medium pink at tip RHS 64AB, inner tepals shape obovate, yellow RHS 9B with pink tip RHS 62A, stripe number medium, stripe size medium to large. Stamens: filament pink, spots absent, anther brownish. Pistil: ovary anthocyanin weak, stigma spots absent. All RHS colours are from 1995 edition.

Origin and Breeding Controlled pollination: Seed parent a seedling of *Alstroemeria aura* (Breeder's code AYKR/197), pollen parent (Breeder's code EXAL/25696) selected from a hybrid breeding line maintained by the applicant at One Tree Hill and later at Lenswood. The seed parent was characterised by yellow (RHS 14A) flowers with green (RHS 135D) tips on the outer tepals and strong anthocyanin colouration of the ovary. The pollen parent was characterised by white (RHS 155B) flowers with green (RHS 135D) tips on the outer tepals. Inner tepals were yellow (RHS 9A) with white (RHS 155B) tips. Selection criteria: 'Savannah' was selected on the basis of flower colour, growth habit and potential for all year round production in a southern Australian environment. Propagation: The variety will be commercially propagated by tissue culture. Breeder: Ivan Novosel, Lenswood, SA.

Choice of Comparators Comparators: 'Victoria'(Ⓟ), 'Saba' and 'Minas' were chosen on the basis of flower colour. No other similar varieties of common knowledge have been identified.

Comparative Trial Location: Lobethal, SA, winter/spring 2000. Conditions: trial conducted in a glasshouse, plants propagated by division and grown in the soil, Trial design: Planting was in 8 'single plant' plots of each variety in a randomised complete block design and included the candidate, comparators and parent plants. Measurements: For the flower descriptions approximately 30 stems of each variety were held in water for a few hours then examined.

Prior Applications and Sales Nil.

Description: **Ben Robinson** and **Daniel Smith**, Scholefield Robinson Horticultural Services Pty Ltd, Adelaide, SA.

Table 2 *Alstroemeria* varieties

	'Savannah'	***'Victoria'Φ**	***'Saba'**	***'Minas'**
LEAF				
width	medium	narrow	medium	medium
shape of blade	ovate	elliptical	ovate	ovate
INFLORESCENCE				
no. of branches on umbel	medium	medium	few – medium	medium
length of branches	long	long	long	medium
length of pedicel	long	long	medium	medium
FLOWER				
main Colour	apricot pink	orange red	purple pink	yellow
size	medium	medium	large	medium
spread of tepals	medium	medium	large	medium
OUTER TEPAL				
shape of blade	round-obovate	obovate	broad obovate	round-obovate
depth of emargination	medium	medium	medium	shallow
main colour of blade	pink 64D	orange 30C	purple 73B	yellow 17A
margin	pink 64AB	centre orange30A	centre	pink 55B
tips		edge green 139B	pink 73A	tip
		tip	margin	stripes
INNER TEPAL				
shape of blade	obovate	narrow obovate	obovate	obovate
main colour of inner side of blade	yellow 9B pink tip 62A	yellow 14A orange tip 33B	yellow 9A purple tip 63AB	yellow 23A
number of stripes on inner side of blade	medium	medium	medium	medium-many
stripe size on inner side of blade	med-large	small-medium	large	medium-large
STAMENS				
main colour of filaments	pink	pale orange red	pink/purple	light purple
colour of anthers	brownish	brownish	purplish	brownish
PISTIL				
anthocyanin colour of ovary	weak	strong	medium	medium

Anisodontea capensis **Anisodontea**

'African Prince'

Application No: 2000/018 Accepted: 5 Mar 2000.
Applicant: **Plant Growers Australia,** Wonga Park, VIC.

Characteristics (Table 3, Figure 17) Plant: habit upright, dense. Stem: internode short (mean 19.05mm). Leaf: length mean 33.54mm, width 30.03mm, shape of apex of lobe pointed, depth of sinus of margin deep. Flower: axilary mostly in clusters, diameter small (mean 31.70mm), petal colour of margin zone red-pruple 72C, colour of eye zone and venation red-purple 60A. (Note: All RHS colour chart numbers refer to 1995 edition.)

Origin and Breeding Open pollination followed by seedling selection: parent *Anisodontea capensis*. The parental plant is characterised by its spreading growth habit. Seed were collected and grown for evaluation. Seedling selection took place in Wonga Park VIC, in 1996. Selection criteria: 'African Prince' was chosen in 1997 on the basis of flower colour and compact habit. Propagation: a number mature stock plants were generated from this seedling through 2 generations by cutting propagation and were found to be uniform and stable. 'African Prince' will be commercially propagated by vegetative cuttings from the stock plants. Breeder: Howard Bentley, Wonga Park, VIC.

Choice of Comparator 'African Princess' was chosen because it is the closest known variety in cultivation. The parental variety was not considered for its spreading growth habit as stated above. No other similar varieties of common knowledge have been identified.

Comparative Trial Location: Park Orchards, VIC, autumn-spring 2000. Conditions: trial conducted in pots, plants propagated from cutting, rooted cuttings planted into 150mm pots filed with soilless potting mix (pine bark base), nutrition maintained with slow release fertilisers, pest and disease treatments applied as required. Trial design: ten pots of each variety arranged in a completely randomised design. Measurements: from twenty plants at random. One sample per plant.

Prior Applications and Sales Nil.

Description: **Mark Lunghusen,** Croydon, VIC.

Table 3 *Anisodontea* varieties

	'African Prince'	*'African Princess'
PLANT HABIT		
	dense	sparse
	upright	spreading
FLOWER DIAMETER (mm)		
mean	31.70	37.00
std deviation	2.11	1.63
LSD/sig.	2.63	P≤0.01
FLOWER PETAL COLOUR (RHS, 1995)		
outer	red-purple	purple
	72C	75A
NUMBER OF FLOWERS PER LEAF AXIS		
	1-3	1

Antirrhinum hybrid
Snapdragon

'Yaprim' syn **Primrose Vein**

Application No: 1999/276 Accepted: 26 Jul 2000.
Applicant: **A T Yates & Son**, Congleton, UK.
Agent: **Plant Growers Australia**, Wonga Park, VIC.

Characteristics (Table 4, Figure 18) Plant: habit spreading. Leaf: long length (mean 25.70mm), width wide (mean 17.42mm), shape of blade obovate, shape of tip acute, shape of base cuneate, pubesence medium. Flowers: axillary, petal man colour of upper petals white 155B, colour of vein red-purple 70A, venation colour intense, large central flower spot, main colour of lower petals yellow-green 150D. (Note: All RHS colour chart numbers refer to 1995 edition.)

Origin and Breeding Controlled pollination: parents *Antirrhinum hispanicum* x *A. molle* and *A. majus*. Hybridisation took place in England in 1993-1994. From this cross, 'Yaprim' was chosen in 1995 on the basis of flower colour and habit. Selection criteria: Flower colour and form. Propagation: at least 10 generations of vegetative propagation have been done and were found to be uniform and stable. Breeder AT Yates and Son, UK.

Choice of Comparators 'Avalanche' was chosen because it is the closest known variety propagated by cuttings. No other similar varieties of common knowledge have been identified.

Comparative Trial Location: Park Orchards, VIC, autumn-spring 2000. Conditions: trial conducted in pots, plants propagated from cutting, rooted cuttings planted into 150mm pots filled with soilless potting mix (pine bark base), nutrition maintained with slow release fertilisers, pest and disease treatments applied as required. Trial design: ten pots of each variety arranged in a completely randomised design. Measurements: from twenty plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
EU	1996	Granted	'Yaprim'
Japan	1997	Applied	'Yaprim'
New Zealand	1998	Applied	'Yaprim'

First sold in UK in Sep 1996

Description: **Mark Lunghusen,** Croydon, VIC.

Table 4 *Antirrhinum* varieties

	'Yaprim'	*'Avalanche'
LEAF: LENGTH (mm)		
mean	25.70	16.95
std deviation	2.99	1.64
LSD/sig	3.18	P≤0.01
LEAF: WIDTH (mm)		
mean	17.42	14.69
std deviation	1.91	1.64
LSD/sig	2.8	ns
LEAF: SHAPE OF BLADE		
	obovate	ovate-orbicular
LEAF: SHAPE OF TIP		
	acute	obtuse
LEAF: SHAPE OF BASE		
	cuneate	obtuse
LEAF: PUBESENCE		
	medium	strong
PETAL: MAIN COLOUR OF UPPER PETALS (RHS)		
	white 155B	white 155C
VEIN: INTENSITY OF COLOURATION		
	strong	weak
CENTRAL FLOWER SPOT: SIZE		
	large	small
PETAL: MAIN COLOUR OF LOWER PETALS (RHS)		
	yellow-green 150D	white 155C

'Yarob' syn **Rose Pink**

Application No: 1999/275 Accepted: 26 Jul 2000.
Applicant: **AT Yates & Son**, Congleton, UK.
Agent: **Plant Growers Australia,** Wonga Park, VIC.

Characteristics (Table 5, Figure 19) Plant: habit spreading. Leaf: long length (mean 33.56mm), width wide (mean 18.96mm), shape of blade obovate, shape of tip acute, shape of base cuneate, pubesence medium. Flowers: axillary, petal colour red-purple 71B, colour of central flower spot yellow 13A. (Note: All RHS colour chart numbers refer to 1995 edition.)

Origin and Breeding Controlled pollination: parents *Antirrhinum hispanicum* x *A. molle* and *A. majus*. Hybridisation took place in England in 1993-1994. From this cross, 'Yarob' was chosen in 1995 on the basis of flower colour and habit. Selection criteria: flower colour and form.

Propagation: at least 10 generations of vegetative propagation have been done and were found to be uniform and stable. Breeder: AT Yates and Son, UK.

Choice of Comparators *Antirrhinum hispanicum* roseum was chosen because it is the closest known variety propagated by cuttings. No other similar varieties of common knowledge have been identified.

Comparative Trial Location: Park Orchards, VIC, autumn-spring 2000. Conditions: trial conducted in pots, plants propagated from cutting, rooted cuttings planted into 150mm pots filled with soilless potting mix (pine bark base), nutrition maintained with slow release fertilisers, pest and disease treatments applied as required. Trial design: ten pots of each variety arranged in a completely randomised design. Measurements: from twenty plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
EU	1996	Granted	'Yarob'
Japan	1997	Applied	'Yarob'
New Zealand	1998	Applied	'Yarob'

First sold in UK in Sep 1996.

Description: **Mark Lunghusen,** Croydon, VIC.

Table 5 *Antirrhinum* varieties

	'Yarob'	* *A. hispanicum* roseum
LEAF: LENGTH (mm)		
mean	33.56	21.70
std deviation	3.29	1.82
LSD/sig	3.78	P≤0.01
LEAF: WIDTH (mm)		
mean	18.96	14.87
std deviation	2.14	1.88
LSD/sig	3.19	P≤0.01
LEAF: SHAPE		
	obovate	ovate-orbicular
LEAF: SHAPE OF BASE		
	cuneate	obtuse
PETAL: COLOUR (RHS)		
	red-purple	
	71B	75A
COLOUR OF CENTRAL FLOWER SPOT (RHS)		
	yellow	yellow
	13A	2D

Avena sativa
Oat

'Nugene'

Application No: 1998/259 Accepted: 16 Mar 1999.
Applicant: **NDSU Research Foundation**, Fargo, North Dakota, USA.
Agent: **The State of Queensland through its Department of Primary Industries,** Brisbane, QLD.

Characteristics (Table 6, Figure 45) Plant: tall spring forage oat, early growth habit erect, maturity late when planted in May. Stem: straw strength strong, uppermost node hairiness medium. Leaf: sheath hairiness medium, blade width medium glabrous. Panicle: branches equilateral semi-erect. Spikelet: pendulous glume length medium. Primary grain: basal hairs absent, lemma colour red-brown, lemma awn absent, rachilla long retained on primary grain. Disease resistance: possesses 'Pc68' gene resistant to almost all Australian pathotypes of *Puccinia coronata* (leaf rust).

Origin and Breeding Controlled pollination: seed parent ND881673 (R805065-5/ 'Dumont') x pollen parent ND880909 (ND830775/'Dumont'). The seed parent was characterised by a very resistant reaction in adult plants in the field to leaf rust with virulence to Pc-38 and Pc-39 that are present in 'Dumont'. The resistance in ND881673 is derived from R805065-5, which was derived from 'Amagalon' germplasm. The pollen parent was also characterised by a highly resistant adult plant reaction to leaf rust races that are virulent on Pc-38 and Pc-39. It also shows a fleck seedling reaction to races virulent on Pc-38, Pc-39 and Pc-91. The candidate has good grain and forage yield and is resistant to most pathotypes of leaf rust in Australia. Hybridisation took place at North Dakota State University, USA in 1993. From this cross, seedling number S3736 was chosen in 1995 on the basis of flowering time. Selection criteria: leaf rust resistance and early flowering. Propagation: by seed. Breeder: Dr Michael McMullen, Fargo, North Dakota, USA.

Choice of Comparators Comparators: 'Amagalon', 'Gwydir'(Þ, 'AC Medallion'(Þ syn 'Moola'(Þ, and 'Warrego'(Þ. 'Amagalon' was chosen because it is the original source material from which the rust resistant gene in Nugene variety was selected. 'Gwydir'(Þ and 'AC Medallion'(Þ syn Moola(Þ were selected for their similarity with 'Nugene'.

Comparative Trial Location: Hermitage Research Station, Warwick QLD. Sown 11 Jun 1999. Conditions: plants were raised in well-fertilised soil in open beds. Trial design: plants arranged in randomised complete blocks with three replications. Measurements: taken from 10 random plants per replicate chosen from approximately 150 plants.

Prior Applications and Sales Nil.

Description: **John Rose,** Warwick, QLD.

Table 6 *Avena* varieties

	'Nugene'	*'Amagalon'	*'Gwydir'ϕ	*'AC Medallion'ϕ syn Moolaϕ	*'Warrego'ϕ
PLANT HEIGHT (cm)					
mean	147.3	164.2	123.3	147.4	119.7
std deviation	5.7	10.4	7.8	9.2	8.9
LSD/sig	3.65	P≤0.01	P≤0.01	ns	P≤0.01
FLAG LEAF LENGTH (mm)					
mean	208.5	221.3	131.8	194.8	199.4
std deviation	32.26	29.17	26.61	29.94	28.47
LSD/sig	21.76	ns	P≤0.01	ns	ns
FLAG LEAF WIDTH (mm)					
mean	12.68	15.03	10.27	16.93	16.97
std deviation	2.51	1.52	1.62	1.53	1.82
LSD/sig	1.66	P≤0.01	P≤0.01	P≤0.01	P≤0.01
DAYS TO PANICLE EMERGENCE					
mean	114.7	118.5	115.6	116.4	110.6
std deviation	2.51	2.84	2.08	1.26	2.25
LSD/sig	1.02	P≤0.01	ns	P≤0.01	P≤0.01
PEDUNCLE LENGTH (cm)					
mean	41.3	44.2	33.6	40.7	33.8
std deviation	4.70	7.38	3.70	4.37	3.21
LSD/sig	2.99	ns	P≤0.01	ns	P≤0.01
PANICLE LENGTH (cm)					
mean	27.6	36.7	21.0	29.1	26.3
std deviation	2.58	3.22	2.96	1.90	2.22
LSD/sig	1.64	P≤0.01	P≤0.01	ns	ns
HAIRINESS OF LOWER LEAF SHEATH					
	medium	medium	absent	medium	absent
HAIRINESS OF TOP NODE					
	present	present	absent	present	absent
LEMMA AWN					
	absent	few	absent	absent	absent
BASAL HAIRS ON GRAIN					
	absent	absent	present	present	absent
RACHILLA ATTACHMENT					
	primary	primary	primary	primary	secondary

Bougainvillea hybrid
Bougainvillea

'Evita'

Application No: 1999/242 Accepted: 31 Jan 2000.
Applicant: **Rybay Pty Ltd trading as Sunset Nursery**, Silverdale, NSW.
Agent: **The University of Sydney**, Plant Breeding Institute, Cobbitty, NSW.

Characteristics (Table 7, Figure 12) Plant: small to medium shrubby vine with a compact (dwarf) bushy habit. Leaves: simple, ovate variable in size with a sinuate margin and an acute apex. The leaves show a tricolour variegation with margin being yellow (RHS 8C), centre being yellow/green (RHS 147 A) and a third pigmentation appearing as flecks, being yellow/green (RHS 148 B). Immature and mature bracts: purple red (RHS 80 C-D). (Note: all RHS colour chart numbers refer to 1995 edition.)

Origin and Breeding Spontaneous mutation: from *Bougainvillea* 'Purity'. 'Purity' is a public cultivar charcterised by its white mature bract colour. Selection crieria: 'Evita' was selected for its unique bract colour. Propagation: vegetative propagation of the selection was carried out to test the performance of the selection and establish the stability of the variety. This variety has shown stability over five generations and approximately 350 plants. Breeder: J. de Aquino, Sunset Nursery, Silverdale, NSW.

Choice of Comparator *Bougainvillea* 'Miski'Φ was considered the most similar variety of common knowledge. *Bougainvillea* 'Miski'Φ has similar leaf colours but differs in the bract colour and a pinkish pigmentation of the young variegated leaves. *Bougainvillea* 'Purity' was considered because it is the source material and very closely matches the overall plant habit but shows differences in the bract colour. A third unnamed variety was considered but not available commercially or in numbers. It is also a sport from 'Purity' and a single plant made available showed it to be much later to flower.

Comparative Trial Location: Sunset Nursery, Eltons Road, Silverdale, NSW (Latitude 33º55′, longitude 150º36′, elevation 75m), between Nov 1999-Dec 2000. Conditions: plants were grown in containers in a plastic covered tunnel house. Trial design: the trial contained a block of approximately 30 plants of *Bougainvillea* 'Evita' and ten to fifteen of each comparator. The trial design was to compare the difference in habit and bract colour between the variety and its comparators. Measurements: from 10 plants at random. One sample per plant.

Prior Applications and Sales Nil.

Description: **Gerhard Stenner**, PBI Cobbity, NSW.

Table 7 *Bougainvillea* varieties

	'Evita'	*'Purity'	*'Miski'Φ
LEAF COLOUR (RHS, 1995), marginal			
	yellow	yellow	yellow
	8 C	10 C-D	10 B-C
LEAF COLOUR (RHS, 1995), centre			
	yellow/green	yellow/green	yellow/green
	147 A	147 B	147 A-B
LEAF COLOUR (RHS, 1995), fleck			
	yellow/green	yellow/green	yellow/green
	148 B	148 D	148 C-D
IMMATURE BRACT COLOUR (RHS, 1995)			
	purple/violet	white	grey/orange
	80 C-D	155 D	169 C
MATURE BRACT COLOUR (RHS, 1995)			
	purple/violet	white	orange/red
	80 C-D	155 D	55 A

Bracteantha bracteata
Everlasting Daisy

'Colourburst Gold'

Application No: 1999/166 Accepted 27 Oct 1999.
Applicant: **The University of Sydney,** Plant Breeding Institute, Cobbitty, NSW and
Yellow Rock Native Nursery, Winmalee NSW.

Characteristics (Table 8, Figure 13) Plant: multi-branching upright herbaceous perennial growing up to 320mm. Leaves: narrow elliptic to lanceolate, colour yellow green (RHS 144A), average size 140.4mm x 15.1mm. Inflorescence: capitulum (head) consisting of disc florets surrounded by papery bracts, open disc florets colour yellow orange (RHS 23A), surrounding bracts are in several rows with the outer, bud colour orange red (RHS 34A), open bract colour yellow orange (RHS 21A) at the tips changing to yellow (RHS 9A) towards the centre, average open flower head diameter 45.3mm.
(Note: all RHS colour chart numbers refer to 1995 edition.)

Origin and Breeding Controlled pollination: *Bracteantha* 'Colourburst Gold' is a selection from a controlled cross carried out at the Plant Breeding Institute, Cobbitty, NSW during 1996 between *Bracteantha* x95.5.1 (seed parent) and *Bracteantha* 'White Monarch' (pollen parent). The seed parent is a herbaceous perennial selected for is compact habit and heavy flowering. The pollen parent is a herbaceous perennial with greyish leaves and large white flowers. 'White Monarch' is a public cultivar and the seed parent is a breeding line. Selection criteria: 'Colourburst Gold' was selected primarily for the golden flower colour, but habit and performance under cultivation were also criteria Propagation: vegetative propagation of the selection was carried out to test the performance of the selection and establish the stability of the variety. Using both cuttings and tissue culture the variety has been stable over several generations. Breeder: P G Abell, Plant Breeding Institute, Cobbitty, NSW.

Choice of Comparators *Bracteantha* 'Colourburst Pink', *Bracteantha* 'Gold n Bronze' were considered the most similar varieties of common knowledge. *Bracteantha* 'Coolgardie Gold' (previously known as 'Kalgoorlie Gold') is similar but it has lighter coloured flowers lacking the orange tones in the bud and smaller leaves. No other variety was considered to as closely match the strong flower colour and plant habit of 'Colourburst Gold'. The parents were not considered as comparators due to the white flower and grey foliage of one and the strongly orange flowers and annual nature of the breeding line.

Comparative Trial Location: Yellow Rock Native, Nursery, Winmalee, NSW, Jan – May 2000. Conditions: vegetatively produced plants were grown in 250mm pots in a well drained media containing composted pine bark fines and sand. The media contained coated slow release fertiliser, dolomite plus trace elements, there was a single application of liquid fertiliser two weeks after potting, irrigation by overhead sprinkler. The environment used was open benched with dappled shade from trees. Trial design: 12 plants each of *Bracteantha* 'Colourburst Gold', 'Colourburst Pink' and 'Gold n Bronze' placed in rows to allow them to develop normally without shading from others. Measurments: from 10 plants at random. Once sample per plant.

Prior Applications and Sales Nil.

Description: **Peter Abell**, PBI Cobbitty, NSW.

Table 8 *Bracteantha* varieties

	'Colourburst Gold'	*'Colourburst Pink'ϕ	*'Golden Bronze'
BUD BRACT COLOUR (RHS, 1995)			
	34A	187D	167D
OPEN BRACT COLOUR (RHS, 1995)			
Tips	21A	63C	21A
Centre	9A	63C	12A
LEAF COLOUR (RHS, 1995)			
	144A	144A	137A
LEAF LENGTH (mm)			
mean	140.4	134.5	79.4
std deviation	13.43	17.09	10.42
LSD/sig	17.9	ns	P≤0.01
LEAF WIDTH (mm)			
mean	15.1	14.8	4.9
std deviation	1.91	2.34	0.98
LSD/sig	2.4	ns	P≤0.01

Brassica napus var *oleifera*
Canola

'BLN 1999'

Application No: 2000/218 Accepted: 14 Nov 2000.
Applicant: **Department of Agriculture for and on behalf of the State of New South Wales,**
Orange, NSW and **Grains Research and Development Corporation,** Barton, ACT**.**

Characteristics (Table 9, Figure 42, 42b) Plant: height average, (165 cm); flowering and maturity early. Leaf: weakly lobed on 12 percent of plants, moderately dentate, moderately long and broad, medium green. Flower: petals yellow, moderately long, and broad. Siliqua: peduncle, pod and beak long. Seed: free of erucic acid.

Origin and Breeding Controlled pollination: seed parent 'BLN 1274' x pollen parent 'BLN 1240' was made in 1996. The F_2 was grown in a blackleg screening nursery in 1997 from which a single plant was selected for blackleg resistance and oil and protein. This selection (96*126-130.3.4) was grown in an S_1 yield trial at Wagga Wagga Agriculture Research Institute in 1998 from which it was selected on yield and early maturity. The line was accelerated to S_4 trials in NSW in 1999 and in S_2 trials in VIC, SA and WA. It has been included in S_4 trials in four states in 2000. Breeder: Neil Wratten, Agriculture Research Institute, Wagga Wagga, NSW.

Choice of Comparators Early flowering varieties, 'Surpass 400', 'Georgie', 'AG Emblem', 'Mystic'ϕ, and 'Monty'ϕ were chosen on the basis of such characters as, leaf length and width, leaf colour, presence and number of lobes, leaf dentation, time of flowering, petal colour, length and width, plant height and pod characters. Herbicide-resistant varieties were not included as comparators. As the parents of BLN 1999 were two heterozygous individual plants in a breeding population seed was not retained for inclusion of the parents in comparative trials.

Comparative Trial Location: conducted in non-irrigated field plots at the Agricultural Research Institute at Wagga Wagga, NSW. Conditions: normal agronomic practices were employed. Trial design: seed was sown on 17 May 2000 in randomised blocks with three replications. Measurements: two replicates were sampled to provide 30 random samples per replication.

Prior Applications and Sales Nil.

Description: **Dr Ross Downes,** Innovative Plant Breeders, Canberra, ACT.

Table 9 *Brassica* varieties

	'BLN1999'	*'Surpass 400'	*'Georgie'	*'AG Emblem'	*'Mystic'ϕ	*'Monty'ϕ
LEAF LENGTH (cm)						
mean	24.3	21.5	26.3	26.3	26.0	23.4
std deviation	2.84	2.71	3.12	3.36	3.02	3.22
LSD/sig	1.32	P≤0.01	P≤0.01	P≤0.01	P≤0.01	ns
LEAF WIDTH (cm)						
mean	10.5	9.7	11.1	10.8	11.0	10.4
std deviation	1.27	1.31	1.48	1.53	1.70	1.59
LSD/sig	0.63	P≤0.01	ns	ns	ns	ns
PLANTS WITH LEAF LOBES (%)						
	12	92	38	75	28	10
LOBE NUMBER PER PLANT WITH LOBED LEAVES						
mean	3.9	3.0	4.0	3.8	3.1	3.7
PETIOLE LENGTH ON PLANTS WITH LOBED LEAVES (cm)						
mean	10.7	11.2	13.0	13.1	12.9	13.3
LEAF DENTATION (rating 3=slight, 7=strong)						
	5.2	5.1	5.1	5.7	5.3	5.0

Table 9 continued

TIME OF FLOWERING (days after sowing at Wagga, NSW on 17 May 2000)						
	112	107	116	112	111	109
PLANT HEIGHT (cm)						
mean	164.6	163.1	164.9	163.0	154.4	151.7
std deviation	9.4	7.0	7.9	8.9	10.0	6.84
LSD/sig	3.6	ns	ns	ns	P≤0.01	P≤0.01
PETAL LENGTH (mm)						
mean	16.0	17.1	15.2	16.2	15.1	14.2
std deviation	0.82	0.90	1.98	1.17	0.90	1.20
LSD/sig	0.52	P≤0.01	P≤0.01	ns	P≤0.01	P≤0.01
PETAL WIDTH (mm)						
mean	9.1	8.3	6.2	9.4	9.0	8.0
std deviation	0.82	0.99	1.17	0.98	0.73	0.85
LSD/sig	0.45	P≤0.01	P≤0.01	ns	ns	P≤0.01
SILIQUA LENGTH (mm)						
mean	58.2	54.2	54.4	56.8	57.3	57.7
std deviation	5.0	5.0	7.4	5.4	5.7	6.1
LSD/sig	2.55	P≤0.01	P≤0.01	ns	ns	ns
BEAK LENGTH (mm)						
mean	13.3	12.9	11.7	12.0	13.2	12.5
std deviation	2.3	1.9	2.3	1.6	2.1	2.4
LSD/sig	0.93	ns	P≤0.01	P≤0.01	ns	ns
PEDUNCLE LENGTH (mm)						
mean	29.5	21.4	27.3	24.2	25.3	27.1
std deviation	4.6	3.0	4.4	2.9	4.5	4.6
LSD/sig	1.74	P≤0.01	P≤0.01	P≤0.01	P≤0.01	P≤0.01

Ceanothus gloriosus
Ceanothus

'Blue Sapphire'

Application No: 2000/099 Accepted: 16 Mar 2000.
Applicant: **Kiwi Colour Ltd,** Auckland, New Zealand.
Agent: **Greenhills Propagation Nursery**, Tynong, VIC.

Characteristics (Table 10, Figure 14) Plant: habit small shrub. Stem: young stem colour greyed-purple 187A. Leaf: length medium (mean 16.57mm), width medium (mean 10.41mm), colour green 139A. Flower: colour violet-blue 95B. (Note: All RHS colour chart numbers refer to 1995 edition.)

Origin and Breeding Spontaneous mutation: arose as a mutation from *Ceanothus* 'Blue Cushion' at the breeders property at Auckland, New Zealand in 1995. Cuttings were taken in 1995, and grown on for observation for the conformation of uniformity and stability of the selection. Selection criteria: leaf colour and plant habit. Propagation: vegetative through at least 3 generations. Breeder: Warwick Wilson, Auckland, New Zealand.

Choice of Comparators *Ceanothus* 'Blue Cushion' was chosen because it is the parental material from which the candidate variety was selected, and is also the closest known variety of common knowledge.

Comparative Trial Location: Tynong, VIC, autumn-spring 2000. Conditions: trial conducted in open, plants propagated from cutting, rooted cuttings planted into 140mm pots filed with soilless potting mix (pine bark base), nutrition maintained with slow release fertilisers, pest and disease treatments applied as required. Trial design: ten pots of each variety arranged in a completely randomised design. Measurements: from twenty plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
New Zealand	1997	Granted	'Blue Sapphire'
EU	1999	Applied	'Blue Sapphire'

First sold in New Zealand in Aug 1998.

Description: **Mark Lunghusen,** Croydon, VIC.

Table 10 *Ceanothus* varieties

	'Blue Sapphire'	***'Blue Cushion'**
YOUNG STEM COLOUR		
	greyed-purple 187A	green 143B
LEAF WIDTH (mm)		
mean	10.41	9.05
std deviation	0.81	1.07
LSD/sig	1.02	P≤0.01

LEAF COLOUR (RHS, 1995)		
	green	green
	139A	137A
FLOWER COLOUR (RHS, 1995)		
	violet-blue	violet
	95B	96A

Coprosma hybrid
Coprosma

'Karo Red'

Application No: 2000/008 Accepted: 31 Jan 2000.
Applicant: **Landcare Research New Zealand Ltd, Lincoln, New Zealand**.
Agent: **Greenhills Propagation Nursery**, Tynong, VIC.

Characteristics (Table 11, Figure 16) Plant: habit small shrub. Leaf: length medium (mean 29.43mm), width medium (mean 17.94mm), shape ovate, tip acute, base hastate, margin strong, main colour brown 200A, secondary colour green 141A, glossiness medium. (Note: All RHS colour chart numbers refer to 1995 edition.)

Origin and Breeding Controlled pollination: arose as a selection from seedlings from crosses made between *Coprosma* 'Coppershine' and *C. serrulata* at Lincoln, New Zealand. Cuttings were taken and grown on for observation for the conformation of uniformity and stability of the selection. Selection criteria: leaf colour. Propagation: vegetative through at least 3 generations. Breeder: P.B. Heenan, Lincoln, New Zealand.

Choice of Comparators *Coprosma* 'Yvonne' and 'Coppershine' were chosen because they are the closest known varieties of common knowledge. *Coprosma serrulata* was not chosen because 'Karo Red' shows no resemblence to this species. No other varieties were considered similar enough to include in the trial.

Comparative Trial Location: Tynong, VIC, autumn-spring 2000. Conditions: trial conducted in open, plants propagated from cutting, rooted cuttings planted into 140mm pots filed with soilless potting mix (pine bark base), nutrition maintained with slow release fertilisers, pest and disease treatments applied as required. Trial design: ten pots of each variety arranged in a completely randomised design. Measurements: from forty plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
New Zealand	1998	Granted	'Karo Red'

Description: **Mark Lunghusen,** Croydon, VIC.

Table 11 *Coprosma* varieties

	'Karo Red'	*'Yvonne'	*'Coppershine'
LEAF: LENGTH (mm)			
mean	29.43	41.05	33.00
std deviation	2.13	4.35	2.43
LSD/sig	2.99	P≤0.01	P≤0.01
LEAF: WIDTH (mm)			
mean	17.94	24.27	14.58
std deviation	1.22	2.17	0.57
LSD/sig	1.35	P≤0.01	P≤0.01
LEAF: LENGTH TO WIDTH RATIO			
mean	1.64	1.69	2.26
std deviation	0.10	0.08	0.10
LSD/sig	0.09	ns	P≤0.01
LEAF: SHAPE OF BLADE	ovate	ovate	obovate
LEAF: SHAPE OF TIP	acute	obtuse	rounded
LEAF: SHAPE OF BASE	hastate	hastate	cuneate
LEAF: UNDULATION OF MARGIN	strong	medium	strong
LEAF: MAIN COLOUR (RHS, 1995)	brown 200A	green 137A	green 137A
LEAF: SECONDARY COLOUR (RHS, 1995)	green 141A	brown 200A	brown 200A
LEAF: GLOSSINESS	medium	strong	medium

Cupressus glabra
Arizona Cypress

'Limesheen'

Application No: 2000/100 Accepted: 21 Mar 2000.
Applicant: **Peter & Ruth Donnelly**, Somersby, NSW**.**

Characteristics (Table 12, Figure 31) Plant: habit erect, broad columnar, speed of growth medium to fast, (mean height 74.7cm at 3.5 years old), width narrow conic (mean width 45.3cm after 3.5 years). First order branchlets: density medium, length short (10th from apex), main colour in spring upper side yellow (RHS 3B); lower side yellow green (RHS 144B). (Note: all RHS colour chart numbers refer to 1995 edition.)

Origin and Breeding Seedling selection: following self pollination of 'Limelight'Ⓟ on applicant's property in 1994. Selection criteria: 'Limesheen' was selected out of the resulting progeny due to its dense, upright habit and lime-yellow foliage, whereas the parent has a wider, more open angular habit. Selection criteria: dense, compact growth habit. Propagation: by cuttings and grafting through 5 generations. Breeder: Peter Donnelly, Somersby. NSW.

Choice of Comparator Comparators: 'Limelight'Ⓟ and 'Limeglow'Ⓟ. 'Limelight'Ⓟ was chosen because it is the original seed parent from which 'Limesheen' was selected. 'Limeglow'Ⓟ, was chosen as the closest known variety to 'Limesheen', also coming from the same parent. One other sister variety – 'Highlight'Ⓟ, was not included as it is taller, narrower, more compact and has a darker yellow leaf colour

than 'Limesheen'. No other similar forms of *Cupressus glabra* have been identified.

Comparative Trial Location: Somersby, NSW (Latitude 33º28′ S, longitude 151º 22′ E, elevation 250m), Sep 99 – Oct 2000. Conditions: trial conducted in open nursery using overhead irrigation, plants grown from cuttings potted into 300mm pots filled with soilless (pine bark based) potting mix, nutrition supplied by slow release fertilisers, no pest or disease control required. Trial design: 10 plants of each variety arranged in a completely randomised design. Measurements: From all trial plants at random. One sample per plant.

Prior Application and Sale
First sold in Australia in Aug 1999 as 'Silversheen'. No prior overseas sales.

Description: **Peter Donnelly,** Somersby, NSW.

Table 12 *Cupressus* varieties

	'Limesheen'	*'Limelight'ϕ	*'Limeglow'ϕ
PLANT WIDTH (mm)			
mean	453	814	646
std deviation	46.20	126.68	79.88
LSD/sig	112.12	P≤0.01	P≤0.01
NUMBER OF FIRST ORDER BRANCHLETS – on top 15cm of plant			
mean	11.3	8.9	23.4
std deviation	2.71	2.37	5.39
LSD/sig	4.64	ns	P≤0.01
LENGTH OF FIRST ORDER BRANCHLET (mm) – 10th from apex			
mean	64.0	55.1	34.9
std deviation	22.15	19.77	7.59
LSD/sig	21.92	ns	P≤0.01
BRANCHLET OF FIRST ORDER MAIN COLOUR (RHS, 1995) – spring			
upper surface	3B	12B/7B	12B/12C
lower surface	144B	149B/144B	149B/144B

Erysimum hybrid
Wallflower

'Pastel Patchwork'

Application No: 2000/017 Accepted: 8 Mar 2000.
Applicant: **Plant Growers Australia,** Wonga Park, VIC.

Characteristics (Table 13, Figure 20) Plant: habit bushy, overall height short 37.90cm, foliage height tall (mean 19.20cm). Flowering stem: length short (mean 18.70cm). Flower: main petal colour during 1st phase greyed-orange 163A, secondary colour during 1st colour phase yellow 9B, main colour during 2nd colour phase, greyed-orange 177D, secondary colour during 2nd colour phase yellow 10B, main colour during 3rd colour phase red-purple 60C, secondary colour during 3rd colour phase yellow 10C. (Note: All RHS colour chart numbers refer to 1995 edition.)

Origin and Breeding Spontaneous mutation: arose from 'Apricot Delight'. Mutation took place in Wonga Park, VIC in 1997. 'Pastel Patchwork' was chosen in 1997 on the basis of flower colour. Selection criteria: flower colour. Propagation: a number mature stock plants were generated from this seedling through 2 generations by cutting propagation and were found to be uniform and stable. 'Pastel Patchwork' will be commercially propagated by vegetative cuttings from the stock plants. Breeder: Howard Bentley, Wonga Park, VIC.

Choice of Comparator 'Apricot Delight' was chosen because it is the parent plant and is also the closest known variety. No other similar varieties of common knowledge have been identified.

Comparative Trial Location: Park Orchards, VIC, autumn-spring 2000. Conditions: trial conducted in pots, plants propagated from cutting, rooted cuttings planted into 150mm pots filled with soilless potting mix (pine bark base), nutrition maintained with slow release fertilisers, pest and disease treatments applied as required. Trial design: ten pots of each variety arranged in a completely randomised design. Measurements: from twenty plants at random. One sample per plant.

Prior Applications and Sales Nil.

Description: **Mark Lunghusen,** Croydon, VIC.

Table 13 *Erysimum* varieties

	'Pastel Patchwork'	*'Apricot Delight'
PLANT: HEIGHT INCLUDING FLOWERING STEM (cm)		
mean	37.90	43.40
std deviation	3.38	3.37
LSD/sig	3.37	P≤0.01
PLANT: HEIGHT OF FOLIAGE (cm)		
mean	19.20	11.40
std deviation	1.99	1.26
LSD/sig	2.48	P≤0.01
FLOWERING STEM: LENGTH OF FLOWERING PORTION ONLY (cm)		
mean	18.70	32.00
std deviation	2.98	3.43
LSD/sig	3.23	P≤0.01
FLOWERING STEM: RATIO LENGTH TO HEIGHT OF FOLIAGE		
mean	0.99	2.85
std deviation	0.20	0.47
LSD/sig	0.47	P≤0.01
PETAL: MAIN COLOUR DURING 1ST COLOUR PHASE (RHS, 1995)		
	greyed orange 163A	yellow orange 17A
PETAL: SECONDARY COLOUR DURING 1ST COLOUR PHASE (RHS, 1995)		
	yellow 9B	absent

PETAL: MAIN COLOUR DURING 2ND COLOUR PHASE (RHS, 1995)

greyed-orange	orange
177D	23A

PETAL: SECONDARY COLOUR DURING 2ND COLOUR PHASE (RHS, 1995)

yellow	absent
10B	

PETAL: MAIN COLOUR DURING 3RD COLOUR PHASE (RHS, 1995)

red-purple	orange
60C	26A

PETAL: SECONDARY COLOUR DURING 3RD COLOUR PHASE (RHS, 1995)

yellow	absent
10C	

Grevillea hybrid
Grevillea

'Crimson Yul-Lo'

Application No: 1999/270 Accepted: 31 Jan 2000.
Applicant: **Ornatec Pty Ltd,** Birkdale, QLD and **Redlands Nursery Pty Ltd,** Redland Bay, QLD.

Characteristics (Table 14, Figure 25) Plant: habit upright shrub 3-4m x 2-3m, fast growing tropical Grevillea, greyed stems, wide leaves, stunning red bottlebrush terminal inflorescence suitable for cut flowers, flowers throughout the year. Stem: main stem branches fairly irregularly, side branches arise at about 30 degrees to main stem and tend to grow upwards, tips of branches almost upright to vertical, internodes very variable, young stem greyed orange (RHS 177B-D), mature stems turning greyish brown. Leaf: petiole short (ca. 4-7cm) but variable, colour greyish green (same as leaf colour), leaves pinnately divided into 5 to 9 linear lanceolate sub-opposite lobes (ca. 11cm x 1 – 1.5cm), upper leaf surface predominantly green (RHS 137C), lower surface greyed green (RHS 192D). Inflorescence: terminal, dense, cylindrical (ca. 13 – 17cm x 5 – 6cm); perianth glabrous (ca. 10mm x 5mm), outer colour red purple (RHS 61D), inner colour red purple (RHS 61B); style glabrous with weak bend, colour (fully open) red purple (RHS 61B); stigma out to upwards in relation to main axis, colour yellow (RHS 9A). (Note: all RHS colour chart number refers to 1995 edition.)

Origin and Breeding Controlled pollination: seed parent *Grevillea* 'Misty Pink' x pollen parent *Grevillea Banksii* 'Red'. The seed parent is characterised by pink flower colour. The hybridisation was done in early 1984; hybrid seed was collected and sown. A unique crimson (deep red) bloom was seen in the resulting offsprings. To date, it has gone through seven generations, and has been found to be stable and uniform. Selection criteria: flower colour, terminal flowering, flowers almost throughout the year and easy to propagate. Propagation: vegetatively propagated through cuttings. Breeder: Mr. Owen Brown, Golden Beach, QLD.

Choice of Comparators 'Coastal Dawn', 'Pink Surprise' and 'Sylvia' were chosen as similar varieties of common knowledge in flower colour. In addition, the seed parent 'Misty Pink' and pollen parent *Grevillea Banksii* 'Red' were also included in the trial. No other similar varieties of common knowledge have been identified.

Comparative Trials Location: Birkdale Nursery (pot grown), Ormiston and Loganhome (Field grown) QLD, Jan 1999 to Dec 2000. Conditions: trial conducted in full sun, plants propagated from cuttings (12/01/1999) and potted with soilless media (peat and bark based), plants also grown in field for evaluation and comparison, nutrition maintained with controlled release fertilisers, pest and disease management applied as required. Trial design: 30 pots of each variety arranged in a completely randomised design, at least 10 plants of candidate varieties were also planted out in field. Measurements: from field and pots at random, detailed measurements were only taken of flower colour.

Prior Applications and Sales Nil.

Description : **Deo Singh**, **Ornatec Pty Ltd,** QLD.

'Coastal Dawn'

Application No: 1999/269 Accepted: 19 Oct 1999.
Applicant: **Ornatec Pty Ltd,** Birkdale, QLD.

Characteristics (Table 14, Figure 25) Plant: habit upright shrub 3-4m x 2-3m, fast growing tropical Grevillea, stunning red-purple bottlebrush terminal inflorescence suitable for cut flowers, flowers mainly winter and spring. Stem: main stem branches fairly irregularly, side branches arise at about 75 degrees to main stem and tend to grow upwards, tips of branches almost upright to vertical, internodes very variable, young stem greyed orange (RHS 177B-D), mature stems turning greyish brown. Leaf: petiole short (ca. 4-5cm) but variable, colour greyish green (same as leaf colour), leaves pinnately divided into 9 to 13 linear lanceolate sub-opposite lobes (ca. 12cm x 0.5cm), upper leaf surface predominantly green (RHS 137C), lower surface greyed green (RHS 192D). Inflorescence: terminal, sparse, cylindrical (ca. 12-15cm x 6-8cm); perianth glabrous (ca. 13mm x 5mm), outer colour red purple (RHS 63C), inner colour red purple (RHS 63A); style glabrous with weak bend, colour (fully open) red purple (RHS 65B); stigma out in relation to main axis, colour yellow (RHS 13B). (Note: all RHS colour chart number refers to 1995 edition.)

Origin and Breeding Controlled pollination: seed parent *Grevillea* 'Misty Pink' x pollen parent *Grevillea Banksii* 'Red'. The seed parent is characterised by pink flower colour. The hybridisation was done in early 1990; hybrid seed was collected and sown. A unique red-purple bloom appeared in July 1993, from the resulting offsprings. To date, it has gone through seven generations, and has been found to be stable and uniform. Selection criteria: flower colour, terminal flowering, flowers mainly in winter and spring and easy to propagate. Propagation: vegetatively propagated through cuttings. Breeder: Mr. Owen Brown, Golden Beach, QLD.

Choice of Comparators 'Crimson Yul-Lo', 'Pink Surprise' and 'Sylvia' were chosen as similar varieties of common knowledge in flower colour. In addition, the seed parent 'Misty Pink' and pollen parent *Grevillea Banksii* 'Red' were also included in the trial. No other similar varieties of common knowledge have been identified.

Comparative Trials Location: Birkdale Nursery (pot grown), Ormiston and Loganhome (Field grown) QLD, Jan 1999 to Dec 2000. Conditions: trial conducted in full sun, plants propagated from cuttings (12/01/1999) and potted with soilless media (peat and bark based), plants also grown in field for evaluation and comparison, nutrition maintained with controlled release fertilisers, pest and disease management applied as required. Trial design: 30 pots of each variety arranged in a completely randomised design, at least 10 plants of candidate varieties were also planted out in field. Measurements: from field and pots at random, detailed measurements were only taken of flower colour.

Prior Applications and Sales Nil.

Description : **Deo Singh**, **Ornatec Pty Ltd,** QLD.

Table 14 *Grevillea* varieties

	'Coastal' Dawn'	**'Crimson Yul-Lo'**	***'Misty Pink'**	***'Pink Surprise'**	***G. banksii* 'Red'**	***'Sylvia'**
INFLORESCENCE: WIDTH	medium	narrow	medium	medium	broad	medium to broad
INFLORESCENCE: DENSITY	sparse	dense	medium	sparse	dense	sparse
STIGMA: ATTITUDE IN RELATION TO MAIN AXIS OF INFLORESCENCE	out	upwards	n/a	down	down	down
FLOWER: SIZE	medium	small	medium	large	large	medium to large
PERIANTH: COLOUR (RHS, 1995)	63A-C	61B-D	55B-D	55B-D	61B-D	63A-D
STYLE: COLOUR WHEN FLOWER FULLY OPEN (RHS, 1995)	65B	61B	150D	150D	61B	63A
STYLE: BEND	weak	weak	weak	strong	medium	medium

'Coastal Sunset'

Application No: 1999/268 Accepted: 19 Oct 1999.
Applicant: **Ornatec Pty Ltd,** Birkdale, QLD.

Characteristics (Table 15, Figure 24) Plant: habit upright shrub 3-4m x 2-3m, fast growing tropical Grevillea, stunning orange-red bottlebrush terminal inflorescence suitable for cut flowers, flowers mainly winter and spring. Stem: main stem branches fairly irregularly, side branches arise at about 75 degrees to main stem and tend to grow upwards, tips of branches almost upright to vertical, internodes variable, young stem light greyish green (RHS 192D), mature stems turning light greyish brown. Leaf: petiole short (ca. 4cm) but variable, colour greyish green (same as leaf colour), leaves pinnately divided into 9 to 13 linear lanceolate sub-opposite lobes (ca. 14cm x 0.5cm), upper leaf surface predominantly green (RHS 137C), lower surface greyed green (RHS 192D). Inflorescence: terminal, sparse, cylindrical (ca. 14-16cm x 6-7cm); perianth glabrous (ca. 12mm x 5mm), outer colour greyed orange (RHS 168D), inner colour red (RHS 39A); style glabrous with very weak bend, colour (fully open) greyed orange (RHS 170C); stigma yellow (RHS 13A). (Note: all RHS colour chart number refers to 1995 edition.)

Origin and Breeding Controlled pollination: seed parent *Grevillea* 'Golden Yul Lo'(Ф) x pollen parent *Grevillea Banksii* 'Red' The seed parent is characterised by yellow flower colour. The hybridisation was done in early 1994, hybrid seed was collected and sown. A unique orange (tangerine) bloom appeared in August 1996, from the resulting offsprings. To date, it has gone through six generations, and has been found to be stable and uniform. Selection criteria: flower colour, terminal flowering, flowers mainly in winter and spring and easy to propagate. Propagation: vegetatively propagated through cuttings. Breeder: Mr. Owen Brown, Golden Beach, QLD.

Choice of Comparators 'Sunset Bronze', 'Coastal Twilight' and 'Dot Brown'(Ф) were chosen as similar varieties of common knowledge in flower colour. *Grevillea* 'Winter Sparkles' was not included in the trial because the flowers are of 'Sandra Gordon' type ie. yellow. Similarly *Grevillea* 'Jester' was not included in the trial due to its different growth habit – spreading shrub. The seed parent *Grevillea* 'Golden Yul Lo'(Ф) was not included because of its difference in flower colour as stated above. The pollen parent *Grevillea Banksii* 'Red' was not included because of its red flower colour. No other similar varieties of common knowledge have been identified.

Comparative Trials Location: Birkdale Nursery (pot grown), Ormiston and Loganhome (Field grown) QLD, Jan 1999 to Dec 2000. Conditions: trial conducted in full sun, plants propagated from cuttings (12/01/1999) and potted with soilless media (peat and bark based), plants also grown in field for evaluation and comparison, nutrition maintained with controlled release fertilisers, pest and disease management applied as required. Trial design: 30 pots of each variety arranged in a completely randomised design, at least 10 plants of candidate varieties were also planted out in field. Measurements: from field and pots at random, detailed measurements were only taken of flower colour.

Prior Applications and Sales Nil.

Description : **Deo Singh**, **Ornatec Pty Ltd,** QLD.

'Coastal Twilight'

Application No: 2000/007 Accepted: 31 Jan 2000.
Applicant: **Ornatec Pty Ltd,** Birkdale, QLD.

Characteristics (Table 15, Figure 24) Plant: habit upright shrub 3-4m x 2-3m, fast growing tropical Grevillea, attractive fine foliage, stunning greyed-red bottlebrush terminal inflorescence suitable for cut flowers, flowers almost through out the year. Stem: main stem branches fairly irregularly, side branches arise at about 75 degrees to main stem and tend to grow upwards, tips of branches almost upright to vertical, internodes very variable, young stem light greyish green (RHS 192D), mature stems turning light greyish brown. Leaf: attractive fine leaves, petiole short (ca. 4cm) but variable, colour greyish green (same as leaf colour), leaves pinnately divided into 14 to 18 linear lanceolate sub-opposite lobes (ca. 13-16cm x 0.3cm), upper leaf surface predominantly green (RHS 137C), lower surface greyed green (RHS 192D). Inflorescence: terminal, sparse, cylindrical (ca. 12-14cm x 7-8cm); perianth hairy (ca. 10mm x 3mm), outer colour greyed red (RHS 179C), inner colour greyed red (RHS 179A); style glabrous, with very weak bend, colour (fully open) greyed red (RHS 179B); stigma upward, colour yellow (RHS 5A). (Note: all RHS colour chart number refers to 1995 edition.)

Origin and Breeding Open pollination followed by seedling selection: seed parent *Grevillea* 'Honey Gem' was growing amongst the other varieties. It is characterised by yellow flower colour. Following open-pollination, seeds were collected and sown in early 1995. A unique greyed red bloom appeared in 1997 from the resulting offsprings. To date, it has gone through four generations, and has been found to be stable and uniform. Selection criteria: flower colour, terminal flowering, flowers almost throughout the year and easy to propagate. Propagation: vegetatively through cuttings. Breeder: Mr. Owen Brown, Golden Beach, QLD.

Choice of Comparators 'Sunset Bronze', 'Coastal Sunset' and 'Dot Brown'(ϕ) were chosen as similar varieties of common knowledge in flower colour. *Grevillea* 'Winter Sparkles' was not included in the trial because the flowers are of 'Sandra Gordon' type ie. yellow. Similarly *Grevillea* 'Jester' was not included in the trial due to its different growth habit – spreading shrub. The seed parent *Grevillea* 'Honey Gem' was not included because of its difference in flower colour as stated above. No other similar varieties of common knowledge have been identified.

Comparative Trials Location: Birkdale Nursery (pot grown), Ormiston and Loganhome (Field grown) QLD, Jan 1999 to Dec 2000. Conditions: trial conducted in full sun, plants propagated from cuttings (12/01/1999) and potted with soilless media (peat and bark based), plants also grown in field for evaluation and comparison, nutrition maintained with controlled release fertilisers, pest and disease management applied as required. Trial design: 30 pots of each variety arranged in a completely randomised design, at least 10 plants of candidate varieties were also planted out in field. Measurements: from field and pots at random, detailed measurements were only taken of flower colour.

Prior Applications and Sales Nil.

Description : **Deo Singh**, **Ornatec Pty Ltd,** QLD.

Table 15 *Grevillea* varieties

	'Coastal Twilight'	'Coastal Sunset'	*'Sunset Bronze'	*'Dot Brown'ϕ
PLANT: HABIT	upright	upright	upright	spreading
LEAF: COLOUR UPPER SIDE – hair removed (RHS, 1995)	139A	137C	139A	137A
LEAF: COLOUR OF LOWER SIDE – including hair (RHS, 1995)	192D	192D	192B	190D
LEAF: HAIRINESS OF UPPER SIDE	medium	medium	absent or very weak	weak
FLOWER: SIZE	medium	medium	medium	large
RECEPTACLE: COLOUR (RHS, 1995)	195B	145B	194B	145C-D
PERIANTH: COLOUR (RHS, 1995)	179A-C	168D and 39A	168B and 46A	160B and 166B
STYLE: COLOUR WHEN FLOWER FULLY OPEN (RHS, 1995)	179B	170C	168A	167D
STIGMA: COLOUR (RHS, 1995)	5A	13A	7A	6A

Gypsophila paniculata
Baby's Breath

'Danfesroy'

Application No: 2000/234 Accepted: 22 Aug 2000.
Applicant: **Danziger – 'Dan' Flower Farm,** Moshav Mishmar Hashivar, Israel.
Agent: **Lynch Flowers**, Glenorie, NSW.

Characteristics (Table 16, Figure 26) Plant: herbaceous rosette forming perennial, short (386mm), compact. Leaf: lanceolate with acute tip, opposite 36.60mm long, 7.85mm width, colour RHS 147A. Inflorescence: compact cymose panicle of numerous flowers. Flowering time: very late. Flower: semi-double, medium (8.50mm diameter), floriferous; petals average 24.6 per flower, generally obtuse, colour whiter than 155D, stamen –5 anthers, pollen white; pistil- stigma light green, style light green, pedicel short 6.59mm in length.

Origin and Breeding Controlled pollination: hybridisation between various genotypes of *Gypsophila paniculata* in applicant's long term breeding program. The maternal parent is a breeding line characterised by a dwarfish, compact growth habit, condensed stem structure, strong apical dominance, large, cream-white, semi-double flowers and early flowering. Selection criteria: selected on the basis of compact growth, unique stem and flower formation and size of flower. Propagation: vegetative by cuttings. Breeder: Gabriel Danziger, Mishmar Hashiva, Israel.

Choice of Comparators Comparator 'Festival White'ϕ was chosen for its similar compact growth form.

Comparative Trial Location: Glenorie, NSW. Conditions: plants were grown in a naturally ventilated plastic covered green house. Growing medium was a native sandy loam soil amended with fertilisers used for the commercial cultivation of *Gypsophila* and formed into raised beds. Rooted cuttings of normal commercial size were planted into the beds on Apr 30, 2000. Irrigation was by drip when required. Trial design: Randomised complete block design with 3 blocks and 8 plants per block. Measurements: were taken at flowering, Sep to Oct, 2000. Height was measured for 5 plants, leaf measurements were made on the leaves from the 5th node below the inflorescence, flower diameter on 24 plants, a pedicel length on 10 plants, petal number on 15 plants.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
EU	2000	Applied	'Danfesroy'

First sold in USA in 2000.

Description: **Greg Lamont, Lynch Flowers**, Glenorie NSW.

Table 16 *Gypsophila* varieties

	'Danfesroy'	*'White Festival'ϕ
GROWTH HABIT	compact, short	semi-erect, tall
LEAF LENGTH (mm)		
mean	36.60	62.95
std deviation	3.77	9.09
LSD/sig	8.96	P≤0.01
LEAF WIDTH (mm)		
mean	7.85	6.12
std deviation	0.46	0.09
LSD/sig	1.10	P≤0.01
LEAF LENGTH/WIDTH RATIO		
mean	4.68	10.29
std deviation	0.49	0.82
LSD/sig	0.87	P≤0.01
PETAL NUMBER		
mean	24.6	19.6
std deviation	3.26	2.74
LSD/sig	3.04	P≤0.01
FLOWER COLOUR (RHS, 1995)	whiter than 155D	white (155D)
FLOWERING TIME	very late	very early

Note: leaf data taken from 5th leaf below the inflorescence.

'Dangypflash'

Application No: 2000/235 Accepted: 22 Aug 2000.
Applicant: **Danziger – 'Dan' Flower Farm,** Moshav Mishmar Hashivar, Israel.
Agent: **Lynch Flowers**, Glenorie, NSW.

Characteristics (Table 17, Figure 27) Plant: herbaceous rosette forming perennial, tall (1420mm), erect. Leaf: lanceolate to oblanceolate with acute tip, opposite, 103.28mm long, 14.61mm width, colour RHS 147A. Inflorescence: cymose panicle of numerous flowers. Flowering time: late. Flower: double, medium (9.20mm diameter), very floriferous; petals average 33.66 per flower, generally obtuse, colour whiter than 155D, stamen 5 anthers, pollen white; pistil: stigma light green, style light green, pedicel short 7.22mm in length.

Origin and Breeding Controlled pollination: hybridisation between various genotypes of *Gypsophila paniculata* in applicant's long term breeding program. The maternal parent is characterised by an open and spreading plant structure, very strong apical dominance, creamy white flowers and a moderate shelf life. Selection criteria: selected on the basis of erect upright growth, ease of harvesting, and narrow conical inflorescence shape, fully double medium-sized flower. Propagation: vegetative by cuttings. Breeder: Gabriel Danziger, Mishmar Hashiva, Israel.

Choice of Comparators Comparator 'Perfecta R11' was chosen for its similarity in flower size and double flower nature.

Comparative Trial Location: Glenorie, NSW. Conditions: plants were grown in a naturally ventilated plastic covered green house. Growing medium was a native sandy loam soil amended with fertilisers used for the commercial cultivation of Gypsophila and formed into raised beds. Rooted cuttings of normal commercial size were planted into the beds on Apr 30, 2000. Irrigation was by drip irrigation when required. Trial design: Randomised complete block design with 3 blocks and 8 plants per block. Measurements were taken at flowering: Sep to Oct, 2000. Height was measured for 5 plants, leaf measurements were made on the leaves from the 5th node below the inflorescence, flower diameter on 24 plants, a pedicel length on 10 plants, petal number on 15 plants.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
Israel	1998	Granted	'Dangypflash'
EU	1999	Granted	'Dangypflash'

First sold in Israel in 1999.

Description: **Greg Lamont, Lynch Flowers**, Glenorie NSW.

Table 17 *Gypsophila* varieties

	'Dangypflash'	*'Perfecta R11'
GROWTH HABIT		
	erect	semi-erect
LEAF WIDTH (mm)		
mean	14.61	18.25
std deviation	1.53	2.73
LSD/sig	2.85	P≤0.01
LEAF LENGTH/WIDTH RATIO		
mean	7.09	5.45
std deviation	0.36	0.39
LSD/sig	0.49	P≤0.01
LEAF SHAPE		
	lanceolate to oblanceolate	lanceolate
PEDICEL LENGTH (mm)		
mean	7.22	11.90
std deviation	0.86	0.91
LSD/sig	1.02	P≤0.01
FLOWER DIAMETER (mm)		
mean	9.20	10.33
std deviation	0.29	0.32
LSD/sig	0.24	P≤0.01

Note: leaf data taken from 5th leaf below the inflorescence.

'Dangypmini'

Application No: 1998/019 Accepted: 3 Feb 1998.
Applicant : **Danziger – 'Dan' Flower Farm,** Moshav Mishmar Hashivar, Israel.
Agent: **Lynch Flowers**, Glenorie, NSW.

Characteristics (Table 18, Figure 28) Plant: herbaceous rosette forming perennial, tall (1310mm), erect. Leaf: lanceolate with acute tip, opposite maximum 44.59mm long, 8.60mm width, colour RHS 147A. Inflorescence: cymose panicle of numerous flowers. Flowering time: very late. Flower: semi-double, small (5.15mm diameter), very floriferous; petals average 19.06 per flower, generally obtuse, colour whiter than 155D, stamen – 5 anthers, pollen white; pistil- stigma light green, style light green, pedicel short 3.86mm in length.

Origin and Breeding Controlled pollination: hybridisation between various genotypes of *Gypsophila paniculata* in applicant's long term breeding program. The maternal parent is characterised by an open, loose plant structure, stems with strong apical dominance, few lightweight stems, resistance to pests and diseases and plenty of small white semi-double flowers. Pollen parent was characterised by compact growth and small white semi-double flowers. Selection criteria: selected on the basis of its unique stem and flower formation and size of flower. Propagation: vegetative by cuttings. Breeder: Gabriel Danziger, Mishmar Hashiva, Israel.

Choice of Comparator 'Magic Golan'(ℓ) was chosen for its similar shiny white flower colour.

Comparative Trial Location: Glenorie, NSW. Conditions: plants were grown in a naturally ventilated plastic covered green house. Growing medium was a native sandy loam soil amended with fertilisers used for the commercial cultivation of Gypsophila and formed into raised beds. Rooted cuttings of normal commercial size were planted into the beds on April 30, 2000. Irrigation was by drip when required. Trial design: Randomised complete block design with 3 blocks and 8 plants per block. Measurements were taken at flowering: Sep to Oct, 2000. Height was measured for 5 plants, leaf measurements were made on the leaves from the 5th node below the inflorescence, flower diameter on 24 plants, a pedicel length on 10 plants, petal number on 15 plants.

Prior Applications and Sales

Country	Year	Status	Name Applied
Israel	1996	Granted	'Dangypmini'
Europe	1997	Granted	'Dangypmini'
Japan	1997	Applied	'Dangypmini'
USA	1997	Granted	'Dangypmini'
New Zealand	1998	Granted	'Dangypmini'
Colombia	1998	Applied	'Dangypmini'
South Africa	1998	Granted	'Dangypmini'

First sold in Israel in 1997.

Description: **Greg Lamont, Lynch Flowers**, Glenorie NSW.

'Dangysha' syn **Yukinko**

Application No: 1998/022 Accepted: 9 Jun 1998.
Applicant: **Danziger – 'Dan' Flower Farm,** Moshav Mishmar Hashivar, Israel.
Agent: **Lynch Flowers**, Glenorie, NSW.

Characteristics (Table 18, Figure 29) Plant: herbaceous rosette forming perennial, tall (1446mm), erect. Leaf: lanceolate with acute tip, opposite, 75.99mm long, 8.85mm width, colour RHS 147A. Inflorescence: open cymose panicle of numerous flowers. Flowering time: medium. Flower: semi-double, medium (7.77mm diameter), very floriferous; petals average 22.46 per flower, generally obtuse, colour whiter than 155D, stamen –5 anthers, pollen white; pistil- stigma light green, style light green, pedicel short 8.66mm in length.

Origin and Breeding Controlled pollination: hybridisation between various genotypes of *Gypsophila paniculata* in applicant's long term breeding program. The maternal parent is characterised by upright growth habit, relatively weak apical dominance, conical-shaped inflorescence, white, medium sized semi-double flowers, 8-10 flowering stems per plant, and pink colouration of flowers during cold temperature. Selection criteria: selected on the basis of erect

upright growth, ease of harvesting, and narrow conical inflorescence shape. Propagation: vegetative by cuttings. Breeder: Gabriel Danziger, Mishmar Hashiva, Israel.

Choice of Comparator 'Magic Golan'ϕ was chosen for its similar flower colour and flower size.

Comparative Trial: Location: Glenorie, NSW. Conditions: plants were grown in a naturally ventilated plastic covered green house. Growing medium was a native sandy loam soil amended with fertilisers used for the commercial cultivation of Gypsophila and formed into raised beds. Rooted cuttings of normal commercial size were planted into the beds on Apr 30, 2000. Irrigation was by drip when required. Trial design: Randomised complete block design with 3 blocks and 8 plants per block. Measurements were taken at flowering: Sep to Oct, 2000. Height was measured for 5 plants, leaf measurements were made on the leaves from the 5th node below the inflorescence, flower diameter on 24 plants, a pedicel length on 10 plants, petal number on 15 plants.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
Japan	1996	Applied	'Dangysha'
EU	1997	Applied	'Dangysha'
Israel	1998	Granted	'Dangysha'

First sold in USA in 1997.

Description: **Greg Lamont, Lynch Flowers**, Glenorie NSW.

Table 18 *Gypsophila* varieties

	'Dangysha' syn **Yukinko**	'Dangypmini	*'Magic Golan'ϕ syn **Golan**ϕ
GROWTH HABIT	erect	erect	semi-erect
LEAF LENGTH (mm) LSD (P≤0.01) = 8.95			
mean	75.99[b]	44.59[a]	112.54[c]
std deviation	8.61	5.46	7.25
LEAF WIDTH (mm) LSD (P≤0.01) = 1.71			
mean	8.85[a]	8.60[a]	15.96[b]
std deviation	1.71	0.91	1.40
LEAF LENGTH/WIDTH RATIO LSD (P≤0.01) = 1.25			
mean	8.71[c]	5.26[a]	7.07[b]
std deviation	0.91	1.45	0.38
PEDICEL LENGTH (mm) LSD (P≤0.01) = 1.21			
mean	8.66[b]	3.86[a]	8.55[b]
std deviation	1.53	0.46	0.57
FLOWER DIAMETER (mm) LSD (P≤0.01) = 0.22			
mean	7.77[b]	5.15[a]	9.13[c]
std deviation	0.36	0.32	0.14
PETAL NUMBER LSD (P≤0.01) = 2.54			
mean	22.46[b]	19.06[a]	23.40[b]
std deviation	3.20	1.98	2.55
FLOWERING TIME	medium	very late	early

Note: mean values followed by the same letters are not significantly different at P≤0.01 according to DMRT.

Leaf data taken from 5th leaf below the inflorescence.

Hebe hybrid
Hebe

'Beverley Hills'

Application No: 2000/098 Accepted: 16 Mar 2000.
Applicant: **Annton Nursery Ltd**, Cambridge, New Zealand.
Agent: **Greenhills Propagation Nursery**, Tynong, VIC.

Characteristics (Table 19, Figure 23) Plant: habit small shrub. Stem: colour greyed-purple 183B. Leaf: length medium (mean 23.53mm), width medium (mean 8.13mm), shape oblanceolate, apex acuminate, base cuneate, cross section slightly concave. Flower: colour purple-violet 82B. Pedicel: colour greyed-purple 183B. (Note: All RHS colour chart numbers refer to 1995 edition.)

Origin and Breeding Open pollination followed by seedling selection: arose as a selection of seedlings believed to be from open pollination between *Hebe diosmifolia* and *Hebe* 'Inspiration' at the breeders property in Cambridge, New Zealand in 1994. Cuttings were taken in 1994, and grown on for observation for the conformation of uniformity and stability of the selection. Selection criteria: leaf size and flower colour. Propagation: vegetative through at least 3 generations. Breeder: Ann Burton, Cambridge, New Zealand.

Choice of Comparators *Hebe diosmifolia* and *Hebe* 'Inspiration' were chosen because they are believed to be the parental material from which the candidate variety was selected, and are also the closest known varieties of common knowledge. *Hebe buxifolia* was considered but excluded because of its white flowers, many of the large leafed Hebe were also considered but rejected because of their obviously much larger leaves.

Comparative Trial Location: Tynong, VIC, autumn-spring 2000. Conditions: trial conducted in open, plants propagated from cutting, rooted cuttings planted into 250mm pots filed with soilless potting mix (pine bark base), nutrition maintained with slow release fertilisers, pest and disease treatments applied as required. Trial design: ten pots of each variety arranged in a completely randomised design. Measurements: from thirty plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
New Zealand	1997	Granted	'Beverley Hills'

First sold in New Zealand in Dec 1996.

Description: **Mark Lunghusen,** Croydon, VIC.

Table 19 *Hebe* varieties

	'Beverley Hills'	**Hebe diosmifolia*	*'Inspiration'
LEAF LENGTH (mm)			
mean	23.53	19.65	37.08
std deviation	1.47	1.02	1.47
LSD/sig	1.62	P≤0.01	P≤0.01
LEAF WIDTH (mm)			
mean	8.13	5.91	12.51
std deviation	0.49	0.37	0.58
LSD/sig	0.57	P≤0.01	P≤0.01
LEAF TIP			
	acuminate	acute	acuminate
LEAF CROSS SECTION			
	slightly concave	concave	flat
FLOWER COLOUR (RHS, 1995)			
	purple-violet 82B	violet 85B	purple violet 82A
PEDICEL COLOUR (RHS, 1995)			
	greyed-purple 183B	greyed-brown 199A	brown 200D
STEM COLOUR (RHS, 1995)			
	greyed-purple 183B	yellow-green 144A	greyed-purple 183A

'Heebie Jeebies'

Application No: 1999/090 Accepted: 17 May 1999.
Applicant: **Stephen Membrey and Gayle Membrey,** Frankston, VIC.
Agent: **Plants Management Australia Pty Ltd,** Warragul, VIC.

Characteristics (Table 20, Figure 22) Plant: evergreen spreading shrub. Stem: glaucous, colour greyed orange (RHS 177B) when young, density of foliage dense. Leaf: sessile, glabrous, glossy, shape oblanceolate, apex mucronulate, base attenuate, margin slightly crenate at apical end, colour yellow green (RHS 147A) on upper side and (RHS 146B) on lower side. Inflorescence: raceme, flowers in clusters developing from basal end first. Flower: number of sepals four, colour green, number of petals four colour violet blue, white at base of raceme, pedicel length short. Petal: colour at dehiscence violet blue (RHS 92A-B). Stamen: number two, filament colour violet blue, anther colour orange. Ovary: inferior, style colour violet blue, stigma colour cream. (Note: all RHS colour chart numbers refer to 1986 edition.)

Origin and Breeding Open-pollinated seedling: likely parent *Hebe* 'Inspiration' which was growing in the vicinity. Selection criteria: 'Heebie Jeebies' was chosen on the basis of flower colour, prolific flowering, and glossy foliage. Propagation: a number of mature stock plants were generated from the original seedling by cuttings through several generations to confirm uniformity and stability. 'Heebie Jeebies' will be commercially propagated by cuttings. Breeder: Stephen Membrey, Frankston, VIC.

Choice of Comparator 'Purple Haze' and 'Inspiration' were considered as similar varieties of common knowledge. 'Purple Haze' was chosen because of similarities in flower colour. 'Inspiration' was chosen because it is the likely parent plant.

Comparative Trial Location: Dromana, VIC, between Dec 1999 and Nov 2000. Conditions: outdoors under ambient southern Victorian (Latitude 38^{O}S) conditions; plants begun as cuttings December 1999, transplanted to 200 mm pots in Feb 2000; media soilless, controlled release fertiliser. Trial design: randomised block. Measurements: ten to twenty specimens selected from ten plants.

Prior Applications and Sales
No prior applications.

'Heebie Jeebies' was first sold in Australia in Nov 1999.

Description: **David Nichols,** Rye, VIC.

Table 20 *Hebe* Varieties

	'Heebie Jeebies'	*'Purple Haze	*'Inspiration'
PLANT WIDTH (cm)			
mean	41.1	44.9	46.5
std deviation	3.3	4.5	5.1
LSD/sig	5.0	ns	P≤0.01
PLANT WIDTH: HEIGHT RATIO			
mean	1.4	1.6	1.9
std deviation	0.2	0.2	0.6
LSD/sig	0.4	ns	P≤0.01
STEM CHARACTERISTICS			
density of foliage	dense	medium to dense	dense
colour of young stem (RHS, 1986)	177B	177B	177A
LEAF LENGTH (mm) two largest leaves.			
mean	36.4	41.6	48.0
std deviation	4.0	2.2	2.1
LSD/sig	2.1	P≤0.01	P≤0.01
LEAF WIDTH (mm) two largest leaves			
mean	11.2	14.0	15.3
std deviation	0.7	0.9	1.3
LSD/sig	0.7	P≤0.01	P≤0.01
LEAF CHARACTERISTICS			
colour upper side (RHS, 1986)	147A	146A	147A
colour under side (RHS, 1986)	146B	144A	146A
shape of blade	oblanceolate	elliptic	oblanceolate
margin	slightly crenate	entire	slightly crenate

Table 20 continued

FLOWER WIDTH (cm)			
mean	8.3	11.7	8.5
std deviation	0.7	0.5	0.7
LSD/sig	0.8	P≤0.01	ns
FLOWER CHARACTERISTICS			
petal colour (RHS, 1986)	violet blue 92A-B	violet blue 90C-D	violet 84A, 86D

Lupinus angustifolius
Narrow Leafed Lupin

'Jindalee'

Application No: 2000/297 Accepted: 6 Nov 2000.
Applicant: **Department of Agriculture for and on behalf of the State of New South Wales,** Orange, NSW**, Grains Research and Development Corporation,** Barton ACT and **Minister for Primary Industries & Resources,** Rosedale, SA**.**

Characteristics (Table 21, Figure 43) Plant: habit bushy, semi erect, height medium tall, maturity medium late. Stem: anthocyanin absent. Leaf: petiole short, leaflet length medium, leaflet width narrow, green. Inflorescence: spike. Flower: medium late, sessile, white to pale blue, tip of carina blue. Seed: cream, strongly ornamented, weight medium. Moderately susceptible to anthracnose compared with 'Wonga'(ϕ. Moderately resistant to Phomopsis compared with 'Wonga'(ϕ, 'Quilinock' and 'Gungurru' which are susceptible.

Origin and Breeding Open pollination followed by single plant selection: 'Jindalee' arose from a distinct plant identified in a population of 'Gungurru'. 'Jindalee' was selected from the progeny on its late flowering, resistance to Phomopsis stem infection and moderate seed size. The seed parent is characterised by shorter early growth, and shorter growth at the beginning of flowering, a longer petiole and broader leaflets. Propagation by seed. Breeder: David Luckett, Wagga Wagga, NSW with the original selection identified by Wayne Hawthorne, Naracoorte, SA. Progenies were evaluated by John Gladstones, Perth, WA and Kate Landers, Wagga Wagga, NSW.

Choice of Comparators 'Gungurru' was chosen because it is the original source material from which the variety was selected. 'Quilinock', 'Wonga'(ϕ and 'Geebung' were selected as comparators because of their similar appearance. No other similar varieties of common knowledge have been identified.

Comparative Trial Location: Wagga Wagga, NSW (Latitude 35ºS, elevation 200m), winter-spring 2000. Conditions: trial conducted in dryland plots in a randomised block with three replications and normal field management. Measurements were taken on ten randomly selected plants in each replication. One sample per plant.

Prior Applications and Sales Nil.

Description: **Dr Ross Downes, Innovative Plant Breeders,** Canberra, ACT.

Table 21 *Lupinus* varieties

	'Jindalee'	***'Quilinock'**	***'Wonga'(ϕ**	**'Geebung'**	**'Gungurru'**
PLANT HEIGHT 3 weeks after emergence (cm)					
mean	6.8	5.8	8.0	6.1	5.3
std deviation	0.65	0.73	0.59	0.71	0.65
LSD/sig	0.29	P≤0.01	P≤0.01	P≤0.01	P≤0.01
PLANT HEIGHT (first flowering – cm)					
mean	62.7	55.4	63.2	58.3	56.7
std deviation	3.70	4.55	5.27	3.73	3.90
LSD/sig	1.72	P≤0.01	ns	P≤0.01	P≤0.01
PLANT HEIGHT (green ripening – cm)					
mean	85.8	77.8	79.4	77.3	80.9
std deviation	3.77	4.14	5.08	5.01	6.16
LSD/sig	2.0	P≤0.01	P≤0.01	P≤0.01	P≤0.01
TERMINAL LEAFLET – petiole length (mm)					
mean	47.1	59.0	50.3	49.7	53.1
std deviation	3.0	6.5	5.9	5.7	6.4
LSD/sig	2.4	P≤0.01	P≤0.01	P≤0.01	P≤0.01
TERMINAL LEAFLET – lamina length (mm)					
mean	47.1	46.7	48.1	45.5	48.2
std deviation	3.1	3.3	2.7	4.3	4.1
LSD/sig	1.5	ns	ns	P≤0.01	ns
TERMINAL LEAFLET – lamina width (mm)					
mean	5.5	6.4	6.4	5.7	6.6
std deviation	0.7	0.9	0.6	0.9	0.9
LSD/sig	0.3	P≤0.01	P≤0.01	ns	P≤0.01

…Continued on Page 33

Fig 1 **Rose – flowers and plant parts of 'Fairy Queen' with comparator 'Spevu'(ᵇ) syn Lovely Fairy(ᵇ) showing differences in flower colour and anthocyanin colouration.**

Fig 2 **Rose – flowers and plant parts of 'Interkuyl' with comparator 'Interlis' showing differences in flower colour, leaf glossiness and anthocyanin colouration.**

Fig 3 **Rose – flowers and plant parts of 'Internes' with comparator 'Interlis' showing differences in flower colour, leaf glossiness and anthocyanin colouration.**

Fig 4 **Rose – flowers and plant parts of 'Lydiver' with comparator 'Interlis' showing differences in flower colour and leaf glossiness.**

Fig 5 **Rose – flowers and plant parts of 'Nirpeter' with comparator 'Ruidriko' showing differences in flower colour and anthocyanin colouration.**

Fig 6 **Rose – flowers and plant parts of 'Sunlampo' with comparator 'Tennessee' showing differences in flower colour and anthocyanin colouration.**

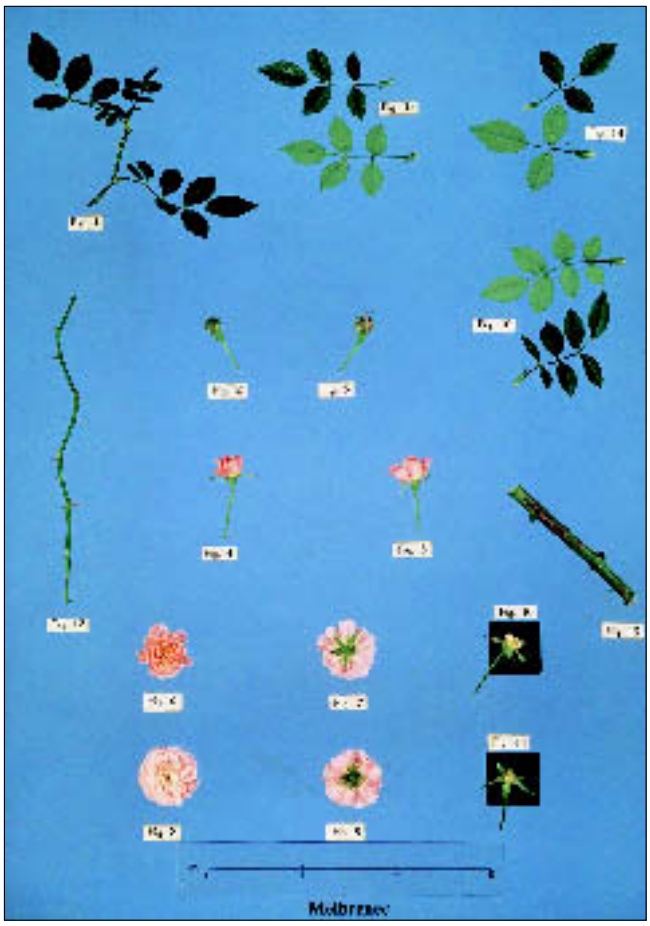

Fig 7 Rose – flowers and plant parts of 'Meibrenec'.

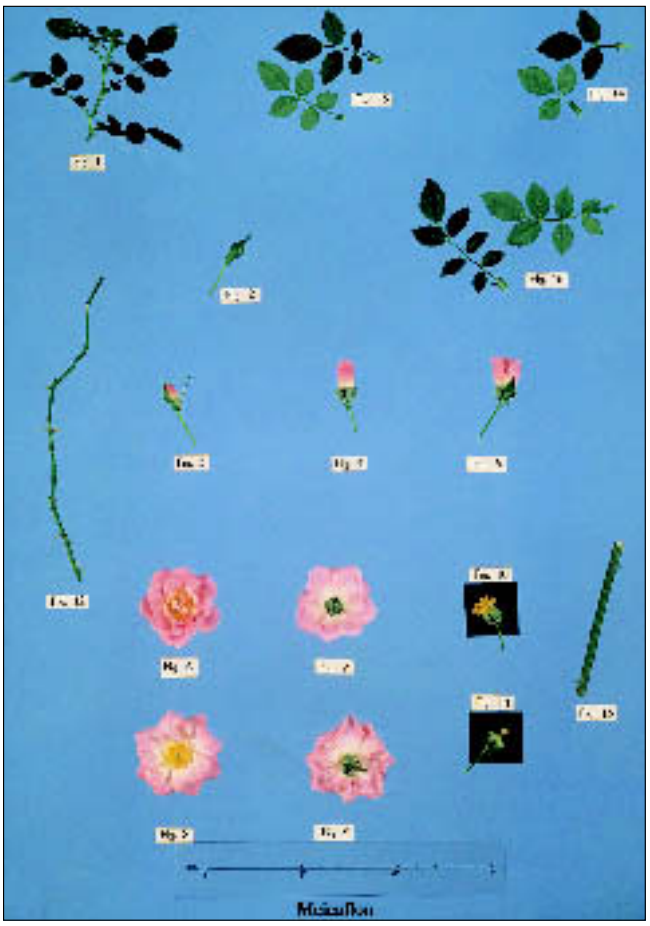

Fig 8 Rose – flowers and plant parts of 'Meicaflon'.

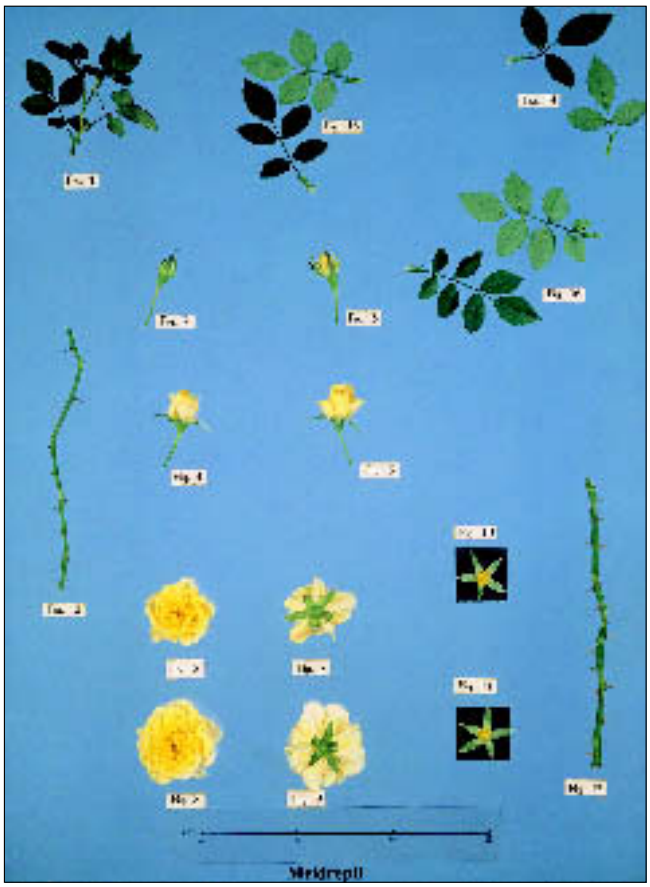

Fig 9 Rose – flowers and plant parts of 'Meidrepil'.

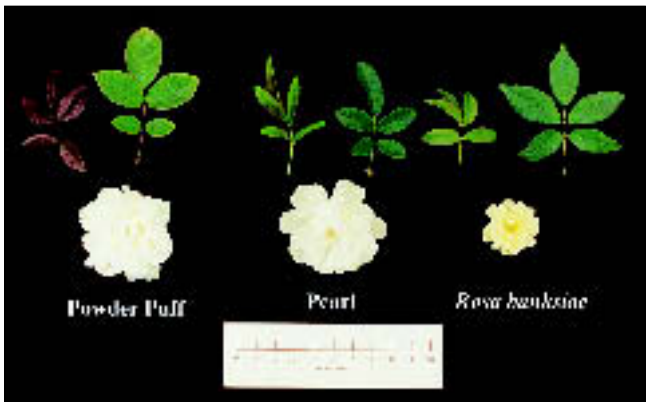

Fig 10 Banksia Rose – leaves and flower of 'Powder Puff' (left) with comparator 'Pearl' (centre) and *R. banksiae* (right).

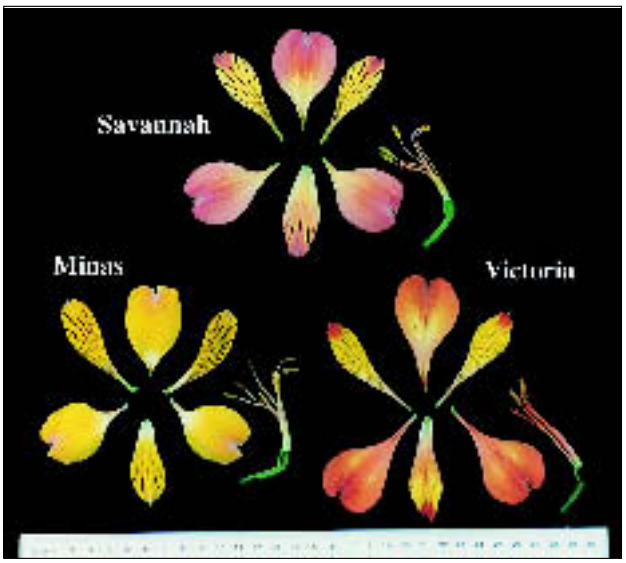

Fig 11 Alstroemeria – floral parts of 'Savannah' (top) with comparator 'Minas' and 'Victoria' showing differences in tepal characteristics and filament colour.

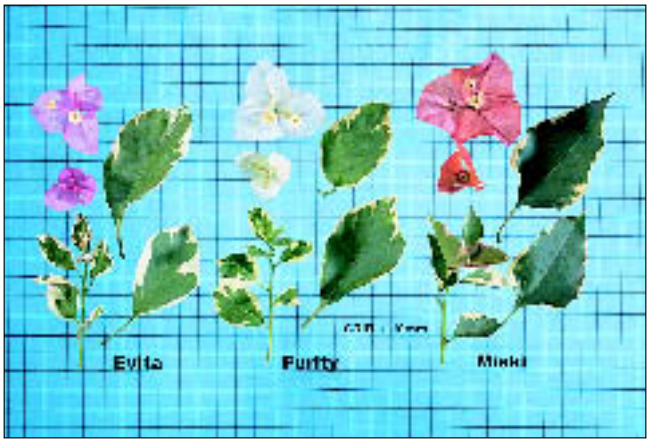

Fig 12 Bougainvillea – 'Evita' (left) with comparators 'Purity' (centre) and 'Miski' (right) showing differences of the bract colour and leaf variegation. Grid size = 10mm.

Fig 13 Everlasting Daisy – 'Colourburst Gold' (left) with comparators 'Colourburst Pink' (centre) and 'Gold n Bronze' (right) demonstrating the difference in flower colour to 'Colourburst Pink' and difference in leaves, flowers and habit of 'Gold n Bronze' All stem specimens have the same number of nodes. Grid size = 10mm.

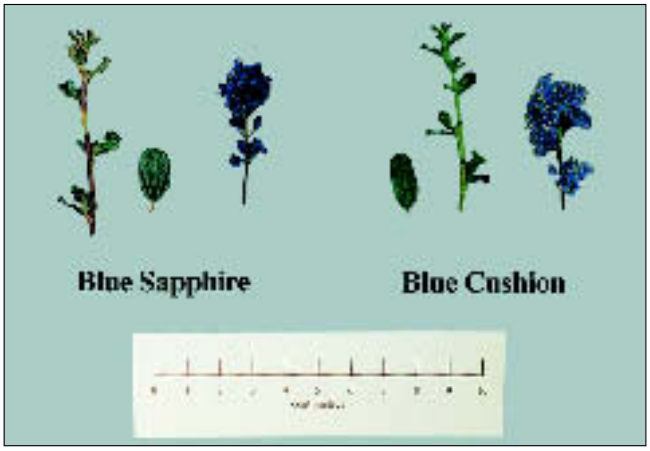

Fig 14 Ceanothus – leaves and flowers of 'Blue Sapphire' (left) with comparator 'Blue Cushion' (right).

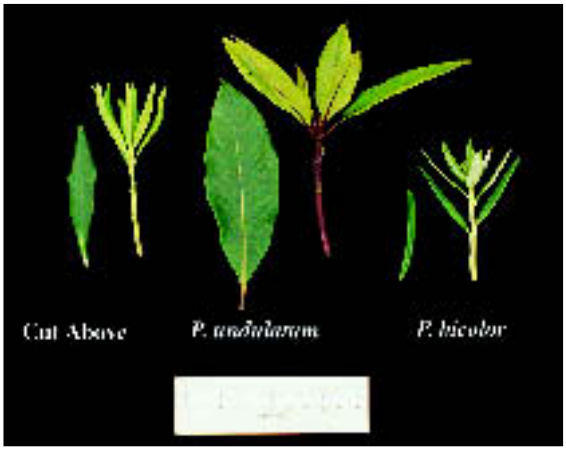

Fig 15 Pittosporum – leaves of 'Cut Above' with comparators *P. undulatum* (centre) and *P. bicolor* (right).

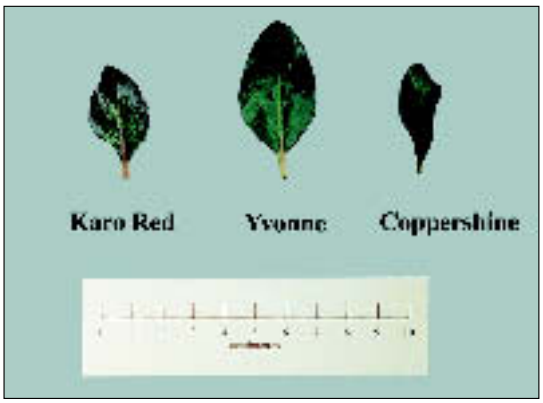

Fig 16 Coprosma – leaf of 'Karo Red' (left) with comparators 'Yvonne' (centre) and 'Coppershine' (right).

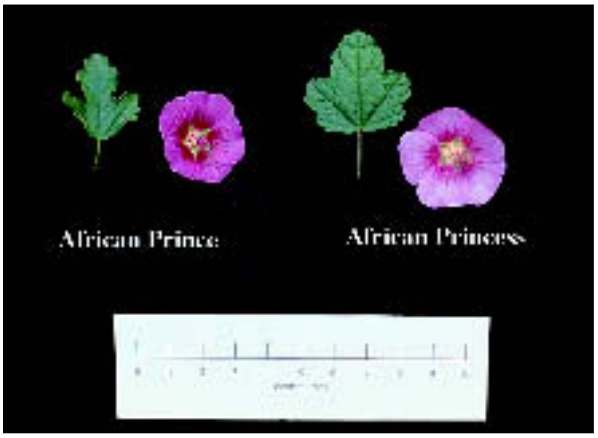

Fig 17 Anisodontea – leaf and flower of 'African Prince' (left) with comparator 'African Princess' (right).

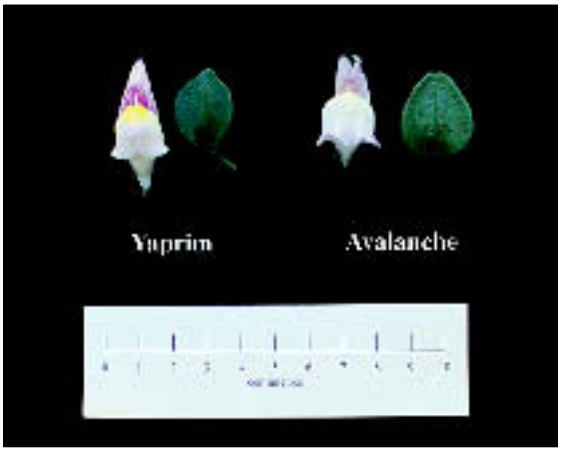

Fig 18 Snapdragon – leaf and flower of 'Yaprim' (left) with comparator 'Avalanche' (right).

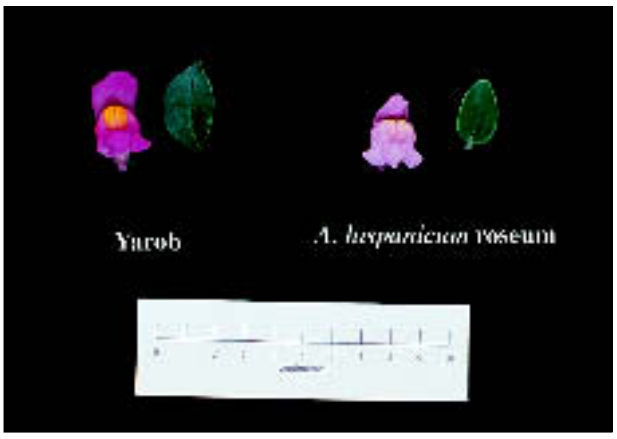

Fig 19 Snapdragon – leaf and flower of 'Yarob' (left) with comparator *A. hispanicum* roseum (right).

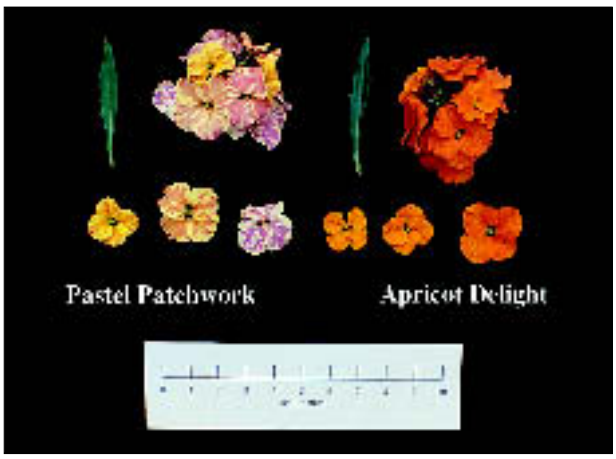

Fig 20 Wallflower – leaf and flowers of 'Pastel Patchwork' (left) with comparator 'Apricot Delight' (right).

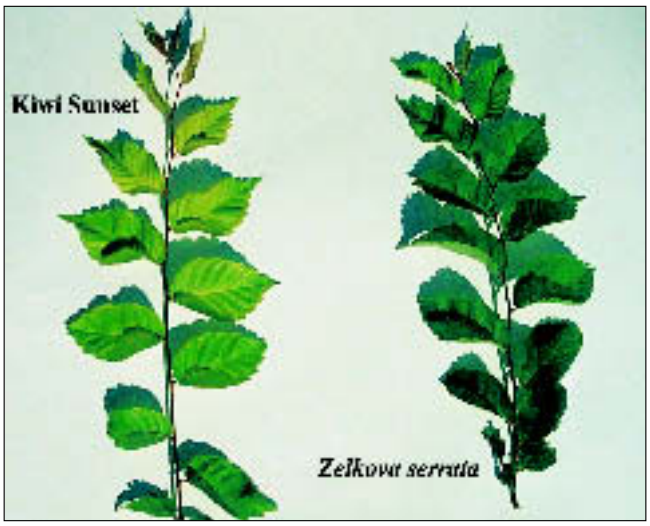

Fig 21 Japanese Elm – leaves of 'Kiwi Sunset' showing differences with parental form *Zelkova serrata.*

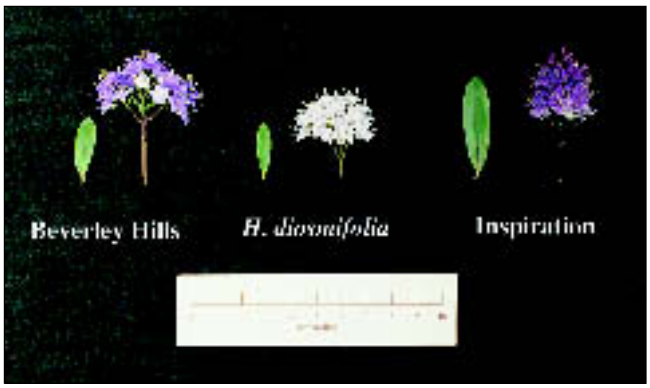

Fig 22 Hebe – leaves and flowers of 'Beverly Hills' (left) with comparators *H. diosmifolia* (centre) and 'Inspiration' (right).

Fig 23 Hebe – flowering shoot of 'Heebie Jeebies' (left) with comparators 'Purple Haze' (centre) and 'Inspiration' (right).

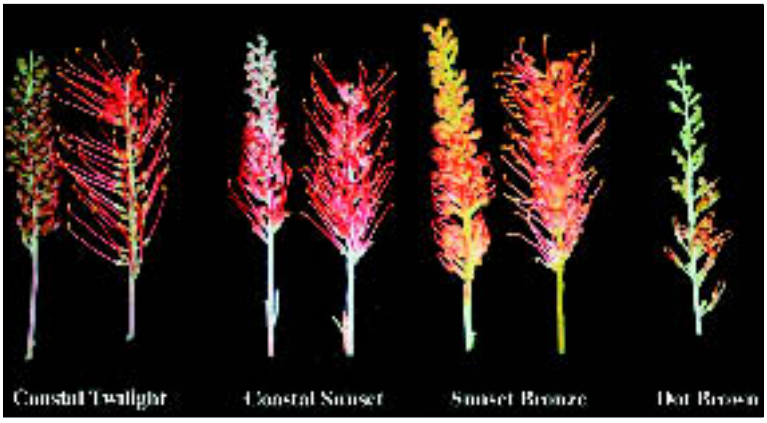

Fig 24 Grevillea – Inflorescence of 'Coastal Twilight' (left), 'Coastal Sunset' (2nd from right) with comparators 'Sunset Bronze' (2nd from left) and 'Dot Brown'(ⓟ) (right).

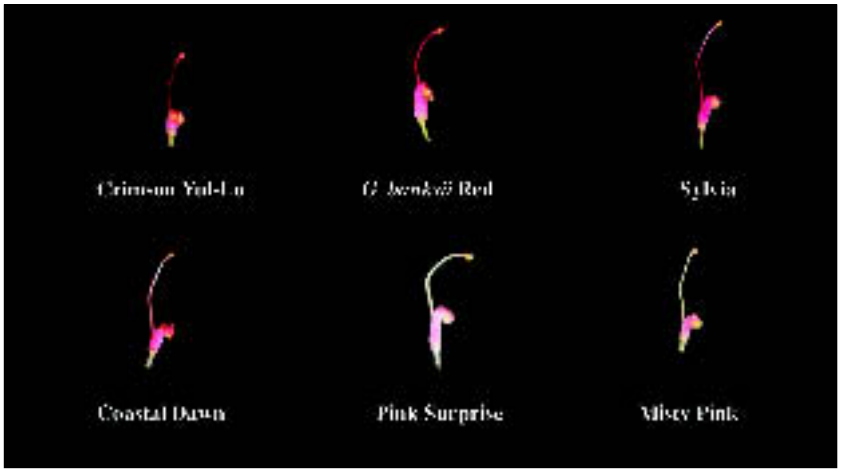

Fig 25 Grevillea – style bend of 'Crimson Yul-Lo' (upper left) and 'Coastal Dawn' (lower left) with comparators *G. banksii* Red (upper centre), 'Pink Surprise' (lower centre), 'Sylvia' (upper right) and 'Misty Pink' (lower right).

Fig 26 Baby's Breath – flowers of 'Danfesroy' (right) with comparator 'White Festival' (left).

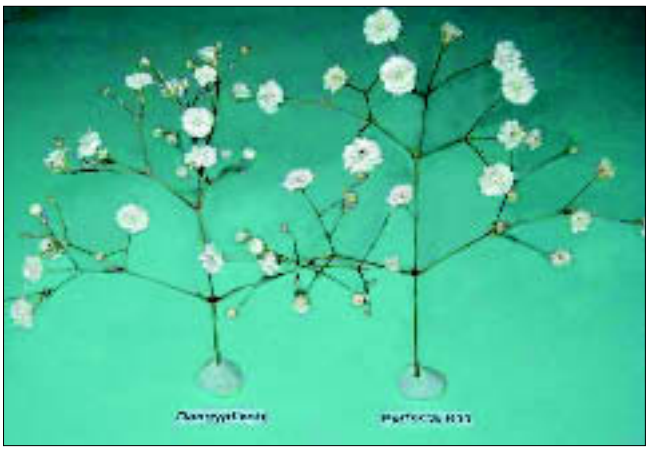

Fig 27 Baby's Breath – flowers of 'Dangypflash' (left) with comparator 'Perfecta R11' (right).

Fig 28 Baby's Breath – flowers of 'Dangypmini' (right) with comparator 'Magic Golan' (left).

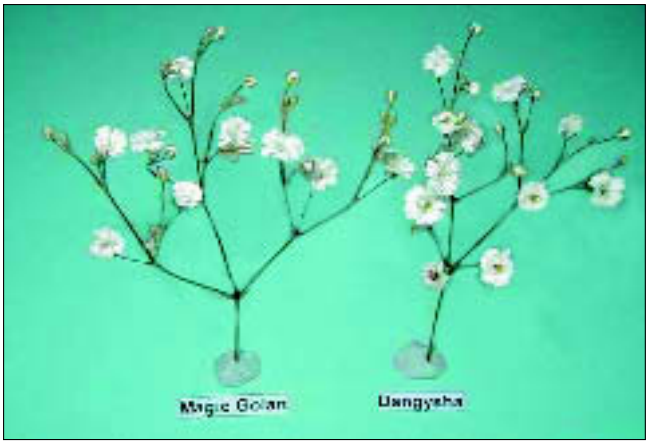

Fig 29 Baby's Breath – flowers of 'Dangysha' (right) with comparator 'Magic Golan' (left).

Fig 30 Bower Wattle – 'Limelight' (centre) with comparators 'Green Mist' (left) and 'Mop top' (right) showing differences in plant size.

Fig 31 Arizona Cypress – 'Limesheen' (left) with comparators 'Limelight' (centre) and 'Limeglow' (right) showing plant width.

Fig 32 Sugarcane – 'Q168' (bottom) with comparators 'BN81-1394' and 'RB72-454' showing culm with leaves removed (base of culm to left). Differences in the alignment, width, shape, dewaxed colour, wax band distinctiveness of the internodes are clearly visible.

Fig 33 Sugarcane – 'Q183' (bottom) with comparators 'Q117' and 'Q165(ɒ)' showing culm with leaves removed (base of culm to left). Differences in the alignment, shape, wax covering, and wax band distinctiveness of the internodes are clearly visible.

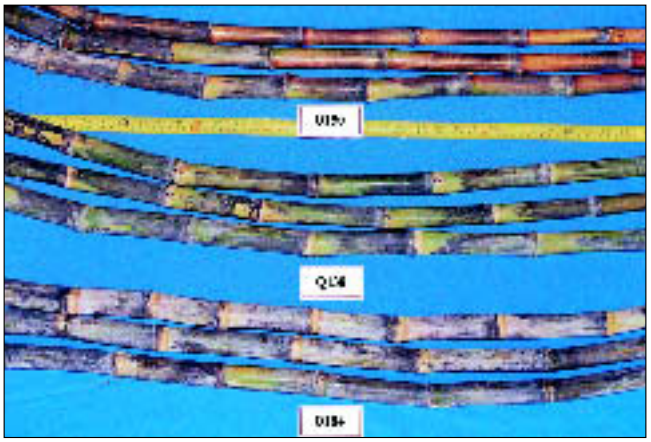

Fig 34 Sugarcane – 'Q184' (bottom) with comparators 'Q138' and 'Q150' showing culm with leaves removed (base of culm to left). Differences in the width, shape, dewaxed colour, wax covering and root band width of the internodes are clearly visible.

Fig 35 Sugarcane – 'Q186' (bottom) with comparators 'Q152' and 'Q174'(ɒ) showing culm with leaves removed (base of culm to left). Differences in the length, width and wax covering of the internodes are clearly visible.

Fig 36 **Sugarcane – 'Q187' (bottom) with comparators 'Q138' and 'Q173'(ᵺ) showing culm with leaves removed (base of culm to left). Differences in the alignment, length, shape, dewaxed unexposed colour, and wax covering of the internodes are clearly visible.**

Fig 37 **Sugarcane – 'Q188' (bottom) with comparators 'Q131' and 'Q138' showing culm with leaves removed (base of culm to left). Differences in the alignment, length, shape, dewaxed colour, wax covering and wax band width of the internodes are clearly visible.**

Fig 38 **Sugarcane – 'Q189' (bottom) with comparators 'Q117' and 'Q180'(ᵺ) showing culm with leaves removed (base of culm to left). Differences in the shape, wax covering and root band width of the internodes are clearly visible. Difference in bud shape is also visible.**

Fig 39 **Sugarcane – 'Q190' (bottom) with comparators 'H56-752' and 'Q160' showing culm with leaves removed (base of culm to left). Differences in the alignment, length, width, wax covering, wax band width and root band width of the internodes are clearly visible.**

Fig 40 **Sugarcane – 'Q191' (bottom) with comparators 'H56-752' and 'Q181'Φ showing culm with leaves removed (base of culm to left). Differences in the alignment, length, shape, wax covering, wax band distinctiveness and width of the internodes, as well as bud shape, are clearly visible.**

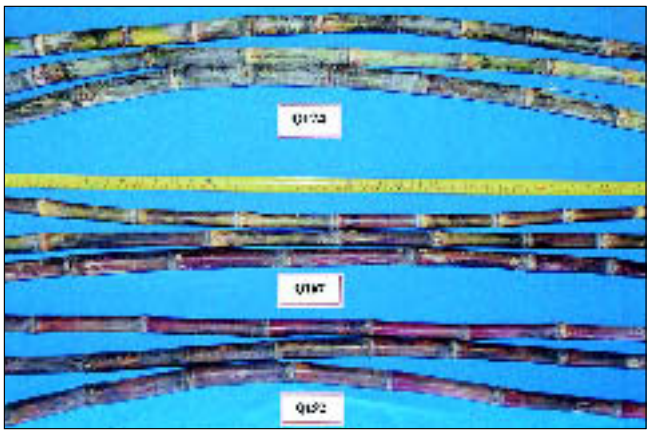

Fig 41 **Sugarcane – 'Q192' (bottom) with comparators 'Q167'Φ and 'Q174'Φ showing culm with leaves removed (base of culm to left). Differences in the length, width, shape, colour and wax covering of the internodes are clearly visible.**

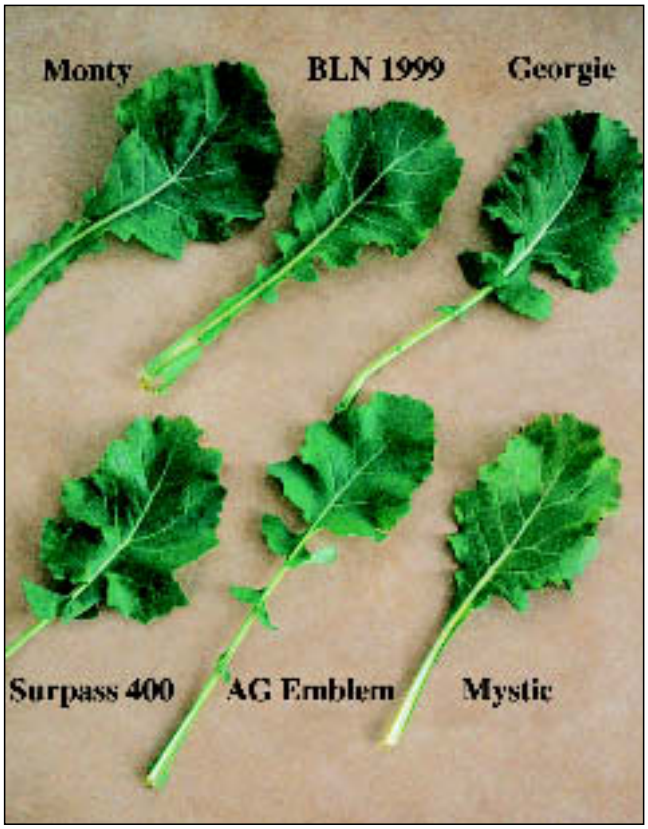

Fig 42a **Canola – leaves of 'BLN 1999' (upper centre) and comparators 'Surpass 400' (lower left), 'Georgie' (upper right), 'Mystic'Φ (lower right), 'Monty'Φ (upper left) and 'AG Emblem' (lower centre).**

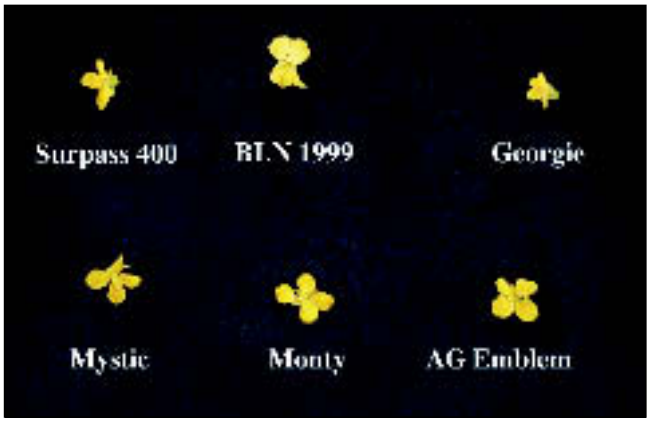

Fig 42b **Canola – flowers of 'BLN 1999' (upper centre) and comparators 'Surpass 400' (upper left), 'Georgie' (upper right), 'Mystic'Φ (lower left), 'Monty'Φ (lower centre) and 'AG Emblem' (lower right).**

Fig 43 Lupin – leaves (petiole and leaflets) and pods of 'Jindalee' (top centre) compared with 'Quilinock' (top left), 'Gungurru' (top right), 'Wonga'(Ф) (lower left) and 'Geebung' (lower right).

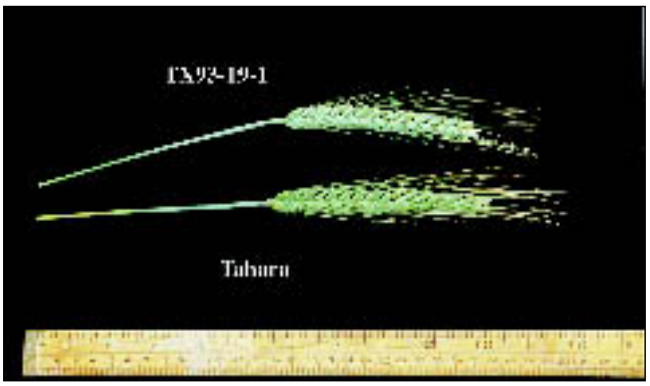

Fig 44 Triticale – ear of 'Tickit', labelled TX93-19-1 (top), showing its comparative greater degree of glaucosity than 'Tahara' (bottom).

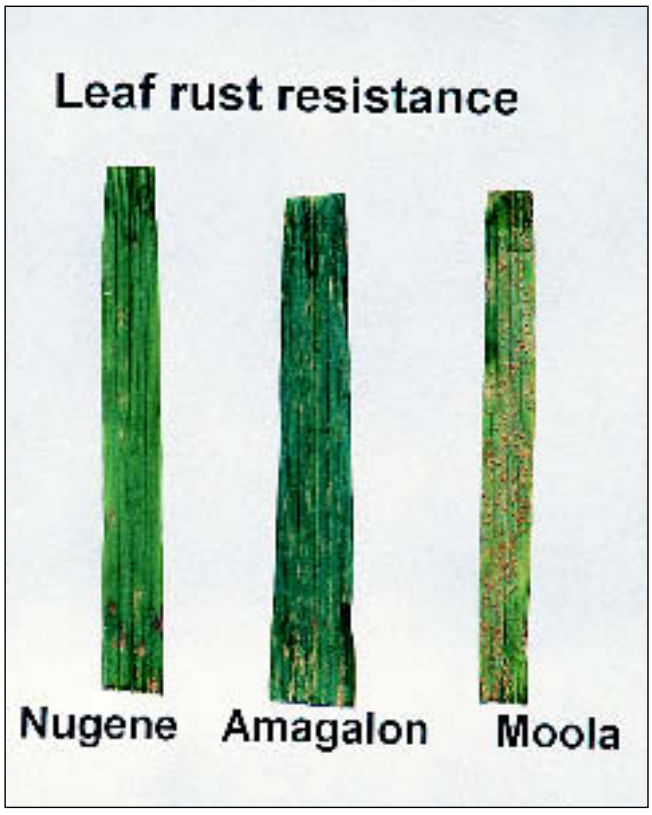

Fig 45 Oat – 'Nugene' (left) possesses 'Pc68' gene resistant to almost all-Australian pathotypes of *Puccinia coronata* (leaf rust). The leaf rust gene was transferred from 'Amagalon' (centre). Comparator 'AC Medallion'(Ф) syn Moola(Ф) showing susceptible reaction.

Table 21 continued

TIME OF FLOWERING (days from sowing)					
	107	103	107	111	104
POD LENGTH (mm)					
mean	60.5	62.3	60.1	60.9	56.7
std deviation	3.81	2.99	3.93	3.43	3.76
LSD/sig	1.42	P≤0.01	ns	ns	P≤0.01
GRAIN – ground colour					
	cream	cream	cream	white	cream
GRAIN – ornamentation					
	strong	moderate	strong	very weak	strong
GRAIN – weight of thousand grains (g)					
mean	148	172	131	164	133
std deviation	6.0	9.0	5.8	5.6	5.5
LSD/sig	17	P≤0.01	ns	ns	ns

Pittosporum bicolor x *Pittosporum undulatum*
Pittosporum

'Cut Above'

Application No: 1997/278 Accepted: 22 Oct 1997.
Applicant: **BE Jackson,** Keysborough, VIC.

Characteristics (Table 22, Figure 15) Plant: tree. Stem: colour of new growth greyed-orange 175A. Leaf: Length medium (mean 75.06mm), width medium (mean 18.77mm), shape of blade eliptical, shape of tip acute, shape of base cuneate, margin strongly undulating, colour green 137A, glossiness weak. (Note: All RHS colour chart numbers refer to 1995 edition.)

Origin and Breeding Open-pollination: arose as a cross between *P. undulatum* and *P. bicolor*. Hybridisation occurred in 1985. Selection criteria: 'Cut Above' was chosen on the basis of growth habit, foliage cover and shape of leaves. Propagation: a number mature stock plants were generated from this seedling through more than 3 generations by cutting propagation and were found to be uniform and stable. Breeder: B.E. Jackson, Keysborough, VIC.

Choice of Comparators *Pittoporum undulatum* and *Pittosporum bicolor* were chosen because they are believed to be the parent plants from which the candidate variety was originated and are also the closest known varieties. No other similar varieties of common knowledge have been identified.

Comparative Trial Location: Dromana, VIC, summer-spring 2000. Conditions: trial conducted in pots, plants propagated from cutting, rooted cuttings planted into 175mm pots filed with soilless potting mix (pine bark base), nutrition maintained with slow release fertilisers, pest and disease treatments applied as required. Trial design: ten pots of each variety arranged in a completely randomised design. Measurements: from thirty plants at random. One sample per plant.

Prior Applications and Sales Nil.

Description: **Mark Lunghusen,** Croydon, VIC.

Table 22 *Pittosporum* varieties

	'Cut Above'	***P. undulatum*P. bicolor**	
STEM: COLOUR OF NEW GROWTH (RHS, 1995)	greyed-orange 175A	greyed-purple 187A	yellow-green 145C
LEAF: LENGTH (mm)			
mean	75.06	124.97	56.35
std deviation	5.98	10.52	9.70
LSD/sig	9.44	P≤0.01	P≤0.01
LEAF: WIDTH (mm)			
mean	18.77	44.75	10.68
std deviation	2.00	3.51	2.42
LSD/sig	3.10	P≤0.01	P≤0.01
LEAF: SHAPE OF BLADE	eliptical	eliptical	linear
LEAF: SHAPE OF TIP	acute	acuminate	acute
LEAF: UNDULATION OF MARGIN	strongly undulating	undulating	revolute
LEAF: GLOSSINESS	weak	medium	strong

Rosa banksiae
Banksia Rose

'Powder Puff'

Application No: 1998/155 Accepted: 7 Sep 1998.
Applicant: **Wallis's Nurseries**, Mosgiel, New Zealand.
Agent: **Southern Advanced Plants**, Dromana VIC**.**

Characteristics (Table 23, Figure 10) Plant: habit climbing. Young shoot: anthocyanin colouration strong, hue of anthocyanin reddish brown to purple. Prickles: present, shape of lower side deep concave, short prickles absent or very few, long prickles few. Leaf: size medium, green

colour medium, glossiness of upper side weak. Leaflet: cross section concave, undulation of margin absent or very weak. Terminal leaflet: length of blade medium, width of blade medium, shape of base, rounded. Flowering shoot: very few. Flower pedicel: number of prickles medium. Flower bud: shape of longitudinal section broad ovate. Flower: type double, diameter large, view from above irregularly rounded, side view of upper part flat, side view of lower part flattened convex, fragrance medium. Sepal: extensions absent or very weak. Petal: size large, colour of middle zone of inner side white 155C, colour of marginal zone of inner side white 155C, spot at base absent, reflexing of margin absent or very weak. Outer stamen: colour of filament white. Seed vessel: small. (Note: all RHS colour chart numbers refer to 1995 edition).

Origin and Breeding Spontaneous mutation: arose from *Rosa banksiae* 'Pearl'. Mutation took place in Wallis's Nurseries, Mosgiel, New Zealand. 'Powder Puff' was chosen on the basis of flower size and fragrance and plant vigour. Propagation: a number mature stock plants were generated from this mutation through 3 generations by cutting propagation and were found to be uniform and stable. Breeder: Clive Wallis, Mosgiel, New Zealand.

Choice of Comparators 'Pearl' was chosen because it is the parent plant from which resulted in the mutation and *Rosa banksiae* was chosen as a similar variety of common knowledge. No other similar varieties of common knowledge have been identified.

Comparative Trial Location: Dromana, VIC, autumn-spring 2000. Conditions: trial conducted in pots, plants propagated from cutting, rooted cuttings planted into 200mm pots filed with soilless potting mix (pine bark base), nutrition maintained with slow release fertilisers, pest and disease treatments applied as required. Trial design: ten pots of each variety arranged in a completely randomised design. Measurements: from thirty plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
New Zealand	1996	Accepted	'Powder Puff'

Description: **Mark Lunghusen,** Croydon, VIC.

Table 23 *Rosa* varieties

	'Powder Puff'	*'Pearl'	* *Rosa banksiae*
YOUNG SHOOT: ANTHOCYANIN COLOURATION	strong	weak	weak
YOUNG SHOOT: HUE OF ANTHOCYANIN COLORATION	reddish brown to purple	reddish brown	reddish brown
PRICKLES: PRESENCE	present	absent	absent
PRICKLE: SHAPE OF LOWER SIDE	deep concave	na	na
LONG PRICKLES	few	absent or very few	absent or very few
LEAF: GREEN COLOUR	medium	dark	medium
LEAF: GLOSSINESS OF UPPER SIDE	weak	absent or very weak	medium
LEAFLET: CROSS SECTION	concave	concave	slightly concave
LEAFLET: UNDULATION OF MARGIN	absent or very weak	absent or very weak	weak
TERMINAL LEAFLET: SHAPE OF BASE	rounded	acute	rounded
FLOWERING SHOOT	very few	many	many
FLOWER PEDICEL: NUMBER OF PRICKLES	medium	few	few
FLOWER BUD: SHAPE OF LONGITUDINAL SECTION	broad ovate	ovate	ovate
FLOWER: NUMBER OF PETALS	many	medium	medium
FLOWER DIAMETER	large	large	small
FLOWER: SIDE VIEW OF UPPER PART	flat	flattened convex	convex
FLOWER: SIDE VIEW OF LOWER PART	flattened convex	flat	flattened convex
FLOWER FRAGRANCE	medium	very weak	very weak
PETAL: SIZE	large	large	small
PETAL: COLOUR OF MIDDLE ZONE OF INNER SIDE (RHS,1995)	white 155C	white 155C	yellow 4D
PETAL: COLOUR OF MARGINAL ZONE OF INNER SIDE (RHS,1995)	white 155C	white 155C	yellow 4D
PETAL: UNDULATION OF MARGIN	medium	absent or very weak	absent or very weak
OUTER STAMEN: PREDOMINANT COLOUR OF FILAMENT	white	white	green
SEED VESSEL: SIZE	small	very small	absent

Rosa hybrid
Rose

'Fairy Queen'

Application No: 1999/132 Accepted: 17 May 1999.
Applicant: **Jan Spek Rozen B.V.** Boskoop, The Netherlands.
Agent: **Grandiflora Nurseries Pty Ltd,** Cranbourne, VIC.

Characteristics (Table 24, Figure 1) Plant: habit creeping, height short, width broad. Stem: anthocyanin medium, colour reddish brown. Prickles: present, shape of lower side deep concave, short prickle number very few, long prickle number many. Leaf: small, green colour very dark, glossiness very strong, cross section slight concave, undulation of margin medium. Terminal leaflet: length short (28-44 mm), width narrow (16-21 mm), shape of base obtuse. Flowering shoots: number of flowers very many. Flower pedicel: number of hairs many. Flower bud: round. Flower: double, number of petals many (53-74), diameter very small (32-39 mm), shape from above round, side view of upper part flattened convex, side view of lower part concave, fragrance very weak, sepal extensions weak, petal size very small, petal colour middle zone of inner side dark pink (RHS 57B, 1995), petal colour marginal zone of inner side dark pink (RHS 57B, 1995), spot at base of inner side present, size large, colour (RHS 155C, 1995), petal colour middle zone of outer side dark pink (RHS 57B, 1995), petal colour marginal zone of outer side dark pink (RHS 57B, 1995), spot at base of outer side present, size medium, colour (RHS 157C, 1995), reflexing of margin very strong, undulation of margin weak. Outer stamen: predominate colour of filament green. Seed vessel: small. Hip shape: longitudinal section pitcher shaped. Time of beginning of flowering medium. Flowering: almost continuous.

Origin and Breeding Spontaneous mutation: parent 'Spevu'Φ syn Lovely FairyΦ having creeping, rambling habit, multi flowering shoots. Mutation was observed in Boskoop, The Netherlands in the early 90's. From this selection four plants were propagated by cutting, and grown to test characteristics. From these plants a further 100 cuttings were taken and planted for extended trials. In 1995 the first commercial trial was introduced in Germany. Later trial plants were sent to agents for overseas trials. Selection criteria: flower colour, suitability for use as a bedding / pot plant. Propagation: by vegetative cuttings were found to be uniform and stable. 'Fairy Queen' will be propagated by vegetative cuttings from the stock plants. Breeder: Jan Spek Rozen B.V, Boskoop, The Netherlands.

Choice of Comparators 'Spevu'Φ syn Lovely FairyΦ was considered for the comparative trial, as this is a similar variety and the parent of 'Fairy queen'. 'The Fairy' was also considered but rejected due to flower colour.

Comparative Trial Comparator: 'Spevu'Φ syn Lovely FairyΦ. Location: Cranbourne, VIC, Jun 1999- Nov 2000, Measurements and other data were collected Nov 2000. Conditions: trial conducted in a glasshouse, plants propagated from cutting, rooted cuttings planted into 330mm pots filed with scoria, nutrition maintained by complete nutrient supplied through fertigation, pest and disease treatments applied as required. Trial design: rows of 10 metre flower beds of each variety arranged end to end. Measurements: from twenty plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
EU	1995	Granted	'Fairy Queen'
Germany	1995	Granted	'Fairy Queen'

First sold in Germany in 1997. First Australian sale in 2000.

Description: **Christopher Prescott, Prescott Roses Pty Ltd,** Clyde, VIC.

Table 24 *Rosa* varieties

	'Fairy Queen'	*'Spevu'Φ syn Lovely FairyΦ
YOUNG SHOOT: ANTHOCYANIN COLOURATION (shoot about 20 cm long)	medium	weak
FLOWER: DIAMETER (mm)		
mean	35.1	39.2
std deviation	2.234	2.348
LSD/sig	2.62	P≤0.01
FLOWER: SIDE VIEW OF LOWER PART (fully opened flower)	concave	flat
PETAL COLOUR (RHS, 1995)		
middle zone inner side	57B	67C
marginal zone inner side	57B	67C
middle zone outer side	57B	67D
marginal zone outer side	57B	67D
PETAL: COLOUR OF SPOT AT BASE (RHS 1995)		
inner side	155C	157D
outer side	157C	157B
PETAL: REFLEXING OF MARGIN (1 = very weak, 9 = very strong)	9	5

'Interkuyl'

Application No: 1999/174 Accepted: 13 Jul 1999.
Applicant: **Interplant B.V,** Leersum, The Netherlands.
Agent: **Grandiflora Nurseries Pty Ltd,** Cranbourne, VIC.

Characteristics (Table 25, Figure 2) Plant: habit narrow, height short, width narrow. Stem: anthocyanin medium, colour bronze to reddish brown. Prickles: absent Leaf: medium, green colour dark, glossiness strong, cross section flat, undulation of margin medium. Terminal leaflet: length medium (57 – 79 mm), width broad (26 – 50 mm), shape of base round. Flowering shoots: number of flowers many. Flower pedicel: number of hairs medium. Flower bud: ovate. Flower: double, number of petals medium (33 – 47), diameter medium (46 – 55 mm), shape from above irregularly rounded, side view of upper part flattened convex, side view of lower part flat, fragrance weak, sepal extensions very weak, petal size small, petal colour middle zone of inner side dark pink (RHS 57B, 1995), petal colour

marginal zone of inner side dark pink (RHS 57B, 1995), spot at base of inner side present, size medium, colour (RHS 155C, 1995), petal colour middle zone of outer side dark pink (RHS 57C, 1995), petal colour marginal zone of outer side dark pink (RHS 57C, 1995), spot at base of outer side present, size medium, colour (RHS 155C, 1995), reflexing of margin strong, undulation of margin medium. Outer stamen: predominate colour of filament Orange. Seed vessel: small. Hip shape: longitudinal section pitcher shaped.

Origin and Breeding Spontaneous mutation: parent 'Interlis' syn Lydia. The parental variety is characterised by narrow upright habit, multi flowering shoots. Mutation was observed in Leersum, The Netherlands in 1995. From this selection few plants were propagated, from these plants the steadiest stems were selected, during 1996 this variety was part of a field trial and in 1997 the first plants were sold for cut flower production. Selection criteria: flower colour, number of flowers per flowering shoot, suitability for cut flower use. Propagation: by both vegetative cuttings and budded onto a rootstock and were found to be uniform and stable. 'Interkuyl' will be commercially propagated by vegetative cuttings or buds from the stock plants. Breeder: Ir. A.J.H. van Doesum, Leersum, The Netherlands.

Choice of Comparators 'Interlis' syn Lydia was considered for the comparative trial, as this is a similar variety and the parent of 'Interkuyl'. This was the only comparator considered as the plants are very similar with the exception of flower colour.

Comparative Trial Location: Cranbourne, VIC, Jun 1999-Nov 2000, Measurements and other data were collected Nov 2000. Conditions: trial conducted in a glasshouse, plants propagated from cutting, rooted cuttings planted into 330mm pots filed with scoria, nutrition maintained by complete nutrient supplied through fertigation, pest and disease treatments applied as required. Trial design: rows of 10 metre flower beds of each variety arranged side by side. Measurements: from twenty plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
The Netherlands	1995	Granted	'Interkuyl'
Canada	2000	Applied	'Interkuyl'
Japan	1997	Applied	'Interkuyl'

First sold in The Netherlands in 1997. First Australian sale Jan 2000.

Description: **Christopher Prescott, Prescott Roses Pty Ltd,** Clyde, VIC.

Table 25 *Rosa* varieties

	'Interkuyl'	***'Interlis'** syn **Lydia**
YOUNG SHOOT: ANTHOCYANIN COLOURATION (shoot about 20 cm long)	medium	very weak
LEAF GREEN COLOUR (at time of first flowering)	dark	medium
LEAF GLOSSINESS OF UPPER SIDE	strong	medium
SEPAL: EXTENSIONS (1 = very weak, 9 = very strong)	1	3
PETAL COLOUR (RHS, 1995)		
middle zone inner side	57B	49D
marginal zone inner side	57B	49D
middle zone outer side	57C	49C
marginal zone outer side	57C	49C
PETAL: SIZE OF SPOT AT BASE (1 = very small, 9 = very large)		
Inner side	5	7
outer side	5	7
OUTER STAMEN: PREDOMINANT COLOUR OF FILAMENT	orange	yellow

'Internes'

Application No: 1999/175 Accepted: 13 Jul 1999.
Applicant: **Interplant B.V,** Leersum, The Netherlands.
Agent: **Grandiflora Nurseries Pty Ltd,** Cranbourne, VIC.

Characteristics (Table 26, Figure 3) Plant: habit narrow, height short, width narrow. Stem: anthocyanin weak, colour bronze to reddish brown. Prickles: present, shape of lower side deep concave, short prickles very few, long prickles few. Leaf: medium, green colour dark, glossiness strong, cross section flat, undulation of margin medium. Terminal leaflet: length medium (49-67 mm), width medium (27-39 mm), shape of base abtuse. Flowering shoots: number of flowers many. Flower pedicel: number of hairs medium. Flower bud: ovate. Flower: double, number of petals medium (45-61), diameter small (38-47 mm), shape from above irregularly rounded, side view of upper part flattened convex, side view of lower part flattened convex, fragrance weak, petal size small, petal colour middle zone of inner side cream (fading from RHS 27D to RHS 155C, 1995), petal colour marginal zone of inner side cream (fading from RHS 27D to RHS 155C, 1995), spot at base of inner side absent, petal colour middle zone of outer side cream (fading from RHS 27D to RHS 155C, 1995), petal colour marginal zone of outer side cream (fading from RHS 27D to RHS 155C, 1995), spot at base of outer side absent, reflexing of margin medium, undulation of margin medium. Outer stamen: predominate colour of filament orange. Seed vessel: small. Hip shape: longitudinal section pitcher shaped.

Origin and Breeding Spontaneous mutation: parent 'Interlis' syn Lydia. The parental variety is characterised by narrow upright habit, multi flowering shoots. Mutation was observed in Leersum, The Netherlands in 1995. From this selection few plants were propagated, from these plants the firmest stems were selected, during 1996 this variety was part of a field trial and in 1997 the first plants were sold for cut flower production. Selection criteria: flower colour, number of flowers per flowering shoot, suitability for cut flower use. Propagation: by both vegetative cuttings and budded onto a rootstock and were found to be uniform and stable. 'Internes' will be commercially propagated by

vegetative cuttings or budded onto rootstocks from the stock plants. Breeder: Ir. A.J.H. van Doesum, Leersum, The Netherlands.

Choice of Comparators 'Interlis' syn Lydia was considered for the comparative trial as this is a similar variety and the parent of 'Internes'. This was the only comparator considered as the plants are very similar with the exception of flower colour.

Comparative Trial Location: Cranbourne, VIC, Jun 1999-Nov 2000, Measurements and other data were collected Nov 2000. Conditions: trial conducted in a glasshouse, plants propagated from cutting, rooted cuttings planted into 330mm pots filed with scoria, nutrition maintained by complete nutrient supplied through fertigation, pest and disease treatments applied as required. Trial design: rows of 10 metre flower beds of each variety arranged end to end. Measurements: from twenty plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
The Netherlands	1996	Granted	'Internes'

First sold in The Netherlands in 1997. First Australian sale Jan 2000.

Description: **Christopher Prescott, Prescott Roses Pty Ltd,** Clyde, VIC.

Table 26 *Rosa* varieties

	'Internes'	*'Interlis' syn Lydia
YOUNG SHOOT ANTHOCYANIN COLOURATION (1 = very weak, 9 = very strong)	3	1
LONG PRICKLES (number, 1 = very few, 9 = very many)	3	1
LEAF GREEN COLOUR (at the time of first flowering)	dark	medium
LEAF GLOSSINESS OF UPPER SIDE	strong	medium
LEAFLET CROSS SECTION	flat	slight concave
TERMINAL LEAFLET: LENGTH OF BLADE (mm)		
mean	56.9	54.5
std deviation	7.370	7.442
LSD/sig	0.79	P≤0.01
TERMINAL LEAFLET SHAPE OF BASE	obtuse	rounded
FLOWER SIDE VIEW OF LOWER PART (fully opened flower)	flattened convex	flat
SEPAL EXTENSIONS (1 = very weak, 9 = very strong)	1	3
FLOWER: DIAMETER (mm)		
mean	42.4	49.9
std deviation	3.307	3.510
LSD/sig	3.89	P≤0.01
PETAL COLOUR (RHS, 1995)		
middle zone inner side	27D – 155C,	49D
marginal zone inner side	27D – 155C,	49D
middle zone outer side	27D – 155C	49C
marginal zone outer side	27D – 155C	49C
PETAL SPOT AT BASE (1 = absent, 9 = present)		
inner side	1	9
outer side	1	9
PETAL SIZE OF SPOT AT BASE		
inner side	absent	large
outer side	absent	large
PETAL COLOUR OF SPOT AT BASE (RHS, 1995)		
inner side	absent	155C
outer side	absent	155C
PETAL REFLEXING OF MARGIN (1 = very weak, 9 = very strong)	5	7

'Lydiver'

Application No: 1999/173 Accepted: 13 Jul 1999.
Applicant: **Interplant B.V,** Leersum, The Netherlands.
Agent: **Grandiflora Nurseries Pty Ltd,** Cranbourne, VIC.

Characteristics (Table 27, Figure 4) Plant: habit narrow, height short, width narrow. Stem: anthocyanin very weak, colour bronze to reddish brown. Prickles: present, shape of lower side deep concave, short prickles very few, long prickles very few. Leaf: medium, green colour dark, glossiness strong, cross section flat, undulation of margin medium. Terminal leaflet: length medium (51-65 mm), width medium (27-35 mm), shape of base abtuse. Flowering shoots: number of flowers many. Flower pedicel: number of hairs medium. Flower bud: ovate. Flower: double, number of petals medium (31-41), diameter small (36-48 mm), shape from above irregularly rounded, side view of upper part flattened convex, side view of lower part flattened convex, fragrance weak, sepal extensions weak, petal size small, petal colour middle zone of inner side pink (RHS 67D, 1995), petal colour marginal zone of inner side pink (RHS 68C, 1995), spot at base of inner side present, size large, colour (RHS 155C, 1995), petal colour middle zone of outer side pink (RHS 68C, 1995), petal colour marginal zone of outer side pink (RHS 68C, 1995), spot at base of outer side present, size large, colour (RHS 155C, 1995), reflexing of margin strong, undulation of margin medium. Outer stamen: predominate colour of filament Orange. Seed vessel: small. Hip shape: longitudinal section pitcher shaped.

Origin and Breeding Spontaneous mutation: parent 'Interlis' syn Lydia. The parental variety is characterised by narrow upright habit, multi flowering shoots. Mutation was observed in Leersum, The Netherlands in 1994. From this selection few plants were propagated, from these plants the steadiest stems were selected, during 1995 this variety was

part of a field trial and in 1996 the first plants were sold for cut flower production. Selection criteria: flower colour, number of flowers per flowering shoot, suitability for cut flower use. Propagation: by both vegetative cuttings and budded onto a rootstock and were found to be uniform and stable. 'Lydiver' will be commercially propagated by vegetative cuttings or buds from the stock plants. Breeder: Ir. A.J.H. van Doesum, Leersum, The Netherlands.

Choice of Comparators 'Interlis' syn Lydia was considered for the comparative trial as this is a similar variety and the parent of 'Lydiver'. This was the only comparator considered as the plants are very similar with the exception of flower colour.

Comparative Trial Location: Cranbourne, VIC, Jun 1999-Nov 2000, Measurements and other data were collected November 2000. Conditions: trial conducted in a glasshouse, plants propagated from cutting, rooted cuttings planted into 330mm pots filed with scoria, nutrition maintained by complete nutrient supplied through fertigation, pest and disease treatments applied as required. Trial design: rows of 10 metre flower beds of each variety arranged side by side. Measurements: from twenty plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
The Netherlands	1994	Granted	'Lydiver'
Belgium	1998	Granted	'Lydiver'
Japan	1997	Applied	'Lydiver'

First sold in The Netherlands in 1996. First Australian sale Jan 2000.

Description: **Christopher Prescott, Prescott Roses Pty Ltd,** Clyde, VIC.

Table 27 *Rosa* varieties

	'Lydiver'	***'Interlis'** syn **Lydia**
LEAF GREEN COLOUR (at time of first flowering)		
	dark	medium
LEAF GLOSSINESS OF UPPER SIDE		
	strong	medium
LEAFLET CROSS SECTION		
	flat	slight concave
TERMINAL LEAFLET SHAPE OF BASE		
	obtuse	rounded
FLOWER SIDE VIEW OF LOWER PART (fully opened flower)		
	flattened convex	flat
FLOWER: DIAMETER (mm)		
mean	40.2	49.9
std deviation	3.225	3.510
LSD/sig	3.85	P≤0.01
PETAL COLOUR (RHS, 1995)		
middle zone inner side	67D	49D
middle zone outer side	68C	49C
marginal zone inner side	68C	49D
marginal zone outer side	68C	49C
OUTER STAMEN: PREDOMINANT COLOUR OF FILAMENT		
	orange	yellow

'Nirpeter'

Application No: 1999/287 Accepted: 22 Oct 1999.
Applicant: **Lux Riviera s.r.l,** Latte Di Ventimiglia, Italy
Agent: **Grandiflora Nurseries Pty Ltd,** Cranbourne, VIC.

Characteristics (Table 28, Figure 5) Plant: habit bushy, height tall, width medium. Stem: anthocyanin strong, colour bronze to reddish brown. Prickles: present, shape of lower side concave, short prickle number very few, long prickle number medium. Leaf: large, green colour dark, glossiness medium, cross section slight concave, undulation of margin weak. Terminal leaflet: length long (72-82 mm), width broad(42-53 mm), shape of base rounded. Flowering shoots: number of flowers few. Flower pedicel: number of hairs few. Flower bud: broad – ovate. Flower: double, number of petals medium (38-74), diameter large (92-22 mm), shape from above irregularly round, side view of upper part flattened convex, side view of lower part flattened convex, fragrance very weak, sepal extensions weak, petal size large, petal colour middle zone of inner side dark pink (RHS 58B, 1995), petal colour marginal zone of inner side pink (RHS 66A, 1995), spot at base of inner side present, size small, colour yellow (RHS 5C, 1995), petal colour middle zone of outer side pink (RHS 61D, 1995), petal colour marginal zone of outer side pink (RHS 61D, 1995), spot at base of outer side present, size small, colour yellow (RHS 3D, 1995), reflexing of margin strong, undulation of margin weak. Outer stamen: predominate colour of filament orange. Seed vessel: medium. Hip shape: longitudinal section funnel shaped.

Origin and Breeding Spontaneous mutation: parent 'Nirpventyel'. The parental variety is characterised by tall bushy plant habit. The mutation was observed in La Prensa, Ecuador in the early 90's. From this selection a few plants were propagated, and grown to better assess the stability of the new colour. From these plants the first three generations were tested to evaluate the best clones to be used as starting material for further generations. Selection criteria: flower colour, suitability for use as a cut flower. Propagation: Initially by grafted plants over Rosa Indica Major and Rosa Canina, and were found to be uniform and stable. 'Nirpeter' will be propagated by vegetative cuttings, or budded onto rootstocks from the stock plants. Breeder: Peter Ullrich, La Prensa, Ecuador.

Choice of Comparators 'Ruidriko'(Ф) syn Vivaldi(Ф), and 'Sonia' were considered for the comparative trial. 'Ruidriko'(Ф) was chosen because of its similar growth characteristics, flower size and shape. 'Sonia' was initially considered for its flower colour. However it was discarded due to its dissimilar growth characteristics, flower size, shape and the colour was not in the same range as 'Nirpeter'. The parent 'Nirpventyel' is a different colour described as "Orange Caminium slightly more orange and red carrot".

Comparative Trial Location: Cranbourne, VIC, Oct 1999-Nov 2000, Measurements and other data were collected December 2000. Conditions: trial conducted in a glasshouse, plants propagated from cutting, rooted cuttings of 'Nirpeter' were planted into 330mm pots filed with scoria, whilst rooted cuttings of 'Ruydriko' were grown in an adjoining glass house with the same controlled environment conditions in the soil. Nutrition maintained by complete nutrient supplied through fertigation, pest and disease treatments applied as required. Trial design: rows of 30 metre flower beds of each variety. Measurements: from twenty plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
Ecuador	1998	Applied	'Nirpeter'
France	1999	Applied	'Nirpeter'

First Australian sale in 2000.

Description: **Christopher Prescott, Prescott Roses Pty Ltd**, Clyde, VIC.

Table 28 *Rosa* varieties

	'Nirpeter'	*'Ruidriko'ϕ syn **Vivaldi**ϕ
YOUNG SHOOT: HUE OF ANTHOCYANIN COLOURATION (shoot about 20 cm long)		
	bronze-reddish brown	reddish brown-purple
LONG PRICKLES NUMBER (1 = very few, 9 = very many)		
	5	7
LEAFLET: CROSS SECTION		
	slight concave	concave
LEAFLET: UNDULATION OF MARGIN (1 = very weak, 9 = very strong)		
	7	5
FLOWER: FRAGRANCE (1 = very weak, 9 = very strong)		
	1	5
FLOWER: NUMBER OF PETALS		
mean	53.0	39.6
std deviation	10.698	8.030
LSD/sig	11.93	P≤0.01
FLOWER: DIAMETER (mm)		
mean	106.6	93.6
std deviation	10.167	5.337
LSD/sig	10.25	P≤0.01
PETAL COLOUR (RHS, 1995)		
middle zone inner side	58B	159C
marginal zone inner side	66A	49D
middle zone outer side	61D	159D
marginal zone outer side	61D	68D
PETAL: SPOT AT BASE (1 = absent, 9 = present)		
inner side	9	1
outer side	9	1
PETAL: REFLEXING OF MARGIN (1 = very weak, 9 = very strong)		
	7	5

'Sunlampo' syn Bellisima

Application No: 1999/289 Accepted: 22 Oct 1999.
Applicant: **Frank Bart Shuurman,** Whenuapai, New Zealand.
Agent: **Grandiflora Nurseries Pty Ltd,** Cranbourne, VIC.

Characteristics (Table 29, Figure 6) Plant: habit bushy, height medium, width medium. Stem: anthocyanin weak, colour reddish brown. Prickles: present, shape of lower side deep concave, short prickle number very few, long prickle number medium. Leaf: medium, green colour medium, glossiness weak, cross section slight concave, undulation of margin strong. Terminal leaflet: length medium (62-79 mm), width medium (41-52 mm), shape of base rounded. Flowering shoots: number of flowers few. Flower pedicel: number of hairs few. Flower bud: broad – ovate. Flower: double, number of petals many (49-79), diameter medium (73-83 mm), shape from above irregularly round, side view of upper part flattened convex, side view of lower part flat, fragrance weak, sepal extensions weak, petal size small, petal colour middle zone of inner side orange (RHS 23B, 1995), petal colour marginal zone of inner side orange (RHS 23B, 1995), spot at base of inner side present, size small, colour yellow (RHS 13B, 1995), petal colour middle zone of outer side orange to yellow (RHS 16B, 1995), petal colour marginal zone of outer side orange (RHS 23B, 1995), spot at base of outer side present, size small, colour yellow (RHS 13C, 1995), reflexing of margin strong, undulation of margin weak. Outer stamen: predominate colour of filament yellow. Seed vessel: size small. Hip shape: longitudinal section pitcher shaped.

Origin and Breeding Controlled pollination: seed parent 'Kordaba'ϕ syn Lambadaϕ x pollen parent 'Pot o' Gold'. The seed parent was characterised by medium sized bushy habit, medium green leaves, single flowering stems, with star shaped flowers of orange colour (RHS 30C, 1995). The pollen parent 'Pot o' Gold' was characterised by short broad bushy habit, medium green leaves, multi flowering stems of yellow flowers with approximately 30 petals. Hybridisation took place in Whenuapai, New Zealand in the mid 90's. This cross was part of a broad cross-pollination program. The initial seedling was selected and sent to overseas agents. Selection criteria: flower colour and suitability as a cut flower. 'Sunlampo' will be commercially propagated by vegetative cuttings or budded from the stock plants. Breeder: Frank Bart Schuurman, Whenuapai, New Zealand.

Choice of Comparators 'Tennessee' was used for the comparative trial. 'Tennessee' is a widely available commercial variety and was chosen for its bushy growth habit and similar coloured flowers. The seed parent was rejected due to colour differences in the flowers, whereas 'Tennessee' was closer. The pollen parent was rejected, as it showed little similarity with 'Sunlampo'.

Comparative Trial Location: Cranbourne, VIC, Oct 1999-Dec 2000, Measurements and other data were collected December 2000. Conditions: trial conducted in a glasshouse, plants propagated from cutting, rooted cuttings planted into 330mm pots filed with scoria, nutrition maintained by complete nutrient supplied through fertigation, pest and disease treatments applied as required. Trial design: rows of 30 metre flower beds of each variety. Measurements: from twenty plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
New Zealand	1998	Applied	'Sunlampo'

First sold in New Zealand in 1998. First Australian sale in 2000

Description: **Christopher Prescott,** Prescott Roses Pty Ltd., Clyde, VIC.

Table 29 *Rosa* varieties

	'Sunlampo'	*'Tennessee'
YOUNG SHOOT: ANTHOCYANIN COLOURATION (1 = very weak, 9 = very strong) (shoot about 20 cm long)	3	5
LEAF: SIZE (1 = very small, 9 = very large)	5	7
LEAF: GREEN COLOUR (1 = very light, 9 = very dark) (at time of first flowering)	5	7
LEAF: GLOSSINESS OF UPPER SIDE (1 = very weak, 9 = very strong)	3	7
LEAFLET: CROSS SECTION	slight concave	flat
LEAFLET: UNDULATION OF MARGIN (1 = very weak, 9 = very strong)	7	3
TERMINAL LEAFLET: LENGTH OF BLADE (mm)		
mean	68.9	83.8
std deviation	4.630	6.426
LSD/sig	7.07	P≤0.01
TERMINAL LEAFLET WIDTH OF BLADE (mm)		
mean	43.7	60
std deviation	3.199	6.182
LSD/sig	6.21	P≤0.01
FLOWER: NUMBER OF PETALS		
mean	63.5	34.1
std deviation	9.629	3.035
LSD/sig	9.01	P≤0.01
FLOWER: SIDE VIEW OF LOWER PART (fully opened flower)	flat	flattened convex
FLOWER: FRAGRANCE (1 = very weak, 9 = very strong)	3	1
PETAL: SIZE (1 = very small, 9 = very large)	3	5
PETAL COLOUR (RHS, 1995)		
middle zone inner side	23B	28B
marginal zone inner side	23B	28B
middle zone outer side	16B	28C
marginal zone outer side	23B	28C
PETAL: SIZE OF SPOT AT BASE OF INNER SIDE (1 = very small, 9 = very large)	3	5
PETAL: COLOUR OF SPOT AT BASE (RHS, 1995)		
inner side	13B	9A
outer side	13C	9B
PETAL: REFLEXING OF MARGIN (1 = very weak, 9 = very strong)	7	3
SEED VESSEL SIZE (at petal fall) (1 = very small, 9 = very large)	3	5

'Meibrenec'

Application No: 1998/236 Accepted: 27 Sep 2000.
Applicant: **Meilland International,** Le Cannet des Maures, France.
Agent: **Kim Syrus,** Melrose Park, SA.

Characteristics (Figure 7) Plant: growth habit flat bushy, height short, width broad. Stem: anthocyanin absent, prickles present, prickle shape of lower side concave. Leaf: size small, glossiness of upper side weak. Terminal leaflet: length short (av. 22.84mm), width narrow (av. 10.94mm). Flower: colour group pink, type double, diameter small (av. 29.38mm), almost continuous flowering, Petal: size small, colour of middle zone inner side RHS 38C (RHS ca. 27B fades from RHS 22B), marginal zone inner side RHS 38C (RHS ca. 27B fades from RHS 22B), middle zone outer side RHS 29C-D (RHS 27B), marginal zone outer side RHS 29C-D (RHS 27B). Basal spot: inner side; present, very small, colour RHS 6D, outer side; present, very small, colour RHS 6D, Seed: vessel size very small, vessel shape funnel. Flowering: almost continuous. (Note: data in parenthesis are from local observations. All RHS colour chart numbers in local observation refers to 1995 edition.

Origin and Breeding Controlled pollination: seed parent ('Meiplarzon' x 'Meitriscal') x pollen parent 'Katharina Zeimet'. The seed parent is characterised by broad bushy growth, yellow blooms, mild fragrance and repeat flowering. The pollen parent is characterised by broad bushy growth, double blooms, medium deep green foliage and repeat flowering. Hybridisation took place in Le Cannet des Maures, France in 1987. From this cross 'Meibrenec' was chosen in 1989 on the basis of flower type. Selection criteria: double flower type, short broad bushy habit, almost continuous flowering, Propagation: 20 plants were grafted through conventional T-budding method onto virus indexed indica major rootstock, all plants were found to be uniform and stable. 'Meibrenec' will be commercially propagated by both budded and vegetative cutting methods. Breeder: Alain Meilland, Le Cannet des Maures, France.

Choice of Comparators The qualified person considers 'Pretty Polly' to be the closest known variety of common knowledge. However, this variety differs significantly from 'Meibrenec' by more upright and bushy habit, larger terminal leaf length and width and more glossy on the leaf upper side.

Comparative Trial Description based on official overseas test report obtained from Geves, Sophia –Antipolis, France. OS Test Report No. 12622. The overseas test report was confirmed by observations made on locally grown material in Myponga, SA. The data from the local observation is shown in parenthesis in the Characteristics section.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
Israel	1995	Applied	'Meibrenec'
EU	1995	Granted	'Meibrenec'
USA	1997	Applied	'Meibrenec'

First sold in The Netherlands in Nov 1994. First Australian sale 1998.

Description**: Kim Syrus,** Melrose Park, SA.

'Meicaflon'

Application No: 1998/235 Accepted: 27 Sep 2000.
Applicant: **Meilland International,** Le Cannet des Maures, France.
Agent: **Kim Syrus,** Melrose Park, SA.

Characteristics (Figure 8) Plant: growth habit flat bushy, height short, width broad. Stem: anthocyanin absent, prickles present, prickle shape of lower side concave. Leaf: size small, glossiness of upper side weak. Terminal leaflet: length short (av. 20.35mm), width narrow (av. 11.69mm). Flower: colour group pink, type double, diameter small (av. 35.36mm), almost continuous flowering, Petal: size small , colour of middle zone inner side RHS 38C (RHS 62C-B), marginal zone inner side RHS 38C (RHS 62CB), middle zone outer side RHS 29C-D (RHS 62D), marginal zone outer side RHS 29C-D (RHS 62D). Basal spot: inner side; present, very small, colour RHS 6D, outer side; present, very small, colour RHS 6D, Seed: vessel size very small, vessel shape funnel. Flowering: almost continuous. (Note: data in parenthesis are from local observations. All RHS colour chart numbers in local observation refers to 1995 edition.)

Origin and Breeding Controlled pollination: seed parent 'The Fairy' x pollen parent 'Katharina Zeimet' x 'Meijikatar'. The seed parent is characterised by broad bushy growth, light pink blooms and repeat flowering. The pollen parent is characterised by upright bushy growth, double blooms, medium glossy deep green foliage and repeat flowering. Hybridisation took place in Le Cannet des Maures, France in 1987. From this cross 'Meicaflon' was chosen in 1989 on the basis of flower type. Selection criteria: double flower type, short broad bushy habit, almost continuous flowering, Propagation: 20 plants were grafted through conventional T- budding method onto virus indexed indica major rootstock, all plants were found to be uniform and stable. 'Meicaflon' will be commercially propagated by both budded and vegetative cutting methods. Breeder: Alain Meilland, Le Cannet des Maures, France.

Choice of Comparators The qualified person considers 'The Fairy' to be the closest known variety of common knowledge. However, this variety differs significantly from 'Meicaflon' by more broad and bushy habit and larger terminal leaf length and width.

Comparative Trial Description based on official overseas test report obtained from Geves, Sophia –Antipolis, France. OS Test Report No. 12621. The overseas test report was confirmed by observations made on locally grown material in Myponga, SA. The data from the local observation is shown in parenthesis in the Characteristics section.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
Israel	1995	Applied	'Meicaflon'
EU	1995	Granted	'Meicaflon'
USA	1997	Applied	'Meicaflon'

First sold in The Netherlands in Nov 1994. First Australian sale 1998.

Description**: Kim Syrus,** Melrose Park, SA.

'Meidrepil'

Application No: 1998/237 Accepted: 27 Sep 2000.
Applicant: **Meilland International,** Le Cannet des Maures, France.
Agent: **Kim Syrus,** Melrose Park, SA.

Characteristics (Figure 9) Plant: growth habit flat bushy, height short, width broad. Stem: anthocyanin very weak, hue bronze to reddish brown, prickles present, prickle shape of lower side concave. Leaf: size small, glossiness of upper side weak. Terminal leaflet: length short (av. 24.27mm), width narrow (av. 12.07mm). Flower: colour group yellow, type double, diameter small (av. 32.56mm), almost continuous flowering, Petal: size small, colour of middle zone inner side RHS 12B (ca. RHS 12B), marginal zone inner side RHS 12B (ca RHS 12B), middle zone outer side RHS 12B-C (ca. RHS 12C), marginal zone outer side RHS 12B-C (ca. RHS 12C). Basal spot: inner side; absent, outer side; absent, Seed: vessel size very small, vessel shape pitcher. Flowering: almost continuous. (Note: data in parenthesis are from local observations. All RHS colour chart numbers in local observation refers to 1995 edition.)

Origin and Breeding Controlled pollination: seed parent ('Meiplarzon' x 'Meitriscal') x pollen parent 'Katharina Zeimet'. The seed parent is characterised by broad bushy growth, yellow blooms, mild fragrance and repeat flowering. The pollen parent is characterised by broad bushy growth, double blooms, glossy deep green foliage and repeat flowering. Hybridisation took place in Le Cannet des Maures, France in 1987. From this cross 'Meidrepil' was chosen in 1989 on the basis of flower type. Selection criteria: double flower type, short broad bushy habit, almost continuous flowering, Propagation: 20 plants were grafted through conventional T-budding method onto virus indexed indica major rootstock, all plants were found to be uniform and stable. 'Meidrepil' will be commercially propagated by both budded and vegetative cutting methods. Breeder: Alain Meilland, Le Cannet des Maures, France.

Choice of Comparators The qualified person considers 'Golden Angel' to be the closest known variety of common knowledge. However, this variety differs significantly from 'Meidrepil' by more upright and bushy habit, larger terminal leaf length and width and less petals.

Comparative Trial Description based on official overseas test report obtained from Geves, Sophia –Antipolis, France. OS Test Report No. 12620. The overseas test report was confirmed by observations made on locally grown material in Myponga, SA. The data from the local observation is shown in parenthesis in the Characteristics section.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
Israel	1995	Applied	'Meidrepil'
EU	1995	Granted	'Meidrepil'
USA	1997	Applied	'Meidrepil'

First sold in The Netherlands in Nov 1994. First Australian sale 1998.

Description**: Kim Syrus,** Melrose Park, SA.

Saccharum hybrid
Sugarcane

'Q168'

Application No: 1997/047 Accepted: 12 Mar 1997.
Applicant: **Bureau of Sugar Experiment Stations,** Indooroopilly, QLD

Characteristics (Table 30, Figure 32) Ploidy: cytologically complex polyploid and aneuploid interspecific sugarcane (*Saccharum* spp. hybrid). Plant: perennial grass with medium growth habit, few to medium tillers per stool. Leaf canopy is very light to light. Suckers are very few in number. Stem: Culm height was not able to be measured because of profuse flowering, but appears to be short to medium. Alternate internodes of a culm are arranged in a medium zigzagged pattern. Length of longest internode on bud side is short with mean length approximately 16.4 cm (range 14.4 to 21.8 cm) and side opposite bud is short with mean length approximately 15.9 cm (range 13.6 to 21.4 cm). Diameter of longest internode central and perpendicular to bud is thin with mean approximately 23.7 mm (range 18.9 to 28.4 mm). Diameter of longest internode central and dissecting bud is very thin to thin with mean approximately 23.8 mm (range 18.5 to 28.7 mm). Internodes are cylindrical to weakly bobbin-shaped and round in cross-section. Colour of dewaxed internode is yellow-green (RHS 144B) exposed and yellow-green (RHS 151A to 152D) unexposed. Wax covering of internode is medium, with wax band indistinct and medium in width. Growth cracks are very few. Cork cracks are absent. Bud groove is conspicuous, medium to long and deep. Root band width on bud side is medium (8.3-9.9 mm). Bud is of strong prominence, triangular pointed in shape, and with base near to leaf scar and tip level to above the growth ring. Bud width excluding wings is wide and bud wing is medium in width. Leaf scar is prominent and is oblique descending towards bud. Growth ring is flush. Leaf: Lamina measurements were not made because of profuse flowering. However, lamina of TVD leaf appears to be short, narrow, and curved near middle in attitude. Midrib of lamina at longitudinal midpoint appears to be narrow and lamina width to midrib width ratio is medium. Leaf sheath of TVD leaf appears to be short and sheaths of senescent leaves have weak to medium adherence to culm. Hairs on abaxial leaf sheath surface (Group 57) are absent to very few. Ligule is crescentiform in shape and medium at midrib section. Cilia along the free margin of the ligule (Group 61) are dense and long. Auricles are medium in prominence and asymmetrical. Inner or underlapping auricle is deltoid in shape and medium in size. Outer or overlapping auricle is transitional in shape. Flowering: The flower is an open panicle and flowering is discontinuous. Seed: The seed or fruit is a caryopsis. Disease resistance: 'Q168' is very highly resistant to Fiji Disease Virus, resistant-intermediate to Leaf Scald (*Xanthomonas albilineans* (Ashby) Dowson), intermediate to Red Rot (*Glomerella tucumanensis* (Spego) Arx and Mueller, and susceptible to very highly susceptible to *Pachymetra* Root Rot. Other characteristics: Fibre quantity and quality are acceptable for milling purposes (impact reading 0.56, shear strength 30.2, short fibre 51.8%). In addition, 'Q168' was uniquely identified by DNA fingerprinting using microsatellite markers.

Origin and Breeding Controlled pollination: 'Q168' is the progeny of a controlled biparental cross made at Meringa (Gordonvale), QLD, between the female parent 'CP51-21' and the male parent '66C807'. Seed was collected from the pollinated female inflorescence and stored for germination in 1985. 'Q168' is very highly resistant to Fiji disease (1) while 'CP51-21' is resistant to resistant-intermediate (3-4) and '66C807' is highly resistant (2). 'Q168' is intermediate (5) to red rot while 'CP51-21' is very highly resistant (1). 'Q168' has been evaluated and selected by BSES in yield trials in NSW. Standard commercial varieties were also included in the trials for comparative purposes. Cane yield, ccs, and sugar yield have been the main selection criteria. Disease resistance screening was conducted at the pathology farm (Eight Mile Plains) and in the Tully glasshouse. After an initial seedling stage (using seed from the cross), all subsequent stages have involved vegetative propagation.

Choice of Comparators 'BN81-1394' and 'RB72-454' were chosen as they are the most similar varieties of common knowledge grown in NSW. Together these varieties accounted for 12% (0.3 million t) of the New South Wales crop in 1999. The male parent '66C807' has been discarded from the parent collection so could not be included as a comparator. The female parent 'CP51-21' was not included as a comparator. 'Q168' is more resistant to Fiji disease virus (1) than 'CP51-21' (3-4) and is more susceptible to red rot (5) than 'CP51-21' (1).

Comparative Trial Location: Conducted at Meringa Sugar Experiment Station (17º 12′ S, 145º 45′ E), Gordonvale, QLD. The trial was planted 22 Sep 1999 and harvested in Oct 2000. DUS data were recorded in mid May 2000. Conditions: Clones were propagated from vegetative cuttings and grown under field conditions. Soil type: Clifton. Watering regime: Rainfed. Chemicals: The fungicide Shirtan was applied at 400 ml per hectare at planting. SuSCon (14 kg/ha) was applied at planting. Fertilisers: DAP (120 kg/ha) was applied at planting. Muriate of potash (140 kg/ha) was applied on 15 November 1999 and urea (100 kg/ha) was applied on 25 November 1999. Total nutrients were: N – 67.6 kg/ha; P – 24 kg/ha; K – 70 kg/ha. Trial design: Clones were grown in a randomised complete block design with three replicates. Plots were single row by 10m, with 1.5m between rows. Measurements: Taken from up to 15 stalks sampled randomly per plot.

Prior Applications and Sales

First Australian sale in Jul 1996.

Description: **Dr Mike Cox,** BSES, Bundaberg, QLD.

Table 30 *Saccharum* varieties

	'Q168'	***'BN81-1394'**	***'RB72-454'**
GROWTH HABIT			
	medium	semi-erect	medium
TILLERING			
	few to medium	few	few
LEAF CANOPY			
	very light to light	very light to light	very light
ALIGNMENT OF INTERNODES			
	medium zigzagged	strongly zigzagged	weakly zigzagged
INTERNODE WIDTH – Central Perpendicular to Bud (mm) LSD (P ≤ 0.01) = 2.38			
mean	23.7[b]	22.6[b]	29.7[a]
std deviation	2.4	2.1	3.1
	thin	very thin to thin	very thick
INTERNODE WIDTH – Central Dissecting Bud (mm) LSD (P ≤ 0.01) = 2.59			
mean	23.8[b]	23.6[b]	30.8[a]
std deviation	2.6	2.4	3.5
	very thin to thin	very thin to thin	very thick
INTERNODE SHAPE			
	cylindrical to weakly bobbin-shaped	concave-convex	cylindrical to conoidal
INTERNODE CROSS-SECTION			
	round	oval	round
INTERNODE DEWAXED COLOUR (RHS) – Exposed			
	yellow-green (144B)	yellow-green (147B) and greyed-red (178A) to greyed-purple (187A)	yellow-green (152B) and greyed-orange (166A)
INTERNODE DEWAXED COLOUR (RHS) – Unexposed			
	yellow-green (151A) to 152D)	yellow-green (144C)	yellow-green (145A to 146D) and greyed-yellow (160B)
INTERNODE WAX COVERING			
	medium	medium to heavy	medium
WAX BAND DISTINCTIVENESS			
	indistinct	medium	distinct
WAX BAND WIDTH			
	medium	very narrow	medium
GROWTH CRACKS			
	very few	absent	very few to few
CORK CRACKS			
	absent	absent	very few
BUD GROOVE PRESENCE			
	conspicuous	absent	absent
BUD GROOVE LENGTH			
	medium to long	n/a	n/a
BUD GROOVE DEPTH			
	deep	n/a	n/a
ROOT BAND WIDTH – Bud Side			
	medium	medium	narrow
BUD – PROMINENCE			
	strong	strong to very strong	weak to medium
BUD – SHAPE			
	triangular pointed	round	ovate to triangular pointed
BUD – POSITION OF BASE (Above Leaf Scar)			
	near	fused	medium
BUD – POSITION OF TIP (Relative to Growth Ring)			
	level to above	slightly below	below
BUD WIDTH (Excluding Wings)			
	wide	medium	narrow
BUD WING WIDTH			
	medium	wide	very narrow
LEAF SCAR PROMINENCE			
	prominent	prominent	medium
LEAF SCAR SLOPE			
	oblique	oblique	oblique
GROWTH RING			
	flush	swollen	slightly swollen
LAMINA ATTITUDE			
	curve near middle	curve near tip	bent near tip
LEAF SHEATH – ADHERENCE TO CULM			
	weak to medium	strong	medium
HAIR GROUP 57 – OCCURRENCE			
	absent to very few	absent	absent
LIGULE HEIGHT			
	medium	medium	wide

Table 30 continued

HAIR GROUP 61 – DENSITY/OCCURRENCE			
	dense	medium to dense	dense
AURICLE – PROMINENCE (Second Fully Unfurled Leaf)			
	medium	inconspicuous	prominent
AURICLE SHAPE – ULP			
	deltoid	transitional	lanceolate
AURICLE SIZE – ULP			
	medium	n/a	medium to large

Means followed by the same letter are not significantly different at $P \leq 0.01$, Duncan's Multiple Range

'Q183'

Application No: 2000/182 Accepted: 19 Jul 2000.
Applicant: **Bureau of Sugar Experiment Stations,** Indooroopilly, QLD.

Characteristics (Table 31, Figure 33) Ploidy: cytologically complex polyploid and aneuploid interspecific sugarcane (*Saccharum* spp. hybrid). Plant: perennial grass with semi-erect growth habit, medium tillers per stool. Leaf canopy is very light to light. Suckers are very few in number. Stem: Culms are short to medium with mean length to top visible dewlap (TVD) approximately 2.55 m (range 1.82 to 2.94 m). Alternate internodes of a culm are arranged in a strongly zigzagged pattern. Length of longest internode on bud side is short to medium with mean length approximately 16.5 cm (range 12.6 to 21.1 cm) and side opposite bud is short with mean length approximately 16.0 cm (range 12.3 to 20.3 cm). Diameter of longest internode central and perpendicular to bud is medium to thick with mean approximately 26.6 mm (range 21.0 to 32.2 mm). Diameter of longest internode central and dissecting bud is medium to thick with mean approximately 27.2 mm (range 21.7 to 33.1 mm). Internodes are slightly bobbin-shaped and slightly oval in cross-section. Colour of dewaxed internode is yellow-green (RHS 144A to 152A) and greyed-orange (RHS166A) exposed and white (RHS 155A) and green-yellow (RHS 1D) unexposed. Wax covering of internode is light to medium, with wax band distinct and wide. Growth cracks are few to medium. Cork cracks are very few. Bud groove is inconspicuous in prominence, very short in length and very shallow in depth. Root band width on bud side is medium (7.7-10.0 mm). Bud is of medium to strong prominence, ovate in shape, and with base near to leaf scar and tip level to below the growth ring. Bud width excluding wings is wide and bud wing is wide. Leaf scar has medium prominence and is oblique descending towards bud. Growth ring is flush to weakly swollen. Leaf: Lamina of TVD leaf is long in length with mean approximately 1.54 m (range 1.42 to 1.70 m), wide to very wide in width with mean approximately 47.8 mm (range 41.2 to 55.3 mm) at longitudinal midpoint, and curved near tip in attitude. Midrib of lamina at longitudinal midpoint is medium in width with mean 3.8 mm (range 3.0 to 5.4 mm). Lamina width to midrib width ratio is medium with mean approximately 12.8 (range 9.1 to 15.1). Leaf sheath of TVD leaf is medium with mean length approximately 31.0 cm (range 28.0 to 34.0 cm). Sheaths of senescent leaves have weak adherence to culm. Hairs on abaxial leaf sheath surface (Group 57) are medium in density and long. Ligule is crescentiform in shape and medium at midrib section. Cilia along the free margin of the ligule (Group 61) are medium to dense and short. Auricles are inconspicuous and asymmetrical. Inner or underlapping auricle is deltoid in shape and very small to small in size. Outer or overlapping auricle is transitional in shape. Flowering: The flower is an open panicle and flowering is discontinuous. Seed: The seed or fruit is a caryopsis. Disease resistance: 'Q183' is resistant-intermediate to intermediate to Leaf Scald (*Xanthomonas albilineans* (Ashby) Dowson), susceptible to Red Rot (*Glomerella tucumanensis* (Spego) Arx and Mueller, very highly resistant to *Pachymetra* Root Rot. Other characteristics: Fibre quantity and quality are acceptable for milling purposes (impact reading 0.44, shear strength 22.6, short fibre 56.3%). In addition, 'Q183' was uniquely identified by DNA fingerprinting using microsatellite markers.

Origin and Breeding Controlled pollination: 'Q183' is the progeny of a controlled biparental cross made at Meringa (Gordonvale), QLD, between the female parent 'Q124' and the male parent 'H56-752'. Seed was collected from the pollinated female inflorescence and stored for germination in 1989. 'Q183' is resistant-intermediate to intermediate to leaf scald while 'Q124' is very highly to highly resistant and 'H56-752' is very highly resistant to resistant. 'Q183' has been evaluated and selected by BSES in yield trials on the Burdekin Sugar Experiment Station and sites within the sugarcane growing area in the Burdekin region. Standard commercial varieties were also included in the trials for comparative purposes. Cane yield, ccs, and sugar yield have been the main selection criteria. Disease resistance screening was conducted at the pathology farm (Eight Mile Plains) and in the Tully glasshouse. After an initial seedling stage (using seed from the cross), all subsequent stages have involved vegetative propagation.

Choice of Comparators 'Q117' and 'Q165'(D) were chosen as they are the most similar varieties of common knowledge grown in the Burdekin region. Together, these two varieties accounted for 38.9% (3.3 million t) of the Burdekin crop in 1999. The male parent 'H56-752' was included as a comparator. 'Q124' was not included as a comparator. 'Q183' is less resistant to leaf scald (4-5) than 'H56-752' (1-3) or 'Q124' (1-2) and is more resistant (1) to *Pachymetra* root rot than 'Q124' (5).

Comparative Trial Location: Conducted at Meringa Sugar Experiment Station (17º 12′ S, 145º 45′ E), Gordonvale, QLD. The trial was planted 22 Sep 1999 and harvested in Oct 2000. DUS data were recorded in mid May 2000. Conditions: Clones were propagated from vegetative cuttings and grown under field conditions. Soil type: Clifton. Watering regime: Rainfed. Chemicals: The fungicide Shirtan was applied at 400 ml per hectare at planting. SuSCon (14 kg/ha) was applied at planting. Fertilisers: DAP (120 kg/ha) was applied at planting. Muriate of potash (140 kg/ha) was applied on 15 Nov 1999 and urea (100 kg/ha) was applied on 25 Nov 1999. Total nutrients were: N – 67.6 kg/ha; P – 24 kg/ha; K – 70 kg/ha. Trial design: Clones were grown in a randomised complete block design with three replicates. Plots were single row by 10m, with 1.5m between rows. Measurements: Taken from up to 15 stalks sampled randomly per plot.

Prior Applications and Sales

First Australian sale in Jul 1999.

Description: **Dr Mike Cox,** BSES, Bundaberg, QLD.

Table 31 *Saccharum* varieties

	'Q183'	*'Q117'	*'Q165'ϕ	*'H56-752'
GROWTH HABIT				
	semi-erect	erect	medium	medium
TILLERING				
	medium	few	medium	medium
LEAF CANOPY				
	very light to light	light to medium	light to medium	light
SUCKERING				
	very few	very few	very few	few
CULM HEIGHT (m) LSD (P ≤ 0.01) = 0.43				
mean	2.55[b]	2.48[b]	2.82[ab]	3.20[a]
std deviation	0.25	0.25	0.15	0.39
	short to medium	short to medium	medium to tall	tall to very tall
ALIGNMENT OF INTERNODES				
	strongly zigzagged	medium zigzagged	medium zigzagged	strongly zigzagged
INTERNODE LENGTH – Bud Side (cm) LSD (P ≤ 0.01) = 1.57				
mean	16.5[b]	14.2[c]	16.7[b]	19.5[a]
std deviation	1.82	1.22	1.37	1.12
	short to medium	very short	short to medium	medium to long
INTERNODE LENGTH – Side Opposite Bud (cm) LSD (P ≤ 0.01) = 1.61				
mean	16.0[b]	13.7[c]	16.2[b]	19.1[a]
std deviation	1.79	1.29	1.25	1.12
	short	very short	short to medium	long
INTERNODE SHAPE				
	slightly bobbin-shaped	tumescent	bobbin-shaped	bobbin-shaped
INTERNODE CROSS-SECTION				
	slightly oval	oval	oval	round to slightly oval
INTERNODE DEWAXED COLOUR (RHS) – Exposed				
	yellow-green (144A to 152A) and greyed-orange (166A)	yellow-green (146C)	greyed-orange (166A to 177A)	yellow-green (144A to 151A)
INTERNODE DEWAXED COLOUR (RHS) – Unexposed				
	white (155A) and green-yellow (1D)	yellow-green (145C to 146C)	yellow-green 144B to 145A)	yellow-green (144B)
INTERNODE WAX COVERING				
	light to medium	heavy	medium	heavy
WAX BAND DISTINCTIVENESS				
	distinct	indistinct	distinct	indistinct
WAX BAND WIDTH				
	wide	wide	medium	wide
GROWTH CRACKS				
	few to medium	very few	very few	absent
CORK CRACKS				
	very few	absent	absent	few
BUD GROOVE PRESENCE				
	inconspicuous	inconspicuous	absent	inconspicuous
BUD GROOVE LENGTH				
	very short	very short to short	n/a	short
BUD GROOVE DEPTH				
	very shallow	very shallow to shallow	n/a	very shallow
ROOT BAND WIDTH – Bud Side				
	medium	medium	narrow	medium
BUD – PROMINENCE				
	medium to strong	medium	weak to medium	medium
BUD – SHAPE				
	ovate	rhomboid to ovate	triangular pointed	ovate
BUD – POSITION OF BASE (Above Leaf Scar)				
	near	near to medium	fused	medium to high
BUD – POSITION OF TIP (Relative to Growth Ring)				
	level to below	level to above	above	level to slightly below
BUD WIDTH (Excluding Wings)				
	wide	narrow to medium	medium	very wide
BUD WING WIDTH				
	wide	narrow to medium	medium	very wide
GROWTH RING				
	flush to weakly swollen	flush	flush	swollen
LAMINA LENGTH (TVD Leaf) (m) LSD (P ≤ 0.01) = 0.17				
mean	1.54[a]	1.31[b]	1.39[ab]	1.51[a]
std deviation	0.07	0.14	0.08	0.10
	long	short	short to medium	long

Table 31 continued

LAMINA WIDTH (Longitudinal Midpoint) (mm) LSD (P ≤ 0.01) = 5.1				
mean	47.8[a]	42.7[ab]	37.0[b]	41.3[b]
std deviation	3.1	1.9	1.7	2.8
	wide to very wide	medium to wide	narrow	medium
LAMINA WIDTH/MIDRIB WIDTH RATIO				
	medium	medium	low to medium	medium
LAMINA ATTITUDE				
	curve near tip	curve near middle	curve near middle	curve near middle
LEAF SHEATH – ADHERENCE TO CULM				
	weak	weak	medium	weak
HAIR GROUP 57 – OCCURRENCE				
	medium	sparse	absent	very sparse
HAIR GROUP 57 – LENGTH				
	long	medium	n/a	short to medium
LIGULE HEIGHT				
	medium	medium	medium	wide
HAIR GROUP 61 – DENSITY/OCCURRENCE				
	medium to dense	sparse to medium	medium	medium
AURICLE – PROMINENCE (Second Fully Unfurled Leaf)				
	inconspicuous	medium	prominent	prominent
AURICLE SHAPE – ULP				
	deltoid	lanceolate	lanceolate	lanceolate
AURICLE SHAPE – OLP				
	transitional	deltoid	transitional	transitional
AURICLE SIZE – ULP				
	very small to small	small	large	medium

Means followed by the same letter are not significantly different at P ≤ 0.01, Duncan's Multiple Range

'Q184'

Application No: 2000/183 Accepted: 19 Jul 2000.
Applicant: **Bureau of Sugar Experiment Stations,** Indooroopilly, QLD.

Characteristics (Table 32, Figure 34) Ploidy: cytologically complex polyploid and aneuploid interspecific sugarcane (*Saccharum* spp. hybrid). Plant: perennial grass with semi-erect growth habit, medium tillers per stool. Leaf canopy is very light to light. Suckers are very few in number. Stem: Culms are short with mean length to top visible dewlap (TVD) approximately 2.40 m (range 1.78 to 3.03 m). Alternate internodes of a culm are arranged in a weakly zigzagged pattern. Length of longest internode on bud side is medium to long with mean length approximately 19.3 cm (range 15.0 to 23.2 cm) and side opposite bud is long with mean length approximately 19.3 cm (range 14.7 to 23.0 cm). Diameter of longest internode central and perpendicular to bud is medium to thick with mean approximately 26.4 mm (range 19.5 to 32.0 mm). Diameter of longest internode central and dissecting bud is medium to thick with mean approximately 27.2 mm (range 20.2 to 39.5 mm). Internodes are bobbin-shaped and oval in cross-section. Colour of dewaxed internode is yellow-green (RHS 152A to 152B) exposed and yellow-green (RHS 151B to 153D) unexposed. Wax covering of internode is medium to heavy, with wax band distinct and narrow. Growth cracks are absent. Cork cracks are very few. Bud groove is absent. Root band width on bud side is medium (9.0-10.9 mm). Bud is of medium prominence, ovate or obovate in shape, and with base near to leaf scar and tip level with the growth ring. Bud width excluding wings is narrow and bud wing is wide. Leaf scar is prominent and is oblique descending towards bud. Growth ring is depressed. Leaf: Lamina of TVD leaf is medium to long in length with mean approximately 1.48 m (range 1.20 to 1.67 m), medium to wide in width with mean approximately 43.3 mm (range 34.0 to 50.4 mm) at longitudinal midpoint, and curved near tip in attitude. Midrib of lamina at longitudinal midpoint is medium to wide in width with mean 4.1 mm (range 3.1 to 7.1 mm). Lamina width to midrib width ratio is low to medium with mean approximately 10.7 (range 6.6 to 13.8). Leaf sheath of TVD leaf is long to very long with mean length approximately 34.6 cm (range 31.0 to 38.0 cm). Sheaths of senescent leaves have weak adherence to culm. Hairs on abaxial leaf sheath surface (Group 57) are medium in density and short. Ligule is crescentiform in shape and medium at midrib section. Cilia along the free margin of the ligule (Group 61) are medium to dense and short. Auricles are prominent and asymmetrical. Inner or underlapping auricle is lanceolate in shape and large in size. Outer or overlapping auricle is transitional in shape. Flowering: The flower is an open panicle and flowering is discontinuous. Seed: The seed or fruit is a caryopsis. Disease resistance: 'Q184' is very highly resistant to Fiji Disease Virus, resistant to Leaf Scald (*Xanthomonas albilineans* (Ashby) Dowson), intermediate to Red Rot (*Glomerella tucumanensis* (Spego) Arx and Mueller, highly resistant to Sugarcane Mosaic Virus, and highly resistant to *Pachymetra* Root Rot. Other characteristics: Fibre quantity and quality are acceptable for milling purposes (impact reading 0.57, shear strength 30.4, short fibre 50.4%). In addition, 'Q184' was uniquely identified by DNA fingerprinting using microsatellite markers.

Origin and Breeding Controlled pollination: 'Q184' is the progeny of a controlled biparental cross made at Meringa (Gordonvale), QLD, between the female parent '60S7493' and the male parent '66C807'. Seed was collected from the pollinated female inflorescence and stored for germination in 1985. 'Q184' is highly resistant to Pachymetra root rot (2) while '60S7493' is highly to very highly susceptible (8-9) and '66C807' is susceptible to highly susceptible (7-8). 'Q184' has been evaluated and selected by BSES in yield trials on the Southern Sugar Experiment Station and sites within the sugarcane growing area in the southern region. Standard commercial varieties were also included in the trials for comparative purposes. Cane yield, ccs, and sugar yield have been the main selection criteria. Disease

resistance screening was conducted at the pathology farm (Eight Mile Plains) and in the Tully glasshouse. After an initial seedling stage (using seed from the cross), all subsequent stages have involved vegetative propagation.

Choice of Comparators 'Q138' and 'Q150' were chosen as they are the most similar varieties of common knowledge grown in the southern region. Together these varieties accounted for 11.0% (0.8 million t) of the southern region crop in 1999. Both parents have been discarded from the parent collection so could not be included as comparators. 'Q184' is more resistant (2) to *Pachymetra* root rot than either of the parents (7-9).

Comparative Trial Location: Conducted at Meringa Sugar Experiment Station (17º 12′ S, 145º 45′ E), Gordonvale, QLD. The trial was planted 22 Sep 1999 and harvested in Oct 2000. DUS data were recorded in mid May 2000. Conditions: Clones were propagated from vegetative cuttings and grown under field conditions. Soil type: Clifton. Watering regime: Rainfed. Chemicals: The fungicide Shirtan was applied at 400 ml per hectare at planting. SuSCon (14 kg/ha) was applied at planting. Fertilisers: DAP (120 kg/ha) was applied at planting. Muriate of potash (140 kg/ha) was applied on 15 November 1999 and urea (100 kg/ha) was applied on 25 November 1999. Total nutrients were: N – 67.6 kg/ha; P – 24 kg/ha; K – 70 kg/ha. Trial design: Clones were grown in a randomised complete block design with three replicates. Plots were single row by 10m, with 1.5m between rows. Measurements: Taken from up to 15 stalks sampled randomly per plot.

Prior Applications and Sales

First Australian sale in Sep 1999.

Description: **Dr Mike Cox,** BSES, Bundaberg, QLD.

Table 32 *Saccharum* varieties

	'Q184'	***'Q138'**	***'Q150'**
GROWTH HABIT			
	semi-erect	semi-erect	medium
TILLERING			
	medium	medium	many
LEAF CANOPY			
	very light to light	light to medium	medium
SUCKERING			
	very few	very few to few	very few
ALIGNMENT OF INTERNODES			
	weakly zigzagged	weakly zigzagged	medium to strongly zigzagged
INTERNODE LENGTH – Bud Side (cm) LSD (P ≤ 0.01) = 1.57			
mean	19.3[a]	19.9[a]	16.9[b]
std deviation	2.18	2.35	1.81
	medium to long	long	short to medium
INTERNODE LENGTH – Side Opposite Bud (cm) LSD (P ≤ 0.01) = 1.61			
mean	19.3[a]	19.7[a]	16.5[b]
std deviation	2.24	2.29	1.84
	long	long	short to medium
INTERNODE SHAPE			
	bobbin-shaped	conoidal	cylindrical
INTERNODE CROSS-SECTION			
	oval	round	round
INTERNODE DEWAXED COLOUR (RHS) – Exposed			
	yellow-green (152A to 152B)	yellow-green (144A)	greyed-orange (174A to 174B)
INTERNODE DEWAXED COLOUR (RHS) – Unexposed			
	yellow-green (151B to 153D)	greyed-yellow (160A)	yellow-green (146D to 150C)
INTERNODE WAX COVERING			
	medium to heavy	light	light
WAX BAND DISTINCTIVENESS			
	distinct	distinct	medium
WAX BAND WIDTH			
	narrow	medium	very wide
GROWTH CRACKS			
	absent	few to medium	numerous
CORK CRACKS			
	very few	very few	few to medium
BUD GROOVE PRESENCE			
	absent	inconspicuous	inconspicuous
ROOT BAND WIDTH – Bud Side			
	medium	narrow	narrow
BUD – PROMINENCE			
	medium	medium to strong	medium to strong
BUD – SHAPE			
	ovate or obovate	rhomboid	round
BUD – POSITION OF BASE (Above Leaf Scar)			
	near	fused to near	near

Table 32 continued

BUD – POSITION OF TIP (Relative to Growth Ring)			
	level	below	level to above
BUD WIDTH (Excluding Wings)			
	narrow	narrow	medium
BUD WING WIDTH			
	wide	medium	medium
LEAF SCAR PROMINENCE			
	prominent	medium	medium
GROWTH RING			
	depressed	flush to swollen	flush
LAMINA LENGTH (TVD Leaf) (m) LSD (P ≤ 0.01) = 0.17			
mean	1.48[a]	1.50[a]	1.23[b]
std deviation	0.12	0.11	0.07
	medium to long	long	very short
LAMINA WIDTH (Longitudinal Midpoint) (mm) LSD (P ≤ 0.01) = 5.10			
mean	43.3[b]	50.1[a]	48.6[ab]
std deviation	4.1	3.7	2.3
	medium to wide	very wide	wide to very wide
MIDRIB WIDTH (Longitudinal Midpoint) (mm) LSD (P ≤ 0.01) = 0.7			
mean	4.1[ab]	4.7[a]	3.5[b]
std deviation	0.7	0.4	0.4
	medium to wide	wide to very wide	narrow to medium
LAMINA WIDTH/MIDRIB WIDTH RATIO			
	low to medium	low to medium	medium
LAMINA ATTITUDE			
	curve near tip	bent near tip	curve near tip
LEAF SHEATH – ADHERENCE TO CULM			
	weak	weak to medium	weak
LENGTH OF TVD LEAF SHEATH (cm) LSD (P ≤ 0.01) = 2.8			
mean	34.6[a]	31.0[b]	31.2[b]
std deviation	1.7	2.9	1.6
	long to very long	medium	medium
HAIR GROUP 57 – OCCURRENCE			
	medium	very sparse	absent
HAIR GROUP 57 – LENGTH			
	short	medium	n/a
LIGULE HEIGHT			
	medium	wide	medium
AURICLE -PROMINENCE (Second Fully Unfurled Leaf)			
	prominent	prominent	inconspicuous
AURICLE SHAPE – ULP			
	lanceolate	lanceolate	transitional
AURICLE SHAPE – OLP			
	transitional	lanceolate	transitional
AURICLE SIZE – ULP			
	large	medium to large	n/a
AURICLE SIZE – OLP			
	n/a	medium to large	n/a

Means followed by the same letter are not significantly different at P ≤ 0.01, Duncan's Multiple Range

'Q186'

Application No: 2000/184 Accepted: 19 Jul 2000.
Applicant: **Bureau of Sugar Experiment Stations,** Indooroopilly, QLD.

Characteristics (Table 33, Figure 35) Ploidy: cytologically complex polyploid and aneuploid interspecific sugarcane (*Saccharum* spp. hybrid). Plant: perennial grass with semi-erect growth habit, few tillers per stool. Leaf canopy is medium. Suckers are few in number. Stem: Culms are short to medium with mean length to top visible dewlap (TVD) approximately 2.54 m (range 2.04 to 3.04 m). Alternate internodes of a culm are arranged in a weakly zigzagged pattern. Length of longest internode on bud side is short with mean length approximately 16.3 cm (range 13.4 to 20.3 cm) and side opposite bud is short to medium with mean length approximately 16.2 cm (range 13.4 to 20.2 cm). Diameter of longest internode central and perpendicular to bud is thin with mean approximately 22.9 mm (range 18.8 to 26.6 mm). Diameter of longest internode central and dissecting bud is thin with mean approximately 23.9 mm (range 19.7 to 28.1 mm). Internodes are bobbin-shaped and round in cross-section. Colour of dewaxed internode is yellow-green (RHS 143A to 144A) exposed and yellow-green (RHS 145A) unexposed. Wax covering of internode is light to medium, with wax band indistinct and narrow. Growth cracks are absent. Cork cracks are absent. Bud groove is absent. Root band width on bud side is narrow (7.0-8.1 mm). Bud is of weak to medium prominence, ovate in shape, and with base near to leaf scar and tip level with the growth ring. Bud width excluding wings is very narrow and bud wing is narrow. Leaf scar is prominent and oblique descending towards bud. Growth ring is swollen. Leaf: Lamina of TVD leaf is very short to short in length with mean approximately 1.28 m (range 1.14 to 1.46 m), medium in width with mean approximately 40.3 mm (range 31.8 to 46.9 mm) at longitudinal midpoint, and bent near tip in attitude. Midrib of lamina at longitudinal midpoint is narrow to medium in width with mean 3.4 mm (range 2.8 to 3.9 mm). Lamina width to midrib width ratio is medium with mean approximately 12.0 (range 9.4 to 14.7). Leaf sheath of TVD leaf is very short with mean length approximately 27.7 cm (range 24.0 to 32.0 cm). Sheaths of senescent leaves have weak adherence to culm. Hairs on abaxial leaf sheath surface (Group 57) are very sparse to sparse in density and short. Ligule is crescentiform in shape and wide at midrib section. Cilia along the free margin of the ligule (Group 61) are dense and short. Auricles are medium in prominence and asymmetrical. Inner or underlapping auricle is deltoid in shape and small to medium in size. Outer or overlapping auricle is

transitional in shape. Flowering: The flower is an open panicle and flowering is discontinuous. Seed: The seed or fruit is a caryopsis. Disease resistance: 'Q186' is very highly resistant to Leaf Scald (*Xanthomonas albilineans* (Ashby) Dowson) and highly resistant to Red Rot (*Glomerella tucumanensis* (Spego) Arx and Mueller. Other characteristics: Fibre quantity and quality are acceptable for milling purposes (impact reading 0.44, shear strength 25.0, short fibre 68.0%). In addition, 'Q186' was uniquely identified by DNA fingerprinting using microsatellite markers.

Origin and Breeding Controlled pollination: 'Q186' is the progeny of a controlled biparental cross made at Meringa (Gordonvale), Q, between the female parent 'Q117' and the male parent '66N2008'. Seed was collected from the pollinated female inflorescence and stored for germination in 1987. 'Q186' and 'Q117' are very highly resistant (1) to Leaf Scald, while '66N2008' is highly resistant (2). 'Q186' has been evaluated and selected by BSES in yield trials on the Meringa Sugar Experiment Station and sites within the sugarcane growing area in the Northern region. Standard commercial varieties were also included in the trials for comparative purposes. Cane yield, ccs, and sugar yield have been the main selection criteria. Disease resistance screening was conducted at the pathology farm (Eight Mile Plains) and in the Tully glasshouse. After an initial seedling stage (using seed from the cross), all subsequent stages have involved vegetative propagation.

Choice of Comparators 'Q152' and 'Q174$^{(\phi)}$' were chosen as they are the most similar varieties of common knowledge grown in the Northern region, and the female parent 'Q117' was also included. Together, these three varieties accounted for 18.9% (2.1 million t) of the Northern region crop in 1999. The male parent '66N2008' was not included as a comparator as it has been discarded from the parent collection. It is more susceptible (6-7) to *Pachymetra* root rot than Q186 (1-2).

Comparative Trial Location: Conducted at Meringa Sugar Experiment Station (17º 12′ S, 145º 45′ E), Gordonvale, QLD. The trial was planted 22 Sep 1999 and harvested in Oct 2000. DUS data were recorded in mid May 2000. Conditions: Clones were propagated from vegetative cuttings and grown under field conditions. Soil type: Clifton. Watering regime: Rainfed. Chemicals: The fungicide Shirtan was applied at 400 ml per hectare at planting. SuSCon (14 kg/ha) was applied at planting. Fertilisers: DAP (120 kg/ha) was applied at planting. Muriate of potash (140 kg/ha) was applied on 15 Nov 1999 and urea (100 kg/ha) was applied on 25 Nov 1999. Total nutrients were: N – 67.6 kg/ha; P – 24 kg/ha; K – 70 kg/ha. Trial design: Clones were grown in a randomised complete block design with three replicates. Plots were single row by 10m, with 1.5m between rows. Measurements: Taken from up to 15 stalks sampled randomly per plot.

Prior Applications and Sales

First Australian sale in Jul 1999.

Description: **Dr Mike Cox,** BSES, Bundaberg, QLD.

Table 33 *Saccharum* varieties

	'Q186'	*'Q117'	*'Q152'	*'Q174'$^{\phi}$
GROWTH HABIT				
	semi-erect	erect	medium	semi-erect
LEAF CANOPY				
	medium	light to medium	very light to light	very light to light
SUCKERING				
	few	very few	medium	very few
CULM HEIGHT (m) LSD (P ≤ 0.01) = 0.43				
mean	2.54^{a}	2.48^{a}	2.82^{a}	n/a
std deviation	0.23	0.25	0.26	n/a
	short to medium	short to medium	medium to tall	n/a
ALIGNMENT OF INTERNODES				
	weakly zigzagged	medium zigzagged	weakly zigzagged	medium zigzagged
INTERNODE LENGTH – Bud Side (cm) LSD (P ≤ 0.01) = 1.57				
mean	16.3^{b}	14.2^{c}	18.4^{a}	14.6^{bc}
std deviation	1.56	1.22	1.78	1.41
	short	very short	medium	very short to short
INTERNODE LENGTH – Side Opposite Bud (cm) LSD (P ≤ 0.01) = 1.61				
mean	16.2^{b}	13.7^{c}	18.2^{a}	14.3^{c}
std deviation	1.48	1.29	1.81	1.47
	short to medium	very short	medium to long	very short to short
INTERNODE WIDTH – Central Perpendicular to Bud (mm) LSD (P ≤ 0.01) = 2.38				
mean	22.9^{b}	27.0^{a}	24.0^{b}	28.1^{a}
std deviation	2.1	3.4	2.0	2.3
	thin	medium to thick	thin to medium	thick to very thick
INTERNODE WIDTH – Central Dissecting Bud (mm) LSD (P ≤ 0.01) = 2.59				
mean	23.9^{c}	28.6^{ab}	25.7^{bc}	28.8^{a}
std deviation	2.3	3.9	2.3	2.6
	thin	thick	thin to medium	thick
INTERNODE SHAPE				
	bobbin-shaped	tumescent	slightly bobbin-shaped	weakly conoidal to tumescent
INTERNODE CROSS-SECTION				
	round	oval	oval	round to weakly oval
INTERNODE DEWAXED COLOUR (RHS) – Exposed				
	yellow-green (143A to 144A)	yellow-green (146C)	yellow-green (146C)	yellow-green (146B to 152A)

Table 33 continued

INTERNODE DEWAXED COLOUR (RHS) – Unexposed				
	yellow-green (145A)	yellow-green (145C to) 146C	yellow-green (144C)	yellow-green (151A to 152C)
INTERNODE WAX COVERING				
	light to medium	heavy	medium	medium to heavy
WAX BAND WIDTH				
	narrow	wide	very wide	wide
GROWTH CRACKS				
	absent	very few	few	very few
CORK CRACKS				
	absent	absent	few	absent
BUD GROOVE PRESENCE				
	absent	inconspic-uous	inconspic-uous	medium
ROOT BAND WIDTH – Bud Side				
	narrow	medium	narrow	narrow
BUD – PROMINENCE				
	weak to medium	medium	weak to medium	medium
BUD – SHAPE				
	ovate	rhomboid to ovate	rhomboid	triangular pointed
BUD – POSITION OF BASE (Above Leaf Scar)				
	near	near to medium	medium	near
BUD – POSITION OF TIP (Relative to Growth Ring)				
	level	level to above	below	level to above
BUD WIDTH (Excluding Wings)				
	very narrow	narrow to medium	medium	narrow
BUD WING WIDTH				
	narrow	narrow to medium	narrow	medium
LEAF SCAR PROMINENCE				
	prominent	medium	medium	medium
GROWTH RING				
	swollen	flush	flush to swollen	flush
lamina width/midrib width ratio				
	medium	medium	low to medium	n/a
lamina attitude				
	bent near tip	curve near middle	curve near tip	curve near tip
LEAF SHEATH – ADHERENCE TO CULM				
	weak	weak	medium	medium
HAIR GROUP 57 – OCCURRENCE				
	very sparse to sparse	sparse	very sparse	very sparse
HAIR GROUP 57 – LENGTH				
	short	medium	very short	short
LIGULE HEIGHT				
	wide	medium	wide	medium
HAIR GROUP 61 – DENSITY/OCCURRENCE				
	dense	sparse to medium	medium	sparse
AURICLE SHAPE – ULP				
	deltoid	lanceolate	deltoid	deltoid
AURICLE SHAPE – OLP				
	transitional	deltoid	transitional	deltoid
AURICLE SIZE – ULP				
	small to medium	small	very small to small	very small

Means followed by the same letter are not significantly different at $P \leq 0.01$, Duncan's Multiple Range

'Q187'

Application No: 2000/185 Accepted: 19 Jul 2000.
Applicant: **Bureau of Sugar Experiment Stations,** Indooroopilly, QLD.

Characteristics (Table 34, Figure 36) Ploidy: cytologically complex polyploid and aneuploid interspecific sugarcane (*Saccharum* spp. hybrid). Plant: perennial grass with erect growth habit and medium tillers per stool. Leaf canopy is medium. Suckers are very few in number. Stem: Culms are very short to short with mean length to top visible dewlap (TVD) approximately 2.19 m (range 1.73 to 2.54 m). Alternate internodes of a culm are arranged in a weakly zigzagged pattern. Length of longest internode on bud side is short to medium with mean length approximately 17.2 cm (range 12.6 to 21.0 cm) and side opposite bud is medium with mean length approximately 17.1 cm (range 12.4 to 21.0 cm). Diameter of longest internode central and perpendicular to bud is thin to medium with mean approximately 24.6 mm (range 20.8 to 30.6 mm). Diameter of longest internode central and dissecting bud is thin to medium with mean approximately 25.2 mm (range 21.1 to 32.7 mm). Internodes are bobbin-shaped and round in cross-section. Colour of dewaxed internode is yellow-green (RHS 146A to 152A) exposed and yellow-green (RHS 151D) unexposed. Wax covering of internode is very light to light, with wax band indistinct and medium in width. Growth cracks are absent. Cork cracks are absent. Bud groove is inconspicuous, medium to long and shallow. Root band width on bud side is narrow (7.2-7.5 mm). Bud is of strong prominence, ovate or obovate in shape, and with base fused to leaf scar and tip below the growth ring. Bud width excluding wings is narrow and bud wing is medium in width. Leaf scar is prominent and is oblique descending towards bud. Growth ring is swollen. Leaf: Lamina of TVD leaf is very long in length with mean approximately 1.63 m (range 1.46 to 1.80 m), wide to very wide in width with

mean approximately 48.4 mm (range 38.2 to 55.0 mm) at longitudinal midpoint, and curved near tip in attitude. Midrib of lamina at longitudinal midpoint is very wide in width with mean 4.9 mm (range 4.3 to 5.6 mm). Lamina width to midrib width ratio is low with mean approximately 9.9 (range 7.2 to 11.8). Leaf sheath of TVD leaf is medium in length with mean approximately 31.8 cm (range 28.0 to 35.0 cm). Sheaths of senescent leaves have weak adherence to culm. Hairs on abaxial leaf sheath surface (Group 57) are medium in density and medium to long. Ligule is crescentiform in shape and medium at midrib section. Cilia along the free margin of the ligule (Group 61) are very sparse and long. Inner or underlapping auricle and outer or overlapping auricle are both transitional in shape. Flowering: The flower is an open panicle and flowering is discontinuous. Seed: The seed or fruit is a caryopsis. Disease resistance: 'Q187' is very highly to highly resistant to Leaf Scald (*Xanthomonas albilineans* (Ashby) Dowson), susceptible to Red Rot (*Glomerella tucumanensis* (Spego) Arx and Mueller, and very highly to highly resistant to *Pachymetra* Root Rot. Other characteristics: Fibre quantity and quality are acceptable for milling purposes (impact reading 0.45, shear strength 16.5, short fibre 82.0%). In addition, 'Q187' was uniquely identified by DNA fingerprinting using microsatellite markers.

Origin and Breeding Controlled pollination: 'Q187' is the progeny of a controlled biparental cross made at Meringa (Gordonvale), QLD, between the female parent '58N829' and the male parent '66N2008'. Seed was collected from the pollinated female inflorescence and stored for germination in 1987**.** 'Q187' is very highly to highly resistant to Pachymetra root rot (1-2) while '58N829' is resistant to intermediate (3-5) and '66N2008' is intermediate-susceptible to susceptible (6-7). 'Q187' is susceptible to red rot (7) while '58N829' is highly resistant (2). 'Q187' has been evaluated and selected by BSES in yield trials on the Meringa Sugar Experiment Station and sites within the sugarcane growing area in the northern region. Standard commercial varieties were also included in the trials for comparative purposes. Cane yield, ccs, and sugar yield have been the main selection criteria. Disease resistance screening was conducted at the pathology farm (Eight Mile Plains) and in the Tully glasshouse. After an initial seedling stage (using seed from the cross), all subsequent stages have involved vegetative propagation.

Choice of Comparators 'Q138' and 'Q173ϕ' were chosen as they are the most similar varieties of common knowledge grown in the northern region. Together these varieties accounted for 8.1% (0.9 million t) of the northern region crop in 1999. Both parents have been discarded from the parent collection so could not be included as comparators. 'Q187' is more resistant (1-2) to *Pachymetra* root rot than either of the parents (3-7) and is more susceptible (7) to red rot than the female parent '58N829' (2).

Comparative Trial Location: Conducted at Meringa Sugar Experiment Station (17º 12′ S, 145º 45′ E), Gordonvale, QLD. The trial was planted 22 Sep 1999 and harvested in Oct 2000. DUS data were recorded in mid May 2000. Conditions: Clones were propagated from vegetative cuttings and grown under field conditions. Soil type: Clifton. Watering regime: Rainfed. Chemicals: The fungicide Shirtan was applied at 400 ml per hectare at planting. SuSCon (14 kg/ha) was applied at planting. Fertilisers: DAP (120 kg/ha) was applied at planting. Muriate of potash (140 kg/ha) was applied on 15 Nov 1999 and urea (100 kg/ha) was applied on 25 Nov 1999. Total nutrients were: N – 67.6 kg/ha; P – 24 kg/ha; K – 70 kg/ha. Trial design: Clones were grown in a randomised complete block design with three replicates. Plots were single row by 10m, with 1.5m between rows. Measurements: Taken from up to 15 stalks sampled randomly per plot.

Prior Applications and Sales

First Australian sale in Sep 1999.

Description: **Dr Mike Cox,** BSES, Bundaberg, QLD.

Table 34 *Saccharum* varieties

	'Q187'	***'Q138'**	***'Q173'ϕ**
GROWTH HABIT	erect	semi-erect	erect
TILLERING	medium	medium	few
LEAF CANOPY	medium	light to medium	light to medium
SUCKERING	very few	very few to few	very few
ALIGNMENT OF INTERNODES	weakly zigzagged	weakly zigzagged	medium to strongly zigzagged
INTERNODE LENGTH – Bud Side (cm) LSD (P ≤ 0.01) = 1.57			
mean	17.2[b]	19.9[a]	17.5[b]
std deviation	1.98	2.35	1.86
	short to medium	long	medium
INTERNODE LENGTH – Side Opposite Bud (cm) LSD (P ≤ 0.01) = 1.61			
mean	17.1[b]	19.7[a]	17.2[b]
std deviation	2.03	2.29	1.76
	medium	long	medium
INTERNODE SHAPE	bobbin-shaped	conoidal	bobbin-shaped to obconoidal
INTERNODE DEWAXED COLOUR (RHS) – Exposed	yellow-green (146A to 152A)	yellow-green (144A)	yellow-green (144A)
INTERNODE DEWAXED COLOUR (RHS) – Unexposed	yellow-green (151D)	greyed-yellow (160A)	yellow-green (151B)

DESCRIPTIONS

Table 34 continued

INTERNODE WAX COVERING			
	very light to light	light	medium to heavy
WAX BAND DISTINCTIVENESS			
	indistinct	distinct	medium
WAX BAND WIDTH			
	medium	medium	wide
GROWTH CRACKS			
	absent	few to medium	medium to numerous
CORK CRACKS			
	absent	very few	absent
BUD GROOVE PRESENCE			
	inconspicuous	inconspicuous	medium
BUD GROOVE LENGTH			
	medium to long	very short to short	short to medium
BUD GROOVE DEPTH			
	shallow	very shallow to shallow	shallow to medium
BUD – PROMINENCE			
	strong	medium to strong	medium
BUD – SHAPE			
	ovate or obovate	rhomboid	ovate
BUD – POSITION OF BASE (Above Leaf Scar)			
	fused	fused to near	near
BUD – POSITION OF TIP (Relative to Growth Ring)			
	below	below	level
BUD WIDTH (Excluding Wings)			
	narrow	narrow	medium
LEAF SCAR PROMINENCE			
	prominent	medium	prominent
GROWTH RING			
	swollen	flush to swollen	flush
LAMINA WIDTH/MIDRIB WIDTH RATIO			
	low	low to medium	low to medium
LAMINA ATTITUDE			
	curve near tip	bent near tip	curve near tip
LEAF SHEATH – ADHERENCE TO CULM			
	weak	weak to medium	strong
LENGTH OF TVD LEAF SHEATH (cm) LSD (P ≤ 0.01) = 2.8			
mean	31.8[b]	31.0[b]	37.9[a]
std deviation	1.2	2.9	1.9
	medium	medium	very long
HAIR GROUP 57 – OCCURRENCE			
	medium	very sparse	absent
HAIR GROUP 57 – LENGTH			
	medium to long	medium	n/a
LIGULE HEIGHT			
	medium	wide	wide
HAIR GROUP 61 – DENSITY/OCCURRENCE			
	very sparse	medium to dense	sparse
AURICLE -PROMINENCE (Second Fully Unfurled Leaf)			
	absent	prominent	prominent
AURICLE SHAPE – ULP			
	transitional	lanceolate	lanceolate
AURICLE SHAPE – OLP			
	transitional	lanceolate	deltoid

Means followed by the same letter are not significantly different at P ≤ 0.01, Duncan's Multiple Range.

'Q188'

Application No: 2000/186 Accepted: 19 Jul 2000.
Applicant: **Bureau of Sugar Experiment Stations,** Indooroopilly, QLD.

Characteristics (Table 35, Figure 37) Ploidy: cytologically complex polyploid and aneuploid interspecific sugarcane (*Saccharum* spp. hybrid). Plant: perennial grass with semi-erect growth habit, few tillers per stool. Leaf canopy is very light. Suckers are very few in number. Stem: Culms are medium to tall with mean length to top visible dewlap (TVD) approximately 2.78 m (range 2.59 to 2.92 m). Alternate internodes of a culm are arranged in a medium zigzagged pattern. Length of longest internode on bud side is long with mean length approximately 20.0 cm (range 15.7 to 25.7 cm) and side opposite bud is long with mean length approximately 19.6 cm (range 15.2 to 25.3 cm). Diameter of longest internode central and perpendicular to bud is medium with mean approximately 25.6 mm (range 20.3 to 34.5 mm). Diameter of longest internode central and dissecting bud is thin to medium with mean approximately 25.3 mm (range 19.3 to 35.8 mm). Internodes are weakly conoidal and round in cross-section. Colour of dewaxed internode is yellow-green (RHS 144A) exposed and yellow-green (RHS 144C) unexposed. Wax covering of internode is medium, with wax band distinct and narrow. Growth cracks are absent. Cork cracks are absent. Bud groove is medium prominence, long and medium in depth. Root band width on bud side is narrow (8.0-9.2 mm). Bud is of medium prominence, round in shape, and with base medium to leaf scar and tip level with the growth ring. Bud width excluding wings is narrow and bud wing is narrow. Leaf scar is prominent and is oblique descending towards bud. Growth ring is swollen. Leaf: Lamina of TVD leaf is short to

medium in length with mean approximately 1.38 m (range 1.11 to 1.67 m), narrow to medium in width with mean approximately 38.9 mm (range 31.9 to 43.3 mm) at longitudinal midpoint, and curved near tip in attitude. Midrib of lamina at longitudinal midpoint is very narrow to narrow in width with mean 2.9 mm (range 2.4 to 3.3 mm). Lamina width to midrib width ratio is medium with mean approximately 13.8 (range 11.4 to 16.9). Leaf sheath of TVD leaf is very long with mean length approximately 35.3 cm (range 33.5 to 38.5 cm). Sheaths of senescent leaves have medium adherence to culm. Hairs on abaxial leaf sheath surface (Group 57) are absent. Ligule is crescentiform in shape and medium at midrib section. Cilia along the free margin of the ligule (Group 61) are medium to dense and medium in length. Auricles are medium in prominence and asymmetrical. Inner or underlapping auricle is lanceolate in shape and medium in size. Outer or overlapping auricle is transitional in shape. Flowering: The flower is an open panicle and flowering is discontinuous. Seed: The seed or fruit is a caryopsis. Disease resistance: 'Q188' is very highly to highly resistant to Fiji Disease Virus, very highly to highly resistant to Leaf Scald (*Xanthomonas albilineans* (Ashby) Dowson), very highly resistant to Sugarcane Mosaic Virus, intermediate to Red Rot (*Glomerella tucumanensis* (Spego) Arx and Mueller, and very highly to highly resistant to *Pachymetra* Root Rot. Other characteristics: Fibre quantity and quality are acceptable for milling purposes (impact reading 0.56, shear strength 30.2, short fibre 51.8%). In addition, 'Q188' was uniquely identified by DNA fingerprinting using microsatellite markers.

Origin and Breeding Controlled pollination: 'Q188' is the progeny of a controlled biparental cross made at Meringa (Gordonvale), QLD, between the female parent 'Q113' and the male parent '63S782'. Seed was collected from the pollinated female inflorescence and stored for germination in 1982. 'Q188' is very highly to highly resistant to Pachymetra root rot (1-2) while 'Q113' is resistant-intermediate (4) and '63S782' is resistant-intermediate to intermediate-susceptible (4-6). 'Q188' has been evaluated and selected by BSES in yield trials on the Southern Sugar Experiment Station and sites within the sugarcane growing area in the southern region. Standard commercial varieties were also included in the trials for comparative purposes. Cane yield, ccs, and sugar yield have been the main selection criteria. Disease resistance screening was conducted at the pathology farm (Eight Mile Plains) and in the Tully glasshouse. After an initial seedling stage (using seed from the cross), all subsequent stages have involved vegetative propagation.

Choice of Comparators 'Q131' and 'Q138' were chosen as they are the most similar varieties of common knowledge grown in the southern region. Together these varieties accounted for 9% (0.6 million t) of the southern region crop in 1999. The male parent '63S782' has been discarded from the parent collection so could not be included as a comparator. The female parent 'Q113' was not included as a comparator. 'Q188' is more resistant to Fiji disease virus (1-2) than 'Q113' (5-6) or '63S782' (3-5) and is more resistant to *Pachymetra* root rot (1-2) than either of the parents (4-6).

Comparative Trial Location: Conducted at Meringa Sugar Experiment Station (17° 12′ S, 145° 45′ E), Gordonvale, QLD. The trial was planted 22 Sep 1999 and harvested in Oct 2000. DUS data were recorded in mid May 2000. Conditions: Clones were propagated from vegetative cuttings and grown under field conditions. Soil type: Clifton. Watering regime: Rainfed. Chemicals: The fungicide Shirtan was applied at 400 ml per hectare at planting. SuSCon (14 kg/ha) was applied at planting. Fertilisers: DAP (120 kg/ha) was applied at planting. Muriate of potash (140 kg/ha) was applied on 15 Nov 1999 and urea (100 kg/ha) was applied on 25 Nov 1999. Total nutrients were: N – 67.6 kg/ha; P – 24 kg/ha; K – 70 kg/ha. Trial design: Clones were grown in a randomised complete block design with three replicates. Plots were single row by 10m, with 1.5m between rows. Measurements: Taken from up to 15 stalks sampled randomly per plot.

Prior Applications and Sales

First Australian sale in Apr 2000.

Description: **Dr Mike Cox,** BSES, Bundaberg, QLD.

Table 35 *Saccharum* varieties

	'Q188'	***'Q131'**	***'Q138'**
GROWTH HABIT			
	semi-erect	erect	semi-erect
TILLERING			
	few	few	medium
LEAF CANOPY			
	very light	very light	light to medium
SUCKERING			
	very few	very few	very few to few
ALIGNMENT OF INTERNODES			
	medium zigzagged	weakly zigzagged	weakly zigzagged
INTERNODE LENGTH – Bud Side (cm) LSD (P ≤ 0.01) = 1.57			
mean	20.0[a]	15.3[b]	19.9[a]
std deviation	2.65	1.62	2.35
	long	very short to short	long
INTERNODE LENGTH – Side Opposite Bud (cm) LSD (P ≤ 0.01) = 1.61			
mean	19.6[a]	14.9[b]	19.7[a]
std deviation	2.70	1.68	2.29
	long	very short to short	long
INTERNODE SHAPE			
	weakly conoidal	bobbin-shaped	conoidal
INTERNODE CROSS-SECTION			
	round	oval	round

Table 35 continued

INTERNODE DEWAXED COLOUR (RHS) – Exposed			
	yellow-green (144A)	yellow-green (144A) to greyed-orange (166A)	yellow-green (144A)
INTERNODE DEWAXED COLOUR (RHS) – Unexposed			
	yellow-green (144C)	greyed-yellow (160A)	greyed-yellow (160A)
INTERNODE WAX COVERING			
	medium	very light	light
WAX BAND WIDTH			
	narrow	narrow	medium
GROWTH CRACKS			
	absent	absent	few to medium
CORK CRACKS			
	absent	absent	very few
BUD GROOVE PRESENCE			
	medium	absent	inconspicuous
BUD GROOVE LENGTH			
	long	n/a	very short to short
BUD GROOVE DEPTH			
	medium	n/a	very shallow to shallow
ROOT BAND WIDTH – Bud Side			
	narrow	very narrow	narrow
BUD – PROMINENCE			
	medium	medium	medium to strong
BUD – SHAPE			
	round	pentagonal	rhomboid
BUD – POSITION OF BASE (Above Leaf Scar)			
	medium	fused	fused to near
BUD – POSITION OF TIP (Relative to Growth Ring)			
	level	below	below
BUD WIDTH (Excluding Wings)			
	narrow	medium	narrow
BUD WING WIDTH			
	narrow	medium	medium
LEAF SCAR PROMINENCE			
	prominent	medium	medium
GROWTH RING			
	swollen	flush	flush to swollen
LAMINA LENGTH (TVD Leaf) (m) LSD (P ≤ 0.01) = 0.17			
mean	1.38[a]	flowered – no lamina measurements possible	1.50[a]
std deviation	0.19		0.11
	short to medium		long
LAMINA WIDTH (Longitudinal Midpoint) (mm) LSD (P ≤ 0.01) = 5.1			
mean	38.9[a]	flowered – no lamina measurements possible	50.1[b]
std deviation	3.6		3.7
	narrow to medium		very wide
MIDRIB WIDTH (Longitudinal Midpoint) (mm) LSD (P ≤ 0.01) = 0.7			
mean	2.9[a]	flowered – no lamina measurements possible	4.7[b]
std deviation	0.3		0.4
	very narrow to narrow		wide to very wide
LAMINA WIDTH/MIDRIB WIDTH RATIO			
	medium	low	low to medium
LAMINA ATTITUDE			
	curve near tip	curve near tip	bent near tip
LEAF SHEATH – ADHERENCE TO CULM			
	medium	weak	weak to medium
LENGTH OF TVD LEAF SHEATH (cm) LSD (P ≤ 0.01) = 2.8			
mean	35.3[a]	flowered – no lamina measurements possible	31.0[b]
std deviation	1.7		2.9
	very long		medium
HAIR GROUP 57 – OCCURRENCE			
	absent	absent	very sparse
LIGULE HEIGHT			
	medium	wide	wide
AURICLE – PROMINENCE (Second Fully Unfurled Leaf)			
	medium	inconspicuous	prominent
AURICLE SHAPE – ULP			
	lanceolate	deltoid	lanceolate
AURICLE SHAPE – OLP			
	transitional	transitional	lanceolate
AURICLE SIZE – ULP			
	medium	small	medium to large

Means followed by the same letter are not significantly different at P ≤ 0.01, Duncan's Multiple Range.

'Q189'

Application No: 2000/187 Accepted: 19 July 2000.
Applicant: **Bureau of Sugar Experiment Stations,** Indooroopilly, QLD.

Characteristics (Table 36, Figure 38) Ploidy: cytologically complex polyploid and aneuploid interspecific sugarcane (*Saccharum* spp. hybrid). Plant: perennial grass with semi-erect growth habit, few tillers per stool. Leaf canopy is light. Suckers are very few in number. Stem: Culms are short to medium with mean length to top visible dewlap (TVD) approximately 2.56 m (range 1.98 to 3.31 m). Alternate internodes of a culm are arranged in a medium to strongly zigzagged pattern. Length of longest internode on bud side is short with mean length approximately 16.2 cm (range

13.2 to 19.4 cm) and side opposite bud is short with mean length approximately 15.9 cm (range 12.7 to 19.1 cm). Diameter of longest internode central and perpendicular to bud is medium with mean approximately 25.6 mm (range 21.7 to 29.6 mm). Diameter of longest internode central and dissecting bud is medium with mean approximately 26.1 mm (range 22.2 to 30.6 mm). Internodes are cylindrical and round to slightly oval in cross-section. Colour of dewaxed internode is greyed-orange (RHS 165A) exposed and yellow-green (RHS 144A to 152A) unexposed. Wax covering of internode is medium to heavy, with wax band indistinct. Growth cracks are very few. Cork cracks are absent. Bud groove is medium in prominence, short to medium in length and shallow to medium in depth. Root band width on bud side is wide (11.2-12.7 mm). Bud is of strong prominence, ovate or obovate to triangular pointed in shape, and with base near to leaf scar and tip level with the growth ring. Bud width excluding wings is wide and bud wing is wide. Leaf scar is prominent and is oblique descending towards bud. Growth ring is swollen. Leaf: Lamina of TVD leaf is medium to long in length with mean approximately 1.47 m (range 1.32 to 1.58 m), narrow to medium in width with mean approximately 38.1 mm (range 33.3 to 41.8 mm) at longitudinal midpoint, and bent near tip in attitude. Midrib of lamina at longitudinal midpoint is very narrow to narrow in width with mean 2.9 mm (range 2.4 to 3.4 mm). Lamina width to midrib width ratio is medium with mean approximately 13.2 (range 11.5 to 16.5). Leaf sheath of TVD leaf is short with mean length approximately 29.9 cm (range 27.5 to 33.0 cm). Sheaths of senescent leaves have weak adherence to culm. Hairs on abaxial leaf sheath surface (Group 57) are medium in density and long. Ligule is crescentiform in shape and medium at midrib section. Cilia along the free margin of the ligule (Group 61) are of medium density and short. Auricles are prominent and asymmetrical. Inner or underlapping auricle is lanceolate in shape and large in size. Outer or overlapping auricle is lanceolate in shape and small in size. Flowering: The flower is an open panicle and flowering is discontinuous. Seed: The seed or fruit is a caryopsis. Disease resistance: 'Q189' is intermediate-susceptible to Leaf Scald (*Xanthomonas albilineans* (Ashby) Dowson), intermediate-susceptible to Red Rot (*Glomerella tucumanensis* (Spego) Arx and Mueller, and resistant to *Pachymetra* Root Rot. Other characteristics: Fibre quantity and quality are acceptable for milling purposes (impact reading 0.40, shear strength 16.8, short fibre 80.8%). In addition, 'Q189' was uniquely identified by DNA fingerprinting using microsatellite markers.

Origin and Breeding Controlled pollination: 'Q189' is the progeny of a controlled biparental cross made at Meringa (Gordonvale), Q, between the female parent 'Q117' and the male parent 'CP56-59'. Seed was collected from the pollinated female inflorescence and stored for germination in 1990. 'Q189' is intermediate-susceptible (6) to Leaf Scald while 'Q117' is very highly resistant (1) and 'Q189' is resistant to Pachymetra root rot (3) while 'CP56-59' is susceptible (7). 'Q189' has been evaluated and selected by BSES in yield trials on the Burdekin Sugar Experiment Station and sites within the sugarcane growing area in the Burdekin region. Standard commercial varieties were also included in the trials for comparative purposes. Cane yield, ccs, and sugar yield have been the main selection criteria. Disease resistance screening was conducted at the pathology farm (Eight Mile Plains) and in the Tully glasshouse. After an initial seedling stage (using seed from the cross), all subsequent stages have involved vegetative propagation.

Choice of Comparators 'Q117' and 'Q180ф' were chosen as they are the most similar varieties of common knowledge grown in the Burdekin region. 'Q117' accounted for 30.0% (2.5 million t) of the Burdekin crop in 1999 while 'Q180ф' is a relatively new variety. 'Q117' is also the female parent. The male parent 'CP56-59' has been discarded from the parent collection so could not be included as a comparator. 'CP56-59' is less resistant to *Pachymetra* root rot (7) than 'Q189' (3).

Comparative Trial Location: Conducted at Meringa Sugar Experiment Station (17º 12′ S, 145º 45′ E), Gordonvale, QLD. The trial was planted 22 Sep 1999 and harvested in Oct 2000. DUS data were recorded in mid May 2000. Conditions: Clones were propagated from vegetative cuttings and grown under field conditions. Soil type: Clifton. Watering regime: Rainfed. Chemicals: The fungicide Shirtan was applied at 400 ml per hectare at planting. SuSCon (14 kg/ha) was applied at planting. Fertilisers: DAP (120 kg/ha) was applied at planting. Muriate of potash (140 kg/ha) was applied on 15 Nov 1999 and urea (100 kg/ha) was applied on 25 Nov 1999. Total nutrients were: N – 67.6 kg/ha; P – 24 kg/ha; K – 70 kg/ha. Trial design: Clones were grown in a randomised complete block design with three replicates. Plots were single row by 10m, with 1.5m between rows. Measurements: Taken from up to 15 stalks sampled randomly per plot.

Prior Applications and Sales

First Australian sale in Jul 2000.

Description: **Dr Mike Cox,** BSES, Bundaberg, QLD.

Table 36 *Saccharum* varieties

	'Q189'	*'Q117'	*'Q180'ф
GROWTH HABIT			
	semi-erect	erect	medium
TILLERING			
	few	few	few to medium
LEAF CANOPY			
	light	light to medium	light to medium
ALIGNMENT OF INTERNODES			
	medium to strongly zigzagged	medium zigzagged	weakly zigzagged
INTERNODE LENGTH – Bud Side (cm) LSD (P ≤ 0.01) = 1.57			
mean	16.2[a]	14.2[ab]	15.9[b]
std deviation	1.69	1.22	1.68
	short	very short	short
INTERNODE LENGTH – Side Opposite Bud (cm) LSD (P ≤ 0.01) = 1.61			
mean	15.9[a]	13.7[b]	15.6[a]
std deviation	1.74	1.29	1.69
	short	very short	short

Table 36 continued

INTERNODE SHAPE	cylindrical	tumescent	bobbin-shaped
INTERNODE CROSS-SECTION	round to slightly oval	oval	oval
INTERNODE DEWAXED COLOUR (RHS) – Exposed	greyed-orange (165A)	yellow-green (146C)	yellow-green (144A)
INTERNODE DEWAXED COLOUR (RHS) – Unexposed	yellow-green (144A to 152A)	yellow-green (145C to 146C)	yellow-green (145B to 145C)
INTERNODE WAX COVERING	medium to heavy	heavy	light
WAX BAND DISTINCTIVENESS	indistinct	indistinct	distinct
GROWTH CRACKS	very few	very few	absent
CORK CRACKS	absent	absent	few to medium
BUD GROOVE PRESENCE	medium	inconspicuous	inconspicuous
BUD GROOVE LENGTH	short to medium	very short to short	very short
BUD GROOVE DEPTH	shallow to medium	very shallow to shallow	very shallow
ROOT BAND WIDTH – Bud Side	wide	medium	narrow
BUD – PROMINENCE	strong	medium	medium to strong
BUD – SHAPE	ovate or obovate to triangular pointed	rhomboid to ovate	round
BUD – POSITION OF BASE (Above Leaf Scar)	near	near to medium	mostly fused
BUD – POSITION OF TIP (Relative to Growth Ring)	level	level to above	above
BUD WIDTH (Excluding Wings)	wide	narrow to medium	very wide
BUD WING WIDTH	wide	narrow to medium	wide
LEAF SCAR PROMINENCE	prominent	medium	prominent
GROWTH RING	swollen	flush	slightly swollen
LAMINA ATTITUDE	bent near tip	curve near middle	curve near tip
LEAF SHEATH – ADHERENCE TO CULM	weak	weak	strong
HAIR GROUP 57 – OCCURRENCE	medium	sparse	sparse
HAIR GROUP 57 – LENGTH	long	medium	medium to long
HAIR GROUP 61 – DENSITY/OCCURRENCE	medium	sparse to medium	medium
AURICLE – PROMINENCE (Second Fully Unfurled Leaf)	prominent	medium	medium
AURICLE SHAPE – ULP	lanceolate	lanceolate	dentoid
AURICLE SHAPE – OLP	lanceolate	deltoid	transitional
AURICLE SIZE – ULP	large	small	medium

Means followed by the same letter are not significantly different at $P \leq 0.01$, Duncan's Multiple Range.

'Q190'

Application No: 2000/190 Accepted: 19 Jul 2000.
Applicant: **Bureau of Sugar Experiment Stations,** Indooroopilly, QLD

Characteristics (Table 37, Figure 39) Ploidy: cytologically complex polyploid and aneuploid interspecific sugarcane (*Saccharum* spp. hybrid). Plant: perennial grass with medium growth habit, few tillers per stool. Leaf canopy is very light to light. Suckers are very few to few in number. Stem: Culms are tall with mean length to top visible dewlap (TVD) approximately 2.96 m (range 2.00 to 3.71 m). Alternate internodes of a culm are arranged in a weakly zigzagged pattern. Length of longest internode on bud side is short with mean length approximately 16.4 cm (range 14.1 to 20.3 cm) and side opposite bud is short to medium with mean length approximately 16.1 cm (range 14.0 to 19.9 cm). Diameter of longest internode central and perpendicular to bud is medium to thick with mean approximately 26.6 mm (range 18.3 to 34.6 mm). Diameter of longest internode central and dissecting bud is medium to thick with mean approximately 27.0 mm (range 19.3 to 36.2 mm). Internodes are bobbin-shaped and round in cross-section. Colour of dewaxed internode is yellow-green (RHS 144A, 145C and 145D to 152D) exposed and yellow-green

(RHS 145A) unexposed. Wax covering of internode is light to medium, with wax band indistinct and wide. Growth cracks are very few. Cork cracks are very few to few. Bud groove is inconspicuous in prominence, short to medium in length and shallow in depth. Root band width on bud side is very wide (11.5-14.6 mm). Bud is of medium to strong prominence, triangular pointed in shape, and with base medium to leaf scar and tip above the growth ring. Bud width excluding wings is wide and bud wing is medium in width. Leaf scar is prominent and is oblique descending towards bud. Growth ring is swollen. Leaf: Lamina of TVD leaf is very short to short in length with mean approximately 1.29 m (range 1.12 to 1.49 m), medium to wide in width with mean approximately 43.0 mm (range 33.1 to 48.4 mm) at longitudinal midpoint, and curved near tip in attitude. Midrib of lamina at longitudinal midpoint is narrow in width with mean 3.1 mm (range 2.4 to 3.9 mm). Lamina width to midrib width ratio is medium with mean approximately 13.8 (range 10.7 to 16.3). Leaf sheath of TVD leaf is very short with mean length approximately 27.2 cm (range 24.0 to 29.5 cm). Sheath of senescent leaves have very weak adherence to culm. Hairs on abaxial leaf sheath surface (Group 57) are medium in density and short. Ligule is deltoid in shape and wide at midrib section. Cilia along the free margin of the ligule (Group 61) are sparse to medium density and short to medium in length. Auricles are prominent and asymmetrical. Inner or underlapping auricle is lanceolate in shape and large to very large in size. Outer or overlapping auricle is transitional in shape. Flowering: The flower is an open panicle and flowering is discontinuous. Seed: The seed or fruit is a caryopsis. Disease resistance: 'Q190' is very highly resistant to Fiji disease virus, very highly resistant to Leaf Scald (*Xanthomonas albilineans* (Ashby) Dowson), highly resistant to Red Rot (*Glomerella tucumanensis* (Spego) Arx and Mueller, and highly resistant to *Pachymetra* Root Rot. Other characteristics: Fibre quantity and quality are acceptable for milling purposes (impact reading 0.49, shear strength 26.8, short fibre 65.1%). In addition, 'Q190' was uniquely identified by DNA fingerprinting using microsatellite markers.

Origin and Breeding Controlled pollination: **'**Q190' is the progeny of a controlled biparental cross made at Meringa (Gordonvale), QLD, between the female parent 'Q107' and the male parent 'H56-752'. Seed was collected from the pollinated female inflorescence and stored for germination in 1986. 'Q190' is very highly resistant (1) to Fiji disease virus while 'Q107' is intermediate to highly susceptible (5-8) and 'H56-752' is highly resistant to resistant (2-3). 'Q190' has been evaluated and selected by BSES in yield trials on the Central Sugar Experiment Station and sites within the sugarcane growing area in the Central region. Standard commercial varieties were also included in the trials for comparative purposes. Cane yield, ccs, and sugar yield have been the main selection criteria. Disease resistance screening was conducted at the pathology farm (Eight Mile Plains) and in the Tully glasshouse. After an initial seedling stage (using seed from the cross), all subsequent stages have involved vegetative propagation.

Choice of Comparators 'H56-752' and 'Q160' were chosen as they are the most similar varieties of common knowledge grown in the Central region. 'H56-752' is a minor variety, accounting for 1.2% (0.1 million t) of the Central region crop in 1999. 'Q160' is a minor variety in the Northern region. The male parent 'H56-752' was included as a comparator. The female parent 'Q107' was not included as a comparator. It is less resistant to Fiji disease virus (5-8) and less resistant to *Pachymetra* root rot (5-9) than 'Q190' (1 and 1-3, respectively).

Comparative Trial Location: Conducted at Meringa Sugar Experiment Station (17º 12′ S, 145º 45′ E), Gordonvale, QLD. The trial was planted 22 Sep 1999 and harvested in Oct 2000. DUS data were recorded in mid May 2000. Conditions: Clones were propagated from vegetative cuttings and grown under field conditions. Soil type: Clifton. Watering regime: Rainfed. Chemicals: The fungicide Shirtan was applied at 400 ml per hectare at planting. SuSCon (14 kg/ha) was applied at planting. Fertilisers: DAP (120 kg/ha) was applied at planting. Muriate of potash (140 kg/ha) was applied on 15 Nov 1999 and urea (100 kg/ha) was applied on 25 Nov 2000. Total nutrients were: N – 67.6 kg/ha; P – 24 kg/ha; K – 70 kg/ha. Trial design: Clones were grown in a randomised complete block design with three replicates. Plots were single row by 10m, with 1.5m between rows. Measurements: Taken from up to 20 stalks sampled randomly per plot.

Prior Applications and Sales

First Australian sale in Jun 2000.

Description: **Dr Mike Cox,** BSES, Bundaberg, QLD.

Table 37 *Saccharum* varieties

	'Q190'	***'H56-752'**	***'Q160'**
GROWTH HABIT			
	medium	medium	semi-erect
TILLERING			
	few	medium	medium
LEAF CANOPY			
	very light to light	light	medium
SUCKERING			
	very few to few	few	very few
CULM HEIGHT (m) LSD (P ≤ 0.01) = 0.43			
mean	2.96[ab]	3.20[a]	2.52[b]
std deviation	0.45	0.39	0.33
	tall	tall to very tall	short to medium
ALIGNMENT OF INTERNODES			
	weakly zigzagged	strongly zigzagged	strongly zigzagged
INTERNODE LENGTH – Bud Side (cm) LSD (P ≤ 0.01) = 1.57			
mean	16.4[b]	19.5[a]	16.1[b]
std deviation	1.46	1.12	1.62
	short to long	medium	short

Table 37 continued

INTERNODE LENGTH – Side Opposite Bud (cm) LSD (P ≤ 0.01) = 1.61			
mean	16.1[b]	19.1[a]	15.4[b]
std deviation	1.46	1.12	1.60
	short to medium	long	short
INTERNODE SHAPE			
	bobbin-shaped	bobbin-shaped	slightly bobbin-shaped
INTERNODE CROSS-SECTION			
	round	round to slightly oval	oval
INTERNODE DEWAXED COLOUR (RHS) – Exposed			
	yellow-green (144A, 145C & 145D to 152D)	yellow-green (144 A to 151A)	yellow-green (144A)
INTERNODE DEWAXED COLOUR (RHS) – Unexposed			
	yellow-green (145A)	yellow-green (144B)	yellow-green (145A to 145C)
INTERNODE WAX COVERING			
	light to medium	heavy	medium to heavy
WAX BAND WIDTH			
	wide	wide	very narrow
GROWTH CRACKS			
	very few	absent	few to medium
CORK CRACKS			
	very few to few	few	medium to numerous
BUD GROOVE PRESENCE			
	inconspicuous	inconspicuous	conspicuous
BUD GROOVE LENGTH			
	short to medium	short	medium
BUD GROOVE DEPTH			
	shallow	very shallow	shallow
ROOT BAND WIDTH – Bud Side			
	very wide	medium	narrow
BUD – PROMINENCE			
	medium to strong	medium	very weak to weak
BUD – SHAPE			
	triangular pointed	ovate	ovate
BUD – POSITION OF BASE (Above Leaf Scar)			
	medium	medium to high	medium
BUD – POSITION OF TIP (Relative to Growth Ring)			
	above	slightly below level to level	
BUD WIDTH (Excluding Wings)			
	wide	very wide	medium
BUD WING WIDTH			
	medium	very wide	medium
LEAF SCAR PROMINENCE			
	prominent	medium	medium
LAMINA LENGTH (TVD Leaf) (m) LSD (P ≤ 0.01) = 0.17			
mean	1.29[b]	1.51[a]	1.33[ab]
std deviation	0.09	0.10	0.13
	very short to short	long	short
LAMINA WIDTH/MIDRIB WIDTH RATIO			
	medium	medium	low to medium
LAMINA ATTITUDE			
	curve near tip	curve near middle	bent near tip
LEAF SHEATH – ADHERENCE TO CULM			
	very weak	weak	weak to medium
HAIR GROUP 57 – OCCURRENCE			
	medium	very sparse	medium
HAIR GROUP 57 – LENGTH			
	short	short to medium	medium
LIGULE SHAPE			
	deltoid	crescentiform	crescentiform
LIGULE HEIGHT			
	wide	wide	medium
HAIR GROUP 61 – DENSITY/OCCURRENCE			
	sparse to medium	medium	sparse to medium
AURICLE -PROMINENCE (Second Fully Unfurled Leaf)			
	prominent	prominent	medium
AURICLE SHAPE – OLP			
	transitional	transitional	lanceolate
AURICLE SIZE – ULP			
	large to very large	medium	small to medium

Means followed by the same letter are not significantly different at P ≤ 0.01, Duncan's Multiple Range.

'Q191'
Application No: 2000/189 Accepted: 19 Jul 2000.
Applicant: **Bureau of Sugar Experiment Stations,** Indooroopilly, QLD.

Characteristics (Table 38, Figure 40) Ploidy: cytologically complex polyploid and aneuploid interspecific sugarcane (*Saccharum* spp. hybrid). Plant: perennial grass with semi-erect growth habit, medium tillers per stool. Leaf canopy is light to medium. Suckers are very few to few in number. Stem: Culms are short with mean length to top visible dewlap (TVD) approximately 2.34 m (range 1.67 to 2.80 m). Alternate internodes of a culm are arranged in a weakly zigzagged pattern. Length of longest internode on bud side is very short to short with mean length approximately 15.5 cm (range 13.2 to 17.5 cm) and side opposite bud is short with mean length approximately 15.3 cm (range 13.0 to 17.5 cm). Diameter of longest internode central and perpendicular to bud is medium to thick with mean approximately 26.4 mm (range 21.5 to 35.1 mm). Diameter of longest internode central and dissecting bud is medium with mean approximately 26.7 mm (range 21.6 to 35.9 mm). Internodes are cylindrical and round in cross-section. Colour of dewaxed internode is yellow-green (RHS 144A to 152D) exposed and yellow-green (RHS 144C) unexposed. Wax covering of internode is very light to light, with wax band distinct and narrow. Growth cracks are very few. Cork cracks are absent. Bud groove is absent. Root band width on bud side is medium (9.3-11.7 mm). Bud is of medium to strong prominence, ovate or obovate in shape, and with base fused to leaf scar and tip level with the growth ring. Bud width excluding wings is wide and bud wing is very wide. Leaf scar is of medium prominence and is oblique descending towards bud. Growth ring is swollen. Leaf: Lamina of TVD leaf is short to medium in length with mean approximately 1.39 m (range 1.26 to 1.52 m), medium in width with mean approximately 41.3 mm (range 37.1 to 47.4 mm) at longitudinal midpoint, and curved near tip in attitude. Midrib of lamina at longitudinal midpoint is narrow to medium in width with mean 3.5 mm (range 2.9 to 4.3 mm). Lamina width to midrib width ratio is medium with mean approximately 11.9 (range 10.0 to 13.8). Leaf sheath of TVD leaf is short to medium with mean length approximately 30.9 cm (range 28.0 to 35.0 cm). Sheath of senescent leaves have medium adherence to culm. Hairs on abaxial leaf sheath surface (Group 57) are very sparse in density and short. Ligule is crescentiform in shape and medium at midrib section. Cilia along the free margin of the ligule (Group 61) have medium density and are long. Auricles are prominent and asymmetrical. Inner or underlapping auricle is lanceolate in shape and large in size. Outer or overlapping auricle is transitional in shape. Flowering: The flower is an open panicle and flowering is discontinuous and very sparse. Seed: The seed or fruit is a caryopsis. Disease resistance: 'Q191' is very highly resistant to Fiji disease virus, highly resistant to Leaf Scald (*Xanthomonas albilineans* (Ashby) Dowson), intermediate to Red Rot (*Glomerella tucumanensis* (Spego) Arx and Mueller, and highly to very highly susceptible to *Pachymetra* Root Rot. Other characteristics: Fibre quantity and quality are acceptable for milling purposes (impact reading 0.45, shear strength 30.2, short fibre 63.6%).

Origin and Breeding Controlled pollination: 'Q191' is the progeny of a controlled biparental cross made at Meringa (Gordonvale), QLD, between the female parent 'NCo310' and the male parent '54N7096'. Seed was collected from the pollinated female inflorescence and stored for germination in 1980. 'Q191' is very highly resistant (1) to Fiji disease virus while 'NCo310' is highly susceptible (8). 'Q191' has been evaluated and selected by BSES in yield trials on the Meringa Sugar Experiment Station and sites within the sugarcane growing area in the Northern region, particularly on the Atherton Tableland. Standard commercial varieties were also included in the trials for comparative purposes. Cane yield, ccs, and sugar yield have been the main selection criteria. Disease resistance screening was conducted at the pathology farm (Eight Mile Plains) and in the Tully glasshouse. After an initial seedling stage (using seed from the cross), all subsequent stages have involved vegetative propagation.

Choice of Comparators 'H56-752' and 'Q181'ϕ were chosen as they are the most similar varieties of common knowledge grown in the Northern region. 'H56-752' is a minor variety and 'Q181'ϕ is a relatively new variety in the Northern region. Neither parent was included as a comparator as both have been discarded from the parent collection. The female parent 'NCo310' is less resistant to Fiji disease virus (8) than 'Q191' (1).

Comparative Trial Location: Conducted at Meringa Sugar Experiment Station (17º 12′ S, 145º 45′ E), Gordonvale, QLD. The trial was planted 22 Sep 1999 and harvested in Oct 2000. DUS data were recorded in mid May 2000. Conditions: Clones were propagated from vegetative cuttings and grown under field conditions. Soil type: Clifton. Watering regime: Rainfed. Chemicals: The fungicide Shirtan was applied at 400 ml per hectare at planting. SuSCon (14 kg/ha) was applied at planting. Fertilisers: DAP (120 kg/ha) was applied at planting. Muriate of potash (140 kg/ha) was applied on 15 Nov 1999 and urea (100 kg/ha) was applied on 25 Nov 2000. Total nutrients were: N – 67.6 kg/ha; P – 24 kg/ha; K – 70 kg/ha. Trial design: Clones were grown in a randomised complete block design with three replicates. Plots were single row by 10m, with 1.5m between rows. Measurements: Taken from up to 20 stalks sampled randomly per plot.

Prior Applications and Sales

First Australian sale in Jun 2000.

Description: **Dr Mike Cox,** BSES, Bundaberg, QLD.

Table 38 *Saccharum* varieties

	'Q191'	*'H56-752'	*'Q181'ϕ
GROWTH HABIT	semi-erect	medium	semi-erect
LEAF CANOPY	light to medium	light	light to medium

Table 38 continued

SUCKERING			
	very few to few	few	very few
CULM HEIGHT (m) LSD (P ≤ 0.01) = 0.43			
mean	2.34[b]	3.20[a]	2.90[a]
std deviation	0.23	0.39	0.20
	short	tall to very tall	medium to tall
ALIGNMENT OF INTERNODES			
	weakly zigzagged	strongly zigzagged	medium zigzagged
INTERNODE LENGTH – Bud Side (cm) LSD (P ≤ 0.01) = 1.57			
mean	15.5[b]	19.5[a]	18.1[a]
std deviation	1.15	1.12	1.53
	very short to short	medium to long	medium
INTERNODE LENGTH – Side Opposite Bud (cm) LSD (P ≤ 0.01) = 1.61			
mean	15.3[b]	19.1[a]	18.0[a]
std deviation	1.17	1.12	1.95
	short	long	medium
INTERNODE SHAPE			
	cylindrical	bobbin-shaped	bobbin-shaped
INTERNODE CROSS-SECTION			
	round	round to slightly oval	round
INTERNODE DEWAXED COLOUR (RHS) – Exposed			
	yellow-green (144A to 152D)	yellow-green (144 A to 151A)	yellow-green (144A)
INTERNODE DEWAXED COLOUR (RHS) – Unexposed			
	yellow-green (144C)	yellow-green (144B)	yellow-green (146C)
INTERNODE WAX COVERING			
	very light to light	heavy	medium
WAX BAND DISTINCTIVENESS			
	distinct	indistinct	distinct
WAX BAND WIDTH			
	narrow	wide	wide
GROWTH CRACKS			
	very few	absent	absent
CORK CRACKS			
	absent	few	few
BUD GROOVE PRESENCE			
	absent	inconspicuous	medium
BUD – PROMINENCE			
	medium to strong	medium	weak to medium
BUD – SHAPE			
	ovate or obovate	ovate	triangular pointed
BUD – POSITION OF BASE (Above Leaf Scar)			
	fused	medium to high	medium
BUD – POSITION OF TIP (Relative to Growth Ring)			
	level	slightly below to level	above
BUD WIDTH (Excluding Wings)			
	wide	very wide	wide
BUD WING WIDTH			
	very wide	very wide	wide
LAMINA WIDTH (Longitudinal Midpoint) (mm) LSD (P ≤ 0.01) = 5.1			
mean	41.3[b]	41.3[b]	51.7[a]
std deviation	2.2	2.8	2.8
	medium	medium	very wide
LAMINA ATTITUDE			
	curve near tip	curve near middle	bent near tip
LEAF SHEATH – ADHERENCE TO CULM			
	medium	weak	medium
HAIR GROUP 57 – OCCURRENCE			
	very sparse	very sparse	sparse to medium
HAIR GROUP 57 – LENGTH			
	short	short to medium	medium to long
LIGULE HEIGHT			
	medium	wide	wide
HAIR GROUP 61 – DENSITY/OCCURRENCE			
	medium	medium	sparse
AURICLE SHAPE – ULP			
	lanceolate	lanceolate	deltoid
AURICLE SHAPE – OLP			
	transitional	transitional	deltoid
AURICLE SIZE – ULP			
	large	medium	medium to large

Means followed by the same letter are not significantly different at P ≤ 0.01, Duncan's Multiple Range.

'Q192'

Application No: 2000/188 Accepted: 19 Jul 2000.
Applicant: **Bureau of Sugar Experiment Stations,** Indooroopilly, QLD.

Characteristics (Table 39, Figure 41) Ploidy: cytologically complex polyploid and aneuploid interspecific sugarcane (*Saccharum* spp. hybrid). Plant: perennial grass with semi-erect growth habit, few tillers per stool. Leaf canopy is light. Suckers are very few in number. Stem: Culms are short to medium with mean length to top visible dewlap (TVD)

approximately 2.58 m (range 1.95 to 2.96 m). Alternate internodes of a culm are arranged in a weakly zigzagged pattern. Length of longest internode on bud side is short to medium with mean length approximately 17.4 cm (range 13.2 to 20.3 cm) and side opposite bud is medium with mean length approximately 17.2 cm (range 13.4 to 20.2 cm). Diameter of longest internode central and perpendicular to bud is thin to medium with mean approximately 24.7 mm (range 19.2 to 31.5 mm). Diameter of longest internode central and dissecting bud is thin to medium with mean approximately 25.5 mm (range 19.9 to 32.0 mm). Internodes are conoidal and round to slightly oval in cross-section. Colour of dewaxed internode is greyed-purple (RHS 187A) exposed and greyed-yellow (RHS 160B) unexposed. Wax covering of internode is very light to light, with wax band distinct and medium in width. Growth cracks are absent. Cork cracks are few to medium. Bud groove is conspicuous, very long and medium to deep. Root band width on bud side is very narrow (5.8-7.4 mm). Bud is of weak to medium prominence, ovate in shape, and with base near to leaf scar and tip slightly above the growth ring. Bud width excluding wings is very narrow and bud wing is narrow. Leaf scar is prominent and is oblique descending towards bud. Growth ring is slightly swollen. Leaf: Lamina of TVD leaf is very short in length with mean approximately 1.22 m (range 1.00 to 1.43 m), wide with mean approximately 46.6 mm (range 27.0 to 53.0 mm) at longitudinal midpoint, and bent near tip in attitude. Midrib of lamina at longitudinal midpoint is wide with mean 4.4 mm (range 2.7 to 5.6 mm). Lamina width to midrib width ratio is low to medium with mean approximately 10.8 (range 6.3 to 15.0). Leaf sheath of TVD leaf is short with mean length approximately 29.1 cm (range 25.5 to 31.0 cm). Sheath of senescent leaves have weak adherence to culm. Hairs on abaxial leaf sheath surface (Group 57) are absent. Ligule is crescentiform in shape and wide at midrib section. Cilia along the free margin of the ligule (Group 61) are sparse to medium and very short to short. Auricles are inconspicuous in prominence and symmetrical. Inner or underlapping auricle is transitional in shape. Outer or overlapping auricle is transitional in shape. Flowering: The flower is an open panicle and flowering is discontinuous. Seed: The seed or fruit is a caryopsis. Disease resistance: 'Q192' is very highly resistant to Fiji Disease Virus, intermediate to intermediate-susceptible to Leaf Scald (*Xanthomonas albilineans* (Ashby) Dowson), highly resistant to Red Rot (*Glomerella tucumanensis* (Spego) Arx and Mueller and susceptible to *Pachymetra* root rot. Other characteristics: Fibre quantity and quality are acceptable for milling purposes (impact reading 0.40, shear strength 18.0, short fibre 74.0%). In addition, 'Q192' was uniquely identified by DNA fingerprinting using microsatellite markers.

Origin and Breeding Controlled pollination: 'Q192' is the progeny of a controlled biparental cross made at Meringa (Gordonvale), QLD, between the female parent '61N1017' and the male parent '66N2008'. Seed was collected from the pollinated female inflorescence and stored for germination in 1982. 'Q192' is intermediate to intermediate-susceptible (5-6) to Leaf Scald, while '66N2008' is highly resistant (2). 'Q192' has been evaluated and selected by BSES in yield trials on the Meringa Sugar Experiment Station and sites within the sugarcane growing area in the Northern region, particularly the Atherton Tableland. Standard commercial varieties were also included in the trials for comparative purposes. Cane yield, ccs, and sugar yield have been the main selection criteria. Disease resistance screening was conducted at the pathology farm (Eight Mile Plains) and in the Tully glasshouse. After an initial seedling stage (using seed from the cross), all subsequent stages have involved vegetative propagation.

Choice of Comparators 'Q167ϕ' and 'Q174ϕ' were chosen as they are the most similar varieties of common knowledge grown in the Northern region. 'Q174'ϕ is a new variety in the northern region and both comparators are being grown on the Atherton Tableland where 'Q192' is approved. Neither parent was included, as both have been discarded from the parent collection.

Comparative Trial Location: Conducted at Meringa Sugar Experiment Station (17º 12′ S, 145º 45′ E), Gordonvale, QLD. The trial was planted 22 Sep 1999 and harvested in Oct 2000. DUS data were recorded in mid May 2000. Conditions: Clones were propagated from vegetative cuttings and grown under field conditions. Soil type: Clifton. Watering regime: Rainfed. Chemicals: The fungicide Shirtan was applied at 400 ml per hectare at planting. SuSCon (14 kg/ha) was applied at planting. Fertilisers: DAP (120 kg/ha) was applied at planting. Muriate of potash (140 kg/ha) was applied on 15 Nov 1999 and urea (100 kg/ha) was applied on 25 Nov 2000. Total nutrients were: N – 67.6 kg/ha; P – 24 kg/ha; K – 70 kg/ha. Trial design: Clones were grown in a randomised complete block design with three replicates. Plots were single row by 10m, with 1.5m between rows. Measurements: Taken from up to 20 stalks sampled randomly per plot.

Prior Applications and Sales

First Australian sale in Jun 2000.

Description: **Dr Mike Cox,** BSES, Bundaberg, QLD.

Table 39 *Saccharum* varieties

	'Q192'	***'Q167'ϕ**	***'Q174'ϕ**
TILLERING			
	few	medium	few
LEAF CANOPY			
	light	light to medium	very light to light
ALIGNMENT OF INTERNODES			
	weakly zigzagged	medium zigzagged	medium zigzagged
INTERNODE LENGTH – Bud Side (cm) LSD (P ≤ 0.01) = 1.57			
mean	17.4[a]	19.1[a]	14.6[b]
std deviation	1.70	1.88	1.41
	short to medium	medium to long	very short to short

Table 39 continued

INTERNODE LENGTH – Side Opposite Bud (cm) LSD ($P \leq 0.01$) = 1.61			
mean	17.2[a]	18.9[a]	14.3[b]
std deviation	1.65	1.88	1.47
	medium	medium to long	very short to short
INTERNODE WIDTH – Central Perpendicular to Bud (mm) LSD ($P \leq 0.01$) = 2.38			
mean	24.7[a]	23.3[a]	28.1[b]
std deviation	3.2	2.0	2.3
	thin to medium	thin	thick to very thick
INTERNODE WIDTH – Central Dissecting Bud (mm) LSD ($P \leq 0.01$) = 2.59			
mean	25.5[a]	23.7[a]	28.8[b]
std deviation	3.1	2.1	2.6
	thin to medium	very thin to thin	thick
INTERNODE SHAPE			
	conoidal	bobbin-shaped	weakly conoidal to tumescent
INTERNODE CROSS-SECTION			
	round to slightly oval	round	round to slightly oval
INTERNODE DEWAXED COLOUR (RHS) – Exposed			
	greyed-purple (187A)	greyed-orange (177A)	yellow-green (146B to 152A)
INTERNODE DEWAXED COLOUR (RHS) – Unexposed			
	greyed-yellow (160B)	yellow-green (151A) to greyed-yellow (160B)	yellow-green (151A to 152C)
INTERNODE WAX COVERING			
	very light to light	very light	medium to heavy
WAX BAND DISTINCTIVENESS			
	distinct	distinct	indistinct
WAX BAND WIDTH			
	medium	medium	wide
GROWTH CRACKS			
	absent	few to medium	very few
CORK CRACKS			
	few to medium	numerous	absent
BUD GROOVE PRESENCE			
	conspicuous	absent	medium to conspicuous
BUD GROOVE LENGTH			
	very long	n/a	medium to long
BUD GROOVE DEPTH			
	medium to deep	n/a	medium to deep
ROOT BAND WIDTH – Bud Side			
	very narrow	narrow	narrow
BUD – PROMINENCE			
	weak to medium	weak to medium	medium
BUD – SHAPE			
	ovate	ovate	triangular pointed
BUD – POSITION OF TIP (Relative to Growth Ring)			
	slightly above	level	level to above
BUD WIDTH (Excluding Wings)			
	very narrow	medium	narrow
BUD WING WIDTH			
	narrow	wide	medium
LEAF SCAR PROMINENCE			
	prominent	medium	medium
GROWTH RING			
	slightly swollen	flush	flush
LAMINA LENGTH (TVD Leaf) (m) LSD ($P \leq 0.01$) = 0.17			
mean	1.22[a]	1.50[b]	1.38[ab]
std deviation	0.11	0.09	0.06
	very short	long	short to medium
LAMINA WIDTH (Longitudinal Midpoint) (mm) LSD ($P \leq 0.01$) = 5.1			
mean	46.6[a]	39.1[b]	40.7[b]
std deviation	5.6	2.5	3.2
	wide	narrow to medium	medium
MIDRIB WIDTH (Longitudinal Midpoint) (mm) LSD ($P \leq 0.01$) = 0.7			
mean	4.4[a]	4.1[a]	3.0[b]
std deviation	0.6	0.3	0.3
	wide	medium to wide	narrow
LAMINA WIDTH/MIDRIB WIDTH RATIO			
	low to medium	low	medium
LAMINA ATTITUDE			
	bent near tip	curve near tip	curve near tip
LEAF SHEATH – ADHERENCE TO CULM			
	weak	weak	medium
LENGTH OF TVD LEAF SHEATH (cm) LSD ($P \leq 0.01$) = 2.8			
mean	29.1[a]	32.6[b]	26.0[a]
std deviation	1.5	2.1	1.0
	short	medium to long	very short

HAIR GROUP 57 – OCCURRENCE	absent	medium	very sparse
LIGULE HEIGHT	wide	wide	medium
HAIR GROUP 61 – DENSITY/OCCURRENCE	sparse to medium	medium to dense	sparse
AURICLE – PROMINENCE (Second Fully Unfurled Leaf)	inconspicuous	medium	medium
AURICLE SHAPE – ULP	transitional	lanceolate	deltoid
AURICLE SHAPE – OLP	transitional	transitional	deltoid

Means followed by the same letter are not significantly different at P ≤ 0.01, Duncan's Multiple Range.

x*Triticosecale*
Triticale

'Tickit'

Application No: 2000/140 Accepted: 8 May 2000.
Applicant: **Luminis Pty Ltd,** Adelaide, SA and **Grains Research and Development Corporation**, Barton, ACT.

Characteristics (Table 40, Figure 44) Plant: habit erect, height medium-tall, spring type, medium maturity. Coleoptiles: medium anthocyanin colouration. Stem: straw pith thin and hairiness of neck strong. Leaf: length and width medium, blue-green, sheaths strongly glaucous, anthocyanin colouration of auricles medium and frequency of recurved flag leaves very low. Inflorescence: ear length and width medium, density of spikelets medium, very strongly glaucous, fully awned, chaff white. Floret: lower glume first beak medium, second beak absent or very short, hairiness on external surface absent. Grain length and density medium, colour red, quality soft. Disease resistance: resistant to triticale stem rust, *Puccinia graminis* f sp. *tritici* race 34-2,12-13, *Puccinia striiformis* f sp. *tritici* race 110E 143 A+ and leaf rust *Puccinia recondita* f sp. *tritici* race 104-1,2,3,(6),(7),11. Resistant to cereal cyst nematode, *Heterodora avenae*.

Origin and Breeding Controlled pollination: seed parent HX87-255 x pollen parent 'Muir'. The seed parent differs from the candidate variety in that 'Tickit' is uniform medium-tall height, whereas HX87-255 segregates medium-tall and dwarf types. The pollen parent differs from the candidate variety in that 'Tickit' has a hairy peduncle and is resistant to cereal cyst nematode whereas 'Muir' has a bald peduncle and is susceptible to cereal cyst nematode. Hybridisation was carried out at Waite Campus, SA, in 1993, as cross TX93-19. In 1994, TX93-19 was grown to F2 in the glasshouse and to F3 as a plot. F3 Single heads were selected and grown to F4 as headhills over summer 1995 and then to F5 as plots. Selection TX93-19-1, a single plot at Parrakie, SA, was selected on the basis of agronomic type and resistance to triticale stem rust. Selection TX93-19-1-3 derives from a single F6 head taken from TX93-19-1 in replicated yield trials in 1996. Multiplication of seed as a head hill over summer, then as a single plot took place in 1997. Confirmation of TX93-19-1-3 as a uniform and high yielding line, with resistance to rust and cereal cyst nematode was carried out in 1998 and 1999 seasons. Selection criteria were rust resistance, agronomic type, grain yield and cereal cyst nematode resistance. Propagation: by seed. Breeder: Dr Kath V. Cooper, Adelaide University, Waite Campus, Glen Osmond, SA.

Choice of Comparators Comparator: 'Tahara'. As the pollen parent, 'Muir' differs from 'Tickit' in having a bald peduncle and being susceptible to cereal cyst nematode, and the seed parent, HX87-255, a line also produced by KV Cooper, segregates plants of different heights, these were not chosen as comparators. As the seed parent, HX87-255 is 'Tahara' x HX87-12 and the penultimate seed parent, 'Tahara' is similar to 'Tickit' in that it is resistant to cereal cyst nematode and is of uniform medium-tall height, 'Tahara' was chosen as the most similar comparator of common knowledge. Other triticale varieties of common knowledge: 'Credit', 'Treat' and 'Everest' differ from 'Tickit' in being susceptible to cereal cyst nematode, as well as differing in a number of plant and seed characters, so were not included in the comparative trial.

Comparative Trial Location: Waite Campus, SA (Latitude 34º 56′S, longitude 138º 38′ E, elevation 100m), Jun-Dec 1999 and 2000. Conditions: trial conducted in the field, sown on 8 Jun, 1999 and 20 Jun, 2000. Fertiliser and herbicides applied as required. Trial design: Two replicates, having current and previous generations of 'Tickit' side-by-side, plus 'Tahara' in random arrangement with other triticale varieties. Plot size was 5m x 6 rows, each plot containing about 300 plants. Within each replicate plot, measurements were taken from 25 individual plants, randomly taken from inner rows of the plot. One sample per plant. Data presented in the comparative table is from the 1999 trial.

Prior Applications and Sales Nil.

Description: **Katharine V Cooper**, Adelaide University, Glen Osmond, SA.

Table 40 *Triticosecale* varieties

	'Tickit'	*'Tahara'
GLAUCOSITY OF FLAG LEAF SHEATH	strong	medium
GLAUCOSITY OF EAR	very strong	strong
PLANT LENGTH: STEM, EAR, AWNS (cm)	medium-tall	medium-tall
mean	108.5	114.8
std deviation	4.49	3.99
LSD/sig	2.2	P≤0.01
AWNS, LENGTH ABOVE TIP OF EAR (cm)		
mean	6.5	5.9
std deviation	0.72	0.77
LSD/sig	0.3	P≤0.01

Zelcova serrata
Japanese Elm

'Kiwi Sunset'

Application No: 2000/052. Accepted: 16 Mar 2000.
Applicant: **Allenton Nurseries,** Ashburton, New Zealand.
Agent: **JFT Nurseries,** Monbulk, VIC.

Characteristics (Table 41, Figure 21) Plant: spreading deciduous tree. Young stem: pubescent, colour upper side greyed orange (RHS 176A-B) under side yellow green (RHS 151A), leaf arrangement alternate. Stipule: number two per node, colour greyed orange and yellow green. Leaf: pubescent, shape ovate to broad elliptic, margin serrate, teeth acute, colour in spring upper side yellow green (RHS 153A) under side (RHS 152D), colour in autumn upper side greyed orange (RHS 165B, 177B) under side greyed orange (RHS 164B) and greyed yellow (RHS 161A). (Note: all RHS colour chart numbers refer to 1986 edition.)

Origin and Breeding Open-pollinated seedling: parent *Zelcova serrata*. Selection criteria: 'Kiwi Sunset' was chosen on the basis of leaf colour. Propagation: mature stock plants were generated from the original seedlings by budding onto *Zelcova serrata* rootstock. All subsequent generations have been produced in the same way to confirm uniformity and stability. 'Kiwi Sunset' will be commercially propagated by budding onto *Zelcova serrata* rootstock. Breeder: Allenton Nurseries, Ashburton, New Zealand.

Choice of Comparator *Zelcova serrata* was chosen because it is the parent plant. Other *Zelcova serrata* hybrids listed in the Royal Horticultural Society Encyclopaedia of Garden Plants (1999 edition) were considered but rejected as follows *Z.* 'Goblin' dwarf plant, *Z.* 'Green Vase' vase shape with green leaves, *Z.* 'Village Green' green leaves red autumn foliage.

Comparative Trial Location: Silvan, VIC between Feb 1998 and Nov 2000. Conditions: ambient southern Victorian (Latitude 38ºS) conditions; plants planted out in nursery rows as *Zelcova serrata* understock in 1996, budded with 'Kiwi Sunset' scions in Feb 1998; soil red kraznozem, fertiliser standard. Trial design: paired replicates. Measurements: twenty specimens selected from twenty plants.

Prior Applications and Sales

Country	Year	Current status	Name Applied
New Zealand	1996	Granted	'Kiwi Sunset'

'Kiwi Sunset' has not been sold.

Description: **David Nichols,** Rye, VIC.

Table 41 *Zelcova* varieties

	'Kiwi Sunset'	**Zelcova serrata*
PLANT CHARACTERISTICS		
colour of young stem upper side (RHS, 1986)	176A-B	184A
colour of young stem under side (RHS, 1986)	151A	152B
anthocyanin in new growth	absent to weak	medium
stipule colour	greyed orange and yellow green	greyed purple
LEAF CHARACTERISTICS (RHS, 1986)		
colour upper side in spring	153A	146A
colour under side in spring	152D	147B
colour upper side in autumn	165B, 177B	166A-B
colour under side in autumn	164B, 161A	164C, 161A

GRANTS

Acmena smithii
Lilly Pilly

'Hot Flush'(Þ)
Application No: 1998/095 Grantee: **Jo Barber and Chris Barber**, Meldale, QLD.
Certificate No: 1610 Expiry Date: 19 November, 2025.

Alstroemeria hybrid
Alstroemeria, Peruvian Lily

'Staprilan'(Þ) syn **Angela**(Þ)
Application No: 1997/251 Grantee: **Van Staaveren b.v.**
Certificate No: 1616 Expiry Date: 19 November, 2020.
Agent: **F & I Baguley Flower & Plant Growers**, Clayton South, VIC.

'Staprimar'(Þ) syn **Margaret**(Þ)
Application No: 1998/151 Grantee: **Van Staaveren b.v.**
Certificate No: 1619 Expiry Date: 19 November, 2020.
Agent: **F & I Baguley Flower & Plant Growers**, Clayton South, VIC.

'Stapripal'(Þ) syn **Paola**(Þ)
Application No: 1998/150 Grantee: **Van Staaveren b.v.**
Certificate No: 1618 Expiry Date: 19 November, 2020.
Agent: **F & I Baguley Flower & Plant Growers**, Clayton South, VIC.

'Stapristef'(Þ) syn **Stefanie**(Þ)
Application No: 1998/149 Grantee: **Van Staaveren b.v.**
Certificate No: 1617 Expiry Date: 19 November, 2020.
Agent: **F & I Baguley Flower & Plant Growers**, Clayton South, VIC.

Brassica napus var *oleifera*
Canola

'46C01'(Þ)
Application No: 1998/228 Grantee: **Pioneer Hi-Bred International Inc**.
Certificate No: 1641 Expiry Date: 19 December, 2020.
Agent: **Pioneer Hi-Bred Australia Pty Ltd**, Toowoomba, QLD.

'Purler'(Þ)
Application No: 1999/160 Grantee: **Department of Agriculture for and on behalf of the State of New South Wales**, Orange, NSW **and Grains Research and Development Corporation**, Barton, ACT.
Certificate No: 1592 Expiry Date: 6 October, 2020.
Agent: **Wesfarmers Dalgety Seed Tech**, Bassenden, WA.

Capsicum annuum var *fasciculatum*
Dwarf Chilli

'Orange Bantam'(Þ)
Application No: 1998/154 Grantee: **NF Derera, AM – ASAS Pty Ltd**.
Certificate No: 1606 Expiry Date: 22 November, 2020.
Agent: **Oasis Horticulture Pty Ltd**, Winmalee, NSW.

Capsicum annuum var *longum*
Condiment Paprika

'Szegedi 80'(Þ) syn **Mellow Scarlet**(Þ)
Application No: 1996/254 Grantee: **Fuszerpaprika Kutato-Fejleszto Kft**.
Certificate No: 1631 Expiry Date: 11 December, 2020.
Agent: **NF Derera, AM, FAIAS, CPAg**, Winston Hills, NSW.

Coleonema pulchrum
Confetti Bush

'Mellow Yellow'(Þ)
Application No: 1999/008 Grantee: **Stephen Membrey and Gayle Membrey**.
Certificate No: 1634 Expiry Date: 14 December, 2020.
Agent: **Plants Management Australia Pty Ltd**, Wonga Park, VIC.

Convolvulus sabiatus
Moroccan Glory Bind

'Star Struck'(Þ)
Application No: 1999/118 Grantee: **Peter Lalor and Robert Gourlay**.
Certificate No: 1626 Expiry Date: 7 December, 2020.
Agent: **D & A Mansfield and Sons Pty Ltd**, Skye, VIC.

Corymbia maculata
Spotted Gum

'Imagine'(Þ)
Application No: 1998/119 Grantee: **Vic John Ciccolella**, Toowoomba, QLD.
Certificate No: 1630 Expiry Date: 8 December, 2025.

Eucalyptus robusta
Swamp Mahogany

'The Green and Gold'(Þ)
Application No: 1997/334 Grantee: **Vic John Ciccolella**, Toowoomba, QLD.
Certificate No: 1629 Expiry Date: 8 December, 2025.

Gaura lindheimeri
Whirling Butterfly

'Blushing Butterflies'(Þ)
Application No: 2000/080 Grantee: **Baldassare Mineo**.
Certificate No: 1637 Expiry Date: 14 December, 2020.
Agent: **Plant Growers Australia Pty Ltd**, Wonga Park, VIC.

'Crimson Butterflies'(Þ)
Application No: 1998/252 Grantee: **Baldassare Mineo**.
Certificate No: 1638 Expiry Date: 14 December, 2020.
Agent: **Plant Growers Australia Pty Ltd**, Wonga Park, VIC.

'Sunny Butterflies'Ⓟ
Application No: 1999/081 Grantee: **Baldassare Mineo**.
Certificate No: 1636 Expiry Date: 14 December, 2020.
Agent: **Plant Growers Australia Pty Ltd**, Wonga Park, VIC.

Gossypium hirsutum
Cotton

'Sicala V-2RR'Ⓟ
Application No: 1999/036 Grantee: **CSIRO Plant Industry**, Narrabri, NSW.
Certificate No: 1633 Expiry Date: 14 December, 2020.

'Sicot 189RR'Ⓟ
Application No: 1999/037 Grantee: **CSIRO Plant Industry**, Narrabri, NSW.
Certificate No: 1632 Expiry Date: 14 December, 2020.

Hordeum vulgare
Barley

'Lindwall'Ⓟ
Application No: 1998/044 Grantee: **The State of Queensland through its Department of Primary Industries** Brisbane, QLD and **Grains Research and Development Corporation**, Barton, ACT.
Certificate No: 1646 Expiry Date: 19 December, 2020.

Hosta hybrid
Plantain Lily

'June'Ⓟ
Application No: 1997/238 Grantee: **Notcutts Nurseries**.
Certificate No: 1635 Expiry Date: 14 December, 2020.
Agent: **Plants Management Australia Pty Ltd**, Wonga Park, VIC.

Impatiens hybrid
New Guinea Impatiens

'Dueimpetred'Ⓟ syn **Red Fox Riviera Red**Ⓟ
Application No: 1999/370 Grantee: **Marga Dummen**.
Certificate No: 1624 Expiry Date: 19 November, 2020.
Agent: **F & I Baguley Flower & Plant Growers**, Clayton South, VIC.

'Dueribluni'Ⓟ syn **Red Fox Riviera Blue Night**Ⓟ
Application No: 1999/369 Grantee: **Marga Dummen**.
Certificate No: 1623 Expiry Date: 19 November, 2020.
Agent: **F & I Baguley Flower & Plant Growers**, Clayton South, VIC.

'Duerior'Ⓟ syn **Red Fox Orange Riviera**Ⓟ
Application No: 1999/177 Grantee: **Marga Dummen**.
Certificate No: 1621 Expiry Date: 19 November, 2020.
Agent: **F & I Baguley Flower & Plant Growers**, Clayton South, VIC.

'Dueripinkeye'Ⓟ syn **Red Fox Riviera Pink Eye**Ⓟ
Application No: 1999/371 Grantee: **Marga Dummen**.
Certificate No: 1625 Expiry Date: 19 November, 2020.
Agent: **F & I Baguley Flower & Plant Growers**, Clayton South, VIC.

'Duerirest'Ⓟ syn **Red Fox Riviera Red Star**Ⓟ
Application No: 1999/176 Grantee: **Marga Dummen**.
Certificate No: 1620 Expiry Date: 19 November, 2020.
Agent: **F & I Baguley Flower & Plant Growers**, Clayton South, VIC.

'Dueriwhiteye'Ⓟ syn **Red Fox Riviera White Eye**Ⓟ
Application No: 1999/178 Grantee: **Marga Dummen**.
Certificate No: 1622 Expiry Date: 19 November, 2020.
Agent: **F & I Baguley Flower & Plant Growers**, Clayton South, VIC.

Lolium multiflorum
Italian Ryegrass

'Robust'Ⓟ
Application No: 1996/041 Grantee: **Upper Murray Seeds**, Tooma, NSW.
Certificate No: 1615 Expiry Date: 27 November, 2020.

Lonicera nitida
Box Honeysuckle

'Little Nikki'Ⓟ
Application No: 1999/159 Grantee: **David George Kent**, Morayfield, QLD.
Certificate No: 1645 Expiry Date: 19 December, 2020.

Lupinus albus
White Lupin

'Lago Azzurro'Ⓟ
Application No: 1995/112 Grantee: **Mt Gambier Property Trust**, Adelaide, SA.
Certificate No: 1640 Expiry Date: 19 December, 2020.

Pelargonium x*hortorum*
Pelargonium

'BFP-788 Bright Scarlet'Ⓟ syn **Designer Bright Scarlet**Ⓟ
Application No: 1998/012 Grantee: **Ball FloraPlant – A Division of Ball Horticultural Company**.
Certificate No: 1605 Expiry Date: 22 November, 2020.
Agent: **Oasis Horticulture Pty Ltd**, Winmalee, NSW.

'BFP-838 Dark Red'Ⓟ syn **Designer Dark Red**Ⓟ
Application No: 1998/008 Grantee: **Ball FloraPlant – A Division of Ball Horticultural Company**.
Certificate No: 1601 Expiry Date: 22 November, 2020.
Agent: **Oasis Horticulture Pty Ltd**, Winmalee, NSW.

'Pink Heart'(Þ) syn **Showcase Pink Heart**(Þ)
Application No: 1998/011 Grantee: **Ball FloraPlant – A Division of Ball Horticultural Company**.
Certificate No: 1604 Expiry Date: 22 November, 2020.
Agent: **Oasis Horticulture Pty Ltd**, Winmalee, NSW.

'Showcase Salmon'(Þ)
Application No: 1998/010 Grantee: **Ball FloraPlant – A Division of Ball Horticultural Company**.
Certificate No: 1603 Expiry Date: 22 November, 2020.
Agent: **Oasis Horticulture Pty Ltd**, Winmalee, NSW.

'Starburst Red'(Þ)
Application No: 1998/009 Grantee: **Ball FloraPlant – A Division of Ball Horticultural Company**.
Certificate No: 1602 Expiry Date: 22 November, 2020.
Agent: **Oasis Horticulture Pty Ltd**, Winmalee, NSW.

Pisum sativum
Field Pea

'Cooke'(Þ)
Application No: 1999/227 Grantee: **The State of Western Australia through its department of agriculture called Agriculture Western Australia**, South Perth, WA and **Grains Research and Development Corporation**, Barton, ACT.
Certificate No: 1611 Expiry Date: 19 November, 2020.

'Helena'(Þ)
Application No: 1999/228 Grantee: **The State of Western Australia through its department of agriculture called Agriculture Western Australia**, South Perth, WA and **Grains Research and Development Corporation**, Barton, ACT.
Certificate No: 1612 Expiry Date: 19 November, 2020.

Rosa hybrid
Rose

'Ausjo'(Þ) syn **Jude the Obscure**(Þ)
Application No: 1998/244 Grantee: **David Austin Roses Ltd**.
Certificate No: 1607 Expiry Date: 22 November, 2020.
Agent: **Siebler Publishing Services**, Hartwell, VIC.

'Interlene'(Þ)
Application No: 1998/263 Grantee: **Interplant B.V.**
Certificate No: 1595 Expiry Date: 19 November, 2020.
Agent: **Grandiflora Nurseries Pty Ltd**, Cranbourne, VIC.

'JACina'(Þ) syn **Wild Dancer**(Þ)
Application No: 1998/079 Grantee: **Bear Creek Gardens, Inc.**
Certificate No: 1649 Expiry Date: 21 December, 2020.
Agent: **Swane's Nurseries Australia Pty Limited**, Dural, NSW.

'JACpihi'(Þ) syn **Grand Finale '98**(Þ)
Application No: 1998/075 Grantee: **Bear Creek Gardens, Inc.**
Certificate No: 1651 Expiry Date: 21 December, 2020.
Agent: **Swane's Nurseries Australia Pty Limited**, Dural, NSW.

'JACzor'(Þ) syn **Fame '98**(Þ)
Application No: 1998/073 Grantee: **Bear Creek Gardens, Inc.**
Certificate No: 1652 Expiry Date: 21 December, 2020.
Agent: **Swane's Nurseries Australia Pty Limited**, Dural, NSW.

'JAColber'(Þ) syn **Opening Night**(Þ)
Application No: 1998/076 Grantee: **Bear Creek Gardens, Inc.**
Certificate No: 1650 Expiry Date: 21 December, 2020.
Agent: **Swane's Nurseries Australia Pty Limited**, Dural, NSW.

'Nirpnufdeu'(Þ)
Application No: 1998/184 Grantee: **Lux Riviera s.r.l.**
Certificate No: 1594 Expiry Date: 19 November, 2020.
Agent: **Grandiflora Nurseries Pty Ltd**, Cranbourne, VIC.

'Ruiconti'(Þ) syn **Yellow Unique**(Þ)
Application No: 1998/265 Grantee: **De Ruiter's Nieuwe Rozen B.V.**
Certificate No: 1597 Expiry Date: 19 November, 2020.
Agent: **Grandiflora Nurseries Pty Ltd**, Cranbourne, VIC.

'Ruioran'(Þ) syn **Orange Unique**(Þ)
Application No: 1998/264 Grantee: **De Ruiter's Nieuwe Rozen B.V.**
Certificate No: 1596 Expiry Date: 19 November, 2020.
Agent: **Grandiflora Nurseries Pty Ltd**, Cranbourne, VIC.

'Sunluck'(Þ)
Application No: 1998/266 Grantee: **Frank Bart Schuurman**.
Certificate No: 1598 Expiry Date: 19 November, 2020.
Agent: **Grandiflora Nurseries Pty Ltd**, Cranbourne, VIC.

'Tanmixa'(Þ) syn **Joy of Life**(Þ)
Application No: 1997/064 Grantee: **Rosen Tantau, Mathias Tantau Nachfolger**.
Certificate No: 1639 Expiry Date: 18 December, 2020.
Agent: **S Brundrett & Sons (Roses) Pty Ltd**, Narre Warren North, VIC.

'WEKdykstra'(Þ) syn **Rose of Narromine**(Þ)
Application No: 1998/077 Grantee: **Weeks Wholesale Rose Grower, Inc.**
Certificate No: 1647 Expiry Date: 21 December, 2020.
Agent: **Swane's Nurseries Australia Pty Limited**, Dural, NSW.

'WEKplapep'(Þ) syn **Scentimental**(Þ)
Application No: 1998/078 Grantee: **Weeks Wholesale Rose Grower, Inc.**
Certificate No: 1648 Expiry Date: 21 December, 2020.
Agent: **Swane's Nurseries Australia Pty Limited**, Dural, NSW.

Scabiosa columbaria
Pincushion Flower, Scabious

'Samanthas Pink'(Þ)
Application No: 1999/238 Grantee: **Super Perennials Ltd**.
Certificate No: 1600 Expiry Date: 22 November, 2020.
Agent: **Australian Perennial Growers Pty Ltd**, Glenorie, NSW.

Solanum tuberosum
Potato

'FL 1867'(Þ
Application No: 1999/186 Grantee: **Frito-Lay Co.**
Certificate No: 1613 Expiry Date: 19 November, 2020.
Agent: **The Smith's Snackfood Co Ltd**, Rydalmere, NSW.

Sutera cordata
Bacopa

'Lavender Showers'(Þ
Application No: 1998/145 Grantee: **Australian Perennial Growers Pty Ltd**, Glenorie, NSW.
Certificate No: 1599 Expiry Date: 22 November, 2020.

Syzygium australe
Lilly Pilly

'Elegance'(Þ
Application No: 1999/030 Grantee: **Brent E Wilson and A Rex Wilson**, Logan Reserve, QLD.
Certificate No: 1627 Expiry Date: 7 December, 2025.

Telopea speciosissima
Waratah

'Songlines'(Þ
Application No: 1996/135 Grantee: **Yellow Rock Native Nursery Pty Ltd**, Winmalee, NSW.
Certificate No: 1593 Expiry Date: 9 October, 2020.

Trifolium michelianum
Balansa Clover

'Bolta'(Þ
Application No: 1995/255 Grantee: **Minister for Primary Industries and Resources**, Adelaide, SA.
Certificate No: 1608 Expiry Date: 23 November, 2020.

'Frontier'(Þ
Application No: 1999/023 Grantee: **Minister for Primary Industries and Resources**, Adelaide, SA**, The State of Western Australia through its department of agriculture called Agriculture Western Australia**, South Perth, WA**, Agriculture Victoria Services Pty Ltd**, Attwood, VIC**, Department of Agriculture for and on behalf of the State of New South Wales**, Orange, NSW**, Grains Research and Development Corporation**, Barton, ACT and **The Woolmark Company,** Parkville, VIC.
Certificate No: 1628 Expiry Date: 8 December, 2020.

Trifolium resupinatum
Persian Clover

'Lightning'(Þ
Application No: 1997/288 Grantee: **Seedco Australia Co-operative Limited**, Hilton, SA.
Certificate No: 1642 Expiry Date: 19 December, 2020.

Trifolium subterraneum ssp *brachycalycinum*
Subterranean Clover

'Antas'(Þ
Application No: 1999/147 Grantee: **Istituto Sperimentale per le Colture Foraggere**.
Certificate No: 1644 Expiry Date: 19 December, 2020.
Agent: **Seedco Australia Co-operative Limited**, Hilton, SA.

Trifolium subterraneum ssp *subterraneum*
Subterranean Clover

'Campeda'(Þ
Application No: 1999/148 Grantee: **Istituto Sperimentale per le Colture Foraggere**.
Certificate No: 1643 Expiry Date: 19 December, 2020.
Agent: **Seedco Australia Co-operative Limited**, Hilton, SA.

Triticum aestivum
Wheat

'Chara'(Þ
Application No: 1999/332 Grantee: **Agriculture Victoria Services Pty Ltd**, Attwood, VIC and **Grains Research and Development Corporation**, Barton, ACT.
Certificate No: 1609 Expiry Date: 23 November, 2020.

'Mira'(Þ
Application No: 1999/333 Grantee: **Agriculture Victoria Services Pty Ltd**, Attwood, VIC and **Grains Research and Development Corporation**, Barton, ACT.
Certificate No: 1614 Expiry Date: 19 November, 2020.

DENOMINATION CHANGED

Agapanthus orientalis
Agapanthus

'Snow Cloud' syn **Summer Pearl**
Application No: 1998/146
From: 'Summer Pearl'

Avena sativa
Oat

'Nugene'
Application No: 1998/259
From: 'Nu Gene'.

AGENT CHANGED

From: Plants Management Australia Pty Ltd
To: Blooming Rights Pty Ltd
For the following PBR applications:

Celosia argentia var *cristata*
Cockscomb

'Martine Pink'
Application No: 1998/063

'Martine Red'
Application No: 1998/064

'Martine Yellow'
Application No: 1998/062

Hypericum androsaeum
Tuscan

'Bosadua'(Þ syn **Dual Fair**(Þ
Application No: 1997/230 Certificate No: 1446

'Bosakin'(Þ syn **King Fair**(Þ
Application No: 1997/227 Certificate No: 1443

'Bosapin'(Þ syn **Pinky Fair**(Þ
Application No: 1997/229 Certificate No: 1445

'Bosaque'(Þ syn **Queen Fair**(Þ
Application No: 1997/237 Certificate No: 1447

'Bosasca'(Þ syn **Scarlet Fair**(Þ
Application No: 1997/230 Certificate No: 1444

CHANGE OF ASSIGNMENT

From: Prophyl Pty Ltd and Swane Brothers Pty Ltd
To: Prophyl Pty Ltd and Swane's Nurseries Australia Pty Ltd
For the following PBR application:

Rosa hybrid
Rose

'Red Iceberg'
Application No: 1999/274

CHANGE OF APPLICANT'S NAME

From: Minister of Primary Industries and Resources
To: Minister of Primary Industries and Resources, The State of Western Australia through its department of agriculture called Agriculture Western Australia, Agriculture Victoria Services Pty Ltd, Department of Agriculture for and on behalf of the State of New South Wales, Grains Research and Development Corporation and The Woolmark Company. For the following PBR application:

Trifolium michelianum
Balansa Clover

'Frontier'(Þ
Application No: 1999/023 Certificate No: 162872

CHANGE OF AGENT'S NAME

From: Swane Bros Pty Ltd
To: Swane's Nurseries Australia Pty Limited
For all PBR applications that include Swane Bros Pty Ltd as the agents.

CONFIRMATION OF APPLICANT'S NAME

From:
Minister for Primary Industries & Resources acting through the South Australian Research and Development Institute
SARDI, State of SA
Primary Industry Resources – SA
Minister for Primary Industries, Natural Resources and Regional Development
Primary Industries & Resources SA
SA Minister for Primary Industries, Natural Resources & Regional Development

To:
Minister for Primary Industries and Resources

for all the PBR applications that include the above names as applicant or joint applicant.

From:
NSW Agriculture
New South Wales Agriculture
NSW Department of Agriculture & Fisheries
NSW Agriculture & Fisheries
Minister for Agriculture and Fisheries of New South Wales
NSW Minister for Agriculture and Fisheries

To: Department of Agriculture for and on behalf of the State of New South Wales

For all the PBR applications that include the above names as applicant or joint applicant.

APPLICATION REFUSED

The following application was refused because it does not satisfy novelty requirement under subsection 43(6)(b)(ii) of *Plant Breeders Rights Act 1994.*

Pisum sativum
Field Pea

'Baccara'
Application No: 2000/314

APPLICATIONS WITHDRAWN

The following varieties are no longer under provisional protection

Bracteantha bracteata
Everlasting Daisy

'Cable Beach'
Application No: 1998/060

'Carrawine'
Application No: 1998/059

'Greta'
Application No: 1997/054

'Margaret Mcarthur'
Application No: 1997/055

Cucurbita maxima
Pumpkin

'Eudlo QHI'
Application No: 1997/308

Hebe hybrid
Hebe

'Southern Skies'
Application No: 1999/220

Lavandula stoechas
Italian Lavender

'Bella White'
Application No: 1999/255

Rosa hybrid
Rose

'Grandalpha'
Application No: 1999/299

'MK II'
Application No: 1998/251

Triticum aestivum
Wheat

'Clearfield WHT CSD'
Application No: 2000/229

GRANTS SURRENDERED

The following varieties are no longer under PBR protection:

Acacia boormanii
Snowy River Wattle

'Olympic Gold'
Application No: 1993/222 Certificate No: 943

Alnus jorullensis
Alder

'Royal Cascade' syn **Weeping Willy**
Application No: 1991/097 Certificate No: 311

Alstroemeria hybrid
Peruvian Lily

'Stabuwit' syn **Amanda**
Application No: 1990/057 Certificate No: 367

Arachis hypogaea
Peanut

'Shosh'
Application No: 1994/225 Certificate No: 944

Hebe hybrid
Hebe

'Rosie'
Application No: 1993/242 Certificate No: 1214

Hordeum vulgare
Barley

'Barque'
Application No: 1997/018 Certificate No: 1191

Isotoma axillaris
Isotoma

'Sapphire Star'
Application No: 1996/282 Certificate No: 1328

Juniperus conferta
Shore Juniper

'Aussie Green N Gold'
Application No: 1996/095 Certificate No: 1179

Koeleria cristata
Koeleria

'Barkoel'
Application No: 1993/270 Certificate No: 520

Ornithopus hybrid
French Serradella

'Grasslands Spectra'
Application No: 1995/072 Certificate No: 932

Phaseolus vulgaris
Bean

'Phoenix'
Application No: 1993/073 Certificate No: 400

Rosa hybrid
Rose

'Meibarke' syn **Debut Meillandina**
Application No: 1990/013 Certificate No: 75

'Meinewkan' syn **Chin Chin**
Application No: 1995/288 Certificate No: 1117

'Meineyta' syn **Anita**
Application No: 1995/102 Certificate No: 1120

'Smooth Perfume' syn **Hadperfume**
Application No: 1993/265 Certificate No: 597

'Smooth Prince' syn **Hadprince**
Application No: 1993/263 Certificate No: 595

Solanum tuberosum
Potato

'Morene'
Application No: 1988/005 Certificate No: 143

'Smith's Stellar'
Application No: 1997/273 Certificate No: 1370

Triticum aestivum
Wheat

'Yanac'
Application No: 1996/096 Certificate No: 1018

Vitis vinifera
Grape

'Moss' syn **Moss Early**
Application No: 1988/027 Certificate No: 211

CORRIGENDA

Avena sativa
Oat

'Nugene'
Application No: 1998/259

In *PVJ* 12(1) p10, in the acceptance list the common name should be Oat rather than Barley.

Hibiscus syriacus
Hibiscus

'Notwoodone' syn **Lavender Chiffon**
Application No: 2000/216

'Notwoodtwo' syn **White Chiffon**
Application No: 2000/217

In *PVJ* 13(3) p12, in the acceptance list, the agent for these two PBR applications should be
Fleming's Nurseries Pty Ltd and not Fleming's Nurseries and Associates Pty Ltd.

Leptospermum hybrid
Tea Tree

'Daydream'
Application No: 1999/390

In *PVJ* 12(4) p14, in the acceptance list, the variety's name was incorrectly published as 'Dreamtime'. In fact, it should be 'Daydream'.

Prunus domestica x *Prunus armeniaca*
Prunus – Interspecific Plum

'Flavor Supreme'
Application No: 1994/166

In *PVJ* 13(3) p74, the common name of the variety was incorrectly published as Plumcot. In fact, it should be Prunus – Interspecific Plum.

Triticum aestivum
Wheat

'Petrie'
Application No: 1999/326

In *PVJ* 13(1) p 78 in the Origin and Breeding section, it was published that: 'Petrie' was developed as a typically intermediate maturing winter-sown wheat …, where in fact it should read as: 'Petrie' was developed as a typically slow maturing winter-sown wheat well adapted to northeren wheat-growing regions of Australia.

APPENDIX 1

FEES

Two fee structures exist as a result of the transition from Plant Variety Rights to Plant Breeders Rights.
For new applications (those lodged on or after 11 November 1994) the PBR fees apply. For older applications lodged before 11 November 1994 and not finally disposed of (Granted, Withdrawn, Refused etc.) the PVR fees in force at the time apply.

The Treasurer has determined that all statutory fees under PBR regulations will be exempted from GST.

Payment of Fees

All cheques for fees should be made payable and sent to:

Collector of Public Monies
C/-Plant Breeders Rights Office
GPO Box 858
Canberra, ACT 2601

The **application fee** ($300) must accompany the application at the time of lodgement.

Consequences of not paying fees when due
Application fee
Should an application not be accompanied by the prescribed application fee the application will be deemed to be 'non-valid' and neither assigned an application number nor examined for acceptance pending the payment of the fee.

Examination fee
Non-payment of the examination fee of an application will automatically result, at the end of 12 months from the date of acceptance, in a refusal of the application. The consequences of refusal are the same as for applications deemed to be inactive (see 'inactive applications' below).

Consideration of a request for an extension of the period of provisional protection from the initial 12 month period may require the prior payment of the examination fee.

Certificate fee
Following the successful completion of the examination, including the public notice period, the applicant will be required and invoiced to pay the certification fee. Payment of the certification fee is a prerequisite to granting PBR and issuing the official certificate by the PBR office. Failure to pay the fee may result in a refusal to grant PBR.

Annual fee
Should an annual renewal fee not be paid within 30 days after the due date, the grant of PBR will be revoked under Section 50 of the PBR Act. To assist grantees, the PBR office will invoice grantees or their Australian agents for renewal fees.

Inactive applications
An application will be deemed inactive if, after 24 months of provisional protection (or 12 months in the case of non-payment of the examination fee) the PBR Office has not received a completed application or has not been advised to proceed with the examination or an extension of provisional protection has not been requested or not granted or a certificate fee has not been paid. Inactive applications will be examined and, should they not fully comply with Section 44 of the PBR Act 1994, they will be refused. As a result provisional protection will lapse, priority claims on that variety will be lost and should the variety have been sold, it will be ineligible for plant breeders rights on reapplication. Continued use of labels or any other means to falsely imply that a variety is protected after the application has been refused is an offence under Section 75 of the Act.

FEES

Basic Fees	Schedule			
	A	**B**	**C**	**D**
	$			
Application	300	300	400	300
Examination – per application	1400	1200	1400	800
Certificate	300	300	250	300
Total Basic Fees	2000	1800	2050	1400

Annual Renewal – all applications 300

Schedule

A Single applications and applications based on an official overseas test reports.

B Applicable when two or more Part 2 Applications are lodged simultaneously and the varieties are of the same genus and the examinations can be completed at one location at the same time.

C Applications lodged under PVR (prior to 10th Nov 1994)

D Applicable to 5 or more applications examined at an Accredited Centralised Testing Centre

Other Fees

Variation to application(s) – per hour or part thereof	75
Change of Assignment – per application	100
Copy of an application (Part 1 and/or Part 2), an objection or a detailed description	50
Copy of an entry in the Register	50
Lodging an objection	100
Annual subscription to Plant Varieties Journal	40
Back issues of Plant Varieties Journal	14
Administration – Other work relevant to PBR – per hour or part thereof	75
Application for declaration of essential derivation	800
Application for (a) revocation of a PBR	500
(b) revocation of a declaration of essential derivation	500
Compulsory licence	500
Request under subsection 19(11) for exemption from public access – varieties with no direct use as a consumer	

APPENDIX 2

Plant Breeders Rights Advisory Committee (PBRAC)

(Members of the PBRAC hold office in accordance with Section 85 of the *Plant Breeder's Rights Act 1994*.)

Dr Paul **Brennan**
PO Box 144
LENNOX HEAD NSW 2478
Representing Plant Breeders

Ms Cheryl **McCaffery**
Proprietor
Eclipse IP Management
PO Box 2221 Milton Business Centre
MILTON QLD 4064
Member with appropriate qualifications and experience

Mr David **Moore**
Consultant
Applied Economic and Technology Services
PO Box 193
GAWLER, SA 5118
Representing consumers

Mr Peter **Neilson**
Crop and Food Research
Birrabee Park
Bowna via
ALBURY NSW 2640
Representing Plant Breeders

Mr Hugh **Roberts**
Farmer
'Birralee'
COOTAMUNDRA NSW 2694
Representing Users

Ms Anna **Sharpe**
Clayton Utz
GPO Box 55
BRISBANE QLD 4000
Member with appropriate qualifications and experience

Mr Doug **Waterhouse** (Chair)
Registrar, Plant Breeders Rights
GPO Box 858
CANBERRA ACT 2601

Comments on the technical operation of, or amendments to, the *Plant Breeder's Rights Act 1994*, particularly applications under section 17(2), should be directed through the Chairman.

APPENDIX 3

INDEX OF ACCREDITED CONSULTANT 'QUALIFIED PERSONS'

The following persons have been accredited by the PBR office based on information provided by these persons. From the information provided by the applicants, the PBR office believes that these people can fulfil the role of 'qualified person' in the application for plant breeder's rights. Neither accreditation nor publication of a name in the list of persons is an implicit recommendation of the person so listed. The PBR office cannot be held liable for damages that may arise from the omission or inclusion of a person's name in the list nor does it assume any responsibility for losses or damages arising from agreements entered into between applicants and any person in the list of accredited persons. Qualified persons charge a fee for services rendered.

A guide to the use of the index of consultants:

- locate in the left column of Table 1 the plant group for which you are applying;
- listed in the right column are the names of accredited qualified persons from which you can choose a consultant;
- in Table 2 find that consultant's name, telephone number and area in which they are willing to consult (they may consult outside the nominated area);
- using the "Nomination of Qualified Person" form as a guide, agree provisionally on the scope and terms of the consultancy; complete the form and attach it to Part 1 of the application form;
- when you are notified that your nomination of a consultant qualified person is acceptable in the letter of acceptance of your application for PBR you should again consult the qualified person when planning the rest of the application for PBR.

TABLE 1

PLANT GROUP/ SPECIES/ FAMILY	CONSULTANT'S NAME (TELEPHONE AND AREA IN TABLE 2)
Almonds	Swinburn, Garth
Apple	Baxter, Leslie Darmody, Liz Fleming, Graham Langford, Garry Mackay, Alastair Maddox, Zoee Malone, Michael Mitchell, Leslie Pullar, David Robinson, Ben Scholefield, Peter Stearne, Peter Tancred, Stephen Valentine, Bruce
Anigozanthos	Paananen, Ian Kirby, Greg
Aroid	Harrison, Peter
Avocado	Swinburn, Garth
Azalea	Barrett, Mike Hempel, Maciej Paananen, Ian
Barley (Common)	Boyd, Rodger Brouwer, Jan Collins, David Khan, Akram Platz, Greg
Berry Fruit	Darmody, Liz Fleming, Graham Maddox, Zoee Pullar, David Robinson, Ben Scholefield, Peter
Blueberry	Pullar, David
Bougainvillea	Iredell, Janet Willa
Brassica	Aberdeen, Ian Baker, Andrew Easton, Andrew Chowdhury, Doza Cross, Richard Fennell, John Kadkol, Gururaj McMichael, Prue Pullar, David Robinson, Ben Scholefield, Peter Tay, David
Buddleia	Robb, John Paananen, Ian
Cactaceae	Friend, Joe
Camellia	Paananen, Ian Robb, John
Cassava	Tay, David
Cereals	Alam, Rafiul Brouwer, Jan Bullen, Kenneth Collins, David Cook, Bruce Cooper, Kath Cross, Richard Davidson, James Derera, Nicholas AM Downes, Ross Fennell, John Hare, Raymond Harrison, Peter Henry, Robert J Khan, Akram Kidd, Charles Law, Mary Ann Mitchell, Leslie Oates, John Platz, Greg Poulsen, David Rose, John Scattini, Walter John Stearne, Peter Stuart, Peter Vertigan, Wayne Williams, Warren Wilson, Frances
Cherry	Darmody, Liz Fleming, Graham Mackay, Alastair Maddox, Zoee Mitchell, Leslie Pullar, David Robinson, Ben Scholefield, Peter
Chickpeas	Brouwer, Jan Chowdhury, Doza Collins, David Goulden, David
Citrus	Ayash, Abdo Edwards, Megan Fox, Primrose Gingis, Aron Lee, Slade Maddox, Zoee Mitchell, Leslie Pullar, David Robinson, Ben Scholefield, Peter Swinburn, Garth Sykes, Stephen Topp, Bruce
Clover	Lake, Andrew Miller, Jeff Mitchell, Leslie Nichols, Phillip
Conifer	Stearne, Peter
Cotton	Alam, Rafiul Derera, Nicholas AM Khan, Akram Leske, Richard
Cucurbits	Alam, Rafiul Ayash, Abdo Cross, Richard Herrington, Mark McMichael, Prue Pullar, David Robinson, Ben Scholefield, Peter Sykes, Stephen
Cydonia	Baxter, Leslie
Dogwood	Darmody, Liz Fleming, Graham Maddox, Zoee Stearne, Peter
Feijoa	Robinson, Ben Scholefield, Peter
Fibre Crops	Ayash, Abdo Khan, Akram
Fig	Darmody, Liz FitzHenry, Daniel Fleming, Graham Maddox, Zoee Pullar, David
Forage Brassicas	Goulden, David
Forage Grasses	Berryman, Tim Fennell, John Harrison, Peter Kirby, Greg Mitchell, Leslie Slatter, John Smith, Kevin
Forage Legumes	Fennell, John Foster, Kevin Harrison, Peter Hill, Jeff Lake, Andrew Miller, Jeff Slatter, John Snowball, Richard
Forest Trees	Lubomski, Marek
Fruit	Ayash, Abdo Beal, Peter Darmody, Liz Fleming, Graham Gingis, Aron Kennedy, Peter Lenoir, Roland Maddox, Zoee

McCarthy, Alec
Mitchell, Leslie
Pullar, David
Robinson, Ben
Scholefield, Peter

Fungi, Basidiomycetes
Cairney, John

Fungi, Entomopathogenic
Milner, Richard

Grapes
Biggs, Eric
Darmody, Liz
Fleming, Graham
Gingis, Aron
Lee, Slade
Maddox, Zoee
Mitchell, Leslie
Pullar, David
Robinson, Ben
Scholefield, Peter
Stearne, Peter
Swinburn, Garth
Sykes, Stephen

Grevillea
Herrington, Mark

Hydrangea
Hanger, Brian
Maddox, Zoee

Impatiens
Paananen, Ian

Jojoba
Dunstone, Bob

Legumes
Aberdeen, Ian
Bahnisch, L
Baker, Andrew
Chowdhury, Doza
Collins, David
Cook, Bruce
Cruickshank, Alan
Downes, Ross
Foster, Kevin
Harrison, Peter
Imrie, Bruce
Kirby, Greg
Khan, Akram
Knights, Edmund
Lake, Andrew
Law, Mary Ann
Loch, Don
Mitchell, Leslie
Nutt, Bradley
Rose, John
Snowball, Richard

Lentils
Brouwer, Jan
Chowdhury, Doza
Collins, David
Goulden, David
Khan, Akram

Lucerne
Lake, Andrew
Mitchell, Leslie
Nichols, Phillip

Lupin
Collins, David

Magnolia
Paananen, Ian

Maize
Slatter, John

Myrtaceae
Dunstone, Bob

Native grasses
Quinn, Patrick
Waters, Cathy

Neem
Friend, Joe

Oat
Collins, David
Khan, Akram
Platz, Greg

Oilseed crops
Downes, Ross
Kidd, Charles
Poulsen, David
Slatter, John

Olives
Ayash, Abdo
Bazzani, Mr Luigi
Gingis, Aron
Pullar, David

Onions
Cross, Richard
Fennell, John
Gingis, Aron
Khan, Akram
McMichael, Prue
Pullar, David
Robinson, Ben
Scholefield, Peter

Ornamentals – Exotic
Abell, Peter
Armitage, Paul
Angus, Tim
Ayash, Abdo
Barth, Gail
Beal, Peter
Collins, Ian
Cross, Richard
Cunneen, Thomas
Darmody, Liz
Dawson, Iain
Derera, Nicholas AM
Eggleton, Steve
Fisk, Anne Marie
Fitzhenry, Daniel
Fleming, Graham
Gingis, Aron
Harrison, Peter
Hempel, Maciej
Johnston, Margaret
Kirkham, Roger
Kwan, Brian
Kulkarni, Vinod
Lamont, Greg
Larkman, Clive
Lenoir, Roland
Lowe, Greg
Lubomski, Marek
Lunghusen, Mark
Maddox, Zoee
McMichael, Prue
Milne, Carolynn
Mitchell, Leslie
Nichols, David
Oates, John
Paananen, Ian
Robb, John
Robinson, Ben
Scholefield, Peter
Singh, Deo
Stearne, Peter
Stewart, Angus
Tay, David
Van der Ley, John
Washer, Stewart
Watkins, Phillip
Winfield, Joel

Ornamentals – Indigenous
Abell, Peter
Allen, Paul
Angus, Tim
Ayash, Abdo
Barrett, Mike
Barth, Gail
Beal, Peter
Cunneen, Thomas
Dawson, Iain
Derera, Nicholas AM
Downes, Ross
Eggleton, Steve
Harrison, Peter
Henry, Robert J
Hockings, David
Jack, Brian
Johnston, Margaret
Kirby, Greg
Kirkham, Roger
Lenoir, Roland
Lowe, Greg
Lullfitz, Robert
Lunghusen, Mark
McMichael, Prue
Milne, Carolynn
Molyneux, W M
Nichols, David
Oates, John
Paananen, Ian
Robinson, Ben
Scholefield, Peter
Singh, Deo
Stearne, Peter
Tan, Beng
Watkins, Phillip
Winfield, Joel
Worrall, Ross

Ornithopus
Foster, Kevin
Nichols, Phillip
Nutt, Bradley
Snowball, Richard

Osmanthus
Paananen, Ian
Robb, John

Pastures & Turf
Aberdeen, Ian
Anderson, Malcolm
Avery, Angela
Bahnisch, L
Berryman, Tim
Cameron, Stephen
Cook, Bruce
Downes, Ross
Croft, Valerie
Harrison, Peter
Kaapro, Jyri
Kirby, Greg
Loch, Don
Miller, Jeff
Mitchell, Leslie
Rose, John

Smith, Raymond
Scattini, Walter John
Slatter, John
Smith, Kevin
Williams, Warren
Wilson, Frances

Peanut
Cruickshank, Alan
George, Doug
Tay, David

Pear
Baxter, Leslie
Darmody, Liz
Fleming, Graham
Langford, Garry
Mackay, Alastair
Maddox, Zoee
Malone, Michael
Pullar, David
Robinson, Ben
Scholefield, Peter
Tancred, Stephen
Valentine, Bruce

Persimmon
Swinburn, Garth

Petunia
Paananen, Ian
Nichols, David

Photinia
Robb, John

Pistacia
Pullar, David
Sykes, Stephen

Pisum
Brouwer, Jan
Chowdhury, Doza
Goulden, David
McMichael, Prue

Potatoes
Ayash, Abdo
Baker, Andrew
Cross, Richard
Fennell, John
Kirkham, Roger
McMichael, Prue
Pullar, David
Robinson, Ben
Scholefield, Peter
Stearne, Peter
Tay, David

Proteaceae
Barth, Gail
Kirby, Neil
Robb, John
Robinson, Ben
Scholefield, Peter

Prunus
Ayash, Abdo
Darmody, Liz
Fleming, Graham
Kennedy, Peter
Mackay, Alastair
Maddox, Zoee
Malone, Michael
Porter, Gavin
Pullar, David
Topp, Bruce
Witherspoon, Jennifer

Pulse Crops
Bestow, Sue
Brouwer, Jan
Chowdhury, Doza
Collins, David
Cross, Richard
Kidd, Charles
Oates, John
Poulsen, David
Slatter, John

Raspberry
Darmody, Liz
Fleming, Graham
Martin, Stephen
Pullar, David
Robinson, Ben
Scholefield, Peter

Rhododendron
Barrett, Mike
Paananen, Ian

Roses
Barrett, Mike
Cross, Richard
Darmody, Liz
Fitzhenry, Daniel
Fleming, Graham
Fox, Primrose
Gingis, Aron
Hanger, Brian
Lee, Peter
Maddox, Zoee
Prescott, Chris
Robinson, Ben
Scholefield, Peter
Stearne, Peter
Swane, Geoff
Syrus, A Kim
Van der Ley, John

Sesame
Bennett, Malcolm
Harrison, Peter
Imrie, Bruce

Sorghum
Khan, Akram
Slatter, John

Soybean
Andrews, Judith
Harrison, Peter
James, Andrew

Spices and Medicinal Plants
Derera, Nicholas AM
Khan, Akram
Pullar, David

Stone Fruit
Ayash, Abdo
Barrett, Mike
Darmody, Liz
Fleming, Graham
Kennedy, Peter
Mackay, Alistair
Maddox, Zoee
Malone, Michael
Pullar, David
Robinson, Ben
Scholefield, Peter
Swinburn, Garth
Valentine, Bruce

Strawberry
Gingis, Aron
Herrington, Mark
Martin, Stephen
Mitchell, Leslie
Morrison, Bruce
Porter, Gavin
Pullar, David
Robinson, Ben
Scholefield, Peter
Zorin, Clara

Sugarcane
Cox, Mike
Morgan, Terence
Tay, David

Sunflower
George, Doug

Tomato
Cross, Richard
Gingis, Aron
Herrington, Mark
Khan, Akram
Martin, Stephen
McMichael, Prue
Pullar, David
Robinson, Ben
Scholefield, Peter

Tree Crops
Friend, Joe
McRae, Tony

Triticale (x Triticosecale Wittmack)
Collins, David

Tropical/Sub-Tropical Crops
Ayash, Abdo
Harrison, Peter
Kulkarni, Vinod
Pullar, David
Robinson, Ben
Scholefield, Peter
Tay, David
Winston, Ted

Umbrella Tree
Paananen, Ian

Vegetables
Alam, Rafiul
Ayash, Abdo
Baker, Andrew
Beal, Peter
Cross, Richard
Derera, Nicholas AM
Fennell, John
Frkovic, Edward
Gingis, Aron
Harrison, Peter
Kirkham, Roger
Khan, Akram
Lenoir, Roland
McMichael, Prue
Oates, John
Pearson, Craig
Pullar, David
Robinson, Ben
Scholefield, Peter
Tay, David
Westra Van Holthe, Jan

Verbena
Paananen, Ian

Wheat (Aestivum & Durum Groups)
Brouwer, Jan
Collins, David
Khan, Akram
Platz, Greg

TABLE 2

NAME	TELEPHONE	AREA OF OPERATION
Abel, Peter	02 9351 8825	
	02 9351 8875 fax	New South Wales
Aberdeen, Ian	03 5782 1029	
	03 5782 2073 fax	SE Australia
Alam, Rafiul	09 9081 3127	
	09 9041 1138 fax	Western Australia
Allen, Paul	07 3824 0263 ph/fax	SE QLD, Northern NSW
Anderson, Malcolm	03 5573 0900	
	03 5571 1523 fax	
	017 870 252 mobile	Victoria
Andrews, Judith	02 6951 2614	
	02 6955 7580 fax	Southern NSW, Northern VIC
Angus, Tim	02 4751 5702 ph/fax	Australia and New Zealand
Armitage, Paul	03 9756 7233	
	03 9756 6948 fax	Victoria
Avery, Angela	02 6030 4500	
	02 6030 4600 fax	South Eastern Australia
Ayash, Abdo	02 9823 4436	
	0414 445 733	Sydney Region
Bahnisch, L	07 5460 1457	
	07 5460 1204 fax	Australia
Baker, Andrew	03 6427 8553	
	03 6427 8554 fax	Tasmania
Barrett, Mike	02 9875 3087	
	02 9980 1662 fax	
	0407 062 494 mobile	NSW/ACT
Barth, Gail	08 8303 9580	
	08 8303 9424 fax	SA and Victoria
Baxter, Leslie	03 6224 4481	
	03 6224 4468 fax	
	0181 21943 mobile	Tasmania
Bazzani, Luigi	08 9772 1207	
	08 9772 1333 fax	Western Australia
Beal, Peter	07 3286 1488	
	07 3286 3094 fax	QLD & Northern NSW
Bennett, Malcolm	08 8973 9733	
	08 8973 9777 fax	NT, QLD, NSW, WA
Berryman, Tim	02 6272 9662 ph/fax	
	0427 894 266 mobile	ACT region
Bestow, Sue	02 6795 4695	
	02 6795 4358 fax	
	0418 953 050 mobile	Australia
Biggs, Eric	03 5023 2400	
	03 5023 3922 fax	Mildura Area
Boyd, Rodger	08 9380 2553	
	08 9380 1108 fax	Western Australia
Brouwer, Jan	03 5362 2159	
	03 5362 2187 fax	South Eastern Australia
Cairney, John	02 9685 9903	Sydney
	j.cairney@nepean.uws.edu.au	
Chowdhury, Doza	08 8303 7227	
	08 8303 7109 fax	South Australia and Victoria
Collins, David	08 9622 6100	Central Western Wheatbelt
	08 9622 1902 fax	of Western Australia
	0154 42694 mobile	
Cooper, Katharine	08 8303 6563	
	08 8303 7119 fax	Australia
Cox, Mike	07 4132 5200	
	07 4132 5253 fax	Queensland and NSW
Croft, Valerie	03 5573 0900	
	03 5571 1523 fax	Victoria
Cross, Richard	64 3 325 6400	
	64 3 325 2074 fax	New Zealand
Cruickshank, Alan	07 4160 0722	
	07 4162 3238 fax	QLD
Cunneen, Thomas	02 4889 8647	
	02 4889 8657 fax	Sydney Region
Darmody, Liz	03 9756 6105	
	03 9752 0005 fax	Australia
Davidson, James	02 6246 5071	High rainfall zone of
	02 6246 5399 fax	temperate Australia
Dawson, Iain	02 6251 2293	ACT, South East NSW
Derera, Nicholas AM	02 9639 3072	
	02 9639 0345 fax	
	0414 639 307 mobile	Australia
Downes, Ross	02 6255 1461 ph	
	02 6278 4676 fax	
	0414 955258 mobile	ACT, South East Australia
Dunstone, Bob	02 6281 1754 ph/fax	South East NSW
Easton, Andrew	07 4690 2666	
	07 4630 1063 fax	QLD and NSW
Edwards, Megan	03 5024 5960	
	03 5024 7470 fax	
	0418 532 354	VIC/NSW
Eggleton, Steve	03 9876 1097	
	03 9876 1696 fax	Melbourne Region
Fennell, John	03 5334 7871	
	03 5334 7892 fax	
	0419 881 887	Australia
FitzHenry, Daniel	02 4862 2487 ph/fax	Sydney and
	0417 891 651 mobile	surrounding districts
Fleming, Graham	03 9756 6105	
	03 9752 0005 fax	Australia
Foster, Kevin	08 9368 3670	Mediterranean areas of
		Australia
Friend, Joe	02 6688 6150 ph/fax	Northern QLD & NSW
Frkovic, Edward	02 6962 7333	
	02 6964 1311 fax	Australia
George, Doug	07 5460 1308	
	07 5460 1112 fax	Australia
Gingis, Aron	03 9887 6120	
	03 9769 1522 fax	Victoria, South Australia
	0419 878658 mobile	and Southern NSW
Goulden, David	64 3 325 6400	
	64 3 325 2074 fax	New Zealand
Hanger, Brian	03 9756 7532	
	03 9756 6684 fax	
	03 9752 0603 fax	
	0418 598106 mobile	Victoria
Hare, Ray	02 6763 1232	
	02 6763 1222 fax	QLD, NSW VIC & SA
Harrison, Peter	08 8948 1894 ph	Tropical/Sub-tropical
	08 8948 3894 fax	Australia, including NT, NW
	0407 034 083 mobile	of WA and tropical arid areas
Hempel, Maciej	02 4628 0376	
	02 4625 2293 fax	NSW, QLD, VIC, SA
Henry, Robert J	02 6620 3010	
	02 6622 2080 fax	Australia
Herrington, Mark	07 5441 2211	
	07 5441 2235 fax	Southern Queensland
Hill, Jeff	08 8303 9487	
	08 8303 9607 fax	South Australia
Hockings, David	07 5494 3385 ph/fax	Southern Queensland
Imrie, Bruce	02 4474 0951	
	02 4474 0952	
	imriecsc@sci.net.au	SE Australia
Iredell, Janet Willa	07 3202 6351 ph/fax	SE Queensland
Jack, Brian	08 9952 5040	
	08 9952 5053 fax	South West WA
James, Andrew	07 3214 2278	
	07 3214 2410 fax	Australia
Johnston, Margaret	07 5460 1240	
	07 5460 1455 fax	SE Queensland
Kaapro, Jyri	02 9637 8711	
	02 9637 8599 fax	Sydney and surrounding areas
Kadkol, Gururaj	03 5382 1269	
	03 5381 1210 fax	North Western Victoria
Kennedy, Peter	02 6382 7600	
	02 6382 2228 fax	New South Wales
Khan, Akram	02 9351 8821	
	02 9351 8875 fax	New South Wales
Kidd, Charles	08 8842 3591	
	08 8842 3066 fax	
	0417 336 458 mobile	Southern Australia
Kirby, Greg	08 8201 2176	
	08 8201 3015 fax	South Australia
Kirby, Neil	02 4754 2637	
	02 4754 2640 fax	New South Wales
Kirkham, Roger	03 5957 1200	
	03 5957 1210 fax	
	0153 23713 mobile	Victoria
Knights, Edmund	02 6763 1100	
	02 6763 1222 fax	North Western NSW
Kulkarni, Vinod	08 9992 2221	
	08 9992 2049 fax	Australia
Kwan, Brian	03 5943 1088	
	03 5943 1146 fax	Australia
Lake, Andrew	08 8177 0558	
	0418 818 798 mobile	
	lake@arcom.com.au	SE Australia
Lamont, Greg	02 9652 1285	
	02 9652 1924 fax	Sydney region
Langford, Garry	03 6266 4344	
	03 6266 4023 fax	
	0418 312 910 mobile	Australia
Larkman, Clive	03 9735 3831	
	03 9739 6370	
	larkman@tpgi.com.au	Victoria
Law, Mary Ann	07 4637 9960	
	07 4637 9962 fax	
	malaw@bigpond.com	Toowoomba region
Lee, Peter	03 6330 1147	
	03 6330 1927 fax	SE Australia

Lee, Slade	02 6620 3410	Queensland/Northern
	02 6622 2080 fax	New South Wales
Lenoir, Roland	02 6231 9063 ph/fax	Australia
Leske, Richard	07 4671 3136	Cotton growing regions
	07 4671 3113 fax	of QLD & NSW
Loch, Don	07 3286 1488	
	07 3286 3094 fax	Queensland
Lowe, Greg	02 4389 8750	
	02 4389 4958 fax	
	0411 327390 mobile	Sydney, Central Coast NSW
Lubomski, Marek	07 5525 3023 ph/fax	NSW & QLD
Lullfitz, Robert	08 9447 6360	South West WA
Lunghusen, Mark	03 9752 0477	
	03 9752 0028 fax	
	0407 050 133 mobile	Melbourne & environs
Mackay, Alastair	08 9310 5342 ph/fax	
	0159 87221 mobile	Western Australia
Maddox, Zoee	03 9756 6105	
	03 9752 0005 fax	Australia
Malone, Michael	+64 6 877 8196	
	+64 6 877 4761 fax	New Zealand
Martin, Stephen	03 6231 2489	
	03 6231 4508 fax	
	0418 500198 mobile	Tasmania
McCarthy, Alec	08 9780 6273	
	08 9780 6136 fax	South West WA
McMichael, Prue	08 8373 2488	
	08 8373 2442 fax	SE Australia
McRae, Tony	08 8723 0688	
	08 8723 0660 fax	Australia
Miller, Jeff	64 6 356 8019 extn 8027	Manawatu region,
	64 3 351 8142 fax	New Zealand
Milne, Carolynn	07 3206 3590	Queensland
Milner, Richard	02 6246 4169	
	02 6246 4042 fax	
	richardm@ento.csiro.au	Australia
Mitchell, Leslie	03 5821 2021	
	03 5831 1592 fax	VIC, Southern NSW
Molyneux, William	03 5965 2011	
	03 5965 2033 fax	Victoria
Morgan, Terence	07 4783 6000	
	07 4783 6001 fax	Australia
Morrison, Bruce	03 9210 9251	
	03 9800 3521 fax	East of Melbourne
Nichols, David	03 5977 4755	SE Melbourne, Mornington
	03 5977 4921 fax	Peninsula, Dandenong Ranges, Victoria
Nichols, Phillip	08 9387 7442	
	08 9383 9907 fax	Western Australia
Nutt, Bradley	08 9387 7423/	
	08 9383 9907 fax	Western Australia
Oates, John	02 4651 2601	Sydney region,
	02 4651 2578 fax	Eastern Australia
Paananen, Ian	02 4381 0051	
	02 4381 0071 fax	
	0412 826589 mobile	Sydney/Newcastle
Platz, Greg	07 4639 8817	
	07 4639 8800 fax	QLD, Northern NSW
Porter, Gavin	07 5460 1231	
	07 5460 1455 fax	SE QLD, Northern NSW
Poulsen, David	07 4661 2944	
	07 4661 5257 fax	SE QLD, Northern NSW
Prescott, Chris	03 5964 2780 ph/fax	
	0417 340 558 mobile	Victoria
Pullar, David	03 9415 1533	
	03 9419 1317 fax	
	0418 575 444 mobile	Australia
Quinn, Patrick	03 5427 0485	SE Australia
Robb, John	02 4376 1330	
	02 4376 1271 fax	
	0199 19252 mobile	Sydney, Central Coast NSW
Robinson, Ben	08 8373 2488	
	08 8373 2442 fax	SE Australia
Rose, John	07 4661 2944	
	07 4661 5257 fax	SE Queensland
Scattini, Walter	07 3356 0863 ph/fax	Tropical and sub-tropical Australia
Scholefield, Peter	08 8373 2488	
	08 8373 2442 fax	
	018 082022 mobile	SE Australia
Singh, Deo	0418 880787 mobile	
	07 3207 5998 fax	Brisbane
Slatter, John	07 4635 0726	
	07 4635 2772 fax	
	0155 88086 mobile	Australia
Smith, Kevin	03 5573 0900	
	03 5571 1523 fax	SE Australia
Smith, Stuart	03 6336 5234	
	03 6334 4961 fax	SE Australia
Snowball, Richard	08 9368 3517	Mediterranean areas of Australia
Stearne, Peter	02 9262 2611	
	02 9262 1080 fax	Sydney, ACT & NSW
Stewart, Angus	02 4385 9788ph/fax	
	0419 632 123 mobile	Sydney, Gosford
Stuart, Peter	07 4690 2666	
	07 4630 1063 fax	SE Queensland
Swane, Geoff	02 6889 1545	
	02 6889 2533 fax	
	0419 841580 mobile	Central western NSW
Swinburn, Garth	03 5023 4644	Murray Valley Region – From
	03 5021 3131 fax	Swan Hill (Vic) to Waikere (SA)
Sykes, Stephen	03 5051 3100	
	03 5051 3111 fax	Victoria
Syrus, A Kim	03 8556 2555	
	03 8556 2955 fax	Adelaide
Tan, Beng	08 9266 7168	
	08 9266 2495	Perth & environs
Tancred, Stephen	07 4681 2931	
	07 4681 4274 fax	
	0157 62888 mobile	QLD, NSW
Tay, David	07 5460 1313	
	07 5460 1112 fax	Australia
Topp, Bruce	07 4681 1255	
	07 4681 1769 fax	SE QLD, Northern NSW
Valentine, Bruce	02 6361 3919	
	02 6361 3573 fax	New South Wales
Van Der Ley, John	02 6561 5047	
	02 6561 5138 fax	Sydney to Brisbane and
	0417 423 768 mobile	New England area
Vertigan, Wayne	03 6336 5221	
	03 6334 4961 fax	Tasmania
Washer, Stewart	08 9300 9995	
	08 9407 5070 fax	
	0196 83642 mobile	Western Australia
Waters, Cathy	02 6888 7404	
	02 6888 7201 fax	SE Australia
Watkins, Phillip	08 9525 1800	
	08 9525 1607 fax	Perth Region
Westra Van Holthe, Jan	03 9706 3033	
	03 9706 3182 fax	Australia
Williams, Warren	64 6 356 8019 NZ	
	02 6356 8019 AUS	
	02 6351 8047 fax AUS	New Zealand
Wilson, Frances	64 3 318 8514	
	64 3 318 8549 fax	Canterbury, New Zealand
Winfield, Joel	03 9737 9660	Victoria
Winston, Ted	07 4068 8796 ph/fax	
	0412 534 514 mobile	QLD, Northern NSW and NT
Witherspoon, Jennifer	0407 688 457 mobile	South Australia
Worrall, Ross	02 4348 1900	
	02 4348 1910 fax	Australia
Zorin, Clara	07 3207 4306 ph/fax	
	0418 984 555	Eastern Australia

APPENDIX 4

INDEX OF ACCREDITED NON-CONSULTANT 'QUALIFIED PERSONS'

Name
Allen, Antony
Ali, S
Baelde, Arie
Barr, Andrew
Batta, Rohitas
Beatson, Ron
Bell, David
Birmingham, Erika
Brennan, Paul
Breust, P
Brewer, L
Brindley, Tony
Buchanan, Peter
Bunker, John
Bunker, Kerry
Burton, Wayne
Cameron, Nick
Cant, Russell
Chin, Robert
Chivers, Ian
Clayton- Greene, Kevin
Coker, Julian
Constable, Greg
Cook, Esther
Cox, Michael
Craig, Andrew
Crane, Peter
Dale, Gary
Dear, Brian
de Betue, Remco
Delaporte, Kate
Done, Anthony
Donnelly, Peter
Downe, Graeme
Draganovic, Oliver
Dyer, Natalie
Eastwood, Russell
Eisemann, Robert
Elliott, Philip
Engel, Richard
Gibson, Peter
Gomme, Simon
Granger, Andrew
Green, Allan
Guy, Graeme
Hall, Nicola
Harden, Patrick
Hart, Ray
Higgs, Robert
Hill, Jeffrey
Hollamby, Gil
Holland, Mark
Hoppo, Sue
Howie, Jake
Irwin, John
Jackson, B
Jackson, Ken
Jaeger, M
Johnston, Christine
Jupp, Noel
Kaehne, Ian
Katelaris, A
Kebblewhite, Tony
Kennedy, Chris
Kimbeng, Collins
Knights, Ted
Knox, Graham
Kobelt, Eric
Langbein, Sueanne
Leighton, Alan
Leonforte, Tony
Lewin, Laurence
Lewis, Hartley
Liu, Chunji
Loi, Angelo
Luckett, David
Macleod, Nick
Mann, Dorham
Mason, Lloyd
McCallum, Lesley
Mcdonald, David
Mcmaugh, P
Mendham, Neville
Menzies, Kim
Moody, David
Moore, Stephen
Neilson, Peter
Newman, Allen
Norriss, Michael
Oakes, John
Offord, Cathy
Patel, Narandra
Paull, Jeff
Pearce, Bob
Peppe, Ivan
Perrott, Neil
Piperidis, George
Pymer, Sally
Reid, Peter
Richardson, Maureen
Richardson, Thomas
Rose, Ian
Rowles, Cherie
Salmon, Alexander
Sammon, Noel
Sandral, Graeme
Sanewski, Garth
Saperstein, Sylvia
Schreuders, Harry
Scott, Ralph
Smith, Michael
Smith, Raymond
Smith, Sue
Song, Leonard
Tonks, John
Toyer, Christine
Trimboli, Daniel
Turner, Matthew
Vaughan, Peter
Weatherly, Lilia
Whalley, R.D.B.
Whiley, Tony
Williams, Rex
Wilson, Rob
Wilson, Stephen
Wirthensohn, Michelle
Wright, Gary
Yan, Guijun
Zeppa, Aldo

APPENDIX 5

ADDRESSES OF UPOV AND MEMBER STATES

International Union for the Protection of New Varieties of Plants (UPOV):

International Union for the
Protection of New Varieties of
Plants (UPOV)
34, Chemin des Colombettes
CH-1211
Geneva 20
SWITZERLAND

Phone: (41-22) 338 9111
Fax: (41-22) 733 0336
Web site: http://www.upov.int

Plant Variety Protection Offices in individual UPOV Member States:

ARGENTINA
Instituto Nacional de Semillas
Ministerio de Economia
Secretaria de Agricultura
Ganaderia y Pesca
Avda. Paseo Colon 922-3.
Piso, 1063 Buenos Aires

Phone: (54 11) 4349 2497
Fax: (54 11) 4349 2417
e-mail: inase@sagyp.mecon.ar

AUSTRALIA
Registrar
Plant Breeders Rights Office
P O Box 858
Canberra ACT 2601

Phone: (61 2) 6272 3888
Fax: (61 2) 6272 3650
e-mail: pbr@affa.gov.au

AUSTRIA
Bundesamt und Forschungszentrum
fur Landwirtschaft
Sortenschutzamt
Postfach 400
Spargelfeldstrasse 191
A- 1226 Wien

Phone: (43 1) 73216 4000
Fax: (43 1) 73216 4211

BELGIUM
Ministere de classes moyennes et de
l'agriculture
Service de la protection des
obtentions
vegetales et des catalogues
nationaux
Tour WTC/3- 11eme etage
Avenue Simon Bolivar 30
B-1000 Bruxelles

Phone: (32 2) 208 37 22
Fax: (32 2) 208 37 16

BOLIVIA
Direccion Nacional de Semillas
Secretaria Nacional De Agricultural y Ganaderia
Avda. 6 de Agosto 2006, Edif. V. Centenario
Casilla 4793
La Paz

Phone (591-2) 391 953
Fax: (591-2) 391 608
e-mail: semillas@mail.entelnet.bo

BRAZIL
Servico Nacional de Protecao de Cultivares-SNPC
(National Plant Varieties Protection Service)
Secretaria de Desenvolvimento Rural-SDR
Ministerio da Agricultura e do Abastedimento
Esplanada dos Ministerios, Bloco D, Anexo A
Terreo, Sala 1-12
CEP 70043-900, Brasilia, DF

Phone: (55-61) 218-2433
Fax: (55-61) 224 2842
e-mail: snpc@agricultura.gov.br

BULGARIA
Patent Office of the Republic of Bulgaria
52 B, Dr. G. M. Dimitrov Blvd.
1113 Sofia

Phone: (359-2) 710 152
Fax: (359-2) 708 325

CANADA
The Commissioner
Plant Breeders' Rights Office
Canadian Food Inspection Agency (CFIA)
3rd Floor, East Court
Camelot Court
59 Camelot Drive
Nepean, Ontario
K1A OY9

Phone: (1 613) 225 2342
Fax: (1 613) 228 6629

CHILE
Ministerio de Agricultura
Servicio Agricola y Ganadero
Departamento de Semillas
Casilla 1167-21
Santiago de Chile

Phone: (56 2) 696 29 96
Fax: (56 2) 696 64 80

CHINA
The Office for the Protection of New Varieties of Plants
Ministry of Agriculture
11 Nong Zhan Guan Nan Li
Beijing 100026

Phone: (86-10) 6419 3029
Fax: (86-10) 6419 3082
e-mail: cnpvp@agri.gov.au

COLOMBIA
Instituto Colombiano Agropecuario (I.C.A)
Division de Semillas
Calle 37 No. 8-43
Santa Fe de Bogota

Phone: (57 1) 232 4697
Fax: (57 1) 232 4695
e-mail: semilla@impsat.net.co

CZECH REPUBLIC
Ministry of Agriculture
Department of European Integration
Tesnov 17
117 05 Prague 1

Phone: (420) 2 2181 2474
Fax: (420) 2 2181 2970

DENMARK
Plantenyhedsnaevnet
(The Danish Institute of Plant and Soil Science)
Teglvaerksvej 10, Tystofte
DK-4230 Skaelskoer

Phone: (45) 53 59 61 41
Fax: (45) 53 59 01 66

ECUADOR
Institutu Esuatoriano de la Propiedad Intelectual
Direccion Nacional de Obtenciones Vegetales
Eloy Alfaro y Amazonas
Edificio MAG, 3er piso
Quito

Phone: (593-2) 566 686
Fax: (593-2) 562 258
e-mail: sectagro@impsat.net.ec

ESTONIA
Variety Control Department
Estonian Plant Production Inspectorate
EE-71024 Viljandi

Phone: (372 4) 334 650
Fax: (372 4) 334 650
e-mail: plant@plant.agri.ee

FINLAND
Plant Variety Board
Plant Variety Rights Office
PO Box 232
SF-00171 Helsinki

Phone: (358) 9 160 3316
Fax: (358) 9 160 2443

FRANCE
Comite de la protection des obtentions vegetales
11, rue Jean Nicot
F-75007 Paris

Phone: (331) 42 75 93 14
Fax: (331) 42 75 94 25

GERMANY
Bundessortenamt
Postfach 61 04 40
D-30604 Hannover

Phone: (49 511) 95 66 5
Fax: (49 511) 56 33 62
e-mail: bsa@bundessortenamt.de

HUNGARY
Hungarian Patent Office
Magyar Szabadalmi Hivatal
Garibaldi-u.2-B.P. 552
H-1370 Budapest

Phone: (36 1) 312 44 00
Fax: (36 1) 311 4841

IRELAND
Controller of Plant Breeders' Rights
Department of Agriculture and Food
Backweston
Leixlip
Co. Kildare

Phone: (353) 1 628 0608
Fax: (353) 1 628 0634
e -mail: backwest@indigo.ie

ISRAEL
Plant Breeders' Rights Council
The Volcani Center
PO Box 6
Bet-Dagan 50 250

Phone: (972) 3 968 3669
Fax: (972) 3 968 34 92
e-mail: ilpbr_tu@netvision.net.il

ITALY
Ufficio Italiano Brevetti e Marchi
Ministero dell'Industria, del Commercio e dell'Artigianato
19,via Molise
I-00187 Roma

Phone: (39 06) 47 05 1
Fax: (39 06) 47 05 30 35

JAPAN
Seeds and Seedlings Division
Agricultural Production Bureau
Ministry of Agriculture, Forestry and Fisheries
1-2-1 Kasumigaseki – Chiyoda-ku
Tokyo 100

Phone: (81 3) 35 91 05 24
Fax: (81 3) 35 02 65 72

KENYA
Plant Breeder's Rights Office
Kenya Plant Health Inspectorate Service (KEPHIS)
Headquarters
Waiyaki Way
PO Box 49592
Nairobi

Tel: (254 –2) 44 40 29
Fax: (254-2) 44 89 40
e-mail: kephis@nbnet.co.ke

KYRGYZSTAN
State Agency of Intellectual Property
House 10/1, Microregion 11
720049 Bishkek

Tel: (996-3312) 510 810
Fax: (996 3312) 510 813
e-mail: kyrgyzpatent@infotel.kg

MEXICO
Servicio Nacional de Inspection y Certification de Semillas – SNICS
Secretaria de Agricultura, Ganaderia y Desarrollo Rural
Lope de Vega 125 8· Piso
Col. Chapultepec Morales
México, D.F. 11570

Phone: (52-5) 203 9427
Fax: (52-5) 250 64 83

NETHERLANDS
Raad voor het Kwekersrecht
(Borad of Plant Breeder's Rights)
Postbus 104
NL-6700 AC Wageningen

Phone: (31 317) 47 80 90
Fax: (31 317) 42 58 67
e-mail:
raad.kwekersrecht@rkr.agro.nl

NEW ZEALAND
Commissioner of Plant Variety Rights
Plant Variety Rights Office
PO Box 130
Lincoln, Canterbury

Phone: (64 3) 325 63 55
Fax: (64 3) 325 29 46

NORWAY
Plantesortsnemnda
(The Plant Variety Board)
Frokontrollen
N-1432 As

Phone: (47) 64 94 75 04
Fax: (47) 64 94 02 08

PANAMA
Direccion General del Registro de la Propiedad Industrial (DIGERPI)\
Ministerio de Comercio e Industrias
Apartado 9658- Zona 4
Panama 4

Phone: (507) 227 3987
Fax: (507) 227 2139
e-mail: digerpi@sinfo.net

PARAGUAY
Ministerio de Agricultura y Ganaderia
Direccion de Semillas (DISE)
Gaspar R. de Francia No. 685
c/ Mcal. Estigarribia
San Lorenzo

Phone: (595) 21 58 22 01
Fax: (595) 21 58 46 45

POLAND
Research Center of Cultivars Testing
(COBORU)
63-022 Slupia Wielka

Phone: (48 61) 285 2341
Fax: (48 61) 285 3558
e-mail: coboru@bptnet.pl

PORTUGAL
Centro Nacional de Registo de Variedades Protegidas (CENARVE)
Edificio II da DGPC
Tapada da Ajuda
P-1300 Lisboa

Phone: (351 213) 613 216
Fax: (351 213) 613 222
e-mail:
dgpc.cenarve@mail.telepac.pt

REPUBLIC OF MOLDOVA
State Commission for Crops Variety Testing and Registration
Ministry of Agriculture
Bul. Stefan Cel Mare 162
C.P. 1873
2004 Chisinau

Phone: (373-2) 24 62 22
Fax: (373-2) 24 69 21

RUSSIAN FEDERATION
State Commission of the Russian Federation
for Selection Achievements Test and Protection
Orlicov per., 1/11
107139 Moscow

Phone: (70-95) 204 49 26
Fax: (70-95) 207 86 26
e-mail: desel@agro.aris.ru

SLOVAKIA
Ministry of Agriculture
Dodrovicova 12
812 66 Bratislava

Phone: (421 7) 306 62 90
Fax: (421 7) 306 62 94

SLOVENIA
Plant Variety Protection and Registration Office
Parmova 33
1000 Ljubljana

Phone: (386-61) 136 3344
Fax: (386-61) 136 3312
e-mail: UVRSR@gov.si

SOUTH AFRICA
The Registrar
National Department of Agriculture
Directorate of Plant and Quality Control
PO Box 25322
Gezina

Phone: (27 12) 808 0365
Fax: (27 12) 808 0365
e-mail: variety.control@nda.agric.za

SPAIN
Oficina Espanola de Variedades Vegetales (OEVV)
Instituto Nacional de Investigacion y Tecnologia
Agraria y Alimentaria
Ministerio de Agricultura, Pesca y Alimentacion
Jose Abascal, 4-7ª pl.
E-28003- Madrid

Phone: (34 91) 347 66 00
Fax: (34 91) 594 27 68

SWEDEN
Statens vaxtsortnamnd
(National Plant Variety Board)
Box 1247
S-171 24 Solna

Phone: (46) 8 783 12 60
Fax: (46) 8 833 170
e-mail: info@vaxtsortnamnden

SWITZERLAND
Bundesamt fur Landwirtschaft
Buro fur Sortenschutz
Mattenhofstr. 5
CH-3003 Bern

Phone: (41 31) 322 25 24
Fax: (41 31) 322 26 34

TRINIDAD AND TOBAGO
Controller (Ag)
Intellectual Property Office
Ministry of Legal Affairs
34 Frederick Street
Port of Spain

Tel: (1 868) 625 9972
Fax: (1 868) 624 1221
e-mail:
Controller.IPOffice@opus.co.tt

UKRAINE
State Patent Office of Ukraine
8 Lvov Square
254655 Kiev 53, GSP- 655

Phone: (880 44) 212 50 82
Fax: (880 44) 212 34 49

UNITED KINGDOM
The Plant Variety Rights Office
White House Lane
Huntingdon Road
Cambridge CB3 OLF

Phone: (44 1223) 34 23 81
Fax: (44 1223) 34 23 86

UNITED STATES OF AMERICA
(For PVP)
The Commissioner
Plant Variety Protection Office
Agricultural Marketing Service
Department of Agriculture
Beltsville, Maryland 20705-2351

Phone: (1 301) 504 55 18
Fax: (1 301) 504 52 91

(For Plant Patent)
The Commissioner of Patents and Trademarks
Patent and Trade Mark Office
Box 4
Washington DC 20231

Phone: (1 703) 305 93 00
Fax: (1 703) 305 88 85

URUGUAY
Instituto Nacional de Semillas (INASE)
Casilla de Correos 7731
Pando Canelone

Phone: (59 82) 288 7099
Fax: (59 82) 288 7077
e-mail: inasepre@adinet.com.uy

EUROPEAN UNION
(for applications filed within the EU)

Community Plant Variety Office
P.O. Box 2141
F-49021 Angers Cedex
FRANCE

Phone: (33 2) 41 25 64 32
Fax: (33 2) 41 25 64 10

CURRENT STATUS OF PLANT VARIETY PROTECTION LEGISLATURE IN UPOV MEMBER COUNTRIES

Argentina[2]
Australia[3]
Austria[2,4]
Belgium[1,4]
Bolivia[2]
Brazil[2]
Bulgaria[3]
Canada[2]
Chile[2]
China[2]
Columbia[2]
Czech Republic[2]
Denmark[3,4]
Ecuador[2]
Finland[2, 4]
France[2, 4]
Germany[3,4]
Hungary[2]
Ireland[2, 4]
Israel[3]
Italy[2,4]
Japan[3]
Kenya[2]
Kyrgyzstan[3]
Mexico[2]
Netherlands[3,4]
New Zealand[2]
Norway[2]
Panama[2]
Paraguay[2]
Poland[2, 5]
Portugal[2, 5]
Republic of Estonia[3]
Republic of Moldova[3]
Russian Federation[3]
Slovakia[2,5]
Slovenia[5]
South Africa[2,5]
Spain[1,4]
Sweden[3,4]
Switzerland[2]
Trinidad and Tobago[2]
Ukraine[2]
United Kingdom[3,4]
USA[3]
Uruguay[2]
(Total 46)

1 Bound by the 1961 Act as amended by the Additional Act of 1972.
2 Bound by the 1978 Act.
3 Bound by the 1991 Act.
4 Member of the European Community which has introduced a (supranational) Community plant variety rights system based upon the 1991 Act.
5 Has already amended its law to conform to the 1991 Act; most other states are in the process of doing so.

APPENDIX 6

CENTRALISED TESTING CENTRES

Under Plant Breeder's Rights Regulations introduced in 1996, establishments may be officially authorised by the PBR office to conduct test growings. An authorised establishment will be known as Centralised Test Centre (CTC).

Usually, the implementation of PBR in Australia relies on a 'breeder testing' system in which the applicant, in conjunction with a nominated Qualified Person (QP), establishes, conducts and reports a comparative trial. More often than not, trials by several breeders are being conducted concurrently at different sites. This makes valid comparisons difficult and often results in costly duplication.

While the current system is and will remain satisfactory, other optional testing methods are now available which will add flexibility to the PBR process.

Centralised Testing is one such optional system. It is based upon the authorisation of private or public establishments to test one or more genera of plants. Applicants can choose to submit their varieties for testing by a CTC or continue to do the test themselves. Remember, using a CTC to test your variety is voluntary.

The use of CTCs recognises the advantages of testing a larger number of candidate varieties (with a larger number of comparators) in a single comprehensive trial. Not only is there an increase in scientific rigour but there are substantial economies of scale and commensurate cost savings. A CTC will establish, conduct and report each trial on behalf of the applicant.

The PBR office has amended its fees so that cost savings can be passed to applicants who choose to test their varieties in a CTC. Accordingly, when 5 or more candidate varieties of the same genus are tested simultaneously, each will qualify for the CTC examination fee of $800. This is a saving of nearly 40% over the normal fee of $1400.

Trials containing less than 5 candidate varieties capable of being examined simultaneously will not be considered as Centralised test trials regardless of the authorisation of the facility. Candidate varieties in non-qualifying small trials will not qualify for CTC reduction of examination fees.

Establishments wishing to be authorised as a CTC may apply in writing to the PBR office outlining their claims against the selection criteria. Initially, only one CTC will be authorised for each genus. Exemptions to this rule can be claimed due to special circumstances, industry needs and quarantine regulations. Authorisations will be reviewed periodically.

Authorisation of CTCs is not aimed solely at large research institutions. Smaller establishments with appropriate facilities and experience, can also apply for CTC status. There is no cost for authorisation as a CTC.

APPLICATIONS FOR AUTHORISATION AS A 'CENTRALISED TESTING CENTRE'

Establishments interested in gaining authorisation as a Centralised Testing Centre should apply in writing addressing each of the Conditions and Selection Criteria outlined below.

Conditions and Selection Criteria
To be authorised as a CTC, the following conditions and criteria will need to be met:

Appropriate facilities
While in part determined by the genera being tested, all establishments must have facilities that allow the conduct and completion of moderate to large scale scientific experiments without undue environmental influences. Again dependent on genera, a range of complementary testing and propagation facilities (e.g. outdoor, glasshouse, shadehouse, tissue culture stations) is desirable.

Experienced staff
Adequately trained staff, and access to appropriately accredited Qualified Persons, with a history of successful PVR/PBR applications will need to be available for all stages of the trial from planting to the presentation of the analysed data. These staff will require the authority to ensure timely maintenance of the trial. Where provided by the PBR office, the protocol and technical guidelines for the conduct of the trial must be followed.

Substantial industry support
Normally the establishment will be recognised by a state or national industry society or association. This may include/be replaced by a written commitment from major nurseries or other applicants, who have a history of regularly making applications for PBR in Australia, to use the facility.

Capability for long term storage of genetic material
Depending upon the genus, a CTC must be in a position to make a long term commitment to collect and maintain, at minimal cost, genetic resources of vegetatively propagated species as a source of comparative varieties. Applicants indicating a willingness to act as a national genetic resource centre in perpetuity will be favoured.

Contract testing for 3rd Parties
Unless exempted in writing by the PBR office operators of a CTC must be prepared to test varieties submitted by a third party.

Relationship between CTC and 3rd Parties
A formal arrangement between the CTC and any third party including fees for service will need to be prepared and signed before the commencement of the trial. It will include among other things: how the plant material will be delivered (e.g. date, stage of development plant, condition etc); allow the applicant and/or their agent and QP access to the site during normal working hours; and release the use of all trial data to the owners of the varieties included in the trial.

One trial at a time
Unless exempted in writing by the PBR office, all candidates and comparators should be tested in a single trial.

One CTC per genus

Normally only one CTC will be authorised to test a genus. Special circumstances may exist (environmental factors, quarantine etc) to allow more than one CTC per genus, though a special case will need to be made to the PBR office. More than one CTC maybe allowed for roses. One CTC may be authorised to test more than one genus. Authorisations for each genus will be reviewed periodically

Authorised Centralised Test Centres (CTCs)

Following publication of applications for accreditation and ensuing public comment, the following organisations/individuals are authorised to act as CTCs. Any special conditions are also listed.

Name	Location	Approved Genera	Facilities	Name of QP	Date of accreditation
Agriculture Victoria, National Potato Improvement Centre	Toolangi, VIC	Potato	Outdoor, field, greenhouse, tissue culture laboratory	R Kirkham G Wilson	31/3/97
Bureau of Sugar Experiment Stations	Cairns, Tully, Ingham, Ayr, Mackay, Bundaberg, Brisbane QLD	*Saccharum*	Field, glasshouse, tissue culture, pathology	M Cox	30/6/97
Ag-Seed Research	Horsham and other sites	Canola	Field, glasshouse, shadehouse, laboratory and biochemical analyses	G Kadkol	30/6/97
Agriculture Western Australia	Northam WA	Wheat	Field, laboratory	D Collins	30/6/97
University of Sydney, Plant Breeding Institute	Camden, NSW	*Argyranthemum, Diascia, Mandevilla*, Oats	Outdoor, field, . irrigation, greenhouses with controlled micro-climates, controlled environment rooms, tissue culture, molecular genetics and cytology lab	J Oates	30/6/97
Boulters Nurseries Monbulk Pty Ltd	Monbulk, VIC	Clematis	Outdoor, shadehouse, greenhouse	M Lunghusen	30/9/97
Geranium Cottage Nursery	Galston, NSW	Pelargonium	Field, controlled environment house	I Paananen	30/11/97
Agriculture Victoria	Hamilton, VIC	*Perennial ryegrass, tall fescue, tall wheat grass, white clover, persian clover*	Field, shadehouse, glasshouse, growth chambers. Irrigation. Pathology and tissue culture. Access to DNA and molecular marker technology. Cold storage.	V Gellert M Anderson	30/6/98
Koala Blooms	Monbulk, VIC	*Bracteantha*	Outdoor, irrigation	M Lunghusen	30/6/98
Redlands Nursery	Redland Bay, QLD	*Aglaonema*	Outdoor, shadehouse, glasshouse and indoor facilities	K Bunker	30/6/98
Protected Plant Promotions	Macquarie Fields, NSW	New Guinea Impatiens including *Impatiens hawkeri* and its hybrids	Glasshouse	I Paananen	30/9/98
University of Queensland, Gatton College	Lawes, QLD	Some tropical pastures	Field, irrigation, glasshouse, small phytotron, plant nursery & propagation, tissue culture, seed and chemical lab, cool storage	D Hanger	30/9/98
Jan and Peter Iredell	Moggill, QLD	Bougainvillea	Outdoor, shadehouse	J Iredell	30/9/98

Protected Plant Promotions	Macquarie Fields, NSW	*Verbena*	Glasshouse	I Paananen	31/12/98
Avondale Nurseries Ltd	Glenorie, NSW	*Agapanthus*	Greenhouse, tissue culture with commercial partnership	I Paananen	31/12/98
Paradise Plants	Kulnura, NSW	*Camellia, Lavandula, Osmanthus, Ceratopetalum*	Field, glasshouse, shadehouse, irrigation, tissue culture lab	J Robb	31/12/98
Prescott Roses	Berwick, VIC	*Rosa*	Field, controlled environment greenhouses	C Prescott	31/12/98
F & I Baguley Flower and Plant Growers	Clayton South, VIC	*Euphorbia*	Controlled glasshouses, quarantine facilities, tissue culture	G Guy	31/3/99
Paradise Plants	Kulnura, NSW	*Limonium, Raphiolepis, Eriostemon, Lonicera, Jasminum*	Field, glasshouse, shadehouse, irrigation, tissue culture lab	J Robb	
Ramm Pty Ltd	Macquarie Fields, NSW	*Angelonia*	Glasshouse	I Paananen	
Carol's Propagation	Alexandra Hills, QLD	*Cuphea*	Field beds, wide range of comparative varieties	C Milne	
Queensland Department of Primary Industries Redlands Research Station	Cleveland, QLD	*Cynodon, Zoysia* and other selected warm season-season turf and amenity species	Field, glasshouse, irrigation, tissue culture lab	D Loch	30/9/00
Luff Partnership	Kulnura, NSW	*Bracteantha*	Field beds, irrigation, shade house, propagation house, cool rooms	I Dawson	31/12/00
Ramm Pty Ltd	Macquarie Fields, NSW	*Petunia, Calibrachoa*	Glasshouse	I Paananen	31/12/00

The following applications are pending:

Name	**Location**	**Genera applied for**	**Facilities**	**Name of QP**
NSW Agriculture	Temora	*Triticum, Hordeum, Avena*	field irrigation, glasshouse, climate controlled areas	P Breust
Bywong Nursery	Bungendore, NSW	*Leptospermum*	Field, shadehouse greenhouse	P Ollerenshaw
Outeniqua Nursery	Monbulk, VIC	Unspecified	Outdoor, glasshouse	
University of Queensland, Gatton College	Lawes, QLD	Ornamental & bedding sp., wheat, millet, *Prunus, Capsicum, Glycine, Ipomea, Vigna*, *Lycopersicon,* Asian vegetables, Tropical fruits, *Solanum*	Field, irrigation, glasshouse, small phytotron, plant nursery & propagation, tissue culture, seed and chemical lab, cool storage	L Bahnisch R Fletcher D George M Johnston G Lewis G Porter D Tay A Wearing D Hanger

Comments (both for or against) either the continued accreditation of a CTC or applications to become a CTC are invited. Written comments are confidential and should be addressed to:

The Registrar
Plant Breeders Rights Office
PO Box 858
CANBERRA ACT 2601
Fax (02) 6272 3650

Closing date for comment: 15 March 2001.

APPENDIX 7

LIST OF CLASSES FOR VARIETY DENOMINATION PURPOSES[1]

As amended by the Council at its twenty-fifth ordinary session, on October 25, 1991.

[Recommendation 9

For the purposes of the fourth sentence of Article 13(2) of the Convention, all taxonomic units are considered closely related that belong to the same botanical genus or are contained in the same class in the list in Annex I to these Recommendations.]

Note: Classes which contain subdivisions of a genus may lead to the existence of a complementary class containing the other subdivisions of the genus concerned (example: Class 9 (Vicia faba) leads to the existence of another class containing the other species of the genus Vicia).*

Class 1: Avena, Hordeum, Secale, xTriticosecale, Triticum

Class 2: Panicum, Setaria

Class 3: Sorghum, Zea

Class 4: Agrostis, Alopecurus, Arrhenatherum, Bromus, Cynosurus, Dactylis, Festuca, Lolium, Phalaris, Phleum, Poa, Trisetum

Class 5: Brassica oleracea, Brassica chinensis, Brassica pekinensis

Class 6: Brassica napus, B. campestris, B. rapa, B. juncea, B. nigra, Sinapis

Class 7: Lotus, Medicago, Ornithopus, Onobrychis, Trifolium

Class 8: Lupinus albus L., L. angustifolius L., L. luteus L.

Class 9: Vicia faba L.

Class 10: Beta vulgaris L. var. alba DC., Beta vulgaris L. var. altissima

Class 11: Beta vulgaris ssp. vulgaris var. conditiva Alef. (syn.: Beta vulgaris L. var. rubra L.), Beta vulgaris L. var. cicla L., Beta vulgaris L. ssp. vulgaris var. vulgaris

Class 12: Lactuca, Valerianella, Cichorium

Class 13: Cucumis sativus

Class 14: Citrullus, Cucumis melo, Cucurbita

Class 15: Anthriscus, Petroselinum

Class 16: Daucus, Pastinaca

Class 17: Anethum, Carum, Foeniculum

Class 18: Bromeliaceae

Class 19: Picea, Abies, Pseudotsuga, Pinus, Larix

Class 20: Calluna, Erica

Class 21: Solanum tuberosum L.

Class 22: Nicotiana rustica L., N. tabacum L.

Class 23: Helianthus tuberosus

Class 24: Helianthus annuus

Class 25: Orchidaceae

Class 26: Epiphyllum, Rhipsalidopsis, Schlumbergera, Zygocactus

Class 27: Proteaceae

COMPLEMENTARY CLASSES

Class 28: Species of Brassica other than (in Class 5 + 6) Brassica oleracea, Brassica chinensis, Brassica pekinensis + Brassica napus, B. campestris, B. rapa, B. juncea, B. nigra, Sinapis

Class 29: Species of Lupinus other than (in Class 8) Lupinus albus L., L. angustifolius L., L. luteus L.

Class 30: Species of Vicia other than (in Class 9) Vicia faba L.

Class 31: Species of Beta + subdivisions of the species Beta vulgaris other than (in Class 10 +11) Beta vulgaris L. var. alba DC., Beta vulgaris L. var. altissima + Beta vulgaris ssp. vulgaris var. conditiva Alef. (syn.: Beta vulgaris L. var. rubra L.), Beta vulgaris L. var. cicla L., Beta vulgaris L. ssp. vulgaris var. vulgaris

Class 32: Species of Cucumis other than (in Class 13 + 14) Cucumis sativus + Citrullus, Cucumis melo, Cucurbita

Class 33: Species of Solanum other than (in Class 21) Solanum tuberosum L.

Class 34: Species of Nicotiana other than (in Class 22) Nicotiana rustica L., N. tabacum L.

Class 35: Species of Helianthus other than (in Class 23 + 24) Helianthus tuberosus + Helianthus annuus

---

* The complementary classes have been added by the Office of the Union for the convenience of the reader and are given the numbers 28 to 35.

1 From UPOV RECOMMENDATIONS ON VARIETY DENOMINATIONS, Adopted by The Council of UPOV on October 16, 1987, and amended on October 25, 1991.

APPENDIX 8

REGISTER OF PLANT VARIETIES

Register of Plant Varieties contains the legal description of the varieties granted Plant Breeder's Rights. Under section 62(1) of the *Plant Breeder's Rights Act 1994* a person may inspect the Register at any reasonable time. Following are the contact details for registers kept in each state and territories.*

South Australia
Ms Lisa Halskov
AQIS
8 Butler Street
PORT ADELAIDE SA 5000
Phone 08 8305 9706

Western Australia
Mr Geoffrey Wood
AQIS
Level, Wing C
Market City
280 Bannister Road
CANNING VALE WA 6154
Phone 08 9311 5407

New South Wales
Mr. Alex Jabs
General Services
AQIS
2 Hayes Road
ROSEBERY NSW 2018
Phone 02 9364 7293

Victoria and Tasmania
Mr. Colin Hall
AQIS
Building D, 2nd Floor
World Trade Centre
Flinders Street
MELBOURNE VIC 3005
Phone 03 9246 6810

Queensland
Mr. Ian Haseler
AQIS
2nd Floor
433 Boundary Street
SPRING HILL QLD 4000
Phone 07 3246 8755

Australian Capital Territory and Northern Territory
ACT and NT Registers are kept
in the Library of PBR Office in Canberra
Phone 02 6272 4228

*In accordance with an amendment to section 61 of *Plant Breeder's Rights Act* 1994, the Register of Plant Varieties will be kept only in one location, the Library of PBR Office in Canberra. Please contact PBR Office if you need further information.

APPENDIX 9

Common Name to Botanical Name Index
For varieties included in this issue

COMMON NAME	BOTANICAL NAME
Agapanthus	*Agapanthus orientalis*
Alder	*Alnus jorullensis*
Alstroemeria	*Alstroemeria* hybrid
Anisodontea	*Anisodontea capensis*
Apple	*Malus domestica*
Arizona Cypress	*Cupressus glabra*
Baby's Breath	*Gypsophila paniculata*
Bacopa	*Sutera cordata*
Balansa Clover	*Trifolium michelianum*
Banksia Rose	*Rosa banksiae*
Barley	*Hordeum vulgare*
Bean	*Phaseolus vulgaris*
Bougainvillea	*Bougainvillea* hybrid
Bower Wattle	*Acacia cognata*
Box Honeysuckle	*Lonicera nitida*
Canola	*Brassica napus* var *oleifera*
Cape Daisy	*Osteospermum ecklonis*
Ceanothus	*Ceanothus gloriosus*
Cockscomb	*Celosia argentia* var *cristata*
Condiment Paprika	*Capsicum annuum* var *longum*
Confetti Bush	*Coleonema pulchrum*
Coprosma	*Coprosma* hybrid
Cotton	*Gossypium hirsutum*
Dwarf Chilli	*Capsicum annuum* var *fasciculatum*
Easter Daisy	*Aster* hybrid
Everlasting Daisy	*Bracteantha bracteata*
Feather Flowers	*Verticordia plumosa* hybrid
Field Pea	*Pisum sativum*
French Serradella	*Ornithopus* hybrid
Giant Water Gum	*Syzygium francisii*
Grape	*Vitis vinifera*
Grevillea	*Grevillea* hybrid
Hebe	*Hebe* hybrid
Hibiscus	*Hibiscus syriacus*
Impatiens	*Impatiens wallerana*
Isotoma	*Isotoma axillaris*
Italian Lavender	*Lavandula stoechas*
Italian Ryegrass	*Lolium multiflorum*
Ivy Pelargonium	*Pelargonium peltatum* hybrid
Japanese Elm	*Zelcova serrata*
Koeleria	*Koeleria cristata*
Lavender	*Lavandula angustifolia*
Lilly Pilly	*Acmena smithii*
Mango	*Mangifera indica*
Moroccan Glory Bind	*Convolvulus sabiatus*
Narrow-Leafed Lupin	*Lupinus angustifolius*
Nectarine	*Prunus persica* var *nucipersica*
Nemesia	*Nemesia foetens*
New Guinea Impatiens	*Impatiens* hybrid
Oat	*Avena sativa*
Peach	*Prunus persica*
Peanut	*Arachis hypogaea*
Pelargonium	*Pelargonium* x*hortorum*
Persian Clover	*Trifolium resupinatum*
Peruvian Lily	*Alstroemeria* hybrid
Pincushion Flower	*Scabiosa columbaria*

COMMON NAME	BOTANICAL NAME
Pittosporum	*Pittosporum bicolor* x *Pittosporum undulatum*
Plantain Lily	*Hosta hybrid*
Potato	*Solanum tuberosum*
Prunus – Interspecific Plum	*Prunus domestica* x *Prunus armeniaca*
Pumpkin	*Cucurbita maxima*
Red Boronia	*Boronia heterophylla*
Red Clover	*Trifolium pratense*
Rose	*Rosa* hybrid
Scabious	*Scabiosa columbaria*
Shore Juniper	*Juniperus conferta*
Snapdragon	*Antirrhinum* hybrid
Snowy River Wattle	*Acacia boormanii*
Spotted Gum	*Corymbia maculata*
Strand Medic	*Medicago littoralis*
Subterranean Clover	*Trifolium subterraneum* ssp *brachycalycinum* *Trifolium subterraneum* ssp *subterraneum*
Sugarcane	*Saccharum* hybrid
Swamp Mahogany	*Eucalyptus robusta*
Tea Tree	*Leptospermum* hybrid
Triticale	x*Triticosecale*
Tully River Stenocarpus	*Stenocarpus* sp
Tuscan	*Hypericum androsaeum*
Verbena	*Verbena* hybrid
Wallflower	*Erysimum* hybrid
Waratah	*Telopea speciosissima*
Wheat	*Triticum aestivum*
Whirling Butterfly	*Gaura lindheimeri*
White Clover	*Trifolium repens*
White Lupin	*Lupinus albus*
Willow Myrtle	*Agonis flexuosa nana*

Register of Australian Winter Cereal Cultivars

Varietal Descriptions from the Voluntary Scheme for the Registration of Cereal Cultivars

Plant Breeder's Rights (PBR) office and the Voluntary Cereal Registration Scheme are collaborating to ensure that descriptions of new varieties, whether they are protected by PBR or not, are made available.

The *Plant Varieties Journal* now includes descriptions of cultivars registered under the Voluntary Cereal Registration Scheme. **Please note that publishing a description in the *Plant Varieties Journal* does not automatically qualify a cultivar to be protected under Plant Breeder's Rights (PBR). PBR is entirely a different scheme and there are specific requirements under the *Plant Breeder's Rights Act 1994* which must be satisfied to be eligible for registration under PBR.** However, it is possible that some cultivars published in this section of the journal are also registered under PBR. When a cultivar is registered under both schemes, the current PBR status of the cultivar is indicated in the descriptions.

A Check list for Registering New Cereal Cultivars in the Voluntary Scheme

Breeders considering submitting a new variety to the voluntary scheme should:

1. Clear the proposed name with Australian Winter Cereal Collection (AWCC). The AWCC will query available information systems to ensure that the proposed name will not be confused with other cultivars of the same group and issue a **registration number**. The timeframe for this process will usually be less than 24 hours, and can be done by phone, fax or by e-mail.
2. Complete a **registration form,** including the registration number and forward the form to the Voluntary Cereal Registration Scheme **–** either by an e-mail attachment or by ordinary mail on a 3.5 inch a IBM formatted floppy diskette. The breeders will be notified of the acceptance for a new registration within one week of its receipt.
3. Send an *untreated* one kilogram (1 kg) reference (or type) **sample of seed** to the Voluntary Cereal Registration Scheme for long term storage in the AWCC. Please indicate if there are any restrictions on the distribution of this seed. Unless advised to the contrary it will be assumed that seed samples of registered cultivars can be freely distributed by the AWCC to *bona fide* scientists for research purposes.
4. Provide a **description of the new cultivar** for publication in the *Plant Varieties Journal* and send it to the Voluntary Cereal Registration Scheme in Word for Windows or in RTF format **–** either by an e-mail attachment or by ordinary mail on a 3.5 inch a IBM formatted floppy diskette. In general, a description should contain the following headings:

- Common name
- Botanical name
- Cultivar name
- Registration number
- Registration date
- Name and address of Originators
- Name and address of Registrar of Cereal Cultivars
- Released by
- Synonyms (if any)
- Parentage
- Breeding and selection
- Morphology
- Disease Reaction
- Yield
- Quality
- PBR Status (if any)
- Acknowledgment (if any)
- Breeder

In addition, you may also include other headings if they are relevant to the description of the variety. Please follow the general style and format of the descriptions published in the current issue. Please note: <u>always</u> format your description <u>in a single column</u>, **do not format in two columns**. Columns will be formatted during the publication process.

The **Voluntary Cereal Registration Scheme** will electronically forward your description to the *Plant Varieties Journal* for publication. *Plant Varieties Journal* reserves the right for editorial corrections and the edited versions will be forwarded to the breeder for review before the final publication. Publication cost will be charged on a cost recovery basis with invoices sent directly from the PBR office to the breeder. The nominal cost will be $400.00 (four hundred dollars) per variety.

There is no descriptions from the Voluntary Cereal Registration Scheme included in this issue.

Contact information

Registration

Voluntary Cereal Registration Scheme
C/- Australian Winter Cereals Collection
RMB 944, Calala Lane
TAMWORTH NSW 2340
Phone: (02) 6763 1149
Fax: (02) 6763 1154
e-mail: mackaym@agric.nsw.gov.au

Publication

Registrar PBR
Plant Breeder's Rights Office
GPO Box 858
CANBERRA ACT 2601
Phone: (02) 6272 4228
Fax: (02) 6272 3650
e-mail: Doug.Waterhouse@affa.gov.au

SERVICE DIRECTORY

ADVERTISE YOUR NEW VARIETY OR SERVICES IN THE

Plant Varieties Journal

Plant Breeders and their agents are invited to take this opportunity to promote their new plant varieties by advertising in the Plant Varieties Journal. Consultant Qualified Persons are also invited to advertise their services. The Journal is well circulated throughout the horticultural and agricultural industry. Advertising in the Journal will promote the commercialisation of new plant varieties and the services offered by the qualified persons. Our policy is to promote the varieties which are currently in the PBR scheme and the services of those who are currently accredited by the PBR office.

The Journal also has a Service Directory. This Directory is suitable for advertising the services provided by Consultant Qualified Persons, Agents, Patent Attorneys, CTC sites or photographers.

Advertising is available at a casual space rate as well as a four times rate, attracting a considerable discount of 25%! Advertisements will be published on the back cover or inside front and back covers. The front cover is restricted to full colour photographs of a PBR variety.

Advertising Rates (incl GST)

			Casual	**4 issues**
Front Cover	(Full Page only)	Colour	$1193.00	$3579.00
Back Cover	(Full Page)	Colour	894.00	2684.00
	(Full Page)	Mono	596.00	1790.00
Inside Front Cover	(Full Page)	Mono	477.00	1431.00
	(Half Page)	Mono	298.00	894.00
Inside Back Cover	(Full Page)	Mono	357.00	1073.00
	(Half Page)	Mono	239.00	716.00
Service Directory	(6cm x 6cm)	Mono	60.00 per spot	

For bookings or further information please contact Kathryn Dawes-Read on 02 6272 4338, fax 02 6272 3650 or email Kathryn.Dawes-Read@affa.gov.au

Plant Breeder's Rights

In industry, product innovation can give you the competitive edge but you need to protect your investment to ensure a sustainable return.

Plant Breeder's Rights (PBR) are a form of intellectual property that allow breeders to decide how their new varieties are to be distributed and marketed.

Varieties protected by PBR may only be produced for sale or sold by growers, distributors and retailers licensed by the plant breeder.

If you would like more information about your rights as a plant breeder, please contact:

Plant Breeder's Rights
Department of Agriculture, Fisheries and Forestry – Australia
GPO Box 858 CANBERRA ACT 2601

Or you can visit our website:
www.affa.gov.au/pbr

Telephone: (02) 6272 4228
Facsimile: (02) 6272 3650

PBR Australia – protecting your investment.

PBR
Australia