ABIES

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The genus Abies may be the next spruce. Once one has their fill of resemblant dwarf, mounded to subglobose Picea in both blue and green choices, the charms of these silver–backed leaves contrasting to darkest jade, twisted or in hairbrush fashion, provide endless appeal in the modern garden. There is no silver more sterling nor precious than white firs against a blue sky or dark evergreen background. Their glowing cones too are remarkable, often obtainable in very young plants in a choice of semiprecious colors. And there is nothing more majestic in any garden than a green towering fir at a century old – so plant one tomorrow for the future. And be sure to allow their lower limbs to cascade and form skirts and wandering sweeps as The Creator intended. And there is no more lovely scent in all the woody plant world than the citrusy–balsam scent that some of these species provide. Are pines and spruce boring us know? We now have fir species that handle very hot, even humid climates and exploitation of their witches brooms, seedlings, and cultivariant creepers has begun. The best in Christmas tree genetics and tissue culture science has been applied to this genus and that is good for ornamental horticulture too. Truly fine, refined firs are with us already and yet more will be coming along if we just seek them out.

It is beyond this scope of this reference to catalog all the named witches broom which only number one plant and have yet to make commerce – many unlikely to exist long or ever be distributed. The Conifertreasury.org has made it a high skill to catalog all these new sports and mutations in extreme detail with most coming from Eastern Europe. CWP is adding the new brooms and dwarves as they appear in collector's and mainstream catalogs.

As the number of fir hybrids increases in our gardens and most especially with named cultivar clones, a review of the hybrid species names is in order. As ever, I do this in alphabetical order of the parents.

concolor x grandis = x dahlemensis firma x homolepis = x umbellata koreana x lasiocarpa = x koreocarpa koreana x veitchii = x arnoldiana cephalonica x nordmanniana = x bornmeulleriana cephanlonica x pinsapo = x vilmorinii nordmanniana x pinsapoa = x insignis pindrow x pinsapo = x vasconcellosiana sibirca x nephrolepis = x sibicro-nephrolepis

ABIES ALBA





Gettysburg National Cemetery, Gettysburg, PA USA. August 2005. This very historical cemetary proved to a gold mine for photogenic old trees, some which are the finest intact examples of their kind in Pennsylvania if not elsewhere in the northeast. This 110 year+ silver fir was a true giant and loaded with cones. I put an arrow in the first photo to denote the actual top of the tree, as the adjacent Nordmann fir seems to extend from above it at first glance. The second image here shows the nice silvery bands on the the basal branches.

Abies alba 'Aargan' – possibly an error for 'Aargau' listed below so: www.stanleyandsons.com (online catalog 2003), name only

Abies alba var. acutifolia Turrill = $A. \times borisii$ -regis

Abies alba alpina Svoboda

ns: a old dubious name. Unclear synonomy.

Abies alba 'Apennina'

ns: a listed name based in Svoboda. It is in the trade in 2003. Description needed.

Abies alba 'Aargau' Mesterhazy, Conifer Treasury 4.0, 2012

ha: dwarf, from broom

or: Gunter Ershrich, Germany

Abies alba 'Aurea' ('Auricoma')

Ic: leaves both yellow and green, reverting often.

Abies alba 'Aureovariegata' (A. pectinata aureovariegata Senec.)

lc: variegated yellow

ns: it may well be 'Aurea' but not all experts agree.

Abies alba 'Bad Wildungen'

ns, id: listed name with Horstmann Naamslijst 1978

Abies alba 'Badenweiler'

ha: dwarf, spreading nest-formed

ns, id: some growers list 'Schwarzwald' as a synonym while

ns, id: list them separately. Research continues.

Abies alba 'Barabit's Spreading' ('Barabit's Spreader')

ha: globose-spreading, 2-4 in. growth a year

II: smaller needle

or: Barabits Nursery, Hungary c. 1965

Abies alba 'Barabit's Star' ('Barabit's Spreader'?) (9/2005)

ha: spreading, much slower, conical with age

Ic: dark green

or: Barabits Nursery, Hungary c. 1965

Abies alba 'Boesger Pyramid'

ha: narrowly pyramidal

Ic: dark green

so, in: www.arrowhead-alpines.com (online catalog 2006)

Abies alba 'Brevifolia'

ha: dwarf

lw, II: needles shorter, wider

Abies alba 'Bystricka'

ha: miniature, often tightly globose, 1 in. a year

Abies alba var. bulgarica Svoboda = A. x borisii-regis

Abies alba 'Candicans'

lc: whitish

id, ns, in: known to Masters in 1892. Not known today.

Abies alba 'Cinerea'

Ic: greyish

in: Europe before 1835

Abies alba 'Columnaris'

ha: narrower, columnar, branchlets of equal length and shorter than typical

II: needles slightly shorter than species typical

eval: 'Pyramidalis' is wider but has been more popular over the decades

Abies alba 'Compacta' (Picea pectinata compacta Frank J. Scott, The art of beautifying suburban home grounds of small small extent, p. 190, 1870 (this predates the Parsons 1887 catalog cited by denOuden & Boom; so likely they offered it much earlier than 1887, Picea pectinata compacta Parsons & Sons Cat. 1887: 65 (apparently not the earliest offering), A. alba f. compacta (Parsons) Rehder, J. Arnold Arb. 6: 204 (1925), 'Nana Compacta')

ha: dwarf, globose, dense, wider than tall

Ic: glossy dark green, glossier than most clones

in: Parsons Nursery, Flushing, NY 1887. One of the first named

in: firs of American origin.

Abies alba 'Cree's Blue'

Ic: apparently bluish

or: Cree Nurseries, Colebrook NH USA before 1987

Abies alba 'Elegans'

ha: dwarf, compact, shrubby

II: shorter

la: somewhat bifid

so: thought to be lost to cultivation

Abies alba 'Fastigiata'

ha: narrowly pyramidal to columnar, branches dense and slender, said to be the outline of a lombardy poplar in time

II: shorter than typical

Abies alba f. flabellata Beiss.

ha: spreading, branches distichous

ns: given the botanical form rank as it was never cultivated

Abies alba 'Gelbunt'

lc: yellowish

in: known to Horstmann in 1978

Abies alba 'Glauca' = A. glauca 'Caerulea'

Abies alba 'Globosa'

ns: a listed name from the US trade 1980's. Not legitimate.



'Green Spiral'. Dawes Arboretum. August 2003. A fresh green beyond fantasy and graceful twisting-weeping way. One can hardly wait until a couple of decades make a masterpiece of it. If you want living art this is one cultivar to get and get going now. A grove of them would be conifer heaven.

Abies alba 'Green Spiral'

ht: 20-30 ft. tall

ha: vigorous, semi-pendulous and spiraled to lightly contorted.

lc: glossy rich green

or: Secrest Arboretum OH USA received in 1916 from Biltmore Nur. NC USA as 'Tortuosa'

id: true 'Tortuosa' is slow to dwarf and more erect

Abies alba 'Hana' (Coenosium Gardens online catalog, accessed 12/25/2011)

ha: mounded with depressed, nested center, 1-2 in. a year

Abies alba 'Havel', www.coniferkingdom.com, accessed 9.4.2019

ha: miniature, very compact, flat-globose

II: very short needle

lc: light green

Abies alba 'Hedge' (Coenosium Gardens online catalog, accessed 12/25/2011)

ha: spreading, somewhat irregularly so, 2 in. a year

lc: dark green

Abies alba 'Hochstucklii' provisional illegimate Latin name

ns, id: a listed name with www.nurgapuukool.ee (online catalog 2007)

Abies alba 'lberegg' (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies alba 'Irramosa' (var. virgata f. irraomosa)

ha: "trunk without branches" (denOuden & Boom 1965), dense foliage

Abies alba 'King's Dwarf'

ha: dense, conical to columnar, slower

Ic: mediumn to light green leaf

in: King and Paton Nursery

li: Welch and Haddow (1993)

Abies alba 'Kladsko' (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies alba 'Leioclada' = A. nordmanniana 'L.'

Abies alba 'Massonii'

ha: needles radially born, resembling A. pinsapo

Abies alba 'Metensis' = 'Pyramidalis'?

ha: fastigiate, that is, much more narrow

or: Metz, France before 1846 when publ. by Seneclauze

id, ns: Gordon in his Pinetum considers it part of our modern 'Pyramidalis'.

id, ns: Beissner in Hand. Nadel. puts it with his A. pectinata stricta Hort.

id, ns: Carr. which is distinct from his A. pectinata pyramidalis and A.p.

id, ns: fastigiata.

Abies alba f. microcarpa Nelson

frd: female cones smaller than species typical

Abies alba 'Microphylla'

ha: dwarf, dense, branches short and thin

bud: red, resinous, smaller

lw: needles thinner

Abies alba minor Masters

ns: a doubtful old name, perhaps for a dwarf or smaller version

Abies alba minima = Picea glauca 'Minima'

Abies alba 'Mlada Boleslaw' ('Mlada Boleslav')

ht: 2 ft. tall x wide (10 years)

ha: dwarf, shrubby

It: needles curled, smallish

in: Horstmann Nursery, Germany 1992, known since 1980's

Abies alba 'Nana'

ht: 2m tall

ha: dwarf, shrubby, compact, often irregular, can resemble A. balsamea 'Nana'

ns, id: Welch and Haddow (1993) consider Loudon's use of this name to

ns, id: be referrable to P. glauca 'Nana'

Abies alba 'Nana Globosa'

ha: globose, dwarf, probably a clone of 'Nana' type with more regular foliage

Abies alba 'Pancake' (9/5)

ht: 24 in. tall x 24 in. wide or wider in time

ha: low spreading, fat as a pancake

or: Holden Arboretum, presumably a cultivariant

in, so: Girard Nurseries (online catalog 2005)

Abies alba parsonii Mattfeld

ns, id: a old listed name, presumably tracing to

ns, id: Parsons Nursery NY USA which grew many conifers.

ns, id: Welch and Haddow (1993) state it is no longer

ns, id: distinguished in the species. I have some

ns, id: intuition (no evidence) that this name refers to Parson's

ns, id: named clone known as 'Compacta'.



'Pendula'. Morris Arboretum, PA USA. July 2005. A very nice example planted accessioned (according to the label) in 1932.

Note the partial reversions in the canopy.





'Pendula'. Gettysburg National Cemetary, PA USA. August 2005. I must confess that had I not studied the Morris tree above I might have been stumped on these two superb trees at the historical old Gettysburg grounds. Their juxiposition on a small hill with the cannons, memorials, and stones is more impressive than this photo captures. The label on these was broken but I knew they were some sort of weeping fir. One does not expect such rarities at a formal, historical cemetery. However this cemetery is full of treasures like Taxus baccata 'Argentea Marginata' (as big as a cabin) and a massive Chamaecyparis pisifera 'Filifera' bearing a gold-mottled sport like a medal of honor.

Abies alba 'Pendula'

ht: 10-15m tall

ha: upright, pendulous, all limbs drooping or hanging down. Plants are slow at first but later can dominate a landscape.

eval: one of the best green weeping firs around. 'Green Spiral' is a variant of it and also very showy.

lsp: amongst fine specimens in old collections worldwide there are good oldies at Morris Arboretum and two very impressive

Isp: giants at Gettysburg National Cemetary in PA. The later tower over cannons and near sacred tombstones,

lsp: making for a very impressive presentation.

Abies alba 'Pendula Gracilis'

ha: as 'Pendula but limbs longer and drooping more

Abies alba polonica Svobosa

ns: a named variant, somewhat doubtful in scope.

Abies alba 'Prostrata' = 'Nana' or 'Tortuosa' or perhaps a spreading cultivariant

Abies alba pumila Beiss.

ns, id: a name from Beissner 1989 but never associated with anything grown this or last century.

Abies alba 'Pygmy' ha: dwarf, globose in: Linnsen 1990



'Pyramidalis'. Dawes Arboretum. August 2003. A stunning tree with many ascending, short limbs and wonderful rich colors.

Abies alba 'Pyramidalis' (Picea pectinata fastigata Booth, P. pectinata Metensis Hort., P. Rinzi Hort. ex Gordon, Pinetum, Abies Rinzi Hort. Paris ex Gordon)

ht: 7-10m

ha: columnar at first, later pyramidal, often much wider at the base, branches distinctly

ha: erect at 30-45 deg. and shorter. Conical in many years.

lc: glossy dark green

or: Germany

Abies alba f. recurva Senec.

ha: branches recurved and semi-pendulous

Abies alba 'Scarabantia'

ha: dwarf, shrubby

in: Horstmann Nursery, Germany 1983

Abies alba 'Schwarzwald'

ha: dense, dwarf, flat-topped with age

Abies alba spinescens Beck

ns: a old listed name, not established nor clear.

Abies alba 'Schwarzwald'

ha: dense, dwarf, from witches broom

II: shorter needles

in, or: Horstmann Nursery, Germany, obtained from boom at Badenweiler in Schwarzwald

Abies alba 'Stricta'

ha: conical, thickly branches, a bit wider and less upright than 'Pyramidalis'

Abies alba 'Tenuifolia'

It: needles thin, tender

Abies alba 'Tenuiorifolia'

II, Iw: needles larger and thinner than typical

frd: female cones to 30cm long ns: it is distinct from 'Tenuifolia'

Abies alba 'Tortuosa'

ha: dwarf to compact, branches twisted and usually ascending

Ic: glossy dark green

ns, id: a plant once sold under this name is the US is now 'Green Spiral'

Abies alba 'Umbraculifera'

ha: umbrella-shaped, branches thicker and shorter, arching and spreading overall

Abies alba 'Variegata'

lc: faintly marked white

It: needles often unequal in size or shape

Abies alba 'Virgata'

ha: branches elongated, narrow, and scarcely branched, needles along the main branches at first, some limbs hanging down

ABIES AMABILIS

Abies amabilis 'Compacta'

ha: dwarf, compact at first, later a small tree

or: Parsons Nursery, NY before 1923 when Hornibrook described it

Abies amabilis 'Hoyt' ('Hoyt HB' provisional name)

ha: dwarf, globose

Ic: very silver

or: found in Portland OR

so: www.stanleyandsons.com

Abies amabilis 'Indian Gold' Buchholznursery.com, accessed 9.4.2019

lc: new tips tinged gold to yellow

Abies amabilis 'Indian Heaven' (12/11)

Ic: mottled white to cream

or: Indian Heaven, Washington USA

Abies amabilis 'Pacific Pearl' www.edwinsmitsconifers.com, accessed 9.8.2019, with color photo

ha: dwarf

lc: rich frosty blue to silvery-blue

Abies amabilis 'Spreading Star' ('Blijdenstein', 'Procumbens')

ha: spreading ground cover

gr: 4-8 in. per year ht: 3 ft. tall in 50 yrs

so: www.stanleyandsons.com

ABIES X ARNOLDIANA

(A. KOREANA X A. VEITCHII)

Abies x arnoldiana 'Barney'

ha: dwarf, flattish-mound with age

or: Poulsen Nursery, Denmark c. 1983 as hybrid

Abies x arnoldiana 'Cyrille' (11/6)

ns, id: a recently listed name from Europe

Abies x arnoldiana 'Graciosa'

frc: female strobili grey to yellow or brown

ns: likely not valid in Latin form

Abies x arnoldiana 'Poulsen'

ha: low, spreading

Ic: bright green, showing much silver

frc: female strobili purple

in, or: Poulsen Nursery c. 1983, as an original cross

Abie x arnoldiana 'Violet'

frc: female strobili brownish-violet

ABIES BALSAMEA

Abies balsamea 'Albicans' ('Albida'?)

ha: dwarf

Ic: new growth white

or: Seneclauze, France found as mutation before 1868

so: likely lost

Abies balsamea 'Andover'

ha: low, spreading, very slow dwarf

or: W.A. Smith found near Andover, NY USA 1957

ns: named by B. Harkness 1959. Welch and Haddow (1993)

ns: suggest it may be just from a damaged plant.

Abies balsamea 'Angusta' ('Angustata')

ha: more narrowly pyramidal, branches shorter. denser

ll: 6-14mm - overall shorter

or, ns: named by Rehder in 1928. Not cultivated now.

Abies balsamea 'Argentea' ('Argentifolia')

Ic: needles more glaucous silvery to white, resembling A. procera for effect

Abies balsamea 'Armintrouts Fastigiate' www.stanleyandsons.com, access 9.8.2019, as 'Armintrouts Fastigiata', an invalid Latinized name

ha: columnar to fastigiate

Abies balsamea var. phanerolepis 'Bear Swamp'

ht: 12 in. tall x 18 in. wide (10Y)

ha: dwarf, low flattish subglobose to mound

Abies balsamea 'Ben Blackburn'

ns, id: a name once listed with Gotelli Coll. Not reported there or elsewhere today.

ABIE005 - Abies balsamea 'Bernadine Gold'

- http://www.inspection.gc.ca/english/plaveg/pbrpov/cropreport/firb/app00007363e.shtml

Abies balsamea var. brachylepis = var. phanerolepis

Abies balsamea 'Brandon Recker' ('Recker') www.edwinsmitsconifers.com, accessed 9.8.2019, with color photo

ha: mounded, dwarf

Ic: lighter green with nice silver stomatal hues

Abies balsamea 'Bruces Variegated' (2/7, amended 12/11)

Ic: rich green, tinged and mottled cream on new growth

ns, so: listed name with <u>www.bethlehemnursery.com</u> (online catalog 2007), no description, described by Buchholz online in 2011

ABIE006 - Abies balsamea 'Canada Creek Ranch' - minature per Stanley and Sons, habit upright to columnar, dense.

Needles lighter green. So, in: http://www.coniferkingdom.com, accessed 10.31.2017, listed under new plants

Abies balsamea 'Coerulea'

ha: pyramidal, branches short

It: distinct 2-ranked

Ic: dark green above, very silvery-white below

or: France before 1867

Abies balsamea 'Coerulescens' ('Glauca'?)

ha: vigorous, dense

II: 6–10mm long – shorter

Ic: bright blue due to blusih stomatic banding

or: Seneclauze, France c. 1865

Abies balsamea 'Columnaris' ('Pyramidalis')

ha: columnar, branches shorter, more erect, vigorous

or: Frahm's Nursery, Elmsborn, Germany before 1903

Abies balsamea 'Compacta'

ha: dwarf?

ns: listed by Meyer 1914 but not described to our knowledge.

Abies balsamea compacta nana

ns, id: a name of unclear origin, possibly from France

Abies balsamea 'Cook's Blue' ('Cook's Blue Improved' invalid)

ns: a listed name, presumably a more glaucous or banded clone.

Abies balsamea 'Cuprona Jewel'

ns: a listed name 2005. Description needed.

Abies balsamea 'Cree's Blue'

lc: rich silvery-blue

or: Leighton Cree, Colebrook, NH USA found in Christmas tree plantation c. 1991

li: Jacobson, A.L. 1996. N. Amer. Land. Trees. Tenspeed Press. p. 2

Abies balsamea 'Denudata'

ha: upright, lacking the normal number of branches, thus very sparse

or: Cochet, France before 1860

Abies balsamea 'Elegans'

ha: dense, branches shorter

ll: 8–10mm – shorter

It: foliage radially borne

or: Seneclauze, France before 1868

so: thought to be lost

Abies balsamea 'Eugene Gold' ('Eugene's Yellow' ex Buchholz, online catalog 2011)

ha: spreading at first, more upright with age, slow, 2-4 in. growth a year

lc: bright yellow

or: Greg Williams, VT USA as sport

so: Stanley and Sons (online catalog 2005)

Abies balsamea 'Fastigiata' provisional name

ns, id: traced to H.J. van de Larr's 1986 Naamlisjt. Not valid in Latin form.

Abies balsamea 'Globosa' = 'Nana' or in some cases A. concolor 'Green Globe'

Abies balsamea 'Grethen' www.edwinsmitsconifers.com, accessed 9.8.2019, with color photo, apparently dwarf and rich green

Abies balsamea hemisphaerica Sudworth = 'Nana'

Abies balsamea f. hudsonia (Jacques) Fern. & Weatherby (nana hort. in part not true 'Nana')

ht: 12-24 in. x wider

ha: prostrate, low-spreading, dwarf

II: 0.5 in. – much shorter

It: pectinate foliage. denOuden & Boom (1965) says that true 'Nana' is radial.

frq: female strobili not appearing in cultivation

ns: the name Hudsonia Group has been applied to the cultivated clones. The trade uses many

ns: versions of the name including Hudsonica, Hudsoniana, and Hudsoni.

or: geo: White Mts., New Hampshire, USA, one clone or two is cultivated

Abies balsamea 'Jamy' ('Jamie'?)

ha: miniature, globose, bun-shaped

ph: https://conifersociety.org/conifers/abies-balsamea-jamie

Abies balsamea 'Kiwi' (2/2007)

ht: 40cm tall x 60cm wide (10 yrs)

ha: dwarf, suglobose

Ic: bluish-green, paler green and almost kiwi colored at times

Abies balsamea 'Klein's Nest'

ha: dwarf, nest-shaped

ns, id: almost certainly the clone widely listed under A. fraseri. Affinity there has been

ns, id: questioned.

Abies balsamea 'Krause'

ha: dwarf, globose, very dense

in: Joel Spingarm, NY USA c. 1972

or: L.A Krause, Gillette, WI usa

Abies balsamea 'Larrys Weeping'

ha: weeping

or: Larry Stanley OR USA

Abies balsamea 'Le Feber' ('Lefeber')

ha: dwarf

lc: yellowish-green, bronzed to brown in winter or: Le Feber Nurseries, Boskoop before 1993

Abies balsamea 'Little Carleigh' ('Little Caleigh')(2/7)

ha: miniature, just 2cm growth a year

Abies balsamea 'Longifolia' (Picea b. longifolia Booth ex Loud., Enc. 1044 (1842))

ha: vigorous, branches erect

II, Iw: longer, narrower than species typical, somewhat like A. fraseri for effect

or: J. Booth & Sons, Germany sent to Lawson Nur. c. 1836

Abies balsamea 'Lutescens'

lc: new growth light yellow, later yellowish-green or: Trial Garden, Diedorf, Germany before 1903

Abies balsamea 'Macrocarpa' (var. macrocarpa Sarg.)

ha: more persistant branches per one report

frd: female strobili slightly larger to 4.5 in.

II: longer than species typical

eval, in, or: John Wilcox found near Omro, WI USA in 1866, introduced to trade by him

eval, in, or: c. 1844. Jacobson (1996) states it was considered a superior ornamental

eval, in, or: form and not just a botanical wonder until the 1920's. It was

eval, in, or: seed-raised and not cloned at that time. It was also offered by Waukegan Nurseries eval, in, or: in the midwest.

ns, id: most botanists lump the Sargent variety into the species' normal range today. Given that it

ns, id: had superior branch retention and longer needles, we must keep it open

ns, id: as a historical horticultural entity, even if not a good botanical one. It may have

ns, id: been regarded as a nursery seed strain just as many superior Christmas tree strains

ns, id: are perpetuated today for their ornamental merits in various conifer genera. It has

ns, id: also been regarded as a transitional phase to A. lasiocarpa by some. From a

ns, id: horticultural viewpoint, the epithet and cone size are purely academic. It is the

ns, id: other traits and merits of the strain that must be appreciated.

Abies balsamea 'Marginata'

Ic: new growth with yellow margins to blades

or: Petrowskaja Academy, Moscow c. 1894, known to Schroder.

ABIE007 – Abies balsamea 'Mighty Tighty' – habit slow, very dense, Or: Gary Gee from witches broom. So, in: http://www.coniferkingdom.com, accessed 10.31.2017, listed under new plants



'Nana'. Dawes Arboretum. Summer 2004. A perfectly lovely and refined example, showing the radial needle arrangement of the true entity.

Abies balsamea 'Nana' ('Globosa' in part, globosa nana, hemispherica?)

ha: dwarf, spreading to subglobose, very dense, mounded and flat-topped with age, growth under 2 inches a year It: foliage radially borne unlike the true f. hudsonia with pectinate positions.

Abies balsamea 'Nudicaulis'

ha: vigorous, lacking branching in whor or part

It: needles dense, appressed, and thicker

or: Leroy, France before 1867

Abies balsamea 'Old Ridge'

ha: slow, 1 in. a year, conical to irregular small shrub

Ic: creamy-yellow, showy in spring, "pure white" per Bob Fincham

or: OLd Ridge Nursery, New Brunswick, GA USA as seedling

so: Stanley and Sons (online catalog 2005)

Abies balsamea 'Pat' (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies balsamea paucifoia Sudworth

ns: listed by Sudworth in 1927. It is not around today. Possibly 'Nudicaulis'

Abies balsamea 'Pederson's Globose'

ha: presumed to be globose, dwarf - not seen or confirmed

li; Hatch, L.C. 1983. Ref. Guide to Orn. Plt. Cultivars. Taxonomic Comp. Res. p. 2 (name only)

Abies balsamea var. phanerolepis Fern. (A. x phanerolepis)

frq: female strobili smaller than var. balsamea, about 0.75-2.5 in.

frt: female strobili with bracts longer than scale, exerted, and projecting - shorter or about 2/3 in typical

frt: variety balsamea, very rarely exerted there.

ns, id: it has been considered a variety of A. fraseri as well as a hybrid to it. Both

ns, id: theories are now considered unlikely. Large bracted mutations or strains

ns, id: occur in many conifer species so this is not surprising from a species with

ns, id: such wide distribuition. Those considering it a hybrid to A. fraseri now use the name

ns, id: A. x phanerolepis. How the two species hybridized in Canada is very hardy to explain but

ns, id: Virgina or West Virginia crosses are possible in THEORY. Catherine Clark studied chloroplast ns, id: microsatellites and considered it a "divergent" balsam and not a hybrid. Roy Clarkson (see

ns, id: Taxon 19(5) 720-7) in 1970 also confirmed this taxon is not a hybrid. J.F. Robinson in 1969

ns, id: (Appal. For. Sci. 15(3): 238-245) says the hybrid theory is "not generally upheld". Other

ns, id: scholars give it other status including "special ecotype". It might be a "protospecies", a nearly

ns, id: diverged, stable taxon almost worthy of species status but not yet as separate as species

ns, id: often are. Where do we park protospecies until a few centuries more divergence? Variety!

geo: Quebec and Newfoundland

Abies balsamea 'Piccolo'

ht: 40cm

ha: dwarf, globose, larger than 'Nana' of the same age, 1 inch growth a year

Ic: dark green

in: Erwin Carstens, Nursery 1987. Coenosium Gardens 2002 or before to US

Abies balsamea 'Prostrata' (Picea b. prostrata Knight, Syn. Con. 39 (1850))

ha: prostrate, dense at times but can be open, mat-forming. Young plants may be bun-shaped at first.

It: foliage pectinate

ns: two clones are thought to have existed under this name, one perhaps lost now.

or: Europe, perhaps France before 1850, probably a variant from f. hudsonia

Abies balsamea 'Quinton Spreader'

ha: low, spreading

or: Canada

in: US trade c. 2001 by Arrowhead Alpines for one. Ed Cope lists it in 1986.

Abies balsamea 'R. Stevens' (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies balsamea 'Renswoude'

ns: a listed name with Kenwith Nur. 2005.

ph: https://conifersociety.org/conifers/abies-balsamea-renswoude

Abies balsamea 'Shepherds Crook' www.edwinsmitsconifers.com, accessed 9.8.2019, not described

Abies balsamea 'Sky Meadow' www.larchcottage.co.uk, accessed 9.8.2019, as "rare variety"

Abies balsamea 'Sinclair', www.coniferkingdom.com, accessed 9.4.2019

ha: slow, 1-2 in. a year

II: shorter needle bud: rounded

ABIE003 - Abies balsamea 'Sticky Fingers' - compact, dense, columnar from broom, branchlets lon, finger-like, needled light green, shorter, quite resinous. Or: Mike and Cheryl Davison. Offered by www.coniferkingdom.com, accessed 2.16.2016.

Abies balsamea 'Treehaven Dwarf'

ha: upright, dwarf

or: Don Hilager, Treehaven Nursery, NY USA

in, so: www.porterhowse.com (online catalog 2007)



'Tyler Blue' in it's intense glaucous tones, leaving nothing for blue spruces to brag about in comparison.

Abies balsamea 'Tyler Blue'

Ic: rich silvery-blue all year

or: George Tyler NH USA, found in Christmas tree plantation. It was

or: later propagated by Greg Williams and subsequently other growers

or: including Gee Farms.

ns, id: we have seen the word "seedlings" placed after this name, so perhaps

ns, id: the one lovely, pure clone has already been corrupted.

ph: https://conifersociety.org/conifers/abies-balsamea-tyler-blue

Abies balsamea 'Variegata' (argenteovariegata)

Ic: mottled or marked white

or: Europe before 1855.

Abies balsamea 'Verkade's Prostrate' ('Verkade's Spreader'?)

ha: procumbent, slow, spreading, just 25-30cm growth a year

lc: dark green

or: Verkade Nurseries 1984 Catalog

li: Hatch, L.C. 1983. Ref. Guide to Orn. Plt. Cultivars. Taxonomic Comp. Res. p. 2

Abies balsamea 'Verkades Prostrate Variegated' Buchholznursery.com, accessed 9.4.2019

ha, Ic: as the base clone but foliage mottled yellow

Abies balsamea 'Verkade's Prostrate Variegated' (12/11, Buchholz Nursery online catalog, accessed 12/25/11)

ha: spreading as the base clone

lc: mottled yellow

Abies balsamea versicolor

ns: listed by Sudworth in 1927. It is not found today. Probably just 'Variegata'

Abies balsamea 'Weeping Larry' Stanley and Sons, online catalog 2005

ha: rigidly, irregularly pendulous, subcolumnar, lower limbs cascading, uppers

ha: more horizontal

Abies balsamea 'Woltcott Pond' (2/7)

ht: 30 in. tall x 18 in. wide (10 years)

ha: densely pyramidal, from witches broom, more globose as

ha: young plants, 1-2 in. a year

or: Sue Milliken and Greg Williams found in Wolcott VT USA

ph: https://conifersociety.org/conifers/abies-balsamea-wolcott-pond

Abies balsamea 'Yellow Tips (GW)' (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies balsamea 'Zimmermann Road' www.edwinsmitsconifers.com, accessed 9.8.2019, with color photo, apparently a slower clone

Abies x borisii-regis 'Filips Colour Catcher' www.edwinsmitsconifers.com, accessed 9.8.2019, with color photo, new growth heavily tinged yellow to gold, some striped yellow and green in a chimeral fashion

Abies x borisii-regis 'J.K. Greece', www.coniferkingdom.com, accessed 9.4.2019

ha: dwarf from broom, 1-3 in. a year

Ic: very dark green, showy white stomata often visible

Abies borisii-regis 'Spring Delight'

Ic: new foliage chartreuse to near yellow, becoming pale green, finally a typical darker green



A. x bornmuelleriana at Juniper Level B.G. September 2019. I was having a friendly chat with plant guru Tony Avent in

front of his Raleigh, North Carolina home where this 15 foot tree stands. In the harsh, 100 deg. F. days with 90 deg. nights of this city, only Abies firma seems to attain an size and longevity. North Carolina produces much of the country's Abies fraseri Christmas trees but that is a cool, colder climate fix hours to the east. Tsuga caroliniana will not grow in the state's Capitol city either nor the Columbia, the top city in South Carolina. Tony said that this hybrid has obviously done well for Plant Delights and JLBG and shows no sign of wear, discoloration, burning, or most importantly night "hyper evapitranspiration" which literally burns conifers alive. One of it's parents is A. nordmanniana and there is a splendid, hundred year old example north in Richmond, a city bearing a similar day and night load of heat and humidity. This is a far more silvery thing than Nordmann fir and in some respects lusher and fuller.

Abies x bornmuelleriana 'Archer' ha: lower, possibly dwarf, spreading in: Kenwith Nurseries, Devon, UK 1991 li: Welch and Haddow (1993)

Abies x bornmuelleriana 'Barney' ('Franke')(2/2007) www.bethlehemnursery.com (online catalog 2007), no description

Ic: dark olive green, silver stomates

bud: orange, often showy

ns, or: species is a cross of A. nordmanniana and A. cephalonica, a known wild pair

Abies x bornmuelleriana 'Franke' ha: flat-topped, globose bun lc: rich green

or: Ken Franke found in Christmas Tree plot in OR USA

so: www.stanleyandsons.com

Abies bracteata 'Corbin' (Buchholz Nursery online catalog, accessed 12/25/2011)

bud: cream to white, showy

lc: green

ABIES CEPHALONICA

Abies cephalonica 'Acicularis'

II, lw: needles 5-10mm long \times 0.5-1.0mm wide, much thinner and shorter than species typical so: probably lost to cultivation. It had little ornamental merit.

Abies cephalonica arcadica Henkel & Hocht. = var. cephalonica

Abies cephalonica 'Aurea' ('Aureovariegata')

Ic: new growth bright golden-yellow. One of the prettier golden firs.

Abies cephalonica 'Barabit's Gold'

Ic: yellow

or: Barabit's Nursery c. 1992

Abies cephalonica 'Bentham's Blue'

ns: a listed name, presumably for a more glaucous selection.

Abies cephalonica var. graeca (Fraas) Lui (var. apollinus (Link) Beiss., Abies equi-trojani Ascherson & Sintenis

ha: denser foliage than var. cephalonica, at least as widely cultivated in Europe and the US

la: more obtuse, less acute than var. cephalonica

It: needles thicker, denser on the upper side of twigs and more pointed forward than var. cephalonica

frt: strobili scales and bracts closer to A. nordmanniana, that is, exerted and much reflected

ch: more cold hardy than var. cephalonica as typical, being a favorite of nurseryman in colder regions geo: Greece to West Turkey, originally known from Mt. Parnassus

ns: not all botanists consider this a worthy and distinct taxon while others have assigned

ns: it specific rank. It is somewhat intermediate to A. nordmanniana but is not thought

ns: to be a hybrid to it. Those experts which assign it a rank of species have often considered it

ns: just an intermediate that did not speciate to the extremes of either A. cephalonica or A. nordmanniana.

ns: because this variety does

ns: show numerous intermediates to var. cephalonica (typical A. cephalonica) it perhaps best placed here.

ns: It should be noted that

ns: Lui's new combination of 1971 is based on Fraas' name A. pectinata var. graeca of 1845.

ns: This epithet var. graeca thus predates

ns: Lindley and Gorden's 1850 use of var. apollinus. Both the RHS checklist and Jacobsen (1998)

ns: accept var. graeca as the best name.

ns: At the species level the name equi-trojani would have priority. Some use of the name

ns: A. apollinis (ie. Bornmueller) is actually

ns: referrable to A. bornmuelleriana, another related species.

Abies cephalonica 'Gregs Broom'

ha: from witchesbroom

in: Kenwith Nursery UK c. 2001

Abies cephalonica 'Hunnewell' ('Hunnewell Broom', 'W.B. Hunnewell'?)

ha: dwarf, 2 inches growth a year, globose in time

or: witches broom

in: Coenosium Gardens c. 2001

Abies cephalonica 'Latifolia'

lw: needles wider than species and somewhat sparser.

Abies cephalonica 'Meyer's Dwarf' ('Nana')

ha: dwarf, slower, globose to flat-topped mound in time, usually without a leader

II: 8-15mm shorter than species typical

Abies cephalonica 'Minitip' www.edwinsmitsconifers.com, accessed 9.8.2019, with color photo, dense pyramidal

Abies cephalonica 'Ottawa Magissa' www.edwinsmitsconifers.com, accessed 9.8.2019, with color photo, showing a dwarf boom still attached

Abies cephalonica panachacia = var. cephalonica

Abies cephalonica parnassica = var. graeca

Abies cephalonica 'Pyramidalis' (pyramidalis Zederbaur)

ha: pyramidal

so: unknown in the modern trade (2003)

Abies cephalonica var. reginae-amaliae = var. cephalonica

Abies cephalonica 'Robusta'

ha: strong, branches more erect and thick, spirally crown in time, decurving below, foliage more dense than many seedlings

Abies cephalonica 'Rubiginosa'

lv: new foliage darkly ferrugineous at first, giving a dark reddish-brown color to new growth. This is the fir equivalent of the cinnamon hemlocks.

Abies cephalonica 'Submutica'

frt: female strobili more cylindrical and shorter (10-12cm long vs. species 12-18cm), apex more obtuse, bracts included (not exerted as species typical)

Abies chensiensis 'Prostrata' provisional name

ha: low, spreading

in: Arrowhead Alpines c. 2006 to US trade

Abies chinensis [extreme dark green]

Ic: rich dark green, keeping the color in winter too

in: Arrowhead Alpines 2006 to US trade, doubtful species name,

in: perhaps an error for A. chensiensis.

Abies chinensis 'Prostrata Glauca'

ha: low, spreading

lc: blue

in: Arrowhead Alpines 2006, a doubtful species name.

Abies cilicica 'Spring Grove' ha: dwarf, witches broom

ABIES CONCOLOR



Pinetum, Winterthur Gardens, PA USA. Summer 2005. A very tall century-old example in a good state of glaucescence though fairly dark. Plant now for the majestic look in 2060!



Cornell Plantations, Ithaca, NY. Summer 2005. A recent planting with four examples designed to show the species' natural variation in the amount of silvery and blue wax. The brightest example approaches 'Argentea' ('Candicans') for extremeness but is not quite so silver.



Pretty tree at Bernheim Forest, not labeled but intermediate to 'Argentea' from the species, overall just a good selection I think.

The following taxa are so widely confused, let's start our understanding of this species' variation with this helpful chart.

CHARACTER	var. concolor (species typical)	Lowiana Group (var. Iowiana (Gord.) Lemm.)
Habit	usually dense, crown often rectangular, forked trunks more common	more open, often conical, less likely to have a forked trunk
Bark	darker brown, not highly corky	lighter brown, more corky
Needle position	brush-like, evenly dispersed and uniformly erect on tops of shoots	often v-shaped along branchets, having a separation down the upper part of the shoots.
Geographic origin of garden plants	Numerous southwest to northwest US states, including CO, NM, and CA	Oregon to Sierra Nevada Mts., a more limited range

NOTE: Today most conifer taxonomists do not accept the validity of these two taxa as botanical varieties. Differences are certainly apparent in cultivated plants in Europe and the US under these two names. Wild plants are less clearly separated and do not meet the usual criteria for botanical varieties or subspecies. Other supposed differences in terms of branchlet color or cone color are considered unreliable. The above differences reflect cultivated plants and SOME wild plants. The RHS and others have adopted the Lowiana Group in place of var. lowiana. It is thus a strain or group of seedlings. One will stlll see plants in collections as botanical varieties and those plants in arboreta often can be separated by the traits above. This is another case of not knowing a wild population well enough and drawing early conclusions in literature from a rather incomplete and biased sample. This occurs in many conifer genera where we come to associate certain traits attributed to one tree or a few to an entire population, imagining them to be a solid, wild variety when it fact they are just genetic oddities and sometimes just random gifts.

Abies concolor var. lowiana 'Abi-normal' Conifer Kingdom, www.coniferkingdom.com, accessed 9.4.2019 ha: dwarf, 1-2 in. a year, layered or tiered with age lt, ls: needles oddly hooked near the apex, an irregular positioning too

Abies concolor 'Albospica'

Ic: new growth whtish, later a normal gray-green

Abies concolor angustata

ns, id: another Sudworth name, as with many of his, a rename of something else.

Abies concolor 'Archer's Dwarf'

ha: miniature, globose to spreading, more conical with age in some examples

Ic: more blue than species typical

ll: shorter



'Argentea' ('Candicans'). Dawes Arboretum. August 2003. This extra glaucous, super silver variant occurs just like hyperblue seedlings in the blue spruce line. If you have room for just one cultivar this is still a nice choice.



Argentea' ('Candicans'). Cornell Plantations. Summer 2005. A view against the blue sky, showing how the clone should be more silvery than blue at this distance. There are very few Picea pungens quite this silver.

Abies concolor 'Argentea' ('Candicans', f. argentea)

Ic: foliage more distinctly silvery or whitish

ns: this variant occurs occasionally in seedbeds.

eval: one of the most amazing of all silvery conifers, looking great against a blue sky. eval: There is not one Picea pungens on earth this exact color nor of the same texture.

Abies concolor 'Aurea'

Ic: new growth golden-yellow, later a more normal silvery-grey

Abies concolor 'Biella' ('Bella')

ha: dwarf

lc: rich blue color or: Hungary c. 1990

Abies concolor 'Big Shot #14 ha: upright, very compact

lc: blue

II: smaller than species typical

or: Jerry Morris

ns: this is a provisional name

so: www.stanleyandsons.com

Abies concolor 'Birthday Broom' ha: miniature bun, very flat

ht: 6 in wide in 10 years

or: Rich Eyre found as witches broom on his birthday

so: www.stanleyandsons.com



'Blue Cloak'. Raulston Arboretum. Handling the heat and humidity well so far. It is now 10 feet tall and about 4 feet wide in 2019 as shown below. Frankly it's a better, super blue pyramidal conifer than any Picea pungens ever to be in the Raulstson collection and about as fine as the Cupressus glabra in ultra blue shades.



Abies concolor 'Blue Cloak'

ha: weeping with upright, strong leader and branches all downward

lc: blue

so: www.stanleyandsons.com (online catalog 2001)

Abies concolor 'Blue Spreader'

ns: a listed name, presumably more glaucous and wide-spreading

Abies concolor 'Brevifolia'

II: needles shorter than species typical

Abies concolor 'Brady' (3/01)

ha: dwarf, from a broom

or: Jerry Morris

Abies concolor 'Bryce Canyon' (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

ABIE001 – Abies concolor 'Bugy Wugy' (Buchholz Nursery)

Abies concolor 'Butzii' lt: needles distinctly directed forward so: thought to be lost from cultivation.

Abies concolor 'Candicans' = 'Argentea' in part ns, id: Welch and Haddow (1993) regard it as a clone of f. argentea.

Abies concolor 'CC Broom' (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies concolor 'Cernosice' ha: dwarf from a broom

Abies concolor 'Charmin Chub'

ha: miniature

Abies concolor Cibola Group

ha: vigorous

lu: more drought resistant than most seed strains or: selected from populations near Cibola NM USA

prop, ns, id: it is a high select seed strain and not a simple provenance

Abies concolor 'Clarence'

ns, id: a listed name from the US 1970's. Not reported now.



'Compacta' ('Glauca Compacta'). Cornell Plantations, Ithaca, NY. Summer 2005. A nice young example.

Abies concolor 'Compacta' ('Glauca Compacta', 'Violacea Compacta'?)

ha: dwarf, compact, irregular at times

Ic: needles more glaucous than species typical

It: needles more stiff, sometimes falcate (sickle-shaped)

II: 2.5–4.0cm – much shorter

eval: this is a good size of plant to enjoy the species in a smaller garden.

Abies concolor 'Conica'

ha: conical, dwarf, slower

It: needles more horizontal than species typical, not curved as common in 'Compacta'

Ic: blue-green, less glaucous than 'Compacta'

II: 2.0-4.0cm - shorter

Abies concolor Lowiana Group 'Creamy'

ha: dwarf, globose, otherwise as Lowiana Group

Ic: cream new growth

or, in: Gordon Haddow, Kenwith Nurseries c. 1991 when he registered it.

Abies concolor 'Cush' (2/7) www.bethlehemnursery.com (online catalog 2007), no description

ha: dwarf, 1-2 in. a year, subglobose with age

lc: light bluish-green, fairly pale

Abies concolor 'Domschke'

ha: dwarf

gr: 1 in per year or: eastern Europe

so: www.stanleyandsons.com (online catalog 2001)

Abies chensiensis 'Prostrata' provisional name

ha: low, spreading

in: Arrowhead Alpines c. 2006 to US trade

Abies chinensis [extreme dark green]

Ic: rich dark green, keeping the color in winter too

in: Arrowhead Alpines 2006 to US trade, doubtful species name,

in: perhaps an error for A. chensiensis.

Abies concolor 'Eagle Rock' Conifer Kingdom, www.coniferkingdom.com, accessed 9.4.2019

ha: dwarf from broon, 1-2 in. a year, flat-topped with age

Ic: rich powdery blue foliage from greener new tips

Abies concolor 'Elkins Weeping'

ha: weeping

lc: dark green

or: H. Elkins as seedling

in: Spingarn Nursery, NY USA c. 1979

Abies concolor 'Ephriam' (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies concolor 'Fagerhult' (3/02)

ha: vigorous, pendulous, cascading over rocks if allowed. Can staked to make a small pendulous tree.

Ic: very blue

II: longer needles than species typical

or: Fagerhult Nursery, Sweden before 1933

Abies concolor 'Falcata'

It: needles almost all sickle-shaped or falcate

Abies concolor 'Fastigiata'

ha: columnar, branches shorter and more erect

Abies concolor 'Gable's Weeping'

ha: semi-pendulous, often just irregular and horizontal, some plants I have

ha: seen are barely weeping and only with a lightly drooping horizontality.

Abies concolor 'Glauca' = Violacea Group, likely some plants of 'Argentea' get mixed up too

Abies concolor 'Glauca Compacta' = 'Compacta'

Abies concolor 'Glenmore'

ha: upright, conical lc: rich light blue

Abies concolor 'Globosa'

ha: globose, dwarf, branches very short

Ic: less distinctly glaucous compared to 'Compacta'

Abies concolor 'Green Globe'

ha: globose

Ic: more green than many cultivars

Abies concolor 'Heard'

ns: a listed name from Arrowhead Alpines 2006.

Abies concolor 'Hexe' ('Hex')

ha: dwarf, spreading to mounded lc: greyish-blue, quite glaucous

in: Horstmann Nursery, Germany c. 1977

Abies concolor 'Hillier's Dwarf'

ha: dwarf, spreading, from a witches broom in: Gordon Haddow, Kenwith Nursery, 1986

Abies concolor 'Holman WB' (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

ABIE008 – Abies concolor 'Hoop-dee-doo' – habit dense, very compact. Needles light blue. Or: Mike and Cheryl Davidson, found as broom at a golf course. So, in: http://www.coniferkingdom.com, accessed 10.31.2017, listed under new plants

Abies concolor 'Hosta La Vista' (Buchholz Nursery catalog online, accessed 12.25.2011, not described but photo shows compact, very blue foliage)

Abies concolor 'Husky Pup'

ha: conical, more flat-topped and mounded as young plants, sometimes irregular

lc: light grey-green

or: N. Sizoo, Seattle WA USA before 1975 when reg.

Abies concolor 'Igel' ('Horstmann Igel')

ha: extreme dwarf

so: Coenosium Gardens to US trade

Abies concolor 'Imaculate Conception' (3/01)

ha: oddly shaped broom

in: Arrowhead Alpines 2001

Abies concolor 'Jack' Conifer Kingdom, www.coniferkingdom.com, accessed 9.4.2019

ha: slower, 2-4 in. a year, mounding with time, wider than tall

Ic: yellowish-green tips become rich powder blue by fall and winter

or: Rob Tudehope as broom

Abies concolor 'Kallebergs Weeping Blue' www.edwinsmitsconifers.com, accessed 9.8.2019, with color photo

Abies concolor 'Kinky'

ha: oddly twisted with "unnatural knotted shapes"

It: both needles and branches twisted

Ic: powdery gray-blue, very pale

in: Arrowhead Alpines 2006

Abies concolor 'Kings Gap' (2/2007) www.bethlehemnursery.com (online catalog 2007), no description

ha: dwarf to miniature, 1 in. a year, proven useful in rockeries

Ic: bright blue the current year

Abies concolor 'Kohouts Fastigiate' (3/7)

ha: narrowly columnar

so: www.hulsdonk.com (online catalog 2007)

Abies concolor 'La Veta'

ha: dwarf

gr: 1 in. per year

or: Jerry Morris as witches broom

so: www.stanleyandsons.com (online catalog 2001)

Abies concolor 'Larata'

ns, id: a listed name with Suncrest Gardens, PA USA in 1993, name only.

Abies concolor Lincoln Group

ha: denser

dr: more root rot resistant

prop: seed strain

Abies concolor 'Little Globe'

ha: dwarf, globose

Abies concolor var. lowiana 'Little Wedge' Conifer Kingdom, www.coniferkingdom.com, accessed 9.4.2019

ha: miniature, 0.5-1.0 in. a year

II: needles very short

or Dan Spear found as seeding in San Bernadino Mts.

Abies concolor [longleaf selections]

II: blades much longer

ns, id: this name appears in various places. Good clones must be named.

Abies concolor Lowiana Group (var. lowiana (Gord.) Lemm.)

id: see chart above.

Abies concolor 'Masonic Broom'

ha: miniature to dwarf, flat-topped, shrubby, dense, 1 in. growth a year

lc: bluish-grey

or: broom found at a Masonic Home in PA USA

in: Hillside Nursery

Abies concolor 'Mike Stearn' ('Mike Stern')

ha: globose, dwarf

lc: light blue, often a pale bluish-green in young stock

II: shorter than species typical

in: Kenwith Nursery c. 2002

Abies concolor 'Minima' www.buchholznursery.com, accessed 9.8.2019, likely a post-1959 Latin name, not described

Abies concolor 'Mora'

ha: dwarf

gr: 0.75 in. per year

lc: rich blue

or: Jerry Morris found in NM near Mora Mexico as witches broom

so: catalog from www.stanleyandsons.com

Abies concolor 'Morton' (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies concolor nana

ns, id: invalid name for any dwarf clone. Go with named cultivars.

Abies concolor 'Olcott'

lsp: Morton Arboretum. Not reported elsewhere.

Abies concolor 'Olson' (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies concolor 'Ostrov Nad Ohri'

ha: dwarf, globose to mounded-spreading

Ic: light blue to bluish-grey

or: Czech Republic as broom

Abies concolor pendens (Beiss.) Sudworth, Arb. Flora 1897 (based on A.c. var. lasiocarpa pendula Hort. ex Beiss. 'Pendula'

Abies concolor Lowiana Group 'Pendens'

ha: weeping

so: thought to be lost forever. It is not 'Pendula'.

Abies concolor 'Pendula'

ha: narrowly pendulous, branches drooping down

Abies concolor 'Perks' (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies concolor 'Pigglemee'

ha: flat globe, more spreading than some dwarf clones

gr: 1 in./year

ll: 1.5cm – very short

It: more curved needled

lc: light blue

so: Coenosium Gardens (website 2002)

Abies concolor 'Pineola Dwarf'

ha: slow, upright, semi-dwarf or slow at most, not a real dwarf

in: Don Smith, NJ USA before 1990

Abies concolor 'Potts Longneedle' (3/7)

lsp: a listed name from www.dawesarb.org (online inventory 2007)

Abies concolor 'Prostrata' provisional illegitimate name (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies concolor purpurea compressa Sudworth = var. violacea 'Compacta'

Abies concolor 'Pygmy' (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies concolor 'Pyramidalis'

ns, id: questionable, invalid name, surely a more narrow selection.

ns, id: Welch and Haddow (1993) divid Lawson's use of the name

ns, id: in 1851 from Krussman's 1979 reference to a plant from Chicago.

ns, id: Neither are known today and can be studied.

Abies concolor 'Recurva'

It: needles strongly recurved at first

lc: glaucous blue

Abies concolor Rio Grande Group

lc: bluish-green, more blue than some

ch: more cold hardy than species typical

or: a selected population from Rio Grande CO USA

prop, ns, id: it is a high select seed strain and not a simple provenance

Abies concolor 'Saint John' ('St. John') (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies concolor 'Schrammii'

Ic: more intensely glaucous blue

It: needles often forming a V-shape on each branchlet.

Abies concolor 'Scooter'

ha: dense dwarf

gr: 1.5 in. per year

Ic: bright, often pale green

or: Jerry Morris found as broom east of Silver City NM

so: www.stanleyandsons.com (online catalog 2001)

Abies concolor [select blue]

ns, id: invalid name for bluer seedlings, most part of 'Violacea' or 'Argentea' concepts.

Abies concolor 'Sherwood Blue'

ha: often open, a bit sparse at first

Ic: rich frosty, silvery-blue, very much like 'Candicans'

Abies concolor 'Sidekick' ('Side Kick')

ha: compact, dwarf, 1 inch growth a year

lc: rich blue

or: Jerry Morris as witches broom

Abies concolor [silver blue]

ns, id: a similar invalid name as in "select blue" above

Abies concolor 'Stanwood' www.buchholznursery.com, accessed 9.8.2019, not described but color photo shows subglobose, irregular, very blue form

Abies concolor 'Strange Critter' (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies concolor 'Strange Dude' (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies concolor 'Swifts Silver'

lc: rich silver

Abies concolor 'Stanwood' ('Stanwood WB' invalid)

ha: compact, 1 inch growth a year

II: shorter needles

lc: bluish-green

or: David Horst as broom in yard in Stanwood, IA USA 1995

Abies concolor 'Tubby' Conifer Kingdom, www.coniferkingdom.com, accessed 9.4.2019

ha: dwarf, 1-2 in. a year, "fuzzy appearance" per Conifer Kingdom

lc: bluish-green

Abies concolor 'Varia'

ns, id: Sudworth's 1927 name, not picked up elsewhere and not identificable now.

Abies concolor Lowiana Group 'Variegata'

lc: variegated in some manner. Lost today.

Abies concolor 'Variegated Spacek' (3/7)

so: www.hulsdonk.com (online catalog 2007), name only

Abies concolor Violacea Group ('Violacea', var. violacea (Murr.) Beiss., 'Glauca' in part, 'Atroviolacea', 'Purpurea')

Ic: needles notably silvery-white, occuring sometimes in seedbeds

ns: this is best treated as a cultivar group. It is this species analog of Picea pungens 'Glauca'

Abies concolor Violacea Group 'Violacea Fastigiata' provisional name

ha: as the group by narrower

in, ns: known to Beissner in 1909. It should be renamed if found around today and valuable.

Abies concolor Violacea Group 'Violaceous Prostrate' ('Violacea Prostrata' illegitimate) NEW NAME

ha: low spreading

lc: light silvery-blue, as Violacea Group

or: cultivariant of Violacea Group

Abies concolor 'Viona' www.buchholznursery.com, accessed 9.8.2019, not described

Abies concolor 'Wattez Prostrate'

ha: spreading, cultivariant version of 'Wattezii'

Abies concolor 'Wattezii'

Ic: new growth light yellow, later cream colored. It looks sick unless large and well cared for.

eval: there are many nicer gold firs around.

Abies concolor 'Waukon' ha: dwarf from witchesbroom

lc: bluish-green

or: Dennis Hermsen found broom at Waukon, IA USA

Abies concolor 'Windy Hill' www.buchholznursery.com, accessed 9.8.2019, as 'Windy Hill Form', not descirbed but color photo dense pyramidal plant in rich blue, apparently normal vigor



'Wintergold' in it's spectacular, true yellowish golden colors. It's splendid contrast to the bluest of species clones as well as any dark fir or spruce.

Abies concolor 'Wintergold' ('Winter Gold')

ha: conical, erect, moderate vigor, other plants reportedly more mounded and wide lc: gold in cold weather.

Abies concolor 'Wustemeyer'

ha: denser lc: blue

ns, id: Welch and Haddow (1993) trade to a Wittboldt-Muller in 1991.

Abies concolor 'Z-mark' (12/11)

ha: compact, dwarf lc: rich, silvery blue

ABIES CG GROUP

ABIES CONCOLOR X A. GRANDIS

Abies CG Group 'Leutenegger' CORRECTED NAME ('Leuteneggeri a post-1959, thus invalid Latin name)

haL pyramidal, good vigor, 8-12 in. a year when young

It: sprays more flat than A. concolor, very relaxed in fact

Ic: bluish-green, more glaucous than A. grandis

or: Kurt Wittboldt-Muller, German as deliberate cross

ABIES DELAVAYI

Abies delavayi 'Buchanon'

ha: dwarf, leaves radially born or: Hillier Nurseries before 1987

Abies delavayi 'Green Giant' (11/6)

ha: a stronger, more robust clone

lc: green

Abies delavayi 'Headfort' = A. fargesii 'H.'

Abies delavayi 'Major Neishe' ('Nana')

ha: dwarf to slower at first, later a larger plant

II: 1.0-1.5cm long

or: Hillier Nurseries before 1897

Abies fargesii 'Headfort' ('Hereford')

ha: dwarf to slow

or: Hillier Nurseries found at Headfort, Co. Meath.

ABIES FIRMA



Abies firma. Raulston Arboretum. 2008. Not ordinarily a large plant but this species is one of very few firs which has proven it's ability to handle the heat and humidity of the American south – ie. 110 deg. F. days with high respiration (often fatal to conifers) from 90 deg. nights for weeks on end. The species has also proven durable at the nearby C.R. Keith Arboretum and in other NCSU trials. It will likely become the understock of choice for introducing more fir cultivars into hot climates.

Abies firma 'Bedgebury' ns, id: Germany before 1986. Possibly a cross to A. homolepis

Abies firma 'Golden Hue' Conifer Kingdom, www.coniferkingdom.com, accessed 9.4.2019

ha: standard vigor, 4-7 in. a year, large in time

lc: rich golden new tips

Abies firma 'Halgren' www.buchholznursery.com, accessed 9.8.2019 ha: narrowly pyramidal at first, wider with age, stronger vigor than species lc:rich dark green

Abies firma 'Nana Horizontalis' www.buchholznursery.com, accessed 9.8.2019, likely a post-1959 Latin name

ha: low, spreading, hroizontal, slower

Ic: lighter green than species

Abies firma 'Pendula' provisional name

ha: weeping

ns, id: invalid in Latin form

Abies firma 'Sol'

in: Suncrest Gardens PA USA 1993, name only

Abies firma 'Tardina'

ns, id: traced to Mitchell 1972 from a tree at Borde Hill, Sussex. Not seen today.

Abies firma 'Variegata'

Ic: marked or colored in some manner.

or: Japan

ABIES FRASERI

So often confused are the related species of Abies fraseri and A. balsamea, I feel compelled to set down a reliable separation of them using the best current evidence. I have used this chart in my consultancy work for many years and also with students.

CHARACTER STATE	Abies balsamea	Abies fraseri
Mature female cone bracts	shorter than scales or very slightly exerted (extended) beyond scales, if exerted mostly flat and small	much exerted beyond scales and reflexed on these extensions. This is the classic ID tip and most reliable when coning material is available.
Stomatal rows either side of midrib on leaf below (leaf color)	4 – 8 per side, mostly 6–7	8 - 12 per side - more numerous (often resulting in a more sharp midrib and much whiter or silvery stomatal bands. It is a much prettier Christmas tree on this account)
Foliage aroma when crushed	rich, balsam scent, often strongly so.	less strong balsam scent. I have noticed some faint citrus notes in Christmas tree stock. I have been told that growers also spray cut Christmas trees with oils to give a marketing advantage – so use this trait carefully. Overall, this species has a fainter, more subtle aroma.

1		
Leaf density		Some report this species is more densely foliated, that is, more leaves per unit of stem. This effect is likely the product of regular shearing on Christmas trees (which is all most people know) and these receiving much fertilization compared to wild Balsam firs. Among wild material no data is available to support this feature.
Female strobilus (cone) length	2.0 – 4.0 inches	1.5 – 2.5 (3.0) inches, often slightly smaller. May not be a useful trait in all cases as this species is often cultivated where not durable and on severe, tall mountains were it is much stressed by climate and pollution.
Landscape tolerance (USDA hardiness)	handles cold conditions better (USDA 3) but is less drought tolerant than A. fraseri. If using seed-raised plants, consult a good forestry nursery who can offer you the best strains and provenances for your climate.	Less cold hardy (USDA 4-5), but more tolerant of both drought and high elevations in southern US states.
Geography (states, regions)	From the central Appalachian mountains and to the north (middle VA and to northern US states and into Canada, including Labrador to Upper Yukon)	southern Appalachian mountains (VA, WV, TN, SC, NC) and to the south, often found on tall mountains (3000–6000 ft.) such as Mt. Mitchell at 6684 ft., the largest point east of the Mississippi River.

Abies FRALSAM™ (A. fraseri x A. balsamea)

ha: dense, pyramidal, 10-20% more buds than either parent as typical

lc: silvery-blue to steel blue - random hybrids of these parents should be much greener

It: late budding, giving some frost resistance. Has higher needle retention when cut

- ns, id: this trademarked entity represents a very specific clone with
- ns, id: the traits stated above, not any plant of the cross. Also, this cross is
- ns, id: sometimes referred to the hybrid species A. x phanerolepsis (Fern.) Liu but I do not
- ns, id: believe use of that name is justified. It is based on the A. balsamea var.
- nd, id: phanerolepis Fern. which has NOT been conclusively shown to be a hybrid
- nd, id: of the two species but simply an old name for a Balsam fir variant which
- nd, id: modern analysis shows to be a non-hybrid (see under A. balsamea)
- eval: where either species is durable. It is mainly marketed to date as a
- eval: superior Christmas tree. Given it's traits, landscape use is sure to follow.
- or: Colebrook Nursery 1981 as selection of this hybrid
- so: www.weirtreefarms.com

Abies fraseri 'Coerulea' ('Caerulea', 'Glauca')

ha: low, spreading, vigorous lc: more rich blue-green

Abies fraseri 'Compacta'

ha: compact, dwarf

Abies fraseri 'Dennys Doll' Conifer Kingdom, www.coniferkingdom.com, accessed 9.4.2019

ha: dwarf, 1-3 in. a year, shoots nicely rounded in outline

lc: green with silver accents

or: Dennis Dodge, Bethlehem Nursery

Abies fraseri 'Fantasticooli'

ns: a listed name from Arrowhead Alpines 2001 and since. Description unclear from their catalog.

Abies fraseri 'Fastigata Compacta' Conifer Kingdom, www.coniferkingdom.com, accessed 9.4.2019, likely a post-1959 invlaid, Latinized name

ha: erect, compact, dense with maturity

Abies fraseri 'Ford'

ha: witches broom dwarf

Abies fraseri 'Franklin'

ha: miniature, from a witches broom, eventually upright, pyramidal, and very dense

Abies fraseri 'Frederick'

ha: narrowly columnar to fastigiate, far narrower than most plants

lc: dark green

or: Don Frederick, Evergreen Gardens Nursery, Blairsville PA USA 1970

li: American Conifer Society. 2003. World Conifer Database. online records.

Abies fraseri 'Gee' ('Gee's WB', 'Gee's Broom')

ha: dwarf, from witches broom

in, or: Gee Farms? Listed by Arrowhead Alpines conifer section in 2001

Abies fraseri 'Glauca'

ha: dense, "robust"

Ic: quite silvery-white below, giving a bluish cast overall

ns, id: this name is based on Gordon's Pinetum where he attributed A.f. glauca to

ns, id: the famous English nurseryman William Paul. It was called the "Glaucous

ns, id: Double Balsam Fir", the later three words denoting this species and

ns, id: not the true balsam fir.

OROC ABIE002 - Abies fraseri 'Green Scout' (Brotzman's Nursery)

ha: narrowly columnar

web: http://www.brotzmansnursery.com/abiesfraserigreenscout.html

Abies fraseri 'Hal' (Hal's)

ha: witches broom dwarf

Abies fraseri 'Hilltop Frost' (12/3)

so: Bethlehemnursery.com (online catalog Fall 2003, without description)

Abies fraseri 'Horizontalis'

ns: a listed name from the US before 1990, perhaps a cultivariant?

Abies fraseri 'Joe's Dwarf' (12/3)

so: Bethlehemnursery.com (online catalog Fall 2003, without description)

Abies fraseri 'Julian Potts'

ha: miniature

Abies fraseri 'Klein's Nest' ('Kline's Nest', 'Cline's Nest', 'Kline's Dwarf'?)

ht: 1 ft. tall x 3 ft. wide

ha: dwarf, mounded to low-spreading, similar to P. abies 'Nidiformis' in time, often somewhat irregular

frq: female cones purple, a bonus for a dwarf cultivar

in: Raraflora Nursery, PA USA c. 1972

Abies fraseri 'Mount Kisco' (12/3)

so: Bethlehemnursery.com (online catalog Fall 2003, without description than than "witches broom")

Abies fraseri 'Nana'

ha: dwarf

ns: this post-1959 Latin is almost certainly illegitimate. It maybe A. balsamea f. hudsonia.

Abies fraseri 'Palmer' (popularly 'Palmeri', an invalid, post-1959 Latin form)

ha: more erect, neater

lc: more visible bluish stomates

Abies fraseri 'Pendula'

ha: weeping

ns, in: Welch and Haddow (1993) report it from Coesnosium Gardens 1985.

Abies fraseri 'Piglets' (12/3)

so: Bethlehemnursery.com (online catalog Fall 2003, without description)

Abies fraseri 'Pine Glen'

ha: dwarf from broom but showing good vigor

Abies fraseri 'Prostrata' (f. prostrata Rehd., 'Horizontalis')

ha: 1.2m tall x 4.0m wide when young, dimensions of 4 ft. tall x 12 ft. wide are reported.

st: twigs often reddish pubescent in the most common clone

ha: spreading to horizontal shrub, generally compact, usually without any leader

Isp: E.H. Fulling vouchered a plant at Morton Arboretum, Lisle IL USA in 1933. The

lsp: herbarium sheet exists in the NYBG collections.

Abies fraseri 'Raul's Dwarf' ('Rauls', 'Rawls'?)

ha: we do know that a plant sold as 'Rawls' is a dense globe

ns: a listed name with Kenwith Nursery UK 2001. Related to 'W.B. Rauls'?



'Reeseville Ridge'. Conifer Collection, Dawes Arboretum. Summer 2003. 'Frederick' is narrow by limbs hanging down and this rare clone is narrow by limbs going straight up. This reminds me of how Fraser firs come bagged on trucks before Christmas.

Abies fraseri [Reeseville Ridge clone, Reeseville Selection?]

ha: narrowly columnar to fastigiate, limbs distinctly erect at 15-25% angle. Some

ha: narrow seedlings faill to retain this unique narrowness with age. As a result

ha: this clone is not officially released or named as a cultivar.

lsp: Dawes Arboretum, first seen by me in 2003.

Abies fraseri 'Recker No. 1' provisional name

ha: miniature, from a witches broom

Abies fraseri 'Vasti' ('Ken Franke Prostrate')

ha: low, prostrate

or: Ken Franke as seedling

Abies fraseri 'Verkade's Prostrate'

ha: low, spreading

or: Verkade's Nursery c. 1980

Abies fraseri 'W.B. Rauls'

ns: a listed name from the US trade c. 2003

Abies fraseri 'Wingle's Blue Bonnet' ('Blue Bonnet')

ha: dwarf, conical, 2-4 inches growth a year

lc: rich blue - the most blue seedling known to date (2003)

or: Mat Wingle 1987 from a seedling at the Christmas tree farm

ABIES GRANDIS

Abies grandis 'Aurea' (f. aurea Beiss., 'Aurifolia')

ha: conical

Ic: golden-yellow new growth, dark green by the second year

Abies grandis [Broom #2]

so: www.stanleyandsons.com (online catalog 2003)

Abies grandis 'Compacta' (nana hort.)

ha: dwarf, globose, slow

II: full-sized as species

ns, so: no longer in cultivation per denOuden & Boom (1965). It is now listed in Europe, by Kenwitch Nursery for one.i

ns, so: Welch and Haddow (1993) distinguish the Parsons Nursery 1887 plant from the Beissner/Hesse Nursery plant

ns, so: and note "seldom offered true in the trade".

Abies grandis var. concolor = A. concolor

Abies grandis 'Crassa' Sudworth (A.g. compact Hesse ex Beiss.)

ha: compact

Abies grandis var. densiflora Engel. = A. amabilis

Abies grandis 'Johnsonii' (f. johnsonii)

ht: 65 ft. tall x 10 ft. wide (speciman at Hoyt Arboretum, Portland OR USA planted 1949). The original tree

ht: is reported to have had a 5:1 heighth to width ratio.

ha: more narrowly columnar, branches and twigs noticably shorter. The term fastigiate has been applied to

ha: to this clone but the rathers of 5:1 or 6:1 are wider than the 8:1 to 20:1 usually reserved for that word.

II: to 1.0 in. - shorter than species typical

It: foliage more whorled than species typical - less flat

lsp: Jacobsen (1998) states old trees occur in the Portland OR area

hsp: Matthews (1942) deposited a voucher at the Oregon State Univ. Herbarium

ns: how a cultivar this old was omitted by denOuden & Boom (1965) and other conifer experts is unclear. It

ns: seems like the Journal of Forestry was not regularly reviewed by horticulturalists.

or: John A. Johnson found near Columbia River OR USA 1897, undoubtedly a seedling mutation. This is

or: probably the first fir cultivar named in the US though at the time only the rank of forma existed for clones.

li: Matthews, O.V. 1942. The Johnson fir. Journ. Forestry 40: 579-581

Abies grandis var. oregona Beiss. = typical species

Abies grandis 'Parsonii' = A. concolor Lowiana Group by some reports. Could be 'Compacta' from Parsons?

Abies grandis 'Pendula'

ha: strongly weeping

or: Spath Nurseries, Germany c. 1896

Abies grandis 'Pumila'

ha: dwarf

ns: name based on A. gordoniana pumila Carr. - this name is not in use (2003). Unless it represents

ns: another name for 'Compacta' it would seem to be extinct.

Abies grandis 'Reggear'

ha: dwarf, globose at first, upright-conical over time, about 2 inches growth a year (faster than 'Van Deden's Dwarf')

lc: glossy "kelly green"

or: witches from Reggear's property, central ID USA

so: www.stanleyandsons.com (online catalog 2001)

Abies grandis 'Van Dedem's Dwarf' ('Dedem's Dwarf'?)

ha: miniature to dwarf, mounded to globose, less than 1 inch growth a year

lc: dark green

in: Coenosium Gardens to US trade c. 2002

Abies grandis 'W.C. Gaffney'

so: www.stanleyandsons.com (online catalog 2003, no description)

ABIES HOMOLEPIS



Species. Dawes Arboretum. Summer 2003. A noble, lofty tree towards the western park of the arboretum.



Species. Winterthur Estate and Gardens. June 2005. A good look at the bicolored aspect of this species when viewed at close range.

Abies homolepis 'Malahide'

ha: dwarf

or: Malahide Castle before 1979 when Krussman wrote on it.

Abies homolepis 'Molenhill'

ht: 1m (20 years)

ha: conical, dwarf, tiered branching

II: much shorter needles

or, in: Konijn Nurseries, Holland, intro. c. 1993

Abies homolepis 'Nana' provisional name

ns, id: a dwarf plant associated with Jeddeloh Nurseries, Germany c. 1990.

Abies homolepis 'Newman' www.buchholznursery.com, accessed 9.8.2019, not described



Prostrate Group ('Prostrata'). Conifer Collection, Dawes Arboretum. July 2003. A very nice and vigorous example.

Abies homolepis Prostrate Group NEW GROUP NAME ('Prostrata')

ha: spreading-arching, wider than tall, semi-dwarf, clearly a cultivariant

ns: this 'Prostrata' name is almost certainly post 1959

in: our first record is that it was sold by John Vermeulen & Sons, Neshanic Station,

in: NJ in 1983. It may be known to them as early as 1970.

Abies homolepis 'Scottae'

ha: dwarf

or: A.H. Scott, Media PA

so: we suspect this is lost. It was not seen by us (2005) in

so: either of the Scott gardens (Tyler and Scott Arboreta)

Abies homolepis 'Shelter Island'

ha: semi-prostrate, spreading, irregular form

lc: yellowish-green

or, in: F. Crowe, San Diego CA USA registered with ICRA 1981

Abies homolepis [slender clone]

ha: much narrower, fastigiate

so, or: Arrowhead Alpines (online catalog 2005), a clone from "Gary"

Abies homolepis 'Tomomi' (var. tomomi (Bobbink and Atkins) Rehder in J.A.A. 1: 53 (1919))

ha: more narrow than species typical, also sparser

II: needles 0.3-0.6 in. long - much shorter than species typical at 0.6-1.2 in.

in: Bobbink & Atkins, NJ USA 1909, perhaps as early as 1907 per Jacobson (1997). Also sold by

in: Hicks Nursery, Long Island, NY

Isp: cultivated at NYBG Pinetum c. 1917

Abies homolepis f. umbellata (Mayr) Schelle (A. umbellata Mayr, var. umbellata (Mayr) Wilson)

frc: female strobili yellowish-green to green before ripening to brown - in f. homolepsis they are generally purplish to purplish-red at first

Abies homolepis [variegated clone] ('Variegata' invalid)

Ic: irregularly mottled cream, very unstable

so, or: Arrowhead Alpines (online catalog 2005), reported in the US as early as 1991.

Abies 'Hunnew'

hp: said to be A. cilicica x A. nordmanniana

ns: this name is suspiciously close to Hunnewell Arboretum where

ns: various firs have originated..

ABIES X INSIGNIS

(A. PINSAPO X A. NORDMANNIANA)

A variety of cultivars are reported in old literature, none of the plants well defined or known to me. They seem to be of academic interest only.

'Andreana', 'Beisnneriana', 'Kentiana', 'Mastersiana', 'Pendula', and 'Speciosa'

ABIES KOREANA

Abies koreana 'Alpin Star' ('Alpine Star') (2/2007) <u>www.bethlehemnursery.com</u> (online catalog 2007), no description ha: dwarf, not always dense

Abies koreana 'Alvans Falling Star' www.edwinsmitsconifers.com, accessed 9.8.2019, with color photo

Abies alba 'Arbor's Hexe'

ns, id: a listed name with www.nurgapuukool.ee (online catalog 2007)

Abies koreana 'Aurea' some='Luminetta'

ns, id: Welch and Haddow (1993) refer to a clone from Lohhrunner Nursery BC c. 1970

ns, id: Jeddeloh Nursery of Germany also offered a clone under this name.

Abies koreana 'Barabits Spreading'

ha: spreading to subglobose, 2 inches growth a year, very low

Abies koreana 'Black Prince' (3/02)

ha: slow, compact, conical

Ic: very dark green

Abies koreana 'Blauer Eskimo' ('Blue Eskimo')

ha: dwarf, spreading forming a wide cushion to mound in time

gr: < 1 in. per year

lc: blue grey

or: K. Wittboldt-Muller Nur., Germany c. 1990 as witches broom of 'Blauer Pfiff'

Abies koreana 'Blauer Dragoner'

ha: dense, compact

Ic: more intense blue

or: K. Wittboldt-Muller Nursery, Germany before 1990

Abies koreana 'Blauer Pfiff' ('Blue Hit')

ha: smaller tree, broadly conical to narrow globose, more compact

fc: bright blue to blue-green

or: from irradiated seed (Germany) from

or: Wittboldt-Muller Nur. of Germany.

Abies koreana 'Blauer Zwo' ('Blaue Zwo', 'Blau Zwo')

ha: dwarf, upright, conical, slower at 1-2 in. per year

gr: 1-2 in. per year

lc: greyish blue

fr: small, showy cones often numerous

in: Wustemeyer Nursery, Germany c. 1984

Abies koreana 'Blinsham Gold'

ha: flat-, spreading, older plants more conical

lc: golden-yellow

or: Kenwith Nurseries UK as 'Aurea' seedling before 2001

Abies koreana 'Blue and Silver' ('Blue Silver'?)

ns: listed name in the RHS PLANT FINDER 2003-4

Abies koreana 'Blue Cone Pendula' www.buchholznursery.com, accessed 9.8.2019, partly Latin name

Abies koreana 'Blue Emperor'

ha: compact, slower growing

Ic: rich blue, the best color to date (2003) per Kenwith Nurseries

in: Kenwith Nurseries UK c. 2002

Abies koreana 'Blue Magic'

ha: pyramidal

Ic: rich light, silvery-blue, improved over the older 'Blauer Pfiff'

or: Wittboldt-Muller Nursery, Germany c. 1990

in: Kenwith Nurseries UK c. 2002

Abies koreana 'Blue Standard'

ha: slower

frt: cones dark violet

frq: female strobili numerous

in: Jeddeloph Nursery, Germany c. 1962

li: Lewis, J. 1987. Int. con. reg. Part 1. RHS, London.

Abies koreana 'Blue Star'

Ic: very rich blue

Abies koreana 'Bonanza' www.buchholznursery.com, accessed 9.8.2019

ha: dense, irregular, highly twisted and curled appearance

It: needles highly testied into subglobose ball, showing mostly silver backs

Abies koreana 'Bonsai Blue' (11/01)

ht: 1.8m x 1.6m

ha: dwarf

lc: rich blue

photo, source, origin: www.hachmann.de (online catalog 2001)

Abies koreana 'Brevifolia' illegitimate name

ha: compact, slower

II: 6-10mm lw: 2mm

It: leaves shorter, loosely arranged

Ic: dull green above, greyish-white markings below

frd: female cones smaller than species typical

frc: female cones violet, somewhat showy

or: Jeddeloh Nur. Germany c. 1965

ns: name is post-1959. Should be renamed if it proves valuable over time.

li: Krussman. 1979. Hand.

li: Lewis, J. 1987. Int. con. reg. Part 1. RHS, London.



'Cis' at JC Raulston Arboretum. September 2019. Only doing well because of the cooler, shaded lath house.

Abies koreana 'Cis'

ha: extreme miniature, globose, shrubby, resembling A. balsamea 'Nana'

gr: 0.5-1.0 in. per year lc: dark glossy green

in: Roelvink Nur. of Holland c. 1989

 $so: \underline{www.stanleyandsons.com}$



'Compact Dwarf'. Longwood Gardens.

Abies koreana 'Compact Dwarf' ('Compacta', nana hort.)

ha: compact, dwarf, usually symmetrical, 5-8cm growth a year (per denOuden & Boom)

II: shorter than species typical

or: unknown.

Abies koreana 'Crystal Globe'

in: dwarf, "slightly faster" and "more robust" than most dwarf clones, subglobose

in: Kenwith Nurseries UK c. 2002

Abies koreana 'Dark Hill' (11/01)

ht: 50cm tall x 60-70cm wide

ha: dwarf

lc: dark green with silvery stomatal bands

or: Wittboldt-Muller Nursery, Germany before 1990

Abies koreana 'Diskus' ('Discus') (2/7) www.bethlehemnursery.com (online catalog 2007), no description ha: young plants subglobose, more erect and columnar with age, dense

Abies koreana 'Doni Tajuso'

ha: dwarf in: about 2001

Abies koreana 'Eisregen'

or: Widdbolt-Muller Nursery, Germany c. 1990

Abies koreana 'Filips Gold Patches' www.edwinsmitsconifers.com, accessed 9.8.2019, with color photo, a yellow chimera taking over parts of the foliage mass and some leaves part gold and part green

Abies koreana 'Filips Snowpearls' www.edwinsmitsconifers.com, accessed 9.8.2019, with color photo, parts of leaved and some shoots a white or white-striped chimera

Abies koreana 'Flava'

frc: female strobili yellowish-brown when mature, seed wings dark brown

or: Kornick Arb. Poland 1933 as seedling, Japanese seed source

Abies koreana 'Fliegender Untertasse'

ha: prostrate, contorted branches, slower, eventually more dense

Ic: green, showing much silver

or: Germany

ns: the name means "flying saucer"

or: Widdbolt-Muller Nursery, Germany c. 1991

Abies koreana 'Flynns Flash' (11/6)

ht: 6 ft.

ha": dwarf, upright, slower

lc: tips creamy-white

in: Roslyn Nursery, now closed, (online catalog 2006)

Abies koreana 'Freudenberg' www.buchholznursery.com, accessed 9.8.2019

ha: slower, broadly pyramidal, slightly irregular, more suitable for smaller properties

Abies koreana 'Frosty'

ha: upright, conical, slower

It: needles curled, giving a frosty view

in: Libo Nurseries, Holland c. 1990

Abies koreana 'Gait'

ha: dwarf, globose at first, eventually narrowly upright to nearly fastigiate or conical.

gr: 2 in. per

ht: 3 ft. tall x 1 ft. wide

Ic: dark green

in: Roelvink Nur. Holland c. 1990

Abies koreana 'Gelbbunt'

ha: dwarf, compact

Ic: dark green mottled yellow

or: Horstmann c. 1978

so: www.stanleyandsons.com

Abies koreana 'Glauca'

Ic: rich blue

or: Stanley and Sons (online catalog 2001) say it was

or: developed by chemical treatments in Holland.

ns: the name is not valid and probably has another name by now.

Abies concolor GOLDEN GIO™ www.buchholznursery.com, accessed 9.8.2019, not described

Abies koreana 'Golden Glow'

ha: compact, dwarf

Ic: yellowish orange

or: Konijn Nur. Holland c. 1990

so: www.stanleyandsons.com

Abies koreana 'Golden Wonder' (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies koreana 'Goldener Traum' ('Golden Dream')

ha: compact, shrub-like, vase-shaped at first, later more conical

Ic: yellow to lime green with some leaves both green and yellow. Best color in winter.

or: Wittboldt-Muller Nursery, Germany before 1988

Abies koreana 'Goldherz'

ns, id: Welch and Haddow (1993) list it for a De Belfen Pinetum, Holland c. 1992

Abies koreana 'Grazil'

ha: dwarf, irregular, compact, 1.5cm growth a year

lc: light bluish-green

Abies koreana 'Green-Gold' (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies koreana 'Green Carpet'

ht: 1.0-1.5m tall in 10 years

ha: semi-dwarf, flat, spreading, eventually a mound, 2 in. growth a year

lc: rich forest green

or: Konijn & Sons c. 1990

Abies koreana 'Gruebele'

ha: miniature, globose

lc: green

so: www.stanleyandsons.com

Abies koreana 'Grune Spinne'

ht: 75cm tall x wider

ha: a green mat-forming clone

or: Widdboldt-Muller Nursery, German c. 1990

Abies koreana 'Hexenbesen Horstman'

ns: said to be a dwarf 'Silberlocke' type from Horstman. It is surely one of the named

ns: clones listed below

Abies koreana 'Hexenbesen Wursten'

ns: said to be a dwarf 'Silberlocke' type.

Abies koreana Hexenbesen Wustenmeyer' = 'Silberkugel'

Abies koreana 'Horstmann'

ha: dwarf, 2-10cm growth a year, subglobose to conical, narrower base

II: 11mm

lw: 1.75mm

Ic: dark green above

ns, id: the twisted-needle, silvery clone from this same firm is

ns, id: called 'Silberlocke' but is sold as 'Horstmann's Silberlocke'

or: Horstmann Nursery, Germany before 1985

Abies koreana 'Houte Mayer' (3/7)

ha: dwarf, subglobose

so: www.nurgapuukool.ee (online catalog 2007)

Abies koreana 'Ice Breaker' (2/7)

ha: dwarf, miniature, broom from 'Silberlocke'. New growth forms

ha: little cone-like ringlets, each very bright and spiralled. It is

ha: effective grafted on a standard, 1-2 in. a year.

Ic, It: twisted needles, very silvery-white as 'Silberlocke'

Abies koreana 'Kohout's Hexe'

ha: miniature, from witches broom

so: www.nurgapuukool.ee (online catalog 2007)

Abies koreana 'Inga' = see under A. x koreocarpa

Abies koreana 'Inverleith'

ha: low,, wider than high, eventually larger and tree-like

frg: female strobili numerous

or: Ediunburgh Bot. Gard. from a notable tree

ub: UK trade c. 1985

Abies koreana 'Jane Platt' (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies koreana 'Kenwith' (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies koreana 'KIngs Select' invalid name (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies koreana 'Kohout'

ha: dwarf, mounded

It: twisted needles, showing much silver

in: Kenwith Nurseries UK c. 2002

Abies koreana 'Knospenkonigen' (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies koreana 'Lippetal'

ha: dwarf, compact, somewhat irregular. Stanley and Sons (online catalog 2001) states "main leaders

ha: seem to die out and plant takes different directions".

II: very tiny needles

lc: medium green

or: Ustemeyer Nursery, Germany c. 1989

ns: Gordon Haddow speculates it may be a hybrid to A. delavayi

Abies koreana 'Luminetta' ('Aurea' in part, 'Lutea')

ha: slower growing

lc: bright golden yellow

ns: 'Aurea' is a post-1959 and therefore illegitimate name

Abies koreana 'Mondschein'

ns, id: listed by Welch and Haddow (1993) c. 1984

Abies koreana 'Nana' = 'Compact Dwarf' AND 'Prostrate Beauty'

ns: this name can refer to either defined clone.

Abies koreana 'Nadelkissen' (1/02)

ha: dense, globose to cushion-form, slower than 'Silbermavers'

Ic: silvery green due to twisted leaf showing stomata.

or: Widdboldt-Muler Nursery, Germany c. 1990

in: Coenosium Gardens to US trade c. 2002

Abies koreana 'Nanaimo'

ha: average vigor, more compact than species typical

frc: violet cones often numerous and showy

Abies koreana 'Nisbet'

ha: slower, shrub-like, conical to vase-shaped in time

lc: dull green tinged yellow

or: A.H. Nisbet, UK

in: Kenwith Nur. UK c. 1983

li: Lewis, J. 1987. Int. con. reg. Part 1. RHS, London.

Abies koreana 'Oberon' (11/01)

ha: extreme dwarf, miniature in fact, leaves radial and almost Hebe-like. Older plants more conical.

buds: showy white in white

lc: bright green

so: <u>Taanum</u>

Abies koreana 'Orange Glow'

ha: low, spreading

Ic: dark golden tinged orange in winter

in: Kenwith Nurseries UK 2003

Abies koreana 'Pancake' (10/4)

ha: flat, spreading as the name implies, later more mounded that very flat

Abies koreana 'Piccolo'

ha: dwarf, lacking a terminal leader, eventually spreading to pendulous

ha: like Tsuga canadensis 'Coles Prostrate'

lc: green

II: very reduced size

or: Konijn Nursery before 1979 when Welch oublished it.

Abies koreana 'Pinocchio'

ha: dwarf, very dense, subglobose, 2 inches growth a year or less

lc: rich green

or: E. Carsten Nursery c. 1981

Abies koreana 'Procumbens' = 'Taiga' (in part)

Abies koreana 'Prostrata' = 'Prostrate Beauty'

Abies koreana 'Prostrate Beauty' ('Nana' in part, 'Prostrata')

ha: irregular, often vigorous, spreading to horizontal, some branchlet upcurving

id: it often cones freely as young plants unlike 'Compact Dwarf' which never produces cones

frc: three clones are known with female cones of blue, grey, or green.

ns: this is a polyclonal cultivar with clones of various cone colored noted above.

or: probably a cultivariant (propagated lower branch), known from the Arnold Arb. and

or: Gotelli collections in the 60's if not before.

Abies koreana 'Renaults Dwarf'

ha: compact, dwarf

li: Lewis, J. 1987. Int. con. reg. Part 1. RHS, London.

Abies koreana 'Scherenbach' (3/7)

ha: compact, pyramidal, semi-dwarf

so: www.nurgapuukool.ee (online catalog 2007)

Abies koreana 'Schillerlocke' (2/7)

It, Ic: as 'Silberlocke' but needles more curled, showy

or: 'Silberlocke' seedling

Abies koreana 'Schneesterm'

ha: robust

Ic: dark green above, very silver banded below

Abies koreana 'Schneverdingen'

ha: globose, dwarf

or: Horstmann, Schneverdingen c. 1987

Abies koreana 'Schwartzwald' (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies koreana 'Schwenden Konig' (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies koreana 'Silberglanz'

lc, lt: recurved, silvery

or: Dierks Nursery, Germany c. 1986

Abies koreana 'Silberkugel' ('Silberkruegal'?, 'Silver Globe'. 'Hexenbesen Wustenmeyer', 'Pompon')

ha: dwarf, flat-topped to subglobse, shrub, more dense than 'Silberlocke'

II: 10mm

lw: 1.8mm

lc: yellow-green with twisted needles revealing silvery undersides

in, or: Horstmann Nur. of Germany before 1986 when introduced

ns, id: this plant circlated much before given it's current name. Welch in his 1990 Manual



'Silberlocke'. Dawes Arboretum. August 2003. Twisted perfection on a stem. This breathrough clone has led to several others both more vigorous and less.

Abies koreana 'Silberlocke' ('Horstmann's Silberlocke', 'Silver Curls', 'Silverlade'?, 'Silverlock', 'Silverlade') ha: more vigorous and large in time than 'Silberperl', 'Silberkugel' but less so than 'Silberrief'. It is semi-dwarf for ha: most climates, averaging 1.5-3.0 inches growth a year. Some report vigor as high as 4-6 in. in good nursery ha: culture. It is thus slow to form a leading and good training is therefore essential to get a good form in the ha: long term. It is easily trained in a colorful pyramid.

frc: violet cones appear on youngish plants and give an added bonus.

It: needles closely set, distinctly spiralled revealing the silvery stomates. A very distinct and showy plant.

eval: a wonderful plant and surely essential for any conifer collection that wants to highlight the

eval: diverse beauty of needles. I was shocked to see it thrive in hot 95 degree and humid sun at the

eval: Atlanta Bot. Gard. in July 2003 with only the least bit of faint shade. It is toughter than most of

eval: us with Abies aversion in the hot US states may have thought.

or: Horstmann Nursery, Germany before 1983

ns: It is not 'Horstmann', a very different clone from the same nursery.

li: Lewis, J. 1987. Int. con. reg. Part 1. RHS, London.

Abies koreana 'Silber Mavers' ('Silbermavers', 'Silver Mavers')

ha: very dwarf, slower than 'Silberlocke' by some margin., eventually a tiny globe or bun.

Ic: twisted needles reveal silvery stomatal zones. The colors are blue-green and silver more than

lc: the green and silver of others.

Abies koreana 'Silberperl' ('Hexenbesen Horstmann' at least in part) ha: miniature, dwarf forming a flattened globe – more suitable for rock ha: gardens than most of the other 'Silber' types.

ll: 6–12mm lw: 2mm

Ic: green but twisted to reveal many silver stomatal bands

or: Horstmann Nur. of Germany, introduced by them about 1986

Abies koreana 'Silberreif'

gr: faster than 'Silberlocke' which is often too slow for many gardens

Ic: dark green and silver like 'Silberlocke'

or: seedling in Hachmann Nur.

li: Hachmann Nursery Catalog 1982

Abies koreana 'Silberzwerg'

ha: dwarf, wider than high and subglobose

It: twisted needles showing much silver

or: Jeddeloh Nursery, Germany, intro. 1989

Abies koreana 'Silberschmeltzer'

ns: listed name c. 2001

Abies koreana 'Silver Hoar' (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies koreana 'Silver Show'

ha: narrow, trees to 20 feet are reported and that would take 'Silberlocke' a century?

It: needles curled as 'Silberlocke' but a plant of different origins and vigor

or: K. Wittboldt-Mueller, Germany c. 1970

in: Kromhout, Holland 1976

li: Lewis, J. 1987. Int. con. reg. Part 1. RHS, London.

Abies koreana ['Silver Show' witchesbroom] (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies koreana 'Starker's Dwarf' ('Stark's Dwarf')

ht: 125cm tall x 50cm wide (15 years)

ha: subglobose, dwarf, extremely dense, often flat-topped with age

or: C. Starker, Jennings Lodge, OR USA received from Canada c. 1960

Abies koreana 'Stolwijk No. 2' provisional invalid name

ha: dwarf, globose to spreader

lc: dark green

II: very short needles

or: Stolwijk Nursery, Holland c. 1985

so: www.hortusconclusus.be

Abies koreana 'Taiga' ('Procumbens' in part)

ha: low, spreading, flat and procumbent. More delimiting characters are needed.

Ic: dark rich green

frc: numerous blue female cones appear in youth.

or: Hachmann Nursery, Germany 1984 as 'Procumbens'

Abies koreana 'Threave'

ns: listed name from Kenwith Nurseries UK c. 2002

Abies koreana 'True Blue'

Ic: rich blue, more so than even 'Blauern Pfiff', 'Blaue Zwo', and 'Blue Star'

or: 1993

Abies koreana 'Tundra' (11/01)

ht: 40cm tall x 60cm wide

ha: mounded to globose

or: Welch and Haddow (1993) consider it to be from Korner Nursery not Hachmann

photo, source, origin: www.hachmann.de (online catalog 2001)

Abies koreana 'Verdener Dom' (11/01)

ha: narrowly conical, semi-dwarf

lc: bright green

It: thicker needles than species typical

photo, source, origin: Hachmann (online catalog 2001)

Abies koreana 'Waldgreuze' = A. 'Waldgreuze', a cross to A. lasiocarpa

Abies koreana 'Winter Goldtip'

ns: listed name with Lincluden Nursery UK in 2003, presumably as described in the name.

Abies koreana 'Wuestmeyer' ('Zwergform Wuestmeyer') = 'Silberkugel'?

ha: dwarf, erect, densely borne needles in radial arrangements

in: Horstmann, Germany 1986

or: presumably from a conifer grower of this name, might be 'Hexenbesen Wustenmeyer'='Silberkugel'?

li: Lewis, J. 1987. Int. con. reg. Part 1. RHS, London.

Abies koreana 'Zwergform Mustemeyer'

ha: dwarf

ns, id, or: Wustemeyer Nursery, Germany as seedling. It is spelled

ns, id, or: different ways but doubtless zwerg=dwarf was intended.

ABIES X KOREOCARPA

(A. KOREANA X A. LASIOCARPA

Abies x koreocarpa 'Festival' Conifer Kingdom, www.coniferkingdom.com, accessed 9.9.2019

ha: pyramidal, compact

Ic: rich blue due to very wide, silvery stomates on the back, these up to 97% of the surface below,

lc: second year needles much more green

Abies x koreocarpa 'Fuskenberg'

Ic: very bright blue due to wide, numerous stomatal zones in silver

Abies x koreocarpa 'Hobbytime' https://www.hgeers.nl/abies-koreocarpa-x-hobbytime.html, accessed 9.9.2019

Abies x koreocarpa 'Inga' ('Hurricane Blue')

ha: semi-dwarf, irregular, 3-5 in. a year, some plants are more erect than others per Broken Arrow Nur.

lc: bright silveryt-blue

ns: it may be a hybrid to A. lasiocarpa thus under A. x koreocarpa

Abies x koreocarpa 'Waldgrenze' (Abies koreana x A. lasiocarpa 'Glauca')

or: Widdbolt-Muller Nursery, Germany before 2001

ABIES LASIOCARPA

Abies lasiocarpa 'Alba' invalid name

in: Renault Nurseries, France before 1972

Abies lasiocarpa 'Alpine Beauty' (1/02)

ha: dense, globose as very young plants

lc: blue-green to blue

so: Coenosium Gardens (website 2002)

Abies lasiocarpa var. arizonica 'Argentea' ('Glauca', 'Arizonica Glauca', 'Arizonica Argentea')

Ic: more intensely silver or light blue than the variety. It is the equivalent of Picea pungens 'Glauca' and may be

Ic: more than one clone over the years.

Abies lasiocarpa var. arizonica

ht: 15m - var. lasiocarpa is larger at 20-30m

bk: often more corky, yellowish than var. lasiocarpa

lc: more intensely silvery-blue than var. lasiocarpa

la: more distinctly noticed than var. lasiocarpa

geo: AZ USA - var. lasiocarpa is more common in AK to OR and down as south as NM USA.

Abies lasiocarpa 'Arizonica Compacta' ('Compacta Glauca', 'Glauca Compacta')

ht: 4 ft. tall x 2 ft. wide in many years

ha: dense, dwarf

Ic: rich glaucous

id: it is not the larger, somewhat greener 'Compacta' shown below. The two names have been lumped. The true

id: clone here is very dwarf and distinctly blue.

Abies lasiocarpa 'Bentham A' = 'Elaine'?

Abies lasiocarpa 'Bentham B' provisional name (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies lasiocarpa 'Beissneri'

Is: needles falcate (sickle-shaped), twisted slightly to reveal the stomatal bands below

Abies lasiocarpa 'Beth Mini' ('Beano Broom') www.edwinsmitsconifers.com, accessed 9.8.2019, with color photo, showing a congested dwarf, bluish-green

OROC ABIE004 - Abies lasiocarpa 'Blue Bear' - compact, slow, 2-4 in. a year growth rate, very rich icy blue, a different shade than the popular 'Glauca Compacta'. In, ph: http://www.coniferkingdom.com, accessed 10.12.2016

Abies lasiocarpa 'Blue Nut' (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies lasiocarpa 'Blue Spiral' (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies lasiocarpa 'Blue Truusje'

ns, id: reportedly a very blue clone. Details, confirmation required.

Abies lasiocarpa 'Childs Court' (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies lasiocarpa 'Childs White Bud' (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies lasiocarpa 'Coerulescens'

lc: more highly glaucous, blue overall

so: lost to gardens overall. 'Argentea' has replaced it.



'Compacta'. Conifer Collection, Dawes Arboretum, OH USA. Summer 2003. This nearly perfect speciman is almost legendary among conifer experts in N. America. Note it's size, scale, and density in contrast to the dwarf cultivar before it and massive fir and spruces species behind it.

Abies lasiocarpa var. arizonica 'Compacta' (f. compacta (Beiss.) Rehd.)

ht: 15 ft. tall x 12 ft. wide

ha: broadly conical to globose at first, very dense, semi-dwarf, more obtuse-pyramidal with age

lc: blue-green overall, more silvery stomatal lines appearing visible as one approaches it.

ns: this is not f. compacta (Beiss.) Rehd. which is a clone lost to gardens. It is not all

ns: 'Arizonica Compacta' of the US trade as sometimes assumed.

Abies lasiocarpa 'Compacta Prostrata'

ha: prostrate (assumed from name)

or: Palomino, Italy. Scions were sent to Hillier & Sons Nursery 1970

ns: name is doubtful.

Abies lasiocarpa 'Conica'

ha: dwarf, broadly conica, compact

II: 12mm long - needles are larger at 15-23mm long in the larger 'Compacta'

Ic: needles are less glaucous than true 'Compacta'

Abies lasiocarpa 'Day Creek'

ns: a listed name in the US trade before 1983

Abies lasiocarpa 'Duflon'

ht: 6 in. tall x 6 in. wide in many years

ha: pygmy-sized dwarf, 0.25-0.5 in. growth as year, eventually a dense bun or globe. It is one of the smallest

ha: fir clones ever found.

or: Bita Duflon found near Lake Cushman in WA USA 1954. It is apparently a natural, genetic dwarf

or: dwarf seedling.

in: Ed Lohbrunner, BC

Abies lasiocarpa 'Elaine' ('Bentham A'?)

ha: semi-dwarf, narrowly conical

II: shorter needles

lc: light greyish-blue

ns, or, in: Humphrey Welch 1988, named for his wife

Abies lasiocarpa 'Flat Top'

ns: a listed name in the US trade before 1983

Abies lasiocarpa 'Glacier' (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies lasiocarpa 'Green Globe' ('Globe')

ha: dense, dwarf, globose, 1-2 inches growth a year

lc: rich green - less blue than most clones

ns: this clone is thought to be the same as the one sold as A. concolor 'Green Globe'.

ns: The RHS Checklist of 1987 credits Bob Fincham of Coenosium Gardens with transferring

ns: the name in his 1985 catalog. H.J. Welch had

ns: included it under A. concolor in his 1979 book.

or, in: unclear but probably from Verkade Nursery before 1979.

Abies lasiocarpa 'Hexenbesen' invalid name

ns, id: this name means "witchesbroom" which is not part of any

ns, id: valid cultivar.

Abies lasiocarpa 'Joes Alpine' (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies lasiocarpa 'Kenwith Blue'

ha: upright, smallish tree

lc: bluish-grey

or: Don Hatch c.1978

in: Kenwith Nurseries, UK

Abies lasiocarpa 'King's Blue'

in: Kenwith Nursery UK c. 2002, may be 'Kenwith Blue'

Abies lasiocarpa 'Kyles Pass' (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies lasiocarpa 'Logan Pass' ('HB Logan Pass')

ha: dwarf lc: rich blue

or: by one report from Jerry Morris found as wb near Logan Pass

in: Horstmann Nursery to Germany 1976

ph: https://conifersociety.org/conifers/abies-lasiocarpa-logan-pass

Abies lasiocarpa 'Lopalpun'

ha: miniature dwarf, globose to buns-shaped, 0.5 inch growth a year

Ic: rich blue-green, appearing greyish-green overall

or: Glacier National Park, MT USA as witches broom

so: Stanley & Sons Nursery (online catalog 2001)

Abies lasiocarpa 'Martha's Vineyard'

ha: compact, dwarf lc: greenish overall

so: Stanley & Sons Nursery (online catalog 2001)

Abies lasiocarpa 'Mulligan's Dwarf'

ht: 2 ft. tall x 6 ft. wide says Stanley and Sons. Porterhowse says "dwarf upright" and 3 ft. x 2 ft.

ha: compact, bun-shaped at first, 2 inches growth a year, it less dwarf than 'Green Globe'

lc: green

or, in: reported by Welch in his 1979 book. Origin is unclear but likely the US.

Abies lasiocarpa 'Myeri' illegitimate Latinized name (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies lasiocarpa var. lasiocarpa 'Nana'

ht: 140cm (16 years)

ha: dwarf

or: J. Noble CA USA found in the wild c. 1935

Abies lasiocarpa 'Pendula' ('Arizonica Pendula'?)

ha: strongly pendulous

ns: A. lasiocarpa pendula of Carriere is in fact A. concolor 'Pendula'. This is Ordung and Beissner's taxon.

so: it is thought to be lost to cultivation.

Abies lasiocarpa 'Prickly Pete'

ht: 20 ft. tall x 2 ft. wide

ha: fastigiate, vigorous

lc: blue-green

II: reduced in size, giving a slightly prickly look

or: Jerry Morris before 2000

so: Stanley & Sons Nursery (online catalog 2001)

Abies lasiocarpa 'Rat'

ha: compact, dwarf

lc: green

ls: twisted, giving a slightly "ratty" look

so: Stanley & Sons Nursery (online catalog 2001)

Abies lasiocarpa 'Roger Watson'

ha: dwarf, broadly conical, dense

Ic: dark greyish-green

prop: roots well from cuttings

or: Roger Watson, Somerset UK c. 1959 from a notable tree

in: Wansdyke Nursery, Devon c. 1979

Abies lasiocarpa 'Toenisvorst'

in: Kenwith Nursery UK c. 2002

Abies lasiocarpa 'Utah'

ha: flat mound, extreme dwarf, 0.5 inch growth a year

Ic: light green

ns: this is an invalid name - needs a correct, distinct name

or: Jerry Morris before 2000

so: Stanley & Sons Nursery (online catalog 2001)

ABIES MAGNIFICA

Abies magnifica 'Argentea' = 'Glauca'

lc: rich silvery-blue in: Europe before 1909

Abies magnifica cyanea Sudworth = 'Glauca'

Abies magnifica 'Emerald Pear' ns: a listed name from Europe.

Abies magnifica 'Glauca' (var. cyanea Sudworth, 'Argentea'?)

Ic: blades more glaucous blue

in: Europe before 1891 when Beissner named it

Abies magnifica 'Hexenbesen' provisional invalid name

ha: dwarf, from witchesbroom

II: shorter needles

lc: bluish-green

in: Horstmann Nursery, Germany 1986

Abies magnifica 'Nana'

ha: dwarf, conical

or: known but first reported from Gotelli's original collection

or: (before USNA) c. 1964

Abies magnifica 'Prostrata' ('Glauca Prostrata')

ha: low, spreading

Ic: rich blue as 'Glauca' types

or: Jurissen Nursery, Germany before 1904, probably a cultivariant

Abies magnifica var. shastensis 'Shasta Prostrate'

ha: low spreading, a cultivariant but from this atypical variety

ns, id: some taxonomists refer this variety (and thus its clones)

ns, id: to A. x shastensis, a supposed cross to A. nobilis. This hybrid

ns, id: assignment is not accepted by the majority of American

ns, id: conifer taxonomists and dendrologists.

Abies magnifica f. xanthocarpa Lemmon (A. nobilis var. robusta Masters NOT Veitch nor Carr.)

frc: female strobili golden to yellow

frd: female strobili smaller than typical f. magnifica

Abies nebrodensis 'Sicilian Gold' (5/02)

lc: golden yellow

or: Robert Aebel as discovery

geo: the species is believed to be extinct in the wild.

in, so: Collector's Nursery (online catalog 2002), first introduction

Abies nephrolepis f. chlorocarpa

frc: female strobili green when immature

Abies nephrolepis 'Elegans'

ha: compact

ABIES NORDMANNIANA



Abies nordmanniana. Maymont Foundation Gardens, Richmond, Virginia USA. A magnificent tree with multiple leaders. If one does not know or like firs, one sight of such a great giant will win them over. Many conifers are worse for a hundreds years of age. Junipers, arborvitae, and spruce often get ratty and unkempt. Firs more often than not look better and fuller and richer. In fact, some fir species don't even start to look majestic until half a century is on them. To give you some idea how massive this speciman is, click on the image of it's trunk below.





Species. Longwood Gardens. Two superb, lovely old giants. Most beautiful of all is the permission given for the lower limbs to develop and trials as nature and the Creator intended.

Abies nordmanniana 'Albospicata' lc: needles tipped white when young

so: probably lost to gardens

Abies nordmanniana Ambrolauria Group ('Ambrolauri', 'Ambrolauria')

ht: 100-150 ft. tall x 20 ft.

ha: narrower, denser branches than some groups

lc: dark green

ns, id, lu: this is a proven dark, narrow, durable seed strain for Christmas trees. Some

ns, id, lu: consider it the best of all known Nordmann Fir strains.

or: derived from a Caucasus provenance, selected over the years. Grown since the 1980's and before.

Abies nordmanniana var. equi-trojani 'Archer'

ns: a listed name.

Abies nordmanniana 'Aurea'

Ic: golden yellow, by one report not in the new growth but maturing later

Abies nordmanniana 'Aureospica' ('Aureospicata')

ha: irregular, not a neat form lc: needles tipped yellow

Abies nordmanniana 'Aureovariegata'

Ic: some leaves all or partly yellow, others all or partly green

Abies nordmanniana 'Barabits Compact'

ha: compact, dwarf, flat-topped to bun-shaped, 2-3 inches growth a year

or: Barabit's Nursery before 1990

ph: https://kiginursery.com/dwarf-miniatures/abies-nordmanniana-barabits-compact-dwarf-caucasian-fir/

Abies nordmanniana 'Barabit's Gold'

ns: a listed name, likely a gold clone from Barabit's Nursery

Abies nordmanniana 'Barabit's Spreader'

ha: spreading, lower, semi-dwarf

Abies nordmanniana 'Brandt'

ha: low, spreading

or: Henry Hohman, Kingsville Nursery MD USA 1970

Abies nordmanniana 'Branklyn ' (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies nordmanniana 'Brevifolia'

ha: conical, dwarf, sometimes irregular and lightly contorted

II: shorter than species typical

Abies nordmanniana 'Broom' illegitimate name

ha: dwarf, from a witches broom

or: one clone of this name in the US came from Raraflora Nur. before 1970.

Abies nordmanniana 'Coerulescens'

Ic: more white below, giving a bluer or more silvery look

Abies nordmanniana 'Durham Dwarf'

ht: 3-4 ft. tall x 2-3 ft. wide

ha: dwarf, compact slower pyramids

or: obtained by the JC Raulston Arboretum, Raleigh NC USA in 1991 from Herman

or: Schmidt of Durham NC. Sources indicate it remained dwarf after 20 years.

lsp: there were two examples in the Raulston Arboretum, the best known one in the main

lsp: conifer collection beds (near the row of dwarf loblollies) suddenly perished c. 2004.

Isp: There remains another plant, more shaded, in the eastern arboretum as of 11/2006.

Abies nordmanniana 'Emerald Pearl'

ha: conical, dense lc: dark green

or: Libo Nurseries before 1900

Abies nordmanniana 'Erecta'

ha: more upright. Original tree quite fastigiate. Every fir has such variants.

Abies nordmanniana 'Filips Perfect Column' www.edwinsmitsconifers.com, accessed 9.8.2019, with color photo, showing a dark, dense fastigate to column clone

Abies nordmanniana 'Filips Secret Mystery' www.edwinsmitsconifers.com, accessed 9.8.2019, not described, no image

Abies nordmanniana 'Filips Twister' www.edwinsmitsconifers.com, accessed 9.8.2019, not described, no image

Abies nordmanniana 'Glauca'

lc: more glaucous blue

Abies nordmanniana 'Gold Spear'

li: Lewis, J. and A. Leslie. 1987. Int. Conifer Reg. Part I. RHS. (as listed name)

Abies nordmanniana 'Golden Spreader' (aurea nana)

ha: slower, semi-dwarf, spreading, 4-5cm growth as year

lc: light yellow at first

II: 12-25mm

Abies nordmanniana 'Horizontalis'

ha: dwarf, compact, lacking a leader, overall most branches horizontal

Abies nordmanniana 'Jakobsen' ('Jacobson HB'?, 'Jacobsen WB'?)

ha: dwarf, flat-topped, very dense, 1 inch or less growth a year

lc: bright green

so: Stanley & Sons (online catalog 2001)

Abies nordmanniana 'Jensen' ('Pendula' in part)

ha: vigorous, pendulous

II: shorter than species typical

id: it is not the older clone sold as 'Pendula'

Abies nordmanniana f. macrolepis Vig. & Gauss.

II: to 35mm long – species is closer to 20–25mm

frd: cone scales to 4cm long and wide, seeds to 35mm long (species=15mm)

Abies nordmanniana 'Musterland' ('Muntsterland'?, 'Munsterland')

ha: dwarf, bun-shaped, dense

lc: bright green

so: Stanley & Sons (online catalog 2001)

Abies nordmanniana 'Nana Compacta' ('Compacta', 'Compacta Nana)

ha: pyramidal, dwarf, very dense, branches very short

II: as small as 4-5mm long - much shorter but some are larger and more typical

lc: light green

Fleurs rares: Eriocephalus africanus, Passerina hirsuta, Petasites fragrans, Eupatorium micranthum (E. arboreum).

DES ENVIRONS DE PARIS, — Chrysanthèmes de l'Inde et du Japon (les variétés), Hellébore Rose de Noël, Sapin, If, Gui (en abondance pour la Noël et le jour de l'an), etc.

En dressant la liste ci-dessus, je n'ai pas eu l'intention de citer tout ce qui se vend aux Halles, tant s'en faut (j'en ai oublié et certainement de très-communes), ni d'indiquer exactement l'époque à laquelle chaque fleur arrive sur le marché; j'ai simplement voulu mentionner, d'une façon générale, la grande variété de fleurs qui s'y vendent dans le courant de l'année, et, par ce fait, montrer tout l'intérêt et le plaisir que l'amateur peut trouver en faisant de fréquentes visites à la vente des fleurs.

S. MOTTET.

ABIES NORDMANNIANA PENDULA

L'arbre dont nous allons parler est probablement le premier de ce genre qui, jusqu'à ce jour, ait été remarqué en France. Il s'est trouvé dans un semis fait en 1869 par M. Courtois, pépiniériste à Clamart (Seine), qui l'a vendu à M. Berthier, avenue Amélie, 13, à Bellevue (Seine-et-Oise),

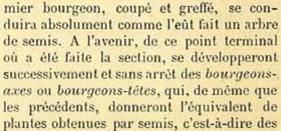
alors qu'il ne présentait encore rien de particulier. Actuellement haut d'environ 2^m 10, ce sujet (fig. 132), qui est très-droit, a déjà les verticilles de la base très-régulièrement rabattus sur la tige, tandis que ceux qui sont au-dessus sont à peine défléchis et que ceux du sommet sont, au contraire,

très-légèrement dressés. Cette direction est, du reste, celle que suivent tous les arbres de semis qui deviendront tout à fait pleureurs: toujours, sur ces arbres, la flèche est et reste verticale. Très-réguliers dans leur forme, les verticilles de ses branches sont

également distants et ramifiés; les ramifications, bien distiques, sont garnies de feuilles denses, surtout sur le dessus des rameaux, qu'elles recouvrent complètement; elles sont grosses, obtuses, comme tronquées au sommet; le dessous porte deux bandes glauques, légèrement farinacées, séparées par une nervure médiane verte. Pour multiplier cette variété, il n'y a d'autre moyen que la greffe, ce qui, comme pratique, ne présente d'autre difficulté que le choix des greffons qui doivent provenir de têtes, c'est-à-dire d'un bourgeon pris sur la flèche d'une plante de semis. Si, au contraire, le bourgeon greffon a été pris

> sur une partie latérale, ce bourgeon, quel qu'il soit, ne s'élèvera jamais verticalement en produisant des rameaux verticillés.

Voici comment il faut opérer pour se procurer des têtes : prendre un sujet dont la tige ou flèche s'élève verticalement en émettant latéralement des branches régulièrement verticillées, puis couper cette flèche à quelques centimètres audessus de son insertion, de manière à avoir là une sorte d'onglet très-court comprenant pourtant quelques feuilles qui, à leur base, portent un ou plusieurs yeux rudimentaires. Ce pre-



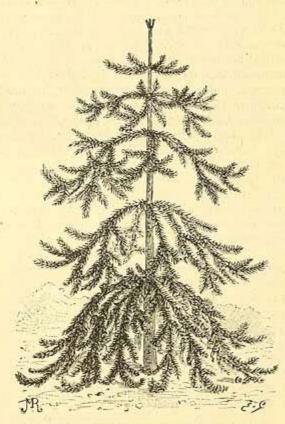


Fig 132. — Abies Nordmanniana pendula, au 1/22° de grandeur naturelle.

'Pendula'. Revue Horticole of 1890 showing "original intent" for this name, clearly not a classic trunk weeper but one with longish, cascading lower limbs.

Abies nordmanniana 'Pendula'

ha: weeping, vigorous, apparently more cascading than overtly drooping

II: 10-18mm - shorter

id: the more recently selected clone 'Jensen' was sold under this name.

Abies nordmanniana 'Procumbens' ha: dwarf, spreading, trailing in time

Abies nordmanniana 'Prostrata' provisional name

ha: spreading, low, very flat

lc: more glaucous blue

ns: known from Iseli Nursery c. 1984. Needs a new valid name if it proves useful. We wonder

ns: it could be an error for 'Procumbens'. It may well be one of many other cultivariants.

Abies nordmanniana 'Refracta' (speciosa)

ha: conical, dwarf, very dense

Abies nordmanniana 'Robusta'

ha: robust, stronger, denser lc: slightly more glaucous

Abies nordmanniana 'Secrest Broom' ('Seacrest Broom') provisional invalid name

ha: dwarf

or: apparently from the Sechrest Arboretum who have not to my knowledge given

or: permission to use their name.

Abies nordmanniana 'Tortifolia'

II: 25-30mm

lc: falcate (sickle-shaped), overall giving the plant a curled or twisted look to the needles

Abies nordmanniana 'Troutmann'

ha: upright or spreading

Ic: green, twisted to reveal silver below

or: Chris Troutmann

so: Stanley & Sons (online catalog 2001)

Abies nordmanniana 'Variegata'

ns: an old name listed by Zederbaur in 1907. Probably one of the named variegates above.

Abies nordmanniana 'Witch Broom'

ha: dwarf, from a witches broom

or: a clone from Kingsville Nursery MD USA was sold under this illegitimate name. See also 'Broom' above.

ABIES NUMIDICA

Abies numidica 'Aurea' lc: yellow to yellow tinged

Abies numidica 'Delicado' www.edwinsmitsconifers.com, accessed 9.8.2019, not described, no image

Abies numdica 'Drath'

ns, id: a listed name from Germany c. 1990

Abies numidica 'Glauca'

Ic: more glaucous blue

II: shorter needle but also wider

or: Arboretum de Barres, France c. 1900

in: Europe since 1909

Abies numidica 'Lawrenceville'

ha: conical, neat

Ic: rich silvery-blue

or: Skylands Arboretum, NJ from seed of

or: source in Lawrenceville NJ

in: Vermuelen Nursery 1972

ns, id: Krussman refers to a green, dwarf plant of this

ns, id: name.

Abies numidica 'Nana' provisional invalid name

ha: dwarf

lc: bluish-green

or: Jeddeloh Nursery, Germany c. 1980

Abies numidica 'Pendula' ('Glauca Pendula'?)

ha: dwarf, lower limbs trailing is staked, often irregular and odd

in: Hillier Nurserties c. 1971

Abies numidica 'Zwergform' provisional name

ha: dwarf

id: Germany c. 1978, not seen now.

Abies x pardei [Holden Arb]

ns, id: a listed name from Arrowhead Alpines 2006 to distinguish this

ns, id: American clone (Holden Arboretum, OH USA) from their French clone.

ABIES PINDROW

Abies pindrow 'Brevifolia' = A. gamblei

Abies pindrow 'Intermedia'

ns, id: listed name from Eastnor Castle c. 1909, possibly a

ns, id: hybrid to A. spectabilis

Abies pindrow 'Variegata' ('Aureovariegata') lc: needles striped or margins golden-yellow

or: Seneclauze Nursery, France c. 1867

ABIES PINSAPO



Species. Maymont Foundation Gardens, Richmond, Virginia USA. September 2003. This breathtaking tree was given decades to develop on a large estate lawn facing the river. Most importantly it was not "limbed up" to accomodate quick and easy lawn care. Nor was it forced to have just one leader. Firs need to trail and sprawl as The Creator intended. Century old cedars of lebanon surround it. To it's left is a 30 foot tall and remarkable example of Chamaecyparis obtusa 'Tetragona Aurea', easily the finest example of that cultivar in the US, and a nice contrast for the bluish firs.

Abies pinsapo 'Argentea'

Ic: more silvery-grey. It is more silver than the bluer 'Glauca'

or: Europe before 1866

Abies pinsapo 'Atlas' (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies pinsapo 'Aurea'

ha: slower, often a low, rambling shrub unless highly trained. It is small enough for

ha: most small gardens and dwarf conifer collections. It is also used in larger rock gardens. It

ha: can be staked and pruned to develop a neat, conical form typical of the firs.

Ic: bright golden-yellow overall, new growth brightest, old needles cream above. Older foliage is greener.

eval: probably the most popular cultivar in gardens today

or: Seneclauze Nursery, France before 1868

Abies pinsapo 'Aurea Nana'

ha: dwarf lc: yellow

ns: a listed name of doubtful validity in Latin form. Kenwith Nursery UK has listed it in 2001.

Abies pinsapo 'Barbara's Dwarf'

ha: dwarf, compact

Abies pinsapo 'Clarke'

ht: 1m tall (20 years) - original tree

ha: true dwarf, very slow

or: W.B. Clarke, San Jose, CA USA as seedling c. 1948

Abies pinsapo 'Danish Column' www.edwinsmitsconifers.com, accessed 9.8.2019, color photo showing a very blue, erect selection

Abies pinsapo 'Delbert's Dwarf'

ha: compact, dwarf

Abies pinsapo 'Fastigiata'

ha: densely columnar, branches shorter or: Seneclauze Nursery, France before 1868



'Glauca'. Raulston Arboretum. 2008. A very pretty and bright foliage.

Abies pinsapo 'Glauca'

ha: full-sized, vigorous, some plants are more uniformly branched and tiered than seedlings.

Ic: foliage more glaucous blue, very pruinose (waxy and white)

It: foliage is more radial than in some species seedlings

frc: male cones are red and contrast nicely with the blue foliage

prop: seedlings of it come true in part just as with glaucous strains of other

prop: conifers, glaucescence being a common and variable genetic trait in

prop: most species.

eval: grafted trees traced to old arboreta (and presumably the true French clone) are best.

or: Desfosse & Thullier Nur., Orleans, France before 1867.

Abies pinsapo 'Hamondii' ('Hammondii')

ha: dwarf, spreading, very short trunk, growth about 6 inches a year

II: smaller than species typical

or: W.P. Hamond, UK before 1881. It is therefore spelled with just the one "m".

Abies pinsapo var. hispanica = species

Abies pinsapo 'Horstmann' ('Horstmann Nana')

ha: dwarf, dense, very short branches, growing 4 inches a year

Ic: blue-grey, colored much like 'Glauca'

or: Horstmann Nursery, Germany c. 1986

ns: it is not related to A. koreana 'Horstmann' and needs a new name.

Abies pinsapo 'Hupps Single Snake' www.edwinsmitsconifers.com, accessed 9.8.2019, image shows a dark green, virgate or snake-type branching

Abies pinsapo 'Kelleriis' ('Keller', 'Kelleris')

ha: dwarf or compact. Stanley & Sons in the US says their plant is "very fast grower like species".

lc: blue-green

or: D.T. Poulsen, Kelleriis, Denmark c. 1925

in: Jeddeloph Nursery 1972

Abies pinsapo 'Kelleriis Glauca' provisional name

ns: a listed name that "may be distinct" from ordinary 'Kelleriis'. There is some

ns: thought the 1925 'Kelleriis' was reselected to become the plant offered

ns: in the 80's. As the description's of 'Kelleriis' differ from dwarf to vigorous this

ns: group is much in need of taxonomic sorting out.

li: Lewis, J. and A. Leslie. 1987. The Int. conifer reg. Part I. p. 24

Abies pinsapo 'Kilmacurraugh'

ns: a listed name from De Belten Pinetum, Netherlands c. 1962

Abies pinsapo subsp. marocana Emborger & Maire

II: often longer than subsp. pinsapo. This is true of stock sold in the US.

It: needles flatter, wider than subsp. pinsapo

Ic: blue-green, fewer stomatal lines than some subsp. pinsapo

bud: less resinous than subsp. pinsapo

frq: female strobili 5-7 in. long - larger than most subsp. pinsapo.

ns: it is a geographic variant located in a small mountain area but

ns: is highly ornamental in some arboreta. It is a transition to A.

ns: numidica but it not considered a hybrid to it. As it has a geographical

ns: limit the rank of subspecies is superior to that of botanical variety.

geo: Morocco, Algeria

Abies pinsapo 'Marokko' (2/2007)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies pinsapo 'Nana'

ht: 90cm (20 years)

ha: dwarf

or: W.B. Clarke, San Jose CA USA c. 1933, first sold 1935

id, ns: this name predates 'Clarke' so it is believed to be another

id, ns: plant. denOuden & Boom do not cover it and it may be lost?

Abies pinsapo 'Nana Glauca'

li; Eiselt, M.G. 1976. Nadelgeholze Ed. 4

Abies pinsapo 'Pendula'

ha: weeping

Abies pinsapo 'Prostrata'

ha: prostrate, presumably a cultivariant which any fir should be able to produce

or: known from Zederbaur 1907 and not seen in the modern trade (2003).

Abies pinsapo 'Pygmaea'

ha: densely pyramidal, true dwarf

or: Seneclauze Nursery, France before 1868

Abies pinsapo 'Pyramidata' ('Pyramidalis Compacta')

ha: compact, conical, limbs more distinctly ascending

Abies pinsapo 'Pyramidalis Glauca' illegitimate name

ha: densely pyramidal to conical

lc: rich blue-green, more glaucous than normal

or: P.C. Detriche, Angers, France c. 1972

Abies pinsapo 'Quicksilver' ('Quick Silver')

ha: dwarf, silvery-grey

in: Don Hatch Nurseries, Devon, England c. 1984

Abies pinsapo var. marocana 'Ronda Mountain' (3/7)

ha: dwarf

lc: medium green

so: www.hulsdonk.com (online catalog 2007)

Abies pinsapo 'San Diego Creeper'

ha: procumbent at first, low spreading, slow, eventually have a nest-like center

lc: glossy green

or: F.J. Crowe, San Diego CA USA before 1980

Abies pinsapo 'Variegata' ('Foliis Variegatus'?)

Ic: variegated in some manner

ns: described by Gordon in 1858 but almost certainly lost to cultivation. Lawson used

ns: the name 'Foliis Variegatus' in 1850 for what could be the same mutation.

Abies pinsapo 'Weeping Blue' ('Pendula Glauca'?)

ha: pendulous

Ic: blue much like 'Glauca'

or: sold in the US c. 1980

ns: it may be the 'Pendula Glauca' (clearly illegitimate name) known in collections

li: Hatch, L.C. 1983. Ref. guide to ornamental plt. cultivars. TCR Press. p. 4

Abies pinsapo x Abies cephalonica = A. x vilmorinii

ABIES PROCERA

Abies procera f. glauca 'Argentea'

lc: needles bluish-white, giving silvery sheens. An extreme silvery variant from f. glauca.

or: Europe, probably Germany before 1886 when published by Freundenberg.

Abies procera 'Barbara's Dwarf'

li: Hatch, L.C. 1983. Reference guide to ornamental plant cultivars. Taxonomic Computer Res. p. 4 (name only, listed in collections)

Abies procera 'Blaue Hexe'

ha: dwarf, growth about 1 inch a year, flat bun in time

lc: bluish-green

ns: name literally translates to "blue witch", more accurately a blue witches broom.

or, in: C.D. Boehjie Nursery, Germany 1965 as broom

Abies procera 'Blue Spiral'

ht: 20 ft. tall x 3 ft. wide

ha: narrowly columnar

lc: rich blue

or: Stanley & Sons, OR USA found as Christmas tree

Abies procera 'DelBar Cascade'

ha: narrowly weeping, an inverted style, reminding one of Picea glauca 'Pendula'

ph: https://kiginursery.com/conifers/abies-procera-delbar-cascade-weeping-blue-noble-fir/, accessed 9.8.2019

Abies procera 'Delbert's Dwarf'

li: Hatch, L.C. 1983. Reference guide to ornamental plant cultivars.

li: Taxonomic Computer Res. p. 4 (name only, listed in collections)

Abies procera 'Fastigiata' provisional invalid name

ha: narrowly columner

ns: Latin name is post-1959 and thus invalid

in: Buchholz & Buchholz Nursery c. 1994 from old Christmas tree farm

li: Jacobson, A.L. 1996. North Amer. Land. Trees. Tenspeed Press. p. 9.

Abies procera 'Franken'

ns, id: a listed name from Holland per Welch and Haddow (1993).

Abies procera 'Frijsenborg' ('Frijsenberg')

lc: bluer

ch: more cold hardy

dr: said to be disease resistant. Details needed!

or: Frijsenborg estate, Denmark



f. glauca (Ravenscroft) Rehd. Pinetum, Highland Park Arboretum., Rochester, NY. August 2005. This lovely giant was planted in 1918. The warm, near Lake Ontario, USDA 5 climate of Rochester suits the firs much better than the colder Syracuse at USDA 4.

Abies procera f. glauca (Ravenscroft) Rehd., 'Glauca', Glauca Group, var. glaucifolia Sudworth) lc: richer greenish-blue, a more glaucous plant frq: female strobili often numerous in cultivation.

or: England c. 1863

ns, id: it is not a clone but instead a wild variation on the glaucescence continuum as occurs in

ns, id: most spruce and fir species. The RHS use Glauca Group but once again it is indistinct from

ns, id: the wild, botanical form, proving entirely redundant except that good seedlings are sometimes

ns, id: grafted.

Isp: there are many good ones in Europe. In the US one planted in 1918 and

lsp: still very pretty exists at Highland Park, Rochester in the old Pinetum.

Abies procera 'Glauca Nana' provisional invalid name

ha: dwarf, irregular arching, may or not develop strong leader

lc: rich powder blue

Abies procera 'Glauca Prostrata' (f. prostrata in part, 'Compacta', 'Procumbens')

ha: low spreading to mounded, prostrate to irregular flat-topped shrub, variable overall, leaders

ha: can develop but are best removed or trained.

Ic: richer, more glaucous blue

or: culivariant of f. glauca, that is a lateral, basal, or spreading shoot and not from a terminal. It was

or: known to Hornibrook as f. prostrata before 1932

ns: f. prostrata (Horn.) Rehd. seems to refer to any prostrate, cultivariant plant but invariably people

ns: : always grow the bluest sorts which are covered here by 'Glauca Prostrata'. If a good prostrate green

ns: selection proves itself, a new cultivar name should be assigned to it. One

ns: named clone of bluish-gray and compact appearance is 'Nobel', described below.

in: Hillier Nurseries, England, 1928-29 catalog.

Abies procera 'Hupps Prostrate' (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies procera 'Jeddeloh'

ha: dward, from witchesbroom

lc: bluish-green, not so blue as 'Blaue Hexe'

or: Jeddeloh Nursery, Germany before 1979 as broom

Abies procera 'La Graciosa'

ht: 3 ft. tall x 5 ft. wide

ha: broadly mounded, semi-dwarf, branches long and spreading, strongly pendulous, growth 6 in. a year,

ha: some upright terminal shoots will develop

or: Christmas tree field, Evans Farm, near Oregon City, OR USA

in: Porterhowse Farms c. 1998, also listed by Stanley & Sons 2002

Abies procera 'Mount Hood'

ha: procument

lc: golden-yellow

or: Jean Iseli before 1989. I'm guessing it could be a cultivariant of

or: 'Sherwoodii' as Jean often liked to experiment with this type of

or: propagation.

Abies procera 'Mount Sii' ('Mt. Sii') (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies procera 'Nellemann' ('Argentea Nellemann')

ha: stronger than 'Blaue Hexe'

lc: rich blue

in: UK c. 1987

Abies procera 'Noble's Dwarf' ('Nobel', 'Hlauca Noble', 'Noble')

ha: decumbent, a cultivariant type spreader, compact

lc: bluish-gray

II: needles smaller than species typical

or: James Noble Conifer Collection, San Francisco, CA

li: Hatch, L.C. 1983. Reference guide to ornamental plant cultivars. Taxonomic Computer Res. p. 4 as 'Nobel'

Abies procera 'Rat Tail'

ha: smal, sparse, tree-form, rat-tail like appearance lt: needles very appressed giving a distinct appearance

Abies procera 'Robusta' (var. robustifolia Sudworth)

ha: robust, stronger II: needles larger

It: needles thicker

or: Europe before 1891.

ns: it is not A. nobilis robusta of Masters which equates to A. magnifica var. shastensis (Lemm.) Lemm.

so: probably lost to cultivation

Abies procera 'Sherwoodii' ('Aurea Sherwoodii', 'Aurea')

ht, ha: 25 ft. - smaller, slower

Ic: golden-yellow all year, colored mainly on the upper side of shoots where sun reaches them

or: Andy Sherman, Sherwood Nursery, Portland OR, named 1948, found in 1933 as a lightning struck tree

Abies procera [silver] (2/7)

ns, so: listed name with www.bethlehemnursery.com (online catalog 2007), no description

Abies procera 'Stanley's Select'

ha: upright, conical, neat, "nice main leader" and "the perfect Christmas tree"

lc: rich turquoise blue

or: Stanley & Sons Nursery, OR USA c. 1972

ABIES SIBIRICA

Abies sibirica 'Alba'

Ic: leaves paler green, very white below

or: Russia c. 1853

in: France before 1855

Abies sibirica 'Candelabrum'

ha: erect, candelabra-type form

or: Moscow befoe 1894 from a notable tree

Abies sibirica 'Columnaris'

ha: narower

in: Europe before 1914 when Beissner named it

Abies sibirica 'Compacta'

ha: dwarf

Abies sibirica 'Elegans'

ha: dwarf

or: Lobkowitz Nursery before 1891

Abies sibirica 'Glauca'

lc: bluer

It: needles curved

or: Mr. Schroeder, Moscow c. 1891

Abies sibirica 'Monstrosa'

ha: dwarf, twisted, tufted

It: needles also twisted

or: Schroeder, Moscow before 1891

Abies sibirica 'Parvula' ha: smaller, slower

in: Schroeder, Moscow before 1894

Abies sibirica 'Pendula' ha: strongly pendulous

or: Regal and Kesselring Nurseries before 1894

so: by all accounts it seems to be lost.

Abies sibirica 'Pumila' ha: dwarf, no leader

or: Schroeder, Moscow before 1894

Abies sibirica 'Pyramidalis' ha: more erect, pyramidal

or: Schroeder, Moscow before 1894

Abies sibirica 'Variegata'

Ic: some branchlets with yellow to cream leaves

or: Europe before 1866, likely a sport in other times and places

ABIES SPECTABILIS

Abies spectabis 'Affinis' lc: more bluish-white below in: Europe before 1867

Abies spectabilis var. densa (Griffith) Silba

ha: denser, but a large tree

Abies spectabilis 'Intermedia'

ns, id: thought to be a cross to A. pindrow.

Abies squamata 'Flakey'

ns, id: a listed name from Arrowhead Alpines 2006.

Abies x vasconcellosiana 'Amaral Franco'

or: Franco, Pena Park, Sintra as clone of A. pindrow x A. pinsapo c. 1961

ABIES VEITCHII

Abies veitchii 'Aurea' provisional name - likely invalid

ha: conical

lc: golden-yellow

ns: this Latin name is of doubtful validity.

Abies veitchii 'Dravenack' ('Otevenack') (12/11)

ha: dwarf, compact

Abies veitchii 'Geelvaal'

ns: a listed name from Europe c. 2001

Abies veitchii 'Glauca' provisional name - likely invalid

lc: steel blue

ns: Welch and Haddow (1993) trace it to Germany in 1968

Abies veitchii 'Haltern'

ha: dwarf, leaves whorled at shoot tips ns: a listed name from Europe c. 2003

Abies veitchii 'Hedergott' ('HB Heddersott'?, 'Hexenbesen Heddergott')

ha: dwarf, vase-shaped in time, irregularly overall, 1 in. growth rate a year

Ic: bright green and silver

or: Wustemeyer, Germany c. 1986

so: Stanley and Sons (online catalog 2001)

Abies veitchii 'Hegechroat'

so: Stanley and Sons (online catalog 2003), name only. Description needed.

Abies veitchii 'Heine' ('Hexenbesen Wustermeyer')

ha: a dwarf witchesbroom clone

Abies veitchii 'Horstmann' (12/11)

ha: dwarf

Ic: green and silver, much more stomatal than others

Abies veitchii 'Jeddeloh Weeping' ('Pendula'invalid) NEW NAME

ht: 2.5m tall (7 years)

ha: drooping, eventually a very elegant shape

or: Jeddeloh Nursery, Germany c. 1970, first sold about 1973

li: Lewis, J. 1987. The international conifer register part I. RHS. p. 34.

Abies veitchii 'Kramer'

ha: dwarf witchesbroom clone.

Abies veitchii 'Minima' provisional name - likely invalid

ha: dwarf

Abies veitchii var. nikkoensis Mayr

frt: female cones with slightly exerted bracts

frd: female cones smaller than var. veitchii (5cm vs. 6-7cm)

ns: this name is not found in all modern treatments.

Abies veitchii f. olivacea (Shirasawa) Kusaka

ha: at least one clone in gardens is more narrow, upright than var. veitchii

frc: female cones olive green at first, later greyish-brown - var. veitchii is a nice bluish-purple when immature

ns: treatment as a botanical form seems more logical as it differs mainly in the one trait (immature cone color). Unique

ns: garden clones of it (ie. narrower habit) should be named as cultivar clones.

Abies veitchii 'Pendula' = 'Jeddeloh Weeping'

Abies veitchii 'Rako' (12/11)

Abies veitchii var. reflexa Koidzumi = var. veitchii

Abies veitchii 'Rumburg' ('Rumburck')

ha: cushion-shaped, dwarf, 1-2 inches growth a year

Ic: green and silver, the new tips often very silvery and pretty

so: Coenosium Gardens (since about 2001)

Abies veitchii 'WBK'

ns: a listed name. Description needed.

Abies vejeri 'Serpent'

ha: procumbent with branches long and irregular with few laterals

li: RHS Conifer Register 1947-84: 6

li: Welch, H.J. 1990. The conifer manual. Kluwer Press. p. 140

One plant of each of the following:

35173. X ABIES VILMORINII Masters.

Spruce.

"A remarkable hybrid (A. pinsapo × cephalonica), very beautiful, hardy, growing well in the same soils in which the parent species grow." (Vilmorin-Andrieux & Cie., Catalogue, 1913-1914).

"Vilmorin's fir. A hybrid between A. cephalonica and A. pinsapo, the latter the seed bearer. Only one fertile seed was produced, but from it was developed the fine tree at Verrières, near Paris, now about 50 feet high. Its leaves are intermediate, but more like those of A. pinsapo; they resemble those of A. cephalonica in having stomata on the lower surface only. The cross was made by the late Henri de Vilmorin in 1867. Many seedlings, mostly intermediate between it and one or other of the parents, have been raised at Verrières." (W. J. Bean, Trees and Shrubs Hardy in the British Isles, vol. 1, p. 120.)

The story of A. x vilmorinii told by the USDA Inventory of plants and seeds.

Abies x vilmorinii 'Pendula' (A. pinsapo x A. cephalonica) ha: pendulous

Abies x vilmorinii 'Rosemoor' (12/11) ns, id: a British clone of this cross.

ARAUCARIA

Araucaria angustifolia 'Elegans' (var. gracilis Carr.)

ha: leaves more dense and appressed on the stem

Iw: needles narrower than species typical It: needles less stiff than species typical

la: less acute than species typical

or: known in Europe since 1852

Araucaria angustifolia 'Ridolfiana'

ha: more vigorous, robust than species typical

II, lw: longer and wider needles than species typical

ns: it is not related to A. ridolfiana Savi

or: known since 1858

Araucaria angustifolia 'Saviana'

Ic: more glaucous blue than species typical

lw: narrower needle than species typical

or: known since 1868

Araucaria araucana 'Andenzwerg'

ha: dwarf, slower, 10cm growth rate a year

II: smaller than species typical

or: G. Horstmann, Germany from seed collected in Parque Nacional Tolhuaca, Chile

Araucaria araucana 'Angustifolia'
ha: branches narrower and more elongated than species typical
Araucaria araucana 'Aurea'
lc: golden-yellow or: Taylor from Castle Kennedy c. 1855 in: W. Barron & Sons, Barrowash, England to trade
Araucaria araucana 'Auslese' provisional invalid name
or: Horstmann Nursery, Germany c. 1983, the name meaning "select" is not valid as a cultivar.
Araucaria araucana 'Densa'
ha: branches loose and sparse (despite the name), only the leaves dense and closely spaced or: known since 1867 so: denOuden & Boom (1965) say it was no longer in cultivation.
Araucaria araucana 'Denudata'
ha: branches sparse and less numerous II: shorter than species typical or: A. Leroy, Angiers, France before 1867
Araucaria araucana 'Distans'
ha: vigorous, major whorls of branches about 1m apart (ie. distant) or: known since before 1867
Araucaria araucana 'Kurt Sachs'
ch: more cold hardy - having survived in Hamburg, Germany for decades without damage
Araucaria araucana 'Platifolia' ('Platyfolia')
II: shorter thanb species typical lw: wider than species typical ns: the spelling 'Platifolia' is preferred here rather than the incorrect 'Platyfolia' seen in Krussman.
Araucaria araucana 'Striata'
lc, st: stems and leaves striped yellow or: A. Leroy, Angiers, France before 1858
Araucaria araucana 'Variegata'
lc: needles a mix of green and light yellow, some shoots all green or: Glendinings Nursery, Turnham Green, England before 1858

Araucaria cunninghamii 'Glauca' Ic: silvery-blue to blue-gray or: Moreton Bay before 1840 in: Loddiges Nursery to European trade c. 1840 Araucaria cunninghamii 'Longifolia' II: longer than species typical ls: straighter, less curved than species typical Araucaria cunninghamii 'Pendula' ha: pendulous or: known since 1867 Araucaria cunninghamii 'Taxifolia' ha: densely branched but not in clusters It: shoted 2-ranked as with some Taxus or: known since 1867 Araucaria excelsa = A. heterophylla Araucaria heterophylla 'Alba' = 'Albospica'? ha: branches shorter, thinner Ic: new growth very pale, nearly white, later more green Araucaria heterophylla 'Albospica' ('Silver Star', variegata alba Carr.) Ic: mottled silvery-white, often mostly green later or: known in Europe snce 1867 Araucaria heterophylla 'Astrid' ('Leopold Astrid') ha: compact, graceful, uniform tiers, more vigorous than 'Gracilis' It: needles smaller, thicker Araucaria heterophylla 'Aurea Marginata' Janssen in Vegetaux d'ornaments 155 (1883, not described) Araucaria heterophylla 'Aurea Variegata' Ic: blue-green (more glaucous) with a broad yellow stripe or: known since 1867 Araucaria heterophylla 'Compacta' ha: denser, compact

or: known since 1891 per Krussman

Araucaria heterophylla 'Cookii' Janssen in Vegetaux d'ornaments 155 (1883, not described, as cooki, apparently not A. cookii as described as a variety of A. excelsa)

Araucaria heterophylla 'Glauca'

ha: slightly slower than species typical, not as robust or full ha: as 'Joseph Napolean Baumann' aka 'Glauca Robusta'

lc: glaucous blue-green

Araucaria heterophylla 'Glauca Baumani' = 'Joseph Napolean Baumann'

Araucaria heterophylla 'Glauca Robusta' = 'Joseph Napolean Baumann'

Araucaria heterophylla 'Gracilis'

ha: slower and more compact than species typical, graceful, branches turning downward. Has a

ha: "frilled appearance" according to Graf.

It: needles thinner

Ic: lighter green than species typical

lu: it is widely grown as a potted indoor plant. It is likely some of the stock under the species name is

lu: of this clone or one very similar.

Araucaria heterophylla 'Joseph Napoleon Baumann' ('Glauca Robusta', 'Napolean Baumann', 'Napolean Beaumann')

ha: more vigorous, branches "broad" in flat planes, some

ha: say it's more compact lc: bluish-green at first

Araucaria heterophylla 'Leopoldii'

ha: compact lc: bluer green

or: Europe since 1923

Araucaria heterophylla 'Ludwig Abel' (A. excelsa var. "Ludwig Abel", anonymous, Wien. III. Gart. I: 7-10 (1876)



This plate from Wiener Illustrirte Garten-Zeitung shows the unique habit of this selected clone as opposed to their concept of species typical shown below. This clone is absent from the majority of conifer references and appears to have been missed by most conifers experts over the years.



ha: branches with more erect, v-shaped branchlets, never

ha: horizontal or pendulous as a entire branch.

Araucaria heterophylla 'Monstrosa'

ha: branches often clustered, irregular

Ic: shoots often white-tipped

or: known since 1867

Araucaria heterophylla 'Muelleri' ('Mulleri')

ha: more vigorous than species typical

in: J. Linden

Araucaria heterophylla 'Multiceps'

ha: "close position of branches" lc: sometimes of "reddish hue"

Araucaria heterophylla 'Niepraschkii'

ha: more vigorous lc: darker green

Araucaria heterophylla 'Pendula' Janssen in Vegetaux d'ornaments 155 (1883, not described)

Araucaria heterophylla 'Robusta' (A. sanderiana hort., A. goldieana hort.)

ha: stronger, more vigorous

Ic: darker green than species typical

or: known in Europe since 1881

Araucaria heterophylla 'Rulei' = A. rulei, not likely a taxon belong to this A. heterophylla though the name A. rulei is thought to have represented at least 3 taxa in the early years.

Araucaria heterophylla 'Silver Star' = 'Albospica'

Araucaria heterophylla 'Simplex' (var. simplex, May in Rev. Hort. 1884: 229-230)

ns, id: an older name

Araucaria heterophylla 'Speciossima' (A. excelsa speciosissima Carr., Rev. Hort. 184: 451)

ha: resembling a more compact A. cunninghammii but

ha: not belonging to that species. Said to be intermediate between

ha: the species and 'Compacta' in density.

II: to 4cm long

It: needles curlved

or: Rougier, Chauviere, France before 1847

Araucaria heterophylla variegata alba = 'Albospica'

Araucaria heterophylla 'Virgata'

ha: branches much elongated and hardly branched or: found in garden at Palermo, Silily before 1906

Araucaria heterophylla 'Viridis' Janssen in Vegetaux d'ornaments 155 (1883, not described)

Araucaria rulei 'Goldieana'

ha: more graceful than species typical

II: smaller than species typical

Araucaria rulei 'Elegans'

ha: branch whorls more closely spaced, branches thinner than species typical

II: smaller than species typical or: known since before 1844

AUSTROCEDRUS



A. chilensis. Charles R. Keith Arboretum. Summer 2009. It proves USDA 7b hardiness there.

The primary species A.chilensis is sometimes kept under Libocedrus but Florin nd Boutelje's proposal for this genus from 1954 seems well accepted in the conifer-loving world, both taxonomic and commercial.

Austrocedrus chilensis 'Argentea'

lc: whitish

or: Seneclauze, France as seedling c. 1868

Austrocedrus chilensis 'Thornhayes Ghost' (3/7)

Ic: more silvery

so: www.thornhayes-nursery.co.uk (online catalog 2007)

Austrocedrus chilensis 'Viridis'

Ic: all green, lacking stomatal lines

ns, id: may prove to be a botanical taxon of some kind.

or: known to Carriere in France in 1867

Austrocedrus chilensis 'Viridis Compacta'

ha: compact, smaller

or: Seneclauze, France before 1868