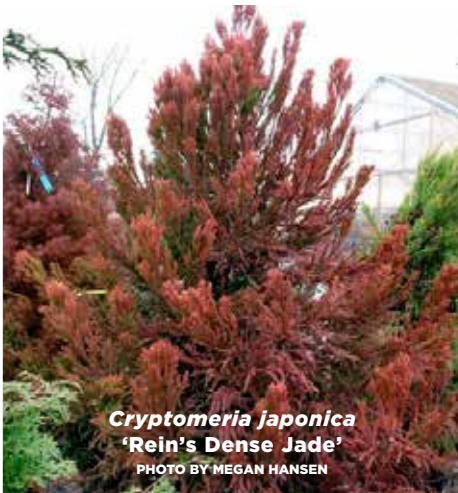


Expanding the tree palette

BY ELIZABETH PETERSEN



TRIED-AND-TRUE TREES punctuate the skies above cities and suburbs, lining streets and casting shade. But, too much of a good thing can cause problems. When there's too many of just one tree variety planted, disease and/or insects can find a way to wreak havoc on whole groves.

"We need a diverse, resilient urban forest," said Martin Nicholson, curator of Hoyt Arboretum in Portland, Oregon. "So

it is important not to overplant any one type of tree."

In Portland, for instance, maple trees make up nearly 30 percent of the city's tree canopy. Instead of planting more of the same, designers and property owners have an opportunity to consider other options.

But without a history of reliability in a region, it can be challenging to choose from lesser-known tree options.

Knowledge is power, though, and tree

experts are ready to suggest great trees that deserve wider use.

Hoyt Arboretum, which houses large collections of trees and shrubs, including some 1,300 species or cultivars of trees, is a great local resource. Trees from a variety of native ranges are tested there to establish how appropriate they are for use in the Pacific Northwest.

Of course, just knowing about a great tree is not enough; trees also have to **>>**

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be available on the market, so the industry also needs to keep seeking new options and to push the envelope for what can perform well in the area.

The curator

As Hoyt's curator since 2008, Nicholson has watched trees weather seasonal extremes and has identified some trees that offer hardiness as well as well-needed diversity.

One such tree is the silverleaf oak (*Quercus hypoleucoides*), which has been tested by 20 years of cold, harsh, rainy winters and hot, dry summers growing in front of the Visitor Center at Hoyt. In early June, beautiful new growth on the tree attracted the attention of visitors, few of whom knew the tree. "It doesn't look like an oak tree," Nicholson said. Even many arborists don't recognize it as such.

The tough, resilient, drought-tolerant



tree thrives in its current location, and it is "variably evergreen," Nicholson said, meaning it loses leaves during the course of the year and produces some litter.

Growing to about 30 feet tall in 20 years, the southwestern native boasts attractive, leathery foliage. Its narrow, dark green leaves are contrasted by dramatic white undersides.

Nicholson credits Sean Hogan of Cistus Nursery with including the silverleaf oak in the design at Hoyt, and Cistus is among the few Oregon nurseries that offer it for sale.

Another tree that boasts great character, *Maytenus boaria*, is commonly grown as a California street tree, Nicholson said. The evergreen tree reaches 20–30 feet tall, with upright branches and small, bright green leaves. It has been found to be more tolerant of cold than originally thought, so Hoyt has been sending cuttings to growers to trial.

With the tag of "Hoyt Hardy" to identify the source of the cuttings, the cold-hardy tree may prove to be an appropriate choice outside its native range of South America.

Even though *Stewartia pseudocamellia* is popular and available, other varieties in the genus have great characteristics that deserve wider use, Nicholson said. *S. monadelpha* has a tall form with great growth and eye-catching, bright orange bark. *S. rostrata* grows more slowly into a beautiful, rounded smaller tree with white flowers.

Davidia involucreta performs well as a yard tree, but it doesn't like the heat of the street, Nicholson said. Known as the "dove tree" or "handkerchief tree," *Davidia* is part of the dogwood family and blooms from April to May with breathtaking inflorescences, each composed of a small reddish flower and long, pure white bracts, which are said to resemble dangling handkerchiefs or doves resting on the branches.

'Tricolor' has "really remarkable variegation," Nicholson said. He also said visitors to the arboretum are fascinated by the cultivar 'Sonoma', which has bracts that are more than twice the normal size.

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Birch trees that resist the bronze birch borer also deserve increased use, and Nicholson's favorite is a Japanese native — the monarch birch (*Betula maximowicziana*). Not only does it have good resistance to borers, it also has great form and striking, 6-inch catkins.

For outstanding fall color, Nicholson recommended *Larix kaempferi*, the Japanese larch. Smaller than the Western larch, this deciduous conifer is very cold hardy; bright green needles turn a remarkable yellow and orange in fall.

Pseudolarix amabilis, known as the golden larch, also produces great fall color and should be used more, Nicholson said. Although also a deciduous conifer, it is not a true larch. Still, the beautiful tree likes full sun and heat, making it a good choice for a wide swath of the country, including the southeastern U.S.

The breeder/researcher

Ryan Contreras of Oregon State University's Department of Horticulture is an ornamental plant breeder and researcher. His goal is to develop plants that are well suited for production and that meet the needs of gardeners.

He offered several recommendations for undeservedly underused trees.

Selections of *Cryptomeria japonica*, the Japanese cedar, are available in many sizes and shapes to fit virtually every landscape need, he said. From little round balls to fastigate forms and unusual foliage, these versatile dwarf conifers have great potential.

Contreras recommended the narrowly upright *C. japonica* 'Rein's Dense Jade' for its formal appearance, dense growth and superior branching. Its foliage provides added interest, taking on bronzy purple tones in winter.

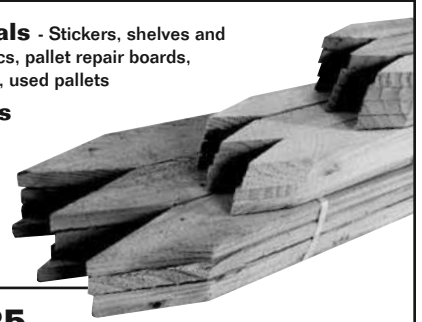
As a big fan of tree lilacs, Contreras recommends *Syringa reticulata*. Few issues affect the trees, which grow 20–30 feet tall. Unlike shrub lilacs, the tree blooms at a different time, producing large clusters of small, creamy white flowers from late spring to early summer — their fragrance is “amazing,” Contreras said. Beautiful reddish-brown bark that resembles



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cherry trees adds to the appeal.

Contreras spoke well of another bronze birch borer-resistant species, *Betula nigra*. Good resistance and attractive exfoliating bark make it superior to species like *B. pendula* and *B. utilis* var. *jacquemontii*, both of which are susceptible to the pest.

Finally, tree-form crape myrtles do well in the Pacific Northwest and deserve greater use, Contreras stated. Many choices, especially among the *Lagerstroemia fauriei* types and hybrids, offer an assortment of sizes and shapes for a variety of situations.

One of his favorites is 'Fantasy' for its attractive cinnamon, exfoliating bark. Discovered at the JC Raulston Arboretum in North Carolina, it is one of five *L. fauriei* seedlings grown from seed collected in Japan. White flowers appear in June, but in mid-summer, the bark show kicks in as rich cinnamon-brown bark exfoliates



in sheets and reveals smooth orange, white and pale reddish-brown bark.

'Fantasy' grows much larger than the common crape myrtle (*L. indica*), has golden fall color and boasts strong resistance to powdery mildew.

Contreras credited Paul Bonine, owner of wholesale specialty plant nursery Xera Plants in Sherwood, Oregon, with boosting the availability of proven crape myrtle cultivars in the Pacific Northwest. Xera Plants offers varieties specifically grown and tested for their propensity to bloom in local summers that are cooler than those in southern states.

The arborist

Kevin Carr, certified arborist with Collier Arbor Care, a division of Bartlett Tree Experts in Clackamas, Oregon, shared his thoughts on lesser-used options for choice trees.



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As an arborist who deals with tree issues day in and day out, Carr promotes trees that require limited input for optimal plant health, especially ones that are not impacted by pests and other problems.

He agreed that crape myrtles are a great choice for hot, full-sun conditions. Crape myrtles adapt to a wide range of conditions, he said, including the moderate winter and long growing season of the Pacific Northwest. These trees take pruning well, too, and size reduction tends to stimulate increased bloom and keeps the trees from outgrowing their bounds, he said.

Another recommendation from Carr is a smaller, tighter, upright selection of western red cedar, *Thuja plicata* 'Hogan'. A naturally occurring form, 'Hogan' stays much smaller than its full-size sibling, maintaining a symmetrical, columnar shape that tops out at about 40 feet. Widely adaptable, it makes an excellent hedge or specimen in a smaller space.

Carr said *Nyssa sylvatica* (black gum or tupelo) is "almost bulletproof." He recommended the large, stately tree for its outstanding adaptability to both dry and wet conditions, and for its beautiful fall color. In fact, a specimen of *N. sylvatica* was planted recently as a memorial to the late Terrill Collier, the long-time owner of Collier Arbor Care who passed away last year, as it was one of his favorite trees.

Another Carr selection is *Maclura pomifera* (Osage orange). Native to the Southeast and Texas, it becomes a large tree with yellow fall color and unusual fruit that looks like a brain. Since the fruit is inedible and somewhat messy, selecting a sterile cultivar can be a good option.

A fine street tree, *Oxydendrum arboreum* (sourwood) is adaptable and has fabulous fall color, Carr said. Chains of creamy white, bell-shaped flowers appear in August and put on a show as green leaves turn into a multi-colored fall display. Carr recommended watering young trees and minimizing competition beneath trees by mulching.

The Washingtonian

Richie Steffen is the curator at the >>

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Elisabeth C. Miller Botanical Garden in Seattle, Washington. He listed off a number of trees that deserve to be more widely planted, starting with *Fagus sylvatica* 'Rohan Obelisk' (syn. 'Red Obelisk'). It tolerates pollution and has upright, very narrow form that works well in a tight spot or as a vertical accent.

Acer saccharum 'BarrettCole' APOLLO® can be used as a street tree or in a small urban garden with limited space. Uniquely narrow, only half the size of the regular sugar maple, it radiates orange and gold fall color, and tolerates sandy and clay soils.

Corylus colurna, the Turkish filbert, is a stately, trouble-free ornamental shade tree for urban or dry sites.

For housing developments and yards, Steffen recommended *Chionanthus retusus*, especially named forms. They're reliable,



easy-to-grow small trees with nice, rounded habits that tolerate drought. Fringed white flowers in early summer support bees.

Magnolia × kewensis 'Wada's Memory' is a small tree that needs little pruning to maintain its strong pyramidal form. Grown from seed from Japan in the Washington Park Arboretum in Seattle, the "superior clone" produces loads of large white flowers in early spring.

For a woodland setting, *Carpinus japonica* (Japanese hornbeam) boasts an elegant, layered habit and attractive leaves with toothed edges and prominent veins. Dry papery catkins resemble hops.

A dramatic small tree, *Cornus kousa* 'Summer Gold' PP22765 has bright, variegated foliage, white spring bracts and dramatic fall color that changes from pink to red.

The Chicagoan

For a different regional perspective, Kris Bachtell, vice president of collections and facilities for The Morton Arboretum in Chicago, offered some suggestions.

Bachtell oversees a 220,000 specimen collection and works with Chicagoland Grows® Plant Introduction Program to develop, select and market plant cultivars that offer "fine ornamental attributes and proven dependability to both landscape professionals and home gardeners."

Bachtell noted that North American native trees provide a wealth of opportunity for breeders and growers seeking to expand their palette of plants, especially for big-scale projects.

For example, he said that hickory trees in the genus *Carya* have great potential for increased use. Bitternut (*C. cordiformis*) and shagbark hickory (*C. ovata*) both become very large trees that should be reserved for large sites, but pecan (*C. illinoensis*), while still a large tree, is a better choice for urban sites. ☺

Elizabeth Petersen writes for the garden industry and teaches SAT/ACT test prep at www.satpreppdx.com. She can be reached at gardenwrite@comcast.net or satpreppdx@comcast.net.

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