



## Getting New Trees to Market Is Not Easy: Part 2

*by Marilyn Loser*

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NOTICE: Alamosa Arbor Week will be April 14 – 20 this year. Once the Park Tree Inventory, funded by a Colorado Tree Coalition grant, is completed, we'll determine where to plant 17 trees funded by Alamosa Parks and Recreation.

In Part 1, I discussed the process of bringing new trees to market. In this column I'll discuss some trees I learned about at the recent Colorado Tree Diversity Conference that might do well in Alamosa. I've tried to select trees that are available in "the trade" – those that can be found at nurseries around the country. I encourage you to consult local nurseries. If I had a choice of purchasing a tree that was grown in Missouri or one grown in North Dakota, I'd pick the ND one as it was probably grown in an environment more similar to our own.

Sources vary on cold hardiness zones. I tried to find reliable sources that listed the following trees as zone 3 or zone 4.

At the conference, I was particularly interested in hearing Kris Bactell speak. He works at the Morton Arboretum just outside of Chicago but has done a lot of plant collecting in northern China. Why China? "There are a lot of species and some similar climates to ours," he said. He disagrees with the idea that you should only plant natives rather than exotics.

"With climate change, if we only plant natives they may not continue to do well," he explained. "It is predicted that the world climate will be changing rapidly. New pests and diseases continue to be recognized. New plants, ones that are more adaptable, are needed more than ever." He particularly likes to collect plants that do well in a variety of environments – they're more likely to survive climate change.

He said there is a lot of stuff in China he would not collect – plants that would be invasive. New plants take 5 – 10 years of watching before being put out to market. He looks for specimens that broaden genetic diversity, increase hardiness and vigor, and adapt to many climates.

Chinese Yellowwood or Maackia (*Maackia amurensis*), has multi-divided leaflets, is slow growing, and usually listed as zone 3. Bactell said he took a photo of one on an old lava flow in China. It's a nitrogen fixer, has off-white flowers tinged with blue, and is very attractive to bees. Wikipedia says it only grows to about 15 feet in the American Midwest, tolerates severe dryness (once established), tolerates cold and heavy clay soils.

Peking Lilac (*Syringa pekinensis* 'China Snow') isn't new. The seed was first collected in Gansu Province, China, in the 1920s. It is a medium-sized flowering tree with late spring blooms of creamy white. It can be grown as a single or multi-stemmed plant.

Bactell suggested a hybrid Korean and Japanese maple (*Acer pseudosieboldianum* x *a. palmatum*) called Northern Glow Maple. According to Wikipedia, it has been grown in North Dakota, where it has done well in temperatures as low as -40 degrees. Its graceful, spreading form glows bright red and orange in the fall.

Greg Morgenson, Research Specialist at North Dakota State University (NDSU), works with plants well adapted to climatic zones 3 through 5 of the northern U.S. and southern Canada. Winters with lows of -20 degrees are typical in the Fargo, ND area.

He suggests Prairie Gem Flowering Pear (Trade Mark (TM) -- 1990) (*Pyrus ussuriensis* 'MorDak'). It is fast growing, zone 3 tree. You can get fruit, but need more than one tree for cross pollination.

Morgenson also recommends Pekin lilac (*Syringa pekinensis* 'Copper Curls'). It is a non-suckering, small tree or tall shrub that can be multi-stemmed. The large, creamy white, fragrant flower clusters appear in mid-June. Pekin lilac has good drought tolerance once it is established and is hardy to zone 3.

A tree he said he uses a lot is the Manchurian Alder - Prairie Horizon(TM - 2003) (*Alnus hirsuta* cv. 'Harbin' ) It is the most drought tolerant alder evaluated in NDSU trials. It's a rapid-growing, medium-sized tree with lush dark green leaves. Bark is gray and beech-like. Purple catkins and clusters of brown, cone-like fruit add interest to the tree throughout winter. Morgenson said mulching is recommended and that the zone 3 alder should reach a height of 25 feet in 18 to 20 years.

Two more trees developed by USDA that are cold hardy to zone 3 are Northern Acclaim (TM -2001) Thornless Honeylocust (*Gleditsia triacanthos* var. *inermis* 'Harve') and Dakota Pinnacle (TM- 1996) Asian White Birch (*Betula platyphylla* 'Fargo').

*"Engineers are straight lines. Biologists are circles. More round cluster plantings of trees are needed in our straight cities!"* Dr. Alex Shigo