Prunus maackii, the Friends’s Plant Dividend for 1986

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Friends of the Arnold Arboretum receive the exceptionally cold-hardy Amur chokecherry as a benefit of membership

All members of the Friends of the Arnold Arboretum will be receiving ready-to-plant seedlings of Prunus maackii in late April or early May, as this year’s plant dividend. In mid-April, staff members and volunteers working in the Dana Greenhouses shipped the six- to twelve-inch seedlings by U.S. mail. Recipients who live farther north than Boston will be pleased to learn that the species is hardy to at least minus 35 degrees Fahrenheit. Unfortunately, Prunus maackii does not perform well south of Zone 6 owing to the stresses of summer heat.

The common name, Amur chokecherry, refers to the species’s native habitat along the Amur River in northeastern China (Manchuria) and southeastern Soviet Union. Prunus maackii is native to parts of Korea as well. The Flora of the U.S.S.R. states that Prunus maackii occurs in the “[t]aiga, mixed forests, rare in conifer forests and even more rare in purely broad-leaved forests, often on mountain slopes, in illuminated sites, along streams, forest edges and clearings, and coarse rock taluses.”

Its history at the Arnold Arboretum goes back 108 years, to 1878, when the Arboretum was in its infancy. During the summer of that year, the Arboretum’s first director, Charles Sprague Sargent, and Asa Gray were actively consulting with Frederick Law Olmsted on the preliminary plans for incorporating the Arboretum into the City of Boston’s park system. That year, plants of Prunus maackii arrived from the botanic garden in St. Petersburg (now called Leningrad). This was the first recorded introduction of the species into the United States. Prunus maackii was not introduced into Britain until 1910.

Though the Amur chokecherry produces small racemes of white flowers (see the back cover of this issue of Arnoldia) and pea-size dark-purple fruit, the main ornamental attraction is its bark. Golden brown and glossy, it peels off in thin strips when mature. Lit by afternoon sun or seen against a backdrop of snow, the beautiful bark of Prunus maackii is an unforgettable sight.

Few Friends of the Arboretum can have missed the prominent pondside planting of the species adjacent to the new Bradley Rose

A close-up glimpse of the shiny bark of Prunus maackii, showing how it characteristically peels away in thin sheets. Photograph by Harrison L. Flint. From the Archives of the Arnold Arboretum.
Garden. These trees are descendants of seeds collected by the Russian botanist B. V. Skvortzov from a forest east of Harbin, Manchuria, on September 19, 1939. Skvortzov sent the seed to the United States Plant Introduction Station at Glenn Dale, Maryland, in January 1940, where they were assigned Plant Introduction Number 135617 and planted. In 1961, scion material from the Plant Introduction Station trees was sent to the Arnold Arboretum, where it was grafted onto Prunus serrulata rootstalk and given Accession Number 388-61. Vegetative cuttings from these grafted trees yielded the trees we have today. Because of their distinctive glossy bark, which can be viewed year round, they are among the most commented-upon trees in the Arboretum.

The Arboretum's records indicate that Prunus maackii can be propagated by seeds, cuttings, and grafts. (See Alfred J. Fordham’s detailed article on the propagation of Prunus maackii below.) Perhaps the easiest method of propagation for the general gardener would be to take semi-hardwood stem cuttings in mid-July and to treat them with an 0.8 percent indolebutyric acid dip or with an equally strong powder. Placed in a rooting medium of equal parts of sand and perlite, and kept in the humid atmosphere of a mist bench or enclosed in a plastic bag, the cuttings should have roots within ten to twelve weeks.

Seedlings should be kept cool until they are planted outdoors, preferably in mid-May. They should be planted in sites with moderate to full sun, in well drained soil. Young trees should be staked for the first two or three years so that their shallow roots can become firmly established.

Pruning and controlling insects and diseases should be easy with the Amur chokecherry. During the early years, structural pruning performed in late winter corrects the tree’s naturally small branching angles and improves its overall shape. Proper care and maintenance keep insect and disease problems to a minimum.