

# *Chionanthus retusus*: The Chinese Fringetree

Peter Del Tredici & Jianhua Li

**H**andsome is a word often used to describe the Chinese fringetree (*Chionanthus retusus*). When planted in the open, this species develops into an elegant small tree, twenty to thirty feet high with approximately the same spread. A century-old specimen at the Arnold Arboretum is about twenty feet tall by thirty feet wide, and when in bloom from late May through mid June is totally covered with showy, white flowers. It is no exaggeration to say that this tree is capable of putting on one of the Arboretum's best floral displays. The blue-purple fruit, which matures from late September to October, provides a second season of interest. Chinese fringetree is more tree-like and graceful than its straggly American cousin, *C. virginicus*, and is not nearly so late to leaf out in the spring.

The species has a broad distribution in Asia, where it shows considerable variation in its growth habit. In cultivation at the Arnold, some specimens are multistemmed, while others—especially those raised from Korean seed—are distinctly single-stemmed. The plant seems to have broad ecological adaptability, growing equally well in the warm, dry climate of southern California (USDA zone 9) and the cold, moist climates of New England (USDA zone 5).

When young, the Chinese fringetree's bark is a pale buff color, peeling off in papery strips. On mature trees, the bark is tight, with distinct ridges and furrows. The lustrous leaves are elliptic to ovate in shape, three to eight inches long and one-and-one-half to four inches wide. The white flowers, each with four strap-like petals, are about an inch across and give off a delicate fragrance. They are produced at



An eighteen-year-old specimen of *Chionanthus retusus* growing at the Arnold Arboretum. Note the single-stemmed growth habit that has developed without pruning.

the ends of the branches and completely hide the foliage when the tree is in bloom. In New England the fall color, being pale yellow, is hardly spectacular; in warm climates, there is no fall color to speak of and green leaves stay on the tree through December. It is adaptable in its environmental responses, being tolerant of full sun to partial shade, moderate summer drought, and a wide range of soil con-



The showy flowers and blue-purple fruit of *Chionanthus retusus*.

ditions. It is generally not bothered by insect pests or diseases.

The Chinese fringetree belongs to the genus *Chionanthus*, which was described by Carl Linnaeus in his *Genera Plantarum* (1737, 1754). The name was based on the American fringetree, which had been introduced to Europe before 1736. Like the Chinese fringetree, *Chionanthus virginicus* produces a profusion of showy, white flowers in spring, which explains Linnaeus' choice of name for the genus (*chion* = snow; *anthos* = flower).

The taxonomic history of the genus is also interesting. In 1788, Swartz described a small, evergreen, Jamaican tree with small corolla lobes, naming it *Thouinia* to commemorate the French gardener André Thouin (1747–1824). However, Linnaeus had already used this name in 1781. Accordingly, Swartz gave his new genus a different name, *Linociera*, in honor of a sixteenth-century French physician, Geoffrey Linocier. Between 1791 to 1976 many species of *Linociera* were described from both the old world and the new. In 1976, William Stearn proposed the union of *Linociera* and *Chionanthus*. The difficulty of distinguishing species of *Linociera* and *Chionanthus* had been recognized as long ago as 1860 by George Thwaites, who suggested the two genera be merged but did not present a formal proposal. Thus, prior to 1976 botanists generally referred deciduous species with big flowers (corolla 1.5

to 4 cm) to *Chionanthus* and evergreen species with small flowers (corolla less than 1 cm) to *Linociera*. However, a small-flowered Ecuadorian species (*L. pubescens*) is a deciduous tree while a deciduous Florida species (*C. pygmaeus*) has small flowers. Other morphological traits overlap between *Chionanthus* and *Linociera*, and no clear-cut differences separate the two. Therefore, Stearn's proposal to unite them has been widely accepted in the botanical community. The combined group is referred to as *Chionanthus* because this name was published earlier than *Linociera*. The union has led to the transfer of numerous species from *Linociera* to *Chionanthus* even though genetic studies have not been performed to determine the evolutionary relationships of deciduous and evergreen species. Modern DNA research will surely help clarify the taxonomy of *Chionanthus* and *Linociera*.

#### References

- Durr, M. A. 1998. *Manual of Woody Landscape Plants*, 5th ed. Stipes Publishing, Champaign, IL.
- Gilman, E. F., and D. G. Watson. 1993. *Chionanthus retusus*, Chinese Fringetree. Fact Sheet ST-160. Department of Environmental Horticulture, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida.

Peter Del Tredici is a senior research scientist and Jianhua Li is a taxonomist at the Arnold Arboretum.