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PROSPECTS FOR CONSERVATION OF AN  
ENDEMIC WOODY SPECIES NATIVE TO FLORIDA

# *Chionanthus pygmaeus* (pygmy fringetree)

THROUGH SEED AND VEGETATIVE PROPAGATION

Amanda L Bayer and J Ryan Stewart

## ABSTRACT

Pygmy fringetree (*Chionanthus pygmaeus* Small [Oleaceae]) is an endemic and rare Florida species with great potential for use in managed landscapes. Conservation as well as cultivation of the species is dependent on a better understanding of its complex seed dormancy and inherent difficulties with vegetative propagation. This article synthesizes work that has been done with the genus *Chionanthus*, including our recent work with pygmy fringetree, and affirms the importance of identifying improved propagation and seed storage techniques for the species. Given that pygmy fringetree is native to a fire-dependent ecosystem, the influence of varying levels of smoke and heat, plus the manipulation of other factors such as temperature and plant growth regulators, should be investigated to improve the likelihood of satisfying seed dormancy requirements. Also, based on work done on congeneric species, low temperature conditions combined with low seed moisture content in addition to pericarp removal may result in improved long-term storage conditions of pygmy fringetree seed. In addition, adventitious rooting appears most likely to occur on early to mid-summer pygmy fringetree softwood cuttings that have been treated with high levels of auxin.

Bayer AL, Stewart JR. 2011. Prospects for conservation of an endemic woody species native to Florida, *Chionanthus pygmaeus* (pygmy fringetree), through seed and vegetative propagation. *Native Plants Journal* 12(1):62–69.

## KEY WORDS

scarification, dormancy, seed germination, stratification

## NOMENCLATURE

USDA NRCS (2010)

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