

## **(011) Selecting Ornamental Cultivars from Teaoil Camellia Breeding**

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Camellia is a popular ornamental plant worldwide. Since the U.S. National Arboretum released more than a dozen cold hardy ornamental camellia cultivars with teaoil camellia (*Camellia oleifera* Abel) in their parentage, market demand for better cold hardy camellia cultivars has increased in the U.S. and many other countries. In China, much breeding work of teaoil camellia had been conducted to improve its oil quality and yield in Guangxi, Hunan, Jiangxi, Zhejiang, and seven other provinces in the past 60 years. A total of more than 600 clones had been evaluated and only 200 elite cultivars were selected for oil production. Some of these clones and cultivars had very attractive ornamental features and should have great potential for ornamental production. Selection for ornamental cultivars from eight teaoil camellia germplasm collection sites in China had been focused on its habit; foliage colors; flower sizes, colors, and abundance; and fruit size, colors and shapes. Based on habit and fruit characteristics, four cultivars, 'Changlin', 'Hongqiu', 'Hunan Dome', and 'Ninglin', had been selected for ornamental production. They could be grown in USDA cold hardiness zones 6–9. Flowering and fruiting of teaoil camellia occurred at the same season, from November to February, which provide very attractive winter displays. New teaoil camellia cultivars, together with many other outstanding ornamental camellias, play important roles in the field of ornamental horticulture, especially as a source of cold-hardy camellia cultivars. Donglin Zhang is a guest professor of Central South University of Forestry and Technology.