

'Frost Prince' and 'Frost Princess' Camellias¹

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Camellias are grown out-of-doors along the East Coast from Maryland to Florida, westward through the Gulf States to Texas, and along the West Coast from southern California to coastal Oregon and Washington. This region, described roughly as the "Camellia Belt," is responsible for most of the camellias grown in the United States. Beyond this region there are scattered plantings, usually under protected microclimatic conditions, subject to severe winter-kill during periodic colder than normal winters.

Camellia sasanqua Thunb. and *C. hiemalis* Nakai, 2 fall-flowering species grown by southern gardeners for many years, produce showy late autumn floral displays ranging from white through pink, magenta, and red. However, these plants are too susceptible to winter injury to be grown much further north than Zone 8 (3) without risk of damage. Beginning with the 1976-77 season, 3 successive unusually cold winters in the Washington D.C. area (Zone 7) made us seriously question the reliability of most *C. sasanqua* or *C. hiemalis* cultivars as long-term landscape plants (2). All but a few of more than 120 representatives of 68 *C. sasanqua* cultivars in the National Arboretum collection were either completely killed or so badly damaged they had to be removed. However, plants of *C. oleifera* Abel at the Arboretum and north of the city, in Maryland, showed no winter injury during this period. These observations led us to intensify the testing of our existing *C. oleifera* hybrids (1) and use the proven hardy strains of *C. oleifera* in our breeding program. *Camellia oleifera* has flowers of little ornamental value, but is native to a very wide range of distribution in the Peoples Republic of China, including regions climatically comparable to New England.

Origin

'Frost Prince' and 'Frost Princess' originated from crosses made during a species compatibility study of the genus (1) conducted in 1969 at the U.S. Plant Introduction Station, Glenn Dale, Md. These 2 cultivars, F₁ interspecific hybrids of *C. hiemalis* x *C. oleifera*, combine the shrub form, foliar characteristics, and cold hardiness of *C. oleifera*

with the flower color, form, and quality of *C. hiemalis*.

Description

'Frost Prince' (*C. hiemalis* 'Shishigashira' x *C. oleifera* PI 162561) (Fig. 1) survived severe winters outdoors at the National Arboretum and in Maryland, and showed little or no damage despite temperatures as cold as -20°C. Last year, when several hard freezes occurred during its blooming period, most unopened flowers were unharmed. Plant form was upright, with branchlets spreading and some drooping at extremities. Leaves were leathery in texture, glossy, dark green, RHS Green 137A (4); elliptic, 6 cm long, 3 cm wide with crenate margins. A very floriferous cultivar, 'Frost Prince' has deep pink flowers (R.H.S. Red-Purple 58C), single to semi-double and about 9 cm across. At senescence, the flower petals fall separately (not as a unit as do *C. japonica* L. cultivars), making the clean up of spent flowers unnecessary. The flowering period frequently lasted as long as 6 weeks, from mid-October to late November in Maryland.

'Frost Princess' (*C. hiemalis* 'Bill Wylam' x *C. oleifera* PI 162561) (Fig. 2) was comparable in cold hardiness to 'Frost Prince', but

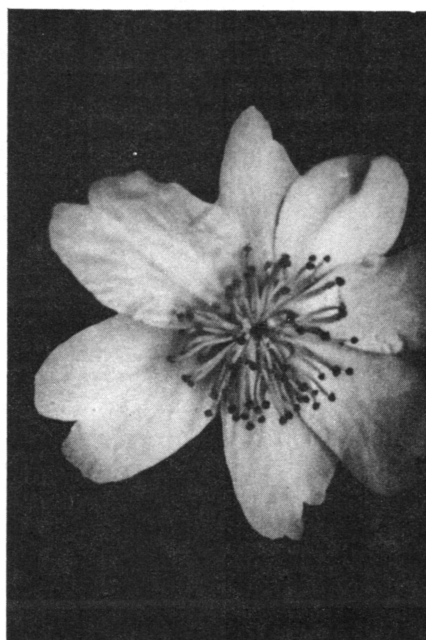


Fig. 1. 'Frost Prince' *Camellia hiemalis* 'Shishigashira' x *C. oleifera*.

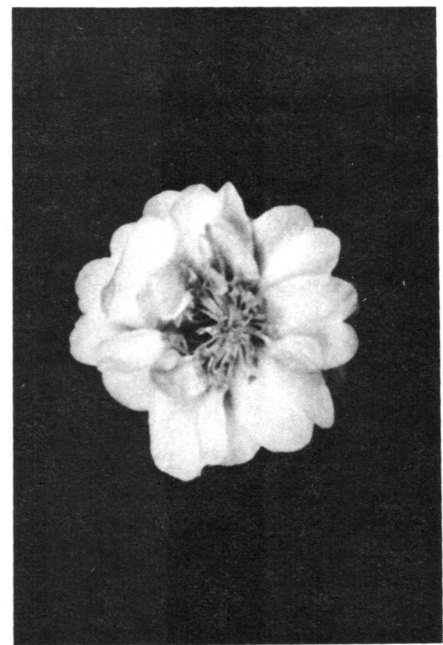


Fig. 2. 'Frost Princess' *Camellia hiemalis* 'Bill Wylam' x *C. oleifera*.

differed from 'Frost Prince' in plant and flower characteristics. Specifically, the plant form was more spreading and branchlets more pendulous. Leaves are glossy, medium green (RHS 137C), elliptic, 5 cm long, 2½ cm wide, with crenate margins and thick, leathery texture. 'Frost Princess' has lavender-pink flowers (RHS Red-Purple 63C), semi-double to anemone in form and about 7.6 cm across. Similar to 'Frost Prince', the flower petals fall separately at senescence. The flowering period extended from late October to late November in Maryland.

Both cultivars thus far have been relatively free of diseases and insects. The most serious camellia diseases are flower petal blight and dieback, both of which are rare in the northern areas where these cultivars are recommended. However, as a precaution, representatives of both cultivars are undergoing evaluation for these diseases in South Carolina. The most serious camellia insects are the scale insects, particularly Peony scale, *Pseudaonidia paenoniae*. No assurances can be given at this time that these hybrid cultivars are more resistant to scale than other camellias.

Availability

Limited quantities of cuttings or scions are available to plant breeders and nurserymen upon request.

Literature Cited

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