

'Carolina Spring' Rhododendron

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Rhododendron catawbiense Michx. (Ericaceae) is a native of the southern Appalachian Mountains. Wyman (1977) recorded its introduction into England in 1809 and its use shortly thereafter for hybridization with more tender *Rhododendron* spp. Krüssman and Epp (1986) cited this species as widely used in breeding for winter hardiness. Dirr (1990) noted this as one of the hardiest and best known of all the rhododendrons. Dirr (1990) listed 101 cultivar selections of *R. catawbiense* hybrids, all noted for their flowers and cold hardiness. The unusual variegated leaves associated with the display of lavender flowers and cold hardiness to -29°C were characteristics leading to the selection of 'Carolina Spring'.

Origin

'Carolina Spring' is a sport selected by L.Q.T. in July 1985 from a plant *R. Catawbiense* 'Boursault' growing at Thomasson Nursery, Hamptonville, N.C. Dirr (1990) described 'Boursault' as "a hardy plant that has lavender flowers in a rounded truss; good sturdy habit, 5' high, - 25°F [cold hardiness - 29°C]." Two cuttings were propagated from the sport. Plants were grown and evaluated by L.Q.T. for 5 years, leading to its selection as a named cultivar.

Description

'Carolina Spring' (Fig. 1) is an erect shrub with ascending-spreading branches. Twigs are yellowish-green, grow 5 to 14 cm-year⁻¹ and become brownish with age. Leaves are evergreen, elliptic to oblong, broadly acute, broadly cuneate, entire, 5 to 12 cm long, 2 to 6 cm wide; the upper surface is dark green [Munsell 5 GY, 5/8 (Wilde and Voigt, 1977)] variegated irregularly with yellowish to cream-colored blotches (Munsell 2.5 GY 8/4 or 8/6);

the lower surface is pale and reticulate. Petioles are 1.5 to 3.5 cm long. Inflorescences are up to 15 cm long with six to 12 flowers. Bracts are concave around the pedicel, keeled, narrowly obtuse and apiculate, entire, 3.5 to 5 cm long, and 1.3 to 1.7 cm wide. Pedicels are 3 to 4 cm long. Flowers are single, open-funnel campanulate, expanding to 7.5 to 8 cm broad, lavender (Munsell 5 RP, 6/4), with inconspicuous, yellowish-green spotting on the dorsal petal. The corolla is 5.5 to 6 cm long, the tube 3 to 3.5 cm long, and the lobes are obtuse, 2.5 to 3 cm long × 3 to 3.5 cm wide. The calyx is inconspicuous, pubescent, 1 to 2 mm long, with the five lobes obscure. The 10 stamens have lavender filaments 2.5 to 4 cm long with 3- to 4-mm-long anthers. The style is 3.5 to 4 cm long, in-curved apically. HOLOTYPE: Fantz 5120.

Observations. Leaf variegation is irregular (Fig. 2). Some leaves exhibit no variegation,



Fig. 2. Variegated leaves of 'Carolina Spring'.

whereas others bear scattered yellowish spots of 1 to 3 mm in diameter. About 30% to 40% of the leaves bear yellowish to cream-colored blotches. Blotches occur most frequently at the margins, are much thinner in texture (or leaf thickness), than the rest of



Fig. 1. Habit of 'Carolina Spring' in full bloom.

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the leaf, and result in leaves becoming slightly wrinkled or convoluted in these areas. The blotches may be entirely marginal or may extend to the midrib. Variegated leaves typically have arcuate midribs, the leaf bending as it elongates toward the variegated side. Juvenile leaves are yellowish-green (Munsell 5 GY, 4/6), becoming darker with age. The variegation pattern is conspicuous on juvenile leaves.

Culture and propagation

'Carolina Spring' is expected to be hardy to U.S. Dept. of Agriculture hardiness zone 4, -29C. Plants grow best in partial sun to shaded sites, reaching a mature height of 1.6 m. Flowering occurs in mid- to late spring.

Vegetative semi-hardwood cuttings were taken in August by selecting 8- to 10-cm long, light green, firm stems. About the basal 3 cm was wounded by removing a longitu-

dinal strip (≈ 1.5) of epidermis to a depth reaching secondary xylem. The wounded portion of the cutting was dipping into a 5000-mg solution of C-Mane/liter [a commercial 1H-indole-3-butyric acid (IBA) preparation, Coor Farm Services, Smithfield, N.C.] for ≈ 10 sec. The treated portion of the cutting was inserted ≈ 2.5 cm into a pine bark-based propagation medium and placed in a greenhouse with 50% polypropylene shade cloth. Cuttings were rooted under intermittent mist operating 5 sec every 5 min from 0800 to 1800 HR. About 95% of the cuttings rooted.

Registration

This cultivar will be registered with the American Rhododendron Society, 21 Squire Terrace, Colts Neck, NJ 07722. The holotype herbarium specimen will be deposited at the U.S. National Arboretum Herbarium, Washington, D.C.

Availability

L.Q. Thomasson Nursery had 1300 plants of 'Carolina Spring' in 0.9-liter and 300 in 11.2-liter containers in 1990. Information on sources of propagules can be obtained from L.Q.T.

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