'Patapsco' and 'Princess Anne' Azaleas

James B. Shanks¹

Department of Horticulture, University of Maryland, College Park, MD 20742

Kenneth C. Sanderson¹

Alabama Agricultural Experiment Station, Auburn University, AL 36849-4201

Additional index words. azalea breeding, *Rhododendron* hybrids

'Patapsco' azalea (*Rhododendron* hybrid) is valuable in the landscape because of its Indica type of vigorous growth and hardiness; 'Princess Anne' has a growth habit more typical of Kurume azaleas. Both bear large flowers in profusion and have proven hardiness in New Jersey, Maryland, and Alabama (plant hardiness zones 7A, 7B, and 8B, respectively) (U.S. Dept. of Agriculture, 1960). These selections are the result of a program initiated in 1950 at the Univ. of Maryland to provide increased flower size for azaleas grown in the landscape, although the objectives later centered on obtaining plants of a more compact habit for forcing in the greenhouse at any time of the year. The names selected are from Maryland streams (derived from early Native American tribal names) and a town on Maryland's Eastern Shore.

Origin

'Patapsco' is a cross, made in the greenhouse in Spring 1950, of *Rhododendron* 'Vervaeana', a large-flowered, greenhouse-forcing azalea of the Belgian group (Galle, 1985) with the landscape azalea *Rhododendron* 'Mucronatum' (Galle, 1985).

'Princess Anne' was selected from a cross of selections from the 1950 crosses of 'Vervaeana' with the Kurume azaleas 'Pink Pearl' and 'Coral Bells' (Fig. 1).

Description

'Patapsco' is the hardier of the two introductions, adapted to fully exposed conditions in winter and summer in Maryland and Alabama. Flower buds of 'Patapsco' have withstood -6C in Alabama landscapes when most Indica type of azaleas, such as *Rhododendron*

'Formosa', were killed. Growth habit is vigorous and densely upright to 2 m at maturity. Plants have lived and retained an acceptably dense form, with little or no pruning, for ≤20

years in an Alabama landscape. 'Patapsco' has shown little or no susceptibility to insects and diseases common to azaleas in this region and relative tolerance of insects and diseases in Maryland. Flowering is usually during the first week of April in Alabama and in late April in Maryland.

The single flowers of 'Patapsco' are imperial purple 78B (Royal Horticultural Society, 1966) at the edge, becoming lighter (78D) toward the center. The throat is marked with 1.5 mm red-purple 67A spots in an approximate 12- to 25-mm-wide band at the top of the 80- to 100-mm-diameter flower (Fig. 2). The flowers are borne in trusses of three to five. Stamens are lavender 78D, five to nine (usually seven) in each flower, and slightly shorter than the white pistil, with darker 78B anthers. The leaves are oblanceolate (≈74 × 27 mm), acute, mucronate, cuneate, entire, and oppressed ciliate, with four to six pairs of prominent lateral veins. The upper leaf surface is

Fig. 1. Pedigree of 'Princess Anne' azaleas.

Fig. 2. Flower of 'Patapsco' azalea.

Received for publication 5 Aug. 94. Accepted for publication 7 Dec. 1995. University of Maryland Agricultural Expt. Station contribution 8835 Sci. Art no. A6619. The cost of publishing this paper was defrayed in part by the payment of page charges. Under postal regulations, this paper therefore must be hereby marked advertisement solely to indicate this fact.

¹Professor Emeritus.

pubescent and woodpecker green 147A. The lower leaf surface is lighter green (146B) and less pubescent.

'Princess Anne' azalea combines handsome, gardenia-like foliage and numerous large, semidouble, hose-in-hose flowers with adaptability as a landscape plant and a potted plant for greenhouse flowering. Flower buds are less cold hardy than those of 'Patapsco', having suffered some damage when minima in Alabama reached -6°C . As a landscape plant, it should be in a protected location because flowers are known to bleach in the full sun and are susceptible to petal blight. Wind may dry petal edges. Although forcing readily in the greenhouse, the flowering period outdoors is more prolonged and is in early to mid-April in Alabama and early May in Maryland. Potted plants are capable of initiating flowers at any time of year and have a relatively short dark storage requirement (4 to 6 weeks at 10°C).

'Princess Anne' has an uneven form in the landscape unless sheared to a compact growth. Although branching freely, 'Princess Anne' has a tendency to develop a central leader, become a tree form, and reach 1.0 to 1.5 m high with age.

Although appearing orange to the casual observer, the flower color is red 48A. Anthers are variously petaloid or pollen bearing and, with the stigma, are the same color as petals. Flowers are 80 to 85 mm in diameter and three of the primary, obovate, 45×33 -mm petals are heavily marked with cardinal red (53C) spots frequently coalescing into solid areas (Fig. 3). Petal margins are coarsely undulate giving the flowers a ruffled appearance. The flowers are borne in trusses of three to five, each creating a massive floral display—the principal disadvantage being a shorter flower life than most azaleas in outdoor and indoor displays.

Leaves of 'Princess Anne' are 95×42 mm, oblanceolate, mucronate, attenuate, and entire. The upper leaf surface is glabrous, arras green 139A, and slightly ciliate with four to seven pairs of distinct veins of peridot green 147B attractively netted on the upper surface. The leaves are sufficiently attractive to be useful as a decorative foliage.

Propagation and uses

Both of the introductions are readily propagated by softwood cuttings and form strong,

Fig. 3. Flowers and leaves of 'Princess Anne' azalea.

massive root systems adapted to a range of organic and mineral soils with pH ranges of 5.5 to 6.6. The releases are more resistant to drought than the Kurume types of azaleas and have no special nutrient requirements. 'Patapsco' and 'Princess Anne' are especially suitable plants for shrub borders, groupings, massing, and foundations. 'Patapsco' would require cutting back with age in some foundations. Both have been flowered as potted plants using 6 weeks at 7°C to break bud dormancy plus 12 h at 3 to $4 \mu\text{mol}\cdot\text{m}^{-2}\cdot\text{s}^{-1}$ incandescent irradiance and 16 to 18°C night minima and natural irradiance of 445 to $792 \mu\text{mol}\cdot\text{m}^{-2}\cdot\text{s}^{-1}$ for flowering. Single flowers, large plant size, and dull foliage detract from using 'Patapsco' as a potted plant. The uneven growth habit and short-lived flowers limit using 'Princess Anne' in potted-plant culture. Both cultivars respond and benefit from manual and chemical pinching and growth retardant treatment when grown as potted plants. 'Patapsco' has been used successfully in cultural experiments at the Auburn Univ. Agricultural Expt. Station under the unofficial name of 'Scott's Lavender' (Sanderson and McGuire, 1992; Sanderson et al., 1985).

Availability

Requests for information and availability of propagation material should be directed to K.C.S., Dept. of Horticulture, Auburn Univ., AL 36849-4201.

Literature Cited

- Galle, F.C. 1985. Azaleas. Timber Press, Portland, Ore.
- Royal Horticultural Society. 1966. Royal Horticultural Society colour chart. Royal Horticultural Society, London.
- Sanderson, K.C. and J.A. McGuire. 1992. Effect of fertilizer placement on the growth of containerized woody ornamentals, p. 69–72. In: B.L. James (ed.). Proc. Southern Nurserymen's Assn. Res. Conf. 39th Annu. Rpt. Southern Nurserymen's Assn., Nashville.
- Sanderson, K.C., C. Williamson-Murdock, W.C. Martin, and B. Reed. 1985. Effect of various fungicides incorporated in a root-inducing powder on the rooting of four woody ornamentals, p. 247–250. In: B.L. James (ed.). Proc. Southern Nurserymen's Assn. Res. Conf. 30th Annu. Rpt. Southern Nurserymen's Assn., Nashville.
- U.S. Dept. of Agriculture. 1960. Plant hardiness zone map. U.S. Dept. Agr. Misc. Publ. 814.