Philadelphus ‘ORSTPHILx1’ Swan Lake® Mockorange

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Mockorange are deciduous shrubs valued for their adaptability and tolerance to drought as well as their highly fragrant flowers. Dirr (2009) asserted that fragrance is the only redeeming factor for plants of the genus and outside of flowering are “eyesores.” Despite this opinion and the limitations of color and other ornamental traits, many mockorange are extremely tough plants and require little care—a point conceded by Dirr (2009). Absent from Dirr (2009) is Philadelphus lewisii, which is native to the Western United States, frequently found in drought conditions, and includes cultivars found hardy to USDA Zone 2B or 3 (Oregon State University 2024). However, many species such as Lewis mockorange (P. lewisii) can be leggy, exhibiting a poor form in production and managed landscapes (personal observation). This requires substantial pruning labor to develop a well-branched shrub, which can be attributed to the fact that breeding has focused on flower forms and production at the expense of other characteristics that would give new cultivars greater year-round interest. Cultivars such as Philadelphus ×virginalis Miniature Snowflake exhibit interesting ornamental traits such as double flowers, are compact, and are amenable to container production, but plants have been observed in landscapes to exceed far beyond its description of 0.9 to 1.2 m (personal observation). Furthermore, many mockorange plants in the landscape generally lack foliage and flowers on the lower half of the plant, showing only bare stems, which diminishes their ornamental appeal (personal observation). There remains much opportunity to improve cultivars of this genus and relatively few species are used in cultivation including P. coronarius, P. lewisii, P. mexicanus, P. microphyllus, and hybrids thereof.

‘ORSTPHILx1’ was selected based on its vigorous but compact habit, extremely high flower production, and excellent fragrance. ‘ORSTPHILx1’ differs from its seed parent, P. coronarius ‘Icezam’, by lacking variegation exhibited by ‘Icezam’. The most apparent difference between ‘ORSTPHILx1’ and its pollen parent, ‘Blizzard’, is its improved branching in container production. Propagation and production trials revealed that ‘Blizzard’ often were limited to one or two branches and required frequent pruning to produce a high-quality, densely branched container plant. ‘ORSTPHILx1’ often had more than five stems as a young plant after propagation and light pruning lead to compact, well-branched, and dense shrubs. Fruit of ‘Blizzard’ (1 cm) are larger than ‘ORSTPHILx1’ (0.7 cm).

‘ORSTPHILx1’ was among 13 genotypes that were identified for advanced evaluation including rooting studies and container production. In collaboration with several commercial nurseries, it was identified among the five that were then distributed under a material transfer agreement (MTA) to commercial growers for evaluation. For final selection and release, there were three genotypes with commercial potential that were made available to commercial growers to apply for exclusive license and ‘ORSTPHILx1’ was chosen for its habit, prolific flower production, and fragrance.

Origin
‘ORSTPHILx1’ PPAF is an interspecific hybrid resulting from a controlled cross between P. coronarius ‘Icezam’ USPP 25,565 IcelandicTM as the seed parent × P. lewisii ‘Blizzard’ (unpatented) as the pollen parent. The cross was made in a greenhouse during 2013. Twenty capsules were collected from this cross combination; the original seedling was germinated in Fall 2013 and grown in Corvallis, OR, USA. The original accession was designated H2013-006-012. The seedling was field planted in 2015 and then transplanted to its current field location (26.07 referring to row 16, space 7) in 2017 (Fig. 1) with plants spaced 1.5 m on center. Since 2018, this selection has been evaluated for stem cutting propagation and container production including from 2019 to 2022 with Monrovia Nursery Company at their Dayton, OR, USA, location. At both locations, observations were made on growth habit, branching, flower production, and incidence of pests or disease.

Fig. 1. The original plant of Philadelphus ‘ORSTPHILx1’ Swan Lake® at 8 years of age that was germinated in 2013, field planted 2015, and left unpruned. Photo is illustrating its dense habit, full branching, and prolific flower production as evidence by the number of capsules. Photo taken 22 Jun 2021.

Description
Philadelphus ‘ORSTPHILx1’ is a deciduous shrub that exhibits an upright and vigorous, yet compact, growth habit with dense branching and deep green foliage into late summer. Its oppositely arranged and simple leaves exhibit heterophylly based on size differences. Most leaves are smaller with nearly entire (ciliate) margins, and others are larger with more prominent teeth. Leaves average 7 cm long (including petiole) by 2.6 cm wide, but sometimes reach up to 10 cm long by 4.1 cm wide. Average leaf blade length is 24.4 mm with most petioles 7.5 mm; however, some reach 9.5 mm. The petiole is grooved adaxially, sparsely pubescent, and RHS 141B in color (Royal Horticulture Society 2007). Leaves are ovate, narrowly acute to mucronate with an obtuse base. Margins are ciliate with sparse, variable teeth. Young foliage is glossy and glabrous; mature foliage adaxially is mostly smooth, slightly undulate to sub-bullate, with some leaves having sparse stellate pubescence giving a slightly scabrous feel. New foliage is glossy with adaxial and abaxial surface color RHS 143A, progressing to intermediate foliage with adaxial and abaxial surface color RHS 141A, maturing to adaxial surface color RHS N134A and abaxial surface color RHS 137C.

Flowers are produced in racemes averaging 6.6 cm long with five to nine flowers and an average of seven. Natural flowering season is 8 May to 13 Jun in western Oregon. Individual flowers are rotate with a diameter of 3.6 cm and depth of 1.9 cm. They are self-cleaning and exhibit a complex fragrance that...
Philadelphus 'ORSTPHILx1' is a mixture of citrus flowers and grape soda that has an overall fruity character. Flowers are single and have four petals that are cruciform, broadly ovate to suborbicular, entire, and 19.3 mm long × 14.8 mm wide. Petals are white, with upper and lower surfaces RHS 155C (Royal Horticulture Society 2007).

Mature height and width of ‘ORSTPHILx1’ is ~175 cm × 140 cm (Fig. 1). Although it has not been evaluated extensively outside of Oregon, based on its pedigree, we expect it is hardy to USDA Zone 5. It is highly floriferous with intensely fragrant single white flowers (Fig. 2). Asexual reproduction by softwood or semihardwood cuttings treated with K-IBA yielded 85% rooting. Characteristics come true to form from cutting propagation, are firmly fixed, and are transmitted through subsequent rounds of serial propagation. A voucher was collected from a greenhouse-forced plant on 12 Apr 2023 and deposited in the Oregon State University Herbarium and accessioned as OSC-V-269237.

Availability

Philadelphus ‘ORSTPHILx1’ was released in 2023 by the Oregon Agricultural Experiment Station and a US Plant Patent application has been submitted. ‘ORSTPHILx1’ was licensed exclusively to Monrovia Nursery Company who has assigned the trade name of Swan Lake® under which they are marketing the plant. Plants are available exclusively from Monrovia Nursery Company and its retail distributors. More information may be found by visiting https://www.monrovia.com/.

References Cited