'Bonfire' Dwarf Peach, 'Leprechaun' Dwarf Nectarine, and 'Crimson Cascade' and 'Pink Cascade' Weeping Peaches

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Abroad and diverse range of germplasm is used in the Univ. of Arkansas peach [*Prunus persica* (L.) Batsch] breeding program to develop scion cultivars and rootstock clones. Occasionally, combinations of genes from wide crosses result in unique plant characteristics. We have selected four genotypes that have potential as ornamental plants. 'Bonfire' is a red-leaf dwarf peach, 'Leprechaun' is a green-leaf dwarf nectarine, and 'Crimson Cascade' and 'Pink Cascade' are red-leaf standard-sized peaches that exhibit a "weeping" growth habit and produce double flowers that are red and pink, respectively.

Origin

'Bonfire'. This cultivar originated from open-pollinated seeds of 'Tsukuba no. 2', a Japanese peach rootstock clone. Seeds were collected in 1984, planted in 1985, and the selection was made in 1988 and designated Ark. 84186-T3.

'Leprechaun'. In 1968, 'Flory' dwarfpeach was crossed with a standard-sized unnamed nectarine. An F₂ population was grown and a dwarf nectarine selection was made. This unnamed selection was used as the female parent in a 1980 cross with peento peach selection Ark. 164P. Then, the F₁ was selfed to recover the recessive dwarf nectarine characteristics of the F₂ generation. A plant was selected in 1983, tested as Ark.327, and is being released as 'Leprechaun'.

'Crimson Cascade' and 'Pink Cascade'. These cultivars resulted from crossing a green-leaf, weeping, double-flowered, unnamed New Jersey peach selection with 'Rutgers Redleaf', a standard-sized tree with red leaves used as a peach rootstock. The F₁ of this cross was self-pollinated in 1978. Two

weeping forms were selected from a population of 70 F₂ seedlings in 1981.

Description

'Bonfire'. 'Bonfire' plants exhibit the typical growth habit of brachytic dwarf peaches. They produce a dense, much-branched, shrub-type growth that attains a height of only ≈ 1 m in 5 years (Fig. 1); older dwarf plants seldom exceed 2 m and can be pruned to retain an even shorter stature. Leaves may grow 20 to 25 cm long and are longer than those of standard trees.

'Bonfire' produces dark-red, attractive leaves that remain red throughout the growing season. Leaves have good resistance to bacterial leaf spot [*Xanthomonas pruni* (E.F. Sm.) Dews.] and retain their leaves throughout summer. Flowers are double and pink. Fruit are round, small, of poor eating quality, and are covered by the plant's dense foliage. 'Bonfire' is valuable as an ornamental dwarf shrub where the red leaf color is desirable in the landscape.

'Leprechaun'. 'Leprechaun' plants are genetic dwarfs and resemble 'Bonfire' in stature and growth habit (Fig. 2). 'Leprechaun' leaves are bright green and produce a very dense plant canopy. Flowers are pink and the bloom period is short. Fruit are small, glabrous, and attractive (Fig. 3). Skin color is 50% bright red over the yellow ground color. Fruit are firm, of good flavor, fully freestone, and ripen late, about the same time as 'Loring'. Fruit are moderately susceptible to peach brown rot [*Monilinia fructicola* (Wint.) Honey]. 'Leprechaun' and 'Bonfire' plants are susceptible to damage from the peach-tree borer [*Synanthedon exitiosa* (Say)].

'Crimson Cascade' and 'Pink Cascade'. These cultivars are very similar, differing only in flower color. Both are red-leaf types with growth habit resembling weeping willow (*Salix babylonica* L.) trees. Plants grow fast; 5-year-old plants reach 4 m in height with a spread of 2.5 m. Mature plants are mounded in form and may reach heights of 8 m.

Leaves produced early in spring are dark red that fades to greenish-red by midsummer. New leaves that are produced in fall under cooler temperatures are dark red. 'Crimson Cascade' produces double, dark-red flowers, whereas 'Pink Cascade' has double pink flow-

ers. Fruit of both cultivars are small, of poor quality, and of little value for consumption.

All four of these ornamentals have been propagated by budding onto peach rootstock. The possibility exists for sculpturing various plant shapes by placing the scion bud at various locations on the understock. For example, the dwarf cultivars can be made to produce a pom-pom topiary by budding high to produce a taller growth form. Good rooting has been obtained from softwood cuttings taken in May in Arkansas and treated with rooting hormones.

Availability

United States plant patent applications have been submitted for 'Bonfire' and 'Leprechaun'. Information on sources of plants of all four cultivars can be obtained from J.N.M., 316 Plant Science Bldg., Univ. of Arkansas, Fayetteville, AR 72701.

Fig. 1. 'Bonfire' dwarf ornamental peach plant.

Fig. 2. 'Leprechaun' dwarf ornamental nectarine plant.

Fig. 3. 'Leprechaun' dwarf ornamental nectarines.

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