Flowering Ornamental *Cuphea glutinosa* 'Purple Passion' and 'Lavender Lei'

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Cuphea (Lythraceae) includes ≈260 species and is native mostly from Mexico through Brazil (Graham and Kleiman, 1985). *Cuphea glutinosa* (Cham. & Schldl.) is native of Brazil (Graham et al., 1981). The primary interest in *Cuphea* spp. is for its seed as a potential source of medium chain triglycerides. However, an alternative use for some *Cuphea* spp. is as landscape and ornamental plants (Brown, 1989; Jaworski and Phatak, 1990, 1991a, 1991b; Pottberg, 1984; Thompson et al., 1987).

Cuphea glutinosa selections 'Purple Passion' and 'Lavender Lei' have potential use as landscape and ornamental plants for the southeastern United States. These plants were adapted only to full sun and were winter hardy in U.S. Dept. of Agriculture (USDA) Plant Hardiness Zone 8A or higher (Jaworski and Phatak, 1990). These plants produce a large mass of purple flowers from early April until mid-November. Natural propagation occurs by rooting of stoloniferous shoots, by underground stolons, and by seeds. Both cultivars breed true from seed.

Origin

'Purple Passion' and 'Lavender Lei' were selected from 25 out of 220 *C. glutinosa* plants that survived Winter 1986-87 in Tifton, GA. They had been grown on Dothan loamy sand (fine loamy, siliceous, thermic, Plinthic Kandudults). These 220 plants were produced from seeds of Arizona accession numbers A 0015, A 0172, A 0175, and A

0247, now located at Ames, Iowa. 'Purple Passion' and 'Lavender Lei' originated from Arizona accession number A 0175 and were assigned Georgia numbers GA 23 and GA 20, respectively.

Description

Selection of 'Purple Passion' was based on overwintering ability, superior ground cover (51-cm diameter circle within 100 days of planting), height (20 cm first year), six-petalled flowers, superior flower count (up to 28 flowers per 100 cm²), and flower color (Jaworski and Phatak, 1990). 'Lavender Lei' selection was based on overwintering ability, superior ground cover (42-cm diameter circle within 100 days of planting), medium height (14 cm first year), six-petalled flowers, superior flower count (up to 20 flowers per 100 cm²), and flower color (Jaworski and Phatak, 1990).

Flowering in the field was from early April until the first autumn freeze, about mid-November in Tifton. Flowering was continuous through the year in hanging baskets and in pots under greenhouse conditions. Flower petal spread was 1.5 × 1.5 cm, the size of the four ventral petals was 0.8 × 0.3 cm, and that of the two dorsal petals was 0.8 × 0.5 cm for both cultivars. The ventral flower petals for both cultivars are purple violet (81C) (Royal Horticultural Society, 1966), and dorsal petals are purple violet (81BC). The flower petal veins are purple (77A). Maximum leaf size for 'Purple Passion' and 'Lavender Lei' was 3.0 × 1.0 cm. The leaves are very small at the base of the plant, reach maximum size before flowering, and are much smaller in the flowering portion than in the rest of the shoot. Leaves of both cultivars are an attractive green (138B). The young shoot tips and the bottom of young leaves of

'Purple Passion' and 'Lavender Lei' are purple, which is not present in 'Lavender Lady' (Jaworski and Phatak, 1991). Stems and leaves higher than 5 cm above the ground were usually killed by low temperatures while the stems and leaves next to the ground remained attractive and green throughout the winter. The lowest temperature in Winter 1987-88, 1988-89, and 1989-90 was -11C.

Disease problems were not observed on either cultivar. White flies (*Aleyrodidae*) and aphids (*Aphididae*) were observed on both cultivars under greenhouse conditions.

Both cultivars proliferate into a dense mat of rooted shoots that completely cover the ground, a characteristic that may add value for erosion control and beautification along highways and as potted plants. The adaptation of 'Purple Passion' and 'Lavender Lei' as permanent plantings in commercial and residential landscape in regions colder than Tifton has yet to be evaluated.

Availability

Information for propagation of 'Purple Passion' and 'Lavender Lei' can be obtained by writing S.C. Phatak, Horticulture Dept., CPES, P.O. Box 748, Tifton, GA 31793.

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