‘Muskogee’ and ‘Natchez’ Lagerstroemia

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‘Muskogee’ and ‘Natchez’ Lagerstroemia (crapemyrtle) are the first cultivars to be produced by controlled interspecific hybridization with L. fauriei Koehne. These cultivars are unique with resistance to mildew incited by Erysiphe lagerstroemiae E. West; pronounced bark coloration; and prolific flowering.

Since Colonial days L. indica L. has been the species extensively cultivated and until recently was exclusively sold only as red, pink, lavender, or white flowered. Most of the cultivars listed in The Lagerstroemia Handbook/Checklist (5) are chance seedlings, and it is only within the last decade that cultivars have resulted from breeding-programs (1). Six cultivars of L. indica (‘Catawba’, ‘Cherokee’, ‘Conestoga’, ‘Potomac’, ‘Powhatan’, and ‘Seminole’) introduced by the U.S. National Arboretum since 1962 are highly mildew tolerant, but not immune.

Origin

The 1956 introduction of L. fauriei seed from an elevation of 370 m on a mountain forest above Kurio, Yasaki­ma, Japan, by the New Crops Research Branch, ARS, U.S. Department of Agriculture, produced mildly resistant germplasm (4). L. fauriei has light green leaves; small, early blooming, white flowers; and trunks that peel annually to expose mottled, dark burgundy-cinnamon new bark. It is a rapid grower that develops a vase shape with a broad crown of outward arching branches and attains a height of more than 10 m. Plants raised from the Japanese seed and field grown at Washington, D.C. were mildew free, but only one was uninjured in 10 successive years of low temperatures. In 1964 L. indica ‘Near East’ was hybridized with the surviving L. fauriei plants. Early observation of the seedling populations of over 400 plants was not particularly noteworthy. Although the plants were vigorous and upright, they produced only white or lavender flowers, and only about 50% were free from mildew. The landscape merit did not become evident until 5 years later when the bark began to exfoliate and reveal a range of cinnamon brown, medium brown, and pale cream mottled trunks. In 1969 these selections were propagated for further evaluation. Two selections, which were distributed in 1976 to cooperating propagation nurseries for stock increase, have been named ‘Muskogee’ and ‘Natchez’ following the tradition of utilizing Indian tribal names for the U.S. National Arboretum crapemyrtle introductions.

The cultivar names ‘Muskogee’ and ‘Natchez’ have been registered with the U.S. National Arboretum, the national registration authority for cultivated Lagerstroemia, in accordance with the International Code of Nomenclature for Cultivated Plants—1980 (5). Subsequently, the names have been published in The Lagerstroemia Handbook/Checklist (Muskogee’ p. 53; ‘Natchez’, p. 54) (1). Herbarium specimines and photographs are on deposit in the U.S. National Arboretum Herbarium.

Description

Lagerstroemia (indica x fauriei) ‘Muskogee’, n.cv., NA 38448, PI 427114. ‘Muskogee’, a multiple-stemmed, deciduous, large shrub or small tree, has grown 7 m high and 5 m wide in 14 years. The exfoliating bark of the sinuous, vigorous, upright trunks is mottled light brown (Greyed Orange 164B-165D) (7). The young branches are 4-striate, light brown (Greyed Orange 166B) becoming grey-brown prior to exfoliating bark the third year after propagation. The glossy, dark green (Yellow Green 147A above and Green 137C beneath) leaves are 3.5-10 cm long and 2.5-4.5 cm wide, elliptic, acuminate at tip, cuneate at base, with a 2.4-mm long petiole, and assume good autumn oranges and reds (Greyed Red 180A-Greyed Orange 165C). The pure white flowers, 3-3.6 cm in diameter, have long clawed, crinkled petals. The long tapered panicles, 14-30 cm long and 10-18 cm wide, are composed of 100-800 flowers produced from late June to September with prolific re­current bloom. The dark brown, woody seed capsules persist on the panicle until late winter.

Culture

‘Muskogee’ and ‘Natchez’ are readily cultivated under climatic and soil conditions similar to those of L. indica. The plants are reliably hardy to Zone 7b (8) and have been uninjured at Washington, D.C. when other L. indica cultivars have been slightly to severely winter killed. Although the tops may be winter killed in a colder zone, the roots will survive to produce shoots that bloom the same season. The plants are adaptable to many exposures and soils, but will grow best in full sun and a reasonably good soil which is of a heavy loam to clay texture, with a pH of 5.0-6.5. These cultivars can be propagated by softwood, hardwood, or root cuttings. Softwood cuttings, 10-20 cm long, taken from vigorous growing shoots during the summer, will root under interrupted mist in 3 weeks. Hardwood cut­tings, 15-20 cm long, can be rooted in the usual manner in cold frames in the late fall and early winter; or they also may be placed horizontally on the propagation media in a warm greenhouse in mid-winter to vegetate. The young shoots that force from the hardwood cuttings are removed and handled as softwood cuttings. By this latter technique the hardwood cuttings will produce a sequence of shoots that periodically can be removed and rooted. Root cuttings, 10-15 cm long, inserted in propagation media root easily. The young plants are amenable to both container and field production. As with all crapemyrtle, the best transplanting time is in late spring and summer when the plant is actively growing. Small plants will flower sparsely the first season, but by the second and third seasons will have profuse bloom. The exfoliating bark and assume good autumn colors.

Outstanding characteristics and uses

‘Muskogee’ and ‘Natchez’ recombine the mildew resistance, growth habit,
trunk, and flowering traits of the parental species in significantly improved landscape plants. The foliage of both cultivars not only is subcoriaceous, glossy, dark green in summer, and orange to red in autumn, but also is resistant to mildew under field conditions, where adjacent L. indica cultivars were severely mildew infected. Mildew resistance eliminates the costly chemical spray application and ensures an attractive plant that grows and flowers profusely. The flowers of both cultivars are borne over a long season with greatest profusion of bloom in late June and early July, but abundant recurrent bloom occurs until September. Among the diverse L. indica cultivars there are few true whites and none that are reliably hardy. The sinuous, mottled trunks with exfoliating bark are striking throughout the year and their most outstanding feature. With age and increased trunk diameter, the sinuous texture and bark coloration become more pronounced. ‘Muskogee’ has upright, multi-colored, light brown trunks; and ‘Natchez’ has prominent, vase-shaped, dark cinnamon brown trunks. The plants may be grown either as single or multiple trunk specimens. ‘Muskogee’ and ‘Natchez’ are suitable as specimen trees in the residential landscape, avenue or mass planting in public parks, and are potential flowering street trees with attractive foliage in summer and coloration in autumn, profuse blooms throughout the summer, and spectacular trunks at all seasons.

Availability

‘Muskogee’ and ‘Natchez’ have been commercially propagated from plants previously distributed to wholesale propagation nurseries under the cooperative programs of the U.S. National Arboretum. These cultivars were introduced in 1980. A subsequent distribution will be made to arboreta and botanic gardens. The U.S. National Arboretum does not have stock of these cultivars available for general distribution.

Literature Cited