

'Abbott Pink' Bluebonnet (*Lupinus texensis* Hook.)

Jerry M. Parsons and Tim D. Davis¹

Texas Agricultural Extension Service, 1143 Coliseum Road, San Antonio, TX 78219

Additional index words. bedding plant, flower color, lupine, ornamentals breeding

Bluebonnet—designated by the state legislature as all six of the *Lupinus* species native to Texas—is the state flower of Texas. The

Received for publication 12 June 1992. Accepted for publication 2 Sept. 1992. 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.

¹Associate Professor, Texas A&M Univ. Research and Extension Center, 17360 Coit Rd., Dallas, TX 75252-6599.

most widespread bluebonnet (*Lupinus texensis*) is a winter annual that produces predominately violet-blue (violet-blue group 96A) (Royal Horticultural Society, 1982) flower spikes in early to middle spring. This species is used widely in impressive floral displays along roadsides throughout much of the state (Andrews, 1986). In 1985, a breeding project was initiated to develop bluebonnet cultivars to use as bedding plants. A primary objective of the project was to develop novel bluebonnet flower colors. Color variants exist in native populations but are quite rare. 'Abbott Pink'

was developed by recurrently selecting for flower color, and is the first seed-propagated cultivar to be released from this project. This cultivar is intended for use as a bedding plant and is named after the late Carroll Abbott, a Texas naturalist and entrepreneur who enthusiastically encouraged bluebonnet cultivation.

Origin

Seed was collected in Spring 1985 from a small group (fewer than 100 individual plants) of naturally occurring pink-flowered bluebonnets found near San Antonio, Texas. This seed was planted in Fall 1985 and produced a population containing ≈10% pink-flowered plants the following spring. The remaining 90% of the plants had typical violet-blue flowers and were rogued as soon as their color was visible. Seed was collected in Spring 1986 from the pink-flowered plants and planted in the fall. This seed produced a population composed of ≈15% pink flowers. Blue-flowered plants were rogued and seed was collected again from the pink-flowered plants. This seed produced a population composed of ≈85% pink-flowered plants in Spring 1988. Pink

flowers were selected for two more years until a pure (>99%) pink-flowered population was obtained. This line has been maintained for two additional years and is now being released as 'Abbott Pink'. Seed collected from 'Abbott Pink' may not remain pure unless plantings are isolated from other bluebonnets.

Description

The plant forms a dense rosette in the fall and then blooms the following March or April, depending on the location and weather. The bloom period is 3 to 5 weeks. The plant produces 120 to 200 racemes/m² of ground surface. The racemes (Fig. 1) are light pink (red group 49D), 9 to 12 cm long, and contain 20 to 35 flowers. Each flower is 10 to 20 mm long and has a 3- to 4-mm-wide white (occasionally maroon) banner spot on the banner petal. The banner spot is generally edged by a narrow maroon (red-purple group 59A) band. Pedicel length is 8 to 12 mm and the flower spike stem diameter is 3 to 4 mm. At full bloom, the plants are 450 to 550 mm tall, have a mounded form, and are 600 to 700 mm in diameter. The foliage is yellow-green (yellow-green group 146B) and is composed of alternate, palmately compound leaves (Fig. 1), generally with five leaflets (occasionally six). Each leaflet is oblanceolate, 30 to 45 mm long, and 12 to 16 mm wide at the widest position. Petiole length is 50 to 65 mm. Pods, 30 to 45 mm long and ≈6 to 10 mm wide, become visible ≈1 month after anthesis and are densely pubescent. There are usually five to seven seeds per pod.



Fig. 1. Photograph of leaves and inflorescence of 'Abbott Pink' bluebonnet.

Cultivation

Seed must be scarified to obtain optimal germination (Davis et al., 1991). Irrigation or rainfall is needed to trigger germination, but once plants are established, they require little additional irrigation under central Texas climatic conditions. The plants grow well in most soilless media. The plants overwinter in U.S. Dept. of Agriculture hardiness zones 8 to 11 (U.S. Dept. of Agriculture, 1990) and often survive winter in zone 7. Chilling is not required for flowering.

Performance

Except for having a different flower color, the garden performance of 'Abbott Pink' is nearly identical to the native violet-blue bluebonnet. 'Abbott Pink' has been successfully grown from seed outdoors in the following Texas locations: San Antonio (4 years), Dallas (2 years), LaPryor (4 years), and Center (3 years). Other than some winter kill in zone 7 in 1989, the plants have not had any problems in these areas. Greenhouse-grown transplants have been used successfully for 2 years in Memphis, Tenn. (transplanted outdoors in December) and at the White House in Washington, D.C. (transplanted outdoors in April).

Availability

Seed can be purchased from Texas Seed Co., P.O. Drawer 599, Kenedy, TX 78119-0599.

Literature Cited

- Andrews, J. 1986. The Texas bluebonnet. Univ. of Texas Press, Austin.
- Davis, T.D., S.W. George, A. Upadhyaya, and J. Parsons. 1991. Improvement of seedling emergence of *Lupinus texensis* Hook. following seed scarification treatments. *J. Environ. Hort.* 9:17-21.
- Royal Horticultural Society. 1982. Royal Horticultural Society colour chart. Royal Hort. Soc., London.
- U.S. Dept. of Agriculture. 1990. Plant hardiness zone map. Agr. Res. Serv., Washington, D.C., Misc. Publ. 1475.