

# Garden Phlox

James Robbins  
Professor - Ornamentals

Rick Cartwright  
Professor - Plant  
Pathologist

Garden phlox (*Phlox paniculata* L.) is a popular, full-sun perennial that is native to open woodland sites from upstate New York across to Michigan and down to Arkansas and Tennessee. The retail trade offers at least 50 cultivars, which were selected for disease resistance and variation in flower or leaf color. In Arkansas, garden phlox typically flowers from late May through mid-October. The average length of flowering is 18 weeks. Individual flowers, approximately 1 inch in diameter, consist of five colorful petals attached to a long tube. The 3- to 4-inch diameter, dome-shaped terminal inflorescence consists of 20 to 40 flowers. Flowers come in a variety of colors including white, pink, purple, orange and bicolored.

The average plant size is 40 inches tall by 23 inches wide. Leaf color is typically a medium green, but variegated-leaf cultivars are available. Garden phlox grows best in full sun in a good, fertile soil that is moist but not wet. Plants are typically situated at the middle or back of a mixed perennial border. To keep plants from becoming overcrowded, the clump should be divided every three or four years in the spring before new growth starts. After blooming, the old flowers should be removed (dead-headed) to prevent reseeding in the garden.

Garden phlox possesses many desirable ornamental characteristics but has one serious problem, powdery mildew disease. Caused by *Erysiphe cichoracearum* L., powdery mildew is a common fungal problem on *P. paniculata*. Phlox plants are infected during mid-spring and early fall when temperatures are near 60°F. Signs include a white powdery mass of spores and hyphae on the upper and lower leaf surfaces and the stem. As the plant grows and temperatures remain cool, the pathogen infects new growth. The disease does not typically interfere with flowering but can cause disfigured flowers. Although the disease does not kill the plant outright, it can weaken it.

Phlox cultivars vary in susceptibility to powdery mildew (Table 1), and the disease can be controlled with fungicides, biological agents and resistant cultivars. Cultivars that are rated as resistant or very resistant ('Red Magic,' 'David,' 'Eden's Crush,' 'Darwin's Joyce,' 'Blue Boy,' 'Robert Poore' and 'Delta Snow') would likely require no fungicide treatment for powdery mildew when grown in Arkansas.

Following are photographs of various phlox varieties.

*Arkansas Is  
Our Campus*

Visit our web site at:  
<http://www.uaex.edu>



Fig. 1. 'David'



Fig. 2. 'Miss Universe'



Fig. 3. 'Mt. Fuji' ('Mt. Fujiyama')



Fig. 4. 'Snow White'



Fig. 5. 'Miss Holland'



Fig. 6. 'Delta Snow'



Fig. 7. 'Fairest One'



Fig. 8. 'Darwin's Joyce'



Fig. 9. 'Prime Minister'



Fig. 10. 'Bright Eyes'



Fig. 11. 'Rosalinde'



Fig. 12. 'Flamingo'



Fig. 13. 'Miss Pepper'



Fig. 14. 'Eden's Crush'



Fig. 15. 'Eva Cullum'



Fig. 16. 'Miss Ellie'



Fig. 17. 'Laura'



Fig. 18. 'Robert Poore'



Fig. 19. 'Little Princess'



Fig. 20. 'Nicky'



Fig. 21. 'Miss Kelly'



Fig. 22. 'Blue Boy'



Fig. 23. 'Little Boy'



Fig. 24. 'Andre'



Fig. 25. 'Red Magic'



Fig. 26. 'Starfire'



Fig. 27. 'Red Super'



Fig. 28. 'Orange Perfection'

**TABLE 1. Powdery mildew ratings and flower color for *Phlox paniculata* cultivars evaluated under field conditions at Fayetteville, Arkansas, in 2001.**

Cultivar	Resistance Rating <sup>1</sup>	Flower Color	Other Comments From Field Observations
'Starfire'	VS	Hot Pink	Leaves purple when emerging, mature green
'Little Princess'	VS	Med. Purple	
'Miss Universe'	VS	White	
'Andre'	VS	Dark Purple/White Eye	Leaves purple when emerging, mature green; long flowering period
'Mt. Fuji' ('Mt. Fujiyama')	VS	White	
'Little Boy'	S	Purple	Long flowering period
'Miss Pepper'	S	Lt. Pink/Dark Pink Eye	Long flowering period
'Rosalinde'	S	Lt. Pink/ Med. Pink Eye	Long flowering period
'Miss Kelly'	S	White/Lt. Pink Eye	Leaves dark green with shades of rust below
'Fairest One'	MS	White/Med. Pink Eye	
'Bright Eyes'	MS	Lt. Pink/Med. Pink Eye	
'Nicky'	MS	Dark Red-Violet	Long flowering period
'Laura'	MS	Purple/White Eye	
'Snow White'	MS	White	Long flowering period
'Prime Minister'	MS	White/Dark Pink Eye	
'Pink Gown'	MS	Med. Pink/Dark Pink Eye	Flowers sweet fragrance
'Miss Ellie'	MR	Med. Pink/Dark Pink Eye	Long flowering period
'Flamingo'	MR	Med. Pink/Dark Pink Eye	
'Red Super'	MR	Red-Violet	Long flowering period
'Eva Cullum'	MR	Med. Pink/Dark Pink Eye	Flowers sweet fragrance
'Starlight'	MR	Purple	
'Orange Perfection'	MR	Bright Orange	
'Red Magic'	R	Hot Pink	
'David'	R	White	
'Eden's Crush'	R	Lt. Pink/Dark Pink Eye	
'Darwin's Joyce'	R	Med. Pink	Leaves variegated white and green
'Blue Boy'	R	Lavender/White Eye	Plant requires staking
'Robert Poore'	R	Lavender/White Eye	
'Delta Snow'	VR	White/Med. Lavender Eye	Flowers sweet fragrance; long flowering period

<sup>1</sup>VS = very susceptible; S = susceptible; MS = moderately susceptible; MR = moderately resistant; R = resistant; VR = very resistant

Acknowledgment is given to **ERIN TAYLOR**, former graduate student, and **DR. GERALD KLINGAMAN**, former Extension horticulture specialist - ornamentals, Horticulture Department, University of Arkansas, Fayetteville, as original co-authors of this fact sheet.

Printed by University of Arkansas Cooperative Extension Service Printing Services.

**DR. JAMES ROBBINS** is professor - ornamentals, Horticulture Department, University of Arkansas Division of Agriculture, Little Rock, and **DR. RICK CARTWRIGHT** is professor - plant pathologist, Department of Plant Pathology, University of Arkansas Division of Agriculture, Fayetteville.

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Director, Cooperative Extension Service, University of Arkansas. The Arkansas Cooperative Extension Service offers its programs to all eligible persons regardless of race, color, national origin, religion, gender, age, disability, marital or veteran status, or any other legally protected status, and is an Affirmative Action/Equal Opportunity Employer.