## *Ulmus davidiana* var. *japonica* **'Prospector'**



The U.S. National Arboretum presents *Ulmus davidiana* var. *japonica* 'Prospector', an elm of Asian origin with proven pest and Dutch elm disease resistance. 'Prospector' offers the vase shape, dense crown, and large green leaves of its American cousin but in a smaller package. It is a great choice for spaces that need an American elm but aren't quite large enough. Try 'Prospector' as a street tree, under power lines, in municipal sites or parks, and, of course, at home.



'Prospector', left; American elm, right

**U.S. National Arboretum Plant Introduction** 

Floral and Nursery Plants Research Unit



U.S. National Arboretum, U.S. Department of Agriculture, Agricultural Research Service, 3501 New York Ave. NE., Washington, DC 20002

## 'Prospector' Japanese elm

<b>Botanical name:</b>	Ulmus davidiana Planch. var. japonica (Rehder) Nakai 'Prospector' (NA 55398; PI 536050)
Family:	Ulmaceae
Hardiness:	USDA Zones (4)5–10
Development:	'Prospector' elm was initially selected by A.M. Townsend and L.R. Schrieber in 1975 from a 1965 planting of <i>U. davidiana</i> var. <i>japonica</i> (as <i>U. wilsoniana</i> ) seedlings in Delaware, Ohio. Over the next 15 years, this plant demonstrated a high level of resistance in both laboratory and field trials to the fungus that causes Dutch elm disease (DED) and to elm leaf beetle. 'Prospector' was named and released in May, 1990.
Significance:	The Dutch elm disease epidemic of the 20th century sparked a great interest in Asian elm species as potential replacements for the American elm because of their inherent tolerance or resistance to DED. The Asian species <i>U. davidiana</i> , which resembles a small American elm in form and leaf, was an excellent prospect for evalua-tion in DED trials. 'Prospector' has consistently exhibited superior tolerance to DED and elm leaf beetle.
<b>Description:</b>	<ul> <li>Height and Width: Approximately 50 feet tall with a 25-foot crown spread at maturity. Smaller than American elm.</li> <li>Growth Rate: Moderately fast; 23 feet tall with a 21-foot crown spread at 10 years of age under normal nursery conditions. Vigorous.</li> <li>Habit: Deciduous tree with vase-shaped crown, similar to American elm, but pendulous at much lower height; dense canopy.</li> <li>Foliage: Leaves 4 1/2 inches long, 3 1/3 inches wide, obovate. New leaves emerge orange red and mature to green; good yellow fall color.</li> <li>Bark: Light grey.</li> <li>Flowers: Very early spring; inconspicuous; not ornamental.</li> <li>Fruit: Small; samaras emerge green, dry to brown; not weedy.</li> </ul>
Culture:	Grows best in well-drained soil. Tolerates somewhat adverse sites. Successfully grown in Maryland, California, Ohio, Oklahoma, Oregon, Tennessee, and Virginia. Requires regular pruning to maintain form due to vigorous early growth.
Propagation:	Roots easily from softwood cuttings under mist, 3000–8000 ppm IBA, in 3 to 4 weeks.
Landscape use:	Locations requiring small to intermediate-sized shade tree: Parks, lawns, streets, or highways, under power lines.
Availability:	Limited availability from wholesale nurseries.

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