

Gardener's Notebook

Horticultural News and Research

TOAD LILY STUDY

A 10-YEAR STUDY of toad lilies (*Tricyrtis* spp.) by the Chicago Botanic Garden (CBG) rates these herbaceous perennials (profiled in the September/October 2000 issue of *The American Gardener*) as exceptionally garden-worthy. Uncommonly



Tricyrtis 'Tojen' displayed good foliage growth and resistance to fungal diseases.

beautiful late-season flowers that can last up to 10 weeks adorn stately, extremely hardy, shade-tolerant foliage. Native from the eastern Himalayas to China, Japan, Taiwan, and the Philippines, the toad lily has proven "no longer a botanical curiosity or specialty plant, but an outstanding perennial for late-season interest in shade and woodland gardens," says Richard Hawke, manager of the garden's plant evaluation programs.

In 1990, 24 *Tricyrtis* species and cultivars were planted in a test site where they were exposed to morning sun followed by dappled shade for the rest of the day. They were protected from wind by a wooden fence. The soil was a periodically droughty clay-loam with a pH of 7.5. The plants were watered as needed, but given no fertilizer and only minimal maintenance in order to simulate home garden culture. Under this regimen in the Midwest's challenging cli-

mate—CBG is in USDA Hardiness Zone 5 and AHS Heat Zone 5—only 16 of the tested plants survived for four or more years.

The survivors were rated for floral and habit display, winter hardiness, cultural adaptability, and disease and pest resistance. Top performers were *T. formosana* and *T. hirta* 'Miyazaki', which received overall marks of "excellent." Among those rated "good" were *T. latifolia*, *T. 'Sinonome'*, and *T. 'Tojen'*, which showed resistance to the fungal disease anthracnose and exhibited healthy, robust foliage.

To order a copy of Plant Evaluation Notes, Issue 16, on *Tricyrtis*, send a check for \$3 payable to Chicago Botanic Garden to: Plant Evaluation Notes, c/o Richard Hawke, Chicago Botanic Garden, 1000 Lake Cook Road, Glenview, IL 60022.

FLORIDA INVASIVES

THE FLORIDA Nurserymen and Growers Association (FNGA) is urging Florida's nursery and landscape professionals to phase out production, sale, and use of 34 plants that are invasive in natural areas.

In addition to such well-publicized invasives as melaleuca (*Melaleuca* spp.), the



Castor bean is on the unwanted list in Florida.

water weed hydrilla, and Australian pine (*Casuarina cunninghamiana*), the list of plants to be avoided includes popular ornamentals: night-blooming cereus (*Cereus undatus*), Chinese brake fern (*Pteris vittata*), and castor bean (*Ricinus communis*). These plants tend to escape gardens and establish colonies in natural areas. For a complete list of the 34 species, contact FNGA, 1533 Park Center Drive, Orlando, FL 32835, (407) 295-7994, or e-mail: infor@fnga.org.

DAYLILY RUST ALERT

FIRST IDENTIFIED in the summer of 2000 on daylilies in a Georgia nursery, daylily rust (*Puccinia hemerocallidis*) has



Daylily rust on the foliage of an affected plant.

subsequently been found on daylilies in Alabama, California, Florida, Louisiana, Minnesota, Mississippi, South Carolina, Tennessee, and Texas. Although the fungus that causes daylily rust initially was identified in Asia, it is believed to have entered the United States on plant material imported from Costa Rica.

The rust pathogen is heteroecious—often, but not necessarily, involving another host plant for a part of its reproductive cycle. One alternate host is *Patrinia* spp. Another plant suspected to

be involved is *Hosta*. Early infection by this fungus may resemble the disease daylily streak. However, after two or three days, daylily rust produces raised spots (pustules). If a white tissue is rubbed over the infected leaves, the pustules will transfer orange powdery spores to the tissue, which won't occur with any other daylily leaf disorder.

Because daylilies form a continuum of susceptible host tissue across the United States and the rust pustules develop quickly and are carried by wind, state and federal plant pathologists do not expect the disease to be contained by regulatory means.

Not all daylilies are equally susceptible. The worst hit is a cultivar named 'Pardon Me'. Also particularly prone to the disease so far are 'Attribution', 'Gertrude Condon', 'Crystal Tide', 'Colonel Scarborough', 'Starstruck', 'Joan Senior', 'Imperial Guard', 'Double Buttercup', and 'Stella de Oro'.

According to Tim Schubert of the Florida Department of Agriculture and Consumer Service, destroying all infected plants may be the safest course of action. Eliminating highly susceptible varieties may protect more resistant ones. Fungicides, applied after all infected foliage has been removed and destroyed, may help control the disease. If fungicide is applied, Schubert suggests neighboring plants should be treated as well.

TRADING TURF FOR CASH

SINCE 1998, the Southern Nevada Water Authority has been paying people to rip



Cacti and other drought-tolerant plants replace turf in this lawnless landscape in Arizona.

up all or part of their lawns. Homeowners receive 40 cents per square foot up to a maximum of \$1,000 if they replace their lawns with less water-dependent indigenous flora. Since the program's inception, about 3 million square feet of lawn has been converted to desert landscaping.

New Mexico, California, and Arizona are also offering homeowners similar financial incentives to reduce water use. But conserving water is not the only benefit of lawnless landscaping—it also reduces the use of synthetic fertilizers and pesticides, and lowers air and noise pollution associated with gas-powered mowers. And by increasing the number of indigenous plants in the landscape, homeowners are providing food and restoring habitat for regionally native insects, birds, and other animals.

SAVING MOUNT VERNON'S TREES

VISITORS TO Mount Vernon, George Washington's historic Virginia homestead and farm on the Potomac River, are treated to a grand vista: a beautiful mansion set on sweeping lawn under a canopy of stately trees. What is missing from this picture is not immediately evident, but absolutely crucial: Under those great shade trees are no seedlings or young trees. This startling absence of future forest growth is blamed principally on grazing by deer.

As the existing trees age, no seedlings are taking their places. In the past century, Mount Vernon has lost more than 70 trees, leaving only 13 remaining of those originally planted under Washington's direction. To halt this loss and provide for the future, the Mount Vernon Department of Horticulture has launched a reforestation initiative in partnership with the non-profit National Tree Trust and The Champion Tree Projects. The Arnold Arboretum at Harvard University in Cambridge, Massachusetts, is providing consulting expertise.

Through this initiative, new generations of Champion Trees—clones of the largest and often oldest specimens of a species—will be planted at Mount Vernon. In addition, a Mount Vernon Special Collection of Champion Trees, propagated directly from the 13 trees that date back to Washington's time, will be

developed. "It's really preserving living history," says Mount Vernon Director of Horticulture Dean Norton. "These are the only living witnesses to the life and times of George Washington."

CAPE MYRTLE SOCIETY FORMED

ON JUNE 28, 200 people attended a formation meeting of the Crape Myrtle Society of America. Because crape myrtle (*Lagerstroemia indica*) is the state shrub of Texas, the meeting was held, fit-



Pink- and white-flowering crape myrtles.

tingly, at the Texas A & M Research and Extension Center in Dallas in partnership with the Crape Myrtle Trails of McKinney Foundation. These two organizations are partnering to establish "The World Collection" of crape myrtles at Texas A & M, at the Texas Agricultural Extension Center in Dallas, and in the city of McKinney, some 30 miles north-east of Dallas.

Currently, McKinney boasts a seven-mile span of the late summer-flowering shrubs and expects to add more than 50,000 more crape myrtles in the next decade. There are more than 300 varieties of crape myrtle in the nursery industry worldwide, with more being introduced each year.

Raul Cabrera, a horticultural researcher at the Experiment Station in Dallas, has developed a new Web site to provide information about the new society and crape myrtles: dallas.tamu.edu/woody/cmyrtle/index.html.