



Virginia Green Industry Council

For Immediate Use

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Electronic Version:

www.viriniagreen.org

DAYLILY RUST - AN AVOIDABLE NUISANCE

Since its discovery in 2000, daylily rust (*Puccinia hemerocallidis*) has been found in daylilies in over half of the United States. The infection does not kill daylilies and, according to the All-American Daylily Selection Council (AADSC), can be avoided by proper selection and horticultural practices. In a worst case scenario, daylily rust can be controlled by treatment of the susceptible varieties.

Daylilies infected by *Puccinia hemerocallidis* show unsightly rust spots and yellowing, mainly on older foliage, similar to rust symptoms on roses, geraniums and other garden plants. The rust is confined to the foliage and bloomstalks (scapes) and does not enter the crown or roots. No daylily plants have been killed by the rust. *Puccinia* spores spread quickly by wind, on clothing and infected plants, but do not infect other plant species. Roses have their own specific rust species, as do most other ornamental plants. Just as with roses, symptoms of daylily rust vary greatly depending on growing conditions and the susceptibility of each variety. Among the 48,000-plus daylily cultivars are varieties that are unusable in some gardens and those that are virtually symptom-free.

The worst rust symptoms will appear on daylilies grown in conditions of high humidity, poor air circulation and nighttime overhead watering. Daylily rust spores require 100% humidity and temperatures between 40 and 90 degrees for five to six hours to germinate. If germination does not occur within two to three days, the spore dies. If germination occurs, infection can lie dormant within green tissue until optimal conditions arise. It appears that spores do not survive outdoors in winters colder than USDA Zone 6, making daylily rust less of a problem in colder areas.

Many gardeners simply cut off the unsightly, rust-infected foliage, which is quickly replaced by clean, new foliage. More aggressive action is also an option, which includes cutting the infected plants to the ground, disposing of foliage, and treating the plants with a fungicide specifically for rust prevention, such as Daconil.

Since 1989, the AADSC has operated a network of daylily test sites throughout the United States and has collected data on over 50 performance characteristics. In 2001, rust resistance was added as one of the key test criteria. In selecting for "bulletproof" performance, the AADSC has eliminated many of the highly susceptible varieties from its program and focused on identifying and promoting the most rust-resistant daylily varieties.

More than 700 varieties have been or are being put through rust trials by the AADSC and University of Georgia, as well as Cornell University and the USDA. Here are the results on some of the most commonly available varieties:

Susceptible

Pardon Me

Ming Toy

Russian Rhapsody

Always Afternoon

Mary Todd

Pandora's Box

Strawberry Candy

Resistant

Little Business

Mini Pearl

Butterscotch Ruffles

Among the AADSC's "All-American Daylilies," Black-Eyed Stella, Lullaby Baby, Bitsy, Frankly Scarlet, and Plum Perfect have been reported as rust resistant; Judith as moderately resistant; Star Struck as moderately susceptible; and Leebea Orange Crush as susceptible.

There are reasons that daylilies are America's favorite perennial. They are an amazing plant, available in a rainbow of colors, shapes, sizes, and varieties that can be easily grown anywhere in the U.S. With proper selection, there's no reason for gardeners to be intimidated by the rust challenge. For regularly-updated information regarding the benefits of gardening with daylilies, and comparisons of daylily variety performance (including rust resistance), visit www.daylilyresearch.org.

For more information about the All American Daylily Selection Council, please contact Mary McLoughlin at (616) 698-0748 P.O. Box 210 e 31606 East Pink Hill Road • Grain Valley, MO 64029

Go to our consumer website for additional gardening information at www.VirginiaGardening.com

The Virginia Green Industry Council is the voice of the horticulture industry in the Commonwealth and is dedicated to enhancing the beauty of the state's environment, the well-being of our citizens, improving our state's economy, and improving the health and wellness for everyone in Virginia. The Council is made up of providers and consumers of horticultural products and services. The Council works to provide public and industry education, environmental guidelines and other information that will keep Virginia green and growing. For more information, visit www.virginiagreen.org. 540-382-0943 FAX: 540-382-2716 E-mail:info@virginiagreen.org

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