



Gardeners Information Service

GRAPE BLACK ROT

Every year I have beautiful green grapes on my vines, but before they ripen they turn black. What can I do about it?

—S.P., ARLINGTON, VIRGINIA

It sounds like you have the vintner's ancient scourge, grape black rot. It usually starts with small spots on the foliage that enlarge and are surrounded by a darker brown border. Spots also appear on the fruit, but, as you noticed, not until they are about half grown. They enlarge quickly, rotting the entire grape in a few days. The diseased fruits turn black, shrivel, and dry up; they look very much like raisins and are known as mummies.

Grape black rot is caused by a fungus, *Guignardia bidwellii*, and is a serious problem for grape growers, since all cultivars are susceptible. Wayne Wilcox, a specialist in grape diseases at Cornell University in Ithaca, New York, explains that sanitation is of utmost importance for control. The fungus produces two types of spores: The overwintering spores survive on mummies and these are airborne, thus any infected fruit left on the ground or on the canes becomes the primary source of infection. Later, the disease is further spread through waterborne spores that develop on infected fruit. Remove all mummies from the vines and from the ground beneath. Mulching to cover any remaining overwintering spores creates a physical barrier that will help reduce infection.

Wilcox suggests that fungicides may be necessary to control the fungus, and timing is critical for their application: The first should be applied right at the start of bloom, followed by one or two more applications at two week intervals. Mancozeb and Captan are two commonly used fungicides for black rot.

If the disease has been left untreated for several years, Wilcox warns that the fungus may also be overwintering in cane lesions. In-

fecting canes should be removed if possible, but if not, a delayed dormant spray of liquid lime sulfur—applied at the first sign of bud break—will help. “It is sort of a trade-off,” says Wilcox. “It burns the heck out of everything,” both the emerging buds and the fungus. But, it may be a necessary procedure if the canes are severely infected.

SHORT-LIVED CARDINAL FLOWER

I can't grow cardinal flowers (*Lobelia cardinalis*) in my garden for more than a year before they die. Is there a secret to growing them?

—C.C., VIA E-MAIL

Cardinal flowers are native to wetlands of the eastern United States and thus thrive in locations such as a wet meadow or alongside a garden pond or stream. They can be grown in more traditional borders as long as you incorporate plenty of organic matter to help retain moisture. It may be a good idea to try and site them so they receive some afternoon shade, otherwise be prepared to water regularly; the more sun cardinal flowers get, the more water they need. No matter where you plant them, take particular care to keep the soil moist until plants are established.

If your site is appropriately moist, the other possible explanation for your difficulty involves mulching. According to the Virginia Native Plant Society's (VNPS) fact sheet on the species, “Cardinal flower's evergreen basal leaves need exposure to the sun for continued photosynthesis through winter.” VNPS advises carefully tucking mulch *underneath* the leaves to protect the plants' shallow roots, but warns, “the plant may die if the basal rosettes are covered with leaves or mulch.” Some growers avoid mulching cardinal flowers altogether.

Even when grown under the best of circumstances, cardinal flowers are short-lived perennials, but when they are well sited, they usually self sow readily.

DIVIDING HOSTAS

My hostas are getting too large for the area where they are located. When is the best time to divide them?

—M. P., DENVILLE, NEW JERSEY

According to the American Hosta Society, hostas can be divided nearly any time, but to minimize stress, early spring is best. Plants should be dug as soon as the eyes—emerging buds—appear, and before appreciable growth takes place. Divisions should be made using a sharp knife; to prevent the spread of infection, the knife should be dipped into a solution of one part bleach to 10 parts water between each cut. Plant the divisions in organic rich, moist but free-draining garden soil and water regularly until they are established.

MYSTERY SUNFLOWER

Last fall I saw a black sunflower at a farmer's market in Missoula, Montana. It was about four inches in diameter and about as black as flowers get. I've been trying to identify the variety and find a source. Can you help?

—L.G., VIA E-MAIL

We've never heard of a black sunflower, but Johnny's Selected Seeds of Albion, Maine (207) 437-4301, does offer the hybrid 'Moulin Rouge', which it claims is the “darkest of sunflowers.” Harris Seeds of Rochester, New York (800) 514-4441 also carries that variety. Its deep burgundy ray petals surround an ebony center. The pollenless, three-to four-inch flowers are borne on well-branched plants that reach six feet tall. 'Moulin Rouge' is recommended both for cut flowers and as an accent planting. Perhaps it is your mystery cultivar.

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WE'RE READY TO HELP: For answers to your gardening questions, call Gardeners Information Service at (800) 777-7931, extension 131, between 10 a.m. and 4 p.m. Eastern time, or e-mail us anytime at gis@ahs.org.