Hollyhock Rust
by Becky Miller-Cripps

Remember the abnormally warm and dry spell we had in January and February? Plants responded to the unseasonable spring by pushing up lots of early growth. This was followed by late rains, and snow in the high country, that provided the moisture this early growth needed to be able to continue.

The result, at least in my yard, was lush growth and bloom like nothing I had experienced in the ten years I've lived in this house. Along my back fence there was what actually appeared to be a cottage garden border. I LOVED it! Annual grasses competed with Love-in-a-Mist (*Nigella damascena)*, a delicate but prolific annual with feathery foliage and beautiful blue star-shaped flowers. Irises bloomed early and widely. And the hollyhocks! They started growing very early and had strong, large-leaved stalks by the time true spring arrived.

But then came the payback. The growth was so lush (or rank) that I couldn't keep up with the weeds. The heavy growth of grasses, annuals and perennials retained moisture and reduced air flow. The result of all this growth was the worst case of hollyhock rust I've ever experienced.

Within the University of California Integrated Pest Management program I found information about rust diseases on various plants. Rust organisms can infect not only hollyhocks, but roses, chrysanthemums and geraniums, broad-leaf trees like poplar and pear, and conifers such as cedar, pine and juniper. In general, rust organisms cause leaf spots and orange blotches that contain the spores for new infections. Rusts are happiest when it's wet and mildly warm. And the spores can blow for miles, so when conditions are right, it's almost impossible to avoid infection.

In a more extensive search for information, I came across the University of Wisconsin (another cooperative extension school) Horticulture Program. Their program contains a pest note specific to hollyhocks. According to the pest note, hollyhock rust (Puccinia malvacearum) is the most common fungal leaf disease of hollyhocks and also can infect both cultivated and wild members of the mallow family. Usually the disease effects are limited to premature leaf death and drop, but sometimes (rarely) it can kill the plant. Hollyhock rust, like all rust diseases, can be spread by water droplets – sprinkler or rain – and wind. The infectious spores also survive the winter in hollyhock leaf litter and stem debris.

So, what can be done if you, like me, experience an unusually heavy infestation of hollyhock rust? According to the University of Wisconsin, "Once symptoms of hollyhock rust appear, control can be difficult." Air flow is key to preventing the wet, warm environment fungi love. My cottage garden border had to go, although it was too late.

Recommendations include: remove common mallow weeds from the area (one of the most-common weeds in my 50-year-old back yard). They are a host for the fungus. Avoid overhead watering; splashing water scatters the spores. Remove diseased leaves and stems. Dispose of damaged plant materials in the municipal trash (if allowed) or by burying them deeply. Do not compost or allow them to lie on the ground. (In the past I had used spent hollyhock leaves and stems as mulch materials around the stems of current plants….Oops!) Do not take the damaged plant materials to the yard waste recycle site – that can spread the disease to other areas.

Fungicides are available that are listed for use on hollyhocks, but need to be sprayed repeatedly using different products with different modes of action to prevent fungicide resistance. According to UC, "The frequent applications required to provide good control of rust may not be warranted in many landscape situations."

If you prefer less chemical control methods, University of Wisconsin recommends not using the seed from infected plants. Avoid planting hollyhocks densely (remember my cottage garden border?) to allow the plants to dry during warm, wet weather. Water properly with a soaker or drip hose and only fertilize when indicated by a soil test. Lush, healthy growth provides an attractive site for fungus to grow.

As for me? I may not grow hollyhocks next to my fence next year. I've already decided that I won't use fungicides, so I may have to take a break from the disease cycle.

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