Chrysanthemum rust

GWF314
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These diseases will attack many types of chrysanthemum, but only a few are seriously affected. Hybrid garden varieties are particularly susceptible.

Q What is chrysanthemum rust?

A There are two types of fungal rust diseases that attack chrysanthemums: white rust and chrysanthemum rust. White rust (*Puccinia horiana*) is the more serious. It originated in Japan and China, but was inadvertently introduced into Europe in the 1960s. Although there was a campaign to eradicate it from Britain, it is now established and can spread extremely quickly.

Q How can I recognise white rust?

A Pale, dimpled spots appear on the upper leaf surfaces which grow through to the undersides. The spots turn brown on the top, and a pale pink/buff colour underneath. These then turn into the distinctive white spots that give the disease its name.

If it is not controlled the leaves become brown and die off, the plant is checked or killed.

Old leaves, young leaves and flowers are attacked. The initial symptoms can be on any part of the plant, but especially where the air is humid and leaves stay wet longest.

Q What plants will it attack?

A Although 12 species of chrysanthemums are vulnerable to the diseases, some common species seem to be immune. Marguerites, pyrethrums, shasta daisies, ox-eye daisies and annual chrysanthemums are safe.

Hybrid garden chrysanthemums are very susceptible. Some kinds are especially likely to get the disease eg 'Margarets'.

Q When should I expect it?

A Outbreaks occur mainly in warm and wet weather. The spread of the disease slows down and symptoms may seem to disappear in dry weather.

The disease gets into the garden on infected plants or by the spores drifting in from outside. The spores can drift for about 1/4 mile in damp air, or in rainstorms. Once in the garden, the spores are transmitted from plant to plant by water splash from rain or watering. A new infection can start in a few hours if it is warm and moist. Wet leaves are needed for it to develop. It can also be spread on hands and tools.

Q Could I mistake white rust for anything else?

A The puncture marks made by leaf miners look like the early stages of the disease. They are more bleached, often wart-like and concentrated on the upper leaves.

Chrysanthemum rust (*Puccinia chrysanthemi*) has brown spots beneath the leaves and yellow-green spots above. It is not as serious as white rust and should respond to the same counter-measures.

Chrysanthemum powdery mildew (*Oidium chrysanthii*) produces a white, powdery covering, rather than spots.

Q What can I do about white rust?

A When you see it on your plants, pick off all affected leaves and burn, bury or consign them to the dustbin. This may control the disease in dry weather if you catch it early enough. Plants can often become heavily infected very quickly. Dig out and burn, bury or throw away the affected plants including all leaves and debris.

Cut out overhead watering, and ventilate greenhouses as much as you can to reduce the humidity. Keep down weeds and basal shoots to improve airflow around the plant.

Q Will it live long in the soil?

A It can last up to eight weeks in the soil, on tools, equipment and plant debris. After an attack, the infected plot must be kept chrysanthemum-free for at least two months. This is not too much of a problem as the attacks usually happen in late summer and early autumn, so the disease dies out during the winter.

Q Can I take cuttings from infected plants?

A White rust will persist in the plants after they die back and are lifted in the autumn. Infected plants should be thrown away, buried or burnt. If white rust has hit your garden, it is best to start again with fresh stock from a good supplier.

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