



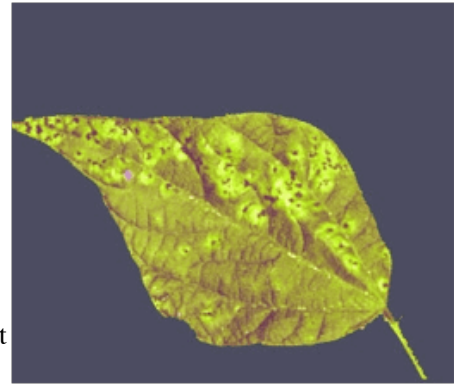
## Integrated Pest Management Program

Plant Science and Landscape Architecture  
Extension

### Bean Rust

Rust is a common disease that affects many plants. Bean rust is caused by *Uromyces phaseoli typica*, and it affects common dry and snap, lima, and scarlet runner beans. It is a worldwide disease, and can destroy an entire crop if conditions are favorable early in the season. It is more severe in humid areas, and is favored by moderate temperatures. It can cause defoliation early in the season, which reduces yield. If only the leaves are infected later in the season, there is little yield loss, and the need for a chemical defoliant may be eliminated.

**Symptoms:** Rust can occur on all above-ground parts of the plant, but rust spots are most numerous on the undersides of leaves. Spots begin as tiny, white, slightly raised spots. These will break open to become distinct round reddish brown spots. When touched, reddish brown dust-like spores brush off. The spots are surrounded by yellow rings on some bean varieties. If the leaves are severely covered, they fall off. In late season, spots may darken as the black over wintering spores are produced.



**Prevention:** Rotate away from any bean for two years. Plow debris under right after harvest. Resistance is available for this disease, although there are many races of the fungus. Many varieties are resistant to a few races, but few varieties are resistant to most races. Avoid over-fertilization with high levels of nitrogen.

Contact your local Cooperative Extension center or refer to current recommendations for chemical control measures in the latest New England Vegetable Management Guide ([Link to store](#)).

#### References:

- Sherf, A.F. and A. A. MacNab. *Vegetable Disease and Their Control*. John Wiley and Sons, New York. 1986
- Staveland, J.R. Rust. pp. 24-25 in *Compendium of Bean Diseases*. R. Hall, ed. APS Press, St Paul, MN. 1991.

**This information was developed for conditions in the Northeast. Use in other geographical areas may be inappropriate.**

**By:** Pamela S. Mercure, IPM Program Assistant, University of Connecticut, 1998

**Updated by:** Mary Concklin, UConn IPM. 2012

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