

(revision date:4/23/2014)

## ***Spruce: Rust***

*Use Integrated Pest Management (IPM) for successful plant problem management.*

### ***Biology***

Spruce rusts are fungal diseases that sometimes require an alternate host to complete their life cycle. There are many rust diseases of spruce, each with different alternate hosts. One spruce rust causes witches' brooms, or abnormally bushy growth of the branches. These witches' brooms gradually lose their healthy green color and turn yellowish or brownish as the fungus matures. Kinnikinnick is the alternate host.

### ***Management Options***

#### **Non-Chemical Management**

- ~ Remove alternate hosts (when known) from around spruce plantings.
- ~ Prune and destroy witches' brooms where possible.

*Select non-chemical management options as your first choice!*

#### **Chemical Management**

***IMPORTANT: Visit Home and Garden Fact Sheets for more information on using pesticides***

None recommended

*Spruce: Rust*

*Images*



~ Caption: Spruce rust  
~ Photo by: R.S. Byther



~ Caption: Spruce rust: witches' broom  
~ Photo by: R.S. Byther