

Stem and Cone Rusts of Pine

Western Gall Rust

Peridermium harknessii J.P. Moore

Endocronartium harknessii (J.P. Moore) Y. Hiratsuka

Host: Ponderosa pine

Symptoms/Signs: This fungus forms round or pear-shaped galls on the main stem or branches, which emit orange spores. There is a white-spored race in Arizona and New Mexico that sometimes develops elongated galls.

Biology: This disease spreads directly from pine to pine.

Infection occurs on a needle-bearing twig. The fungus stimulates the production of xylem, forming galls, which enlarge over the years. Spores appear on the galls in late spring.

Effects:

This disease is probably widespread in the region, but at very low levels.

Occasionally it has been destructive to seedlings and saplings, following infrequent “wave years” of new infection. Gall rust deforms but seldom kills older trees.

Similar Diseases: Dwarf mistletoe can cause trunk swellings (cankers) that are usually much longer than those produced by western gall rust.

References: 93, 117



Figure 227. White-spored gall rust displaying spore sacs and swollen branch.