

## Pine Stem Rusts – Identification

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**Figure 1.** Western gall rust may result in stem breakage



**Figure 2.** The orange spores found in comandra blister rust cankers dramatically increase its detectability in late spring





**Figure 3.** Comandra blister rust is difficult to detect in the summer



**Figure 4.** Alternate host of comandra blister rust, bastard toad-flax



**Figure 5.** Stalactiform branch infection





**Figure 6.** Squirrels commonly feed on bark infected by stem rusts



**Figure 7.** Sweet fern blister rust canker on lodgepole pine sapling





**Figure 8.** White pine blister rust on white pine showing stem canker and flagging of infected branch

