

Common Fungi Affecting Pacific Northwest Trees

Latin name	<i>Phaeolus schweinitzii</i>						
Typical Host tree in the Pacific Northwest Region	Subalpine and amabilis fir, western larch, tamarack, Sitka and white spruce, lodgepole, ponderosa, and western white pine, Douglas-fir, western redcedar (rare), western hemlock, Garry oak.						
Form of fruiting body	Perennial		Annual	✓	Polypore	✓	Gilled
Type of decay	White rot		Brown rot	✓	Soft rot		
White rot - preferential loss of lignin, some break down lignin & cellulose. Brown rot - preferential loss of cellulose. Soft rot - breaks down cellulose.							
Typically attacks:	Live wood		Dead wood		Both		✓
Typical location of decay	Root rot	✓	Butt rot	✓	Sap rot		Heart rot
Comments:							
<p>The early stage fruiting body is leathery with a light brown, yellowish appearance. On the ground the conk has a small stem. On the trunk it is a shelf-like structure. Later on, the conks turn dark brown and become brittle. The top has concentric rings and is velvety in texture, hence its common name 'velvet top fungus.' Conks can persist in dead wood for many years.</p> <p>Conks on the ground, several feet from the base, or at the base of the trunk indicate root rot rather than butt rot. Conks higher up the trunk indicate extensive butt rot. The disease is parasitic on live wood and saprobic on dead wood. It produces a pronounced column of decay. There are few early indicators of infection, although thinning crowns, poor shoot elongation, and some crown dieback may occur. Spreads by windborne spores. Root to root infection can occur but is rare. Infects trees through wounds, fire scars or armillaria lesions, but can also enter from the soil through root tips. Primarily found on mature trees.</p> <p>Common in Douglas-fir more than 75 years old, decay will typically be in the first 10 ft (3m) of the butt log. Decay can spread rapidly causing loss of heartwood, loss of strength and a high susceptibility to stem breakage in windy conditions. On old growth trees the likelihood of trunk failure will be high, especially in windy conditions. The stress of the disease may render the tree susceptible to Douglas-fir bark beetle and armillaria as secondary problems.</p>							
Risk assessment and management implications							
<p>If there are valuable targets or, the target zone is frequently occupied, it may be prudent to remove the tree. If the site conditions allow it, consider converting tall trees into wildlife snags as the heartwood decay provides excellent nesting habitat.</p>							

Phaeolus schweinitzii



Young conk at base of Douglas-fir tree.



Old conk on stump.



Butt rot on Douglas-fir.