



Forest Health Protection, Southern Region

BROWN CUBICAL ROT,

caused by *Polyporus schweinitzii*

Importance. - This disease can affect all southern pines and is most prevalent in trees that have suffered basal wounds from fire, logging, soil compaction, or root injury. Diseased trees are subject to windthrow and breakage.

Identifying the Fungus. - The fungus produces annual conks which develop in late summer and fall, particularly during moist weather. When conks are produced on the base of trees, they are bracketshaped, while those arising from infected roots are supported by a stalk and are circular with sunken centers. The upper surface is reddish-brown with a light yellow margin and has a velvety texture. The underside is dark olive or green, with large irregular pores.



Brown cubical rot conk.



Brown cubical rot.

Identifying the Injury. - The fungus develops primarily in the roots and butt and seldom extends more than 15 or 20 feet up into the stem. The initial stage of decay appears as a light yellow stain. In the advanced stage, the heartwood becomes brittle and breaks into large yellow-brown to reddish-brown cubes.

Biology. - Overmature, suppressed and weakened, or off-site trees are commonly attacked. Spores of the fungus enter living hosts through damaged roots, fire scars, and other wounds near the tree base. The fungus may also spread from infected to healthy trees through root contacts and grafts.

Control. - In forest stands, no method of controlling the disease is known. Losses may be reduced by minimizing stand entries and basal fire injuries. To avoid human injury or property damage, trees with advanced root and butt rot should be removed from recreation sites, parking lots, trails, and buildings.
