

Phylloporus rhodoxanthus (Schw.) Bresadola
Fungi Tridentini 2:95. 1900

Pileus 2-8 cm broad, convex when young, becoming plano-convex to plane to shallowly depressed with age; margin incurved, becoming decurved with age, entire; surface dry, dull, tomentose to velutinous to fibrillose, rarely appearing glabrous during all stages of development; color variable, in some olive-brown, (26) in others brown (4, 22), and in others reddish (21, 25), some show a mixture of these colors. Context 1-3 mm thick, firm, yellow (14, 24), unchanging or slowly becoming greenish or bluish when exposed; taste and odor not distinctive. **Lamellae** decurrent, rarely notched with a decurrent tooth, close, or more commonly, distant to subdistant, yellow (11, 15, 20), sometimes staining greenish blue when bruised; margin entire, concolorous. **Stipe** 2-4 cm long, 0.3-1 cm broad, usually tapering toward the base; surface dry, glabrous except sometimes fibrillose to fibrillose-scaly in midportion; color yellow (1) to concolorous with the lamellae at the apex, becoming brown to reddish brown (8, 21) in midportion, yellowish at the base.

Basidiospores 9.5-12 x 3.5-5 μm , olive-brown in deposit, subellipsoid to subcylindric, walls smooth, pale brown in KOH. Basidia 26-30 x 7-10 μm , clavate, 4-spored. Pleurocystidia 45-60 x 8-15 μm , common, fusoid to lanceolate to subclavate, hyaline, often filled with bright yellow pigment. Cheilocystidia similar to pleurocystidia. Cuticle of pileus differentiated as a trichodermium with some free, erect hyphae or hyphal tips, not gelatinous in KOH. Clamp connections absent.

Solitary to scattered or gregarious in soil under oaks and other hardwoods. Widespread within the state but more common in the mixed coastal forests of the northern portion. Also recorded from Sierra, Siskiyou, Trinity, and Yuba counties.

The major distinguishing characteristics of *Phylloporus rhodoxanthus* are the bright yellow lamellae which may stain greenish or bluish when bruised and may be branched or anastomosed, the olive-brown spore deposit, and the distinctive color variations and combination of colors in the pileus. Because of the bluing reaction of the lamellae, the olive-brown, boletoid spores, and the divergent lamellar trama, this species is thought to be rather closely related to the genus *Boletus*. However, the lamellate hymenophore, which is easily separable from the context of the pileus, indicates a closer relationship to the genus *Paxillus*.