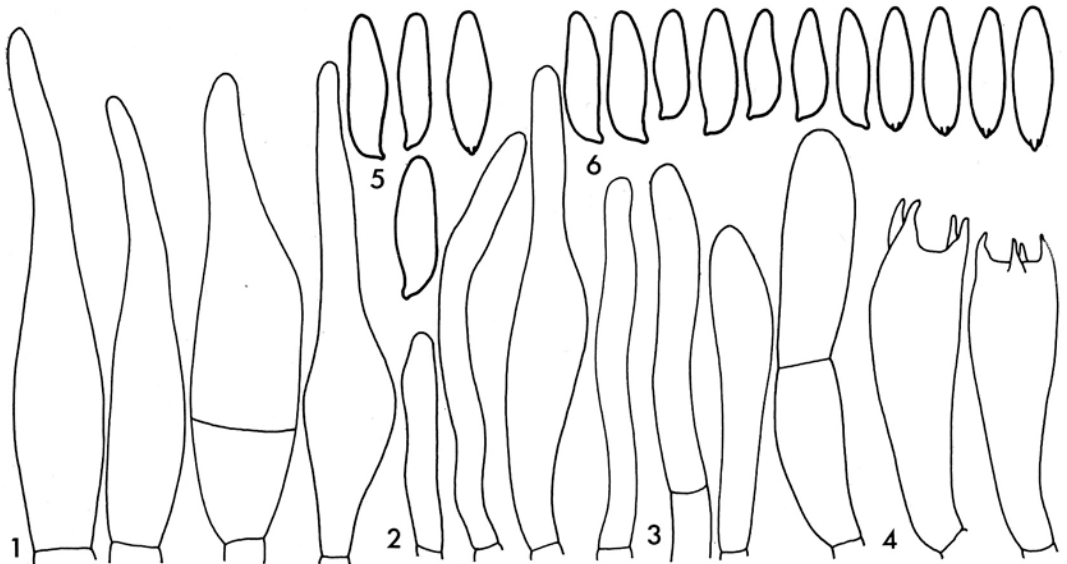


# TYLOPILUS RUBROBRUNNEUS



Upper left, immature basidiocarps ( $\times .4$ ); upper right, mature basidiocarp ( $\times .4$ ); 1, pleurocystidia; 2, cheilocystidia; 3, cuticular elements; 4, basidia; 5, basidiospores of DAOM 145496; 6, basidiospores of DAOM 139452. (All  $\times 1500$  except where indicated).

**Tylopilus rubrobrunneus** Mazzer & Smith, Mich. Bot. 6: 58. 1967.

PILEUS convex at first and usually remaining so at maturity, occasionally becoming plane to somewhat undulate, with a very soft texture resembling that of kid gloves, dark violaceous at first but fading at maturity to violaceous-tan or pinkish brown, glabrous or with a few minute scales, subviscid when wet, with a minute sterile margin, 60-250 mm in diameter. STIPE nearly white to yellow-buff at first, becoming brownish at maturity, with olivaceous stains, glabrous, smooth to faintly reticulate at apex or occasionally coarsely reticulate, clavate, 60-150 × 17-50 mm. TUBES adnate at first and then adnexed, nearly white at first but quickly becoming pinkish- to violaceous-brown, pinkish at maturity, staining brown when bruised, with mouths about 1.6-1.7/mm at maturity. FLESH of pileus white, olivaceous where tunneled by insects, extremely bitter, odourless. FLESH of stipe white.

PILEUS CUTICLE composed of an upright turf of cylindrical to ventricose cells measuring 13-30 × 3.4-8.8 $\mu$ , arising from a very loose tissue below, sometimes with elements appearing to be encrusted (at least below). PILEUS CONTEXT composed of hyaline, clampless, interwoven hyphae 2-12 $\mu$  in diameter. HYMENOPHORAL TRAMA bilateral, composed of hyaline clampless hyphae 2-12 $\mu$  in diameter. LACTIFERS abundant in the pileus context and hymenophoral trama. PLEUROCYSTIDIA abundant, mostly ventricose-rostrate, not clamped at base, 40-53 × 6.5-16 × 2.0-4.0 $\mu$ . CHEILOCYSTIDIA abundant and forming a sterile layer, cylindrical to clavate or rarely ventricose-rostrate, not clamped at base, 20-43 × 2.5-8.0 × 2.5-3.0 $\mu$ . BASIDIA clavate, 4-spored, not clamped at base, 20-37 × 6.5-10.0 $\mu$ . BASIDIOSPORES elongate-ovoid in side view, elongate-elliptical in front view, smooth, without germ pores, weakly dextrinoid and cyanophilous (at least some spores), very pale yellowish or pinkish as viewed under oil immersion, dull pink in mass, 9.8-13.8 × 3.0-4.2 $\mu$ .

SUBSTRATE: In soil under *Fagus grandifolia* and *Acer saccharum*.

DISTRIBUTION: Quebec.

COLLECTIONS: Que., Gatineau Co.: Gatineau Park, soil under beech, 24.VII.1972, DAOM 139452 (Malloch & Ginns), soil under beech and maple, 18.VII.1972, DAOM 145496 (Macrae & Foy); Cantley, soil under beech, 12.IX.1972, DAOM 143184 (Ginns).

NOTES: *T. rubrobrunneus* is easily recognized by these features: 1) large size, 2) white to pale brownish and indistinctly to delicately reticulate stipe, 3) violaceous cap when young, 4) intensely bitter flesh, and 5) pink tube mouths at maturity. There are only two other large bitter boletes that might be confused with this species: *T. felleus* (Fr.) Karsten and *T. plumbeoviolaceus* (Snell & Dick) Singer. The former lacks the violaceous colours in the cap and the latter has both a violaceous cap and stipe. I have collected all three species in the same general area, although *T. felleus* appears to prefer hemlock-dominated habitats, while the other two seem to associate with beech. Although *T. rubrobrunneus* is reported by Smith & Thiers (The Boletes of Michigan. Univ. Mich. Press. 1971) to be common in Michigan, this is, as far as I know, the first report of it from Canada.

David Malloch