

Nomenclatural novelties : Joe Ammirati

Cortinarius tiffanyae Healy, Ammirati & Liimat., sp. nov.

IF 558020

Holotype ISC F-0122222

Diagnosis: Pileus 30–80 mm diam., conical-rounded becoming convex then more expanded, sometimes broadly umbonate, margin incurved becoming slightly elevated, eventually becoming ± radially rimose, surface shiny, especially when young, radially silky fibrillose, hygrophanous, surface reddish tinged at first, general color dark reddish brown to reddish brown with darker umbo, fading to pale reddish yellow when dry. Context in pileus reddish next to cuticle, grayish violet at first, often merely brownish or whitish, in stipe whitish to brownish, mottled with watery brown above when young, at surface of base reddish. Odor unpleasant, ± strongly acerbic taste not recorded. Lamellae sinuate to adnexed, subdistant to distant, slightly intervenose, occasionally forked, pale purplish vinaceous to purplish brown then reddish brown to dark reddish brown, edges paler. Stipe 30–70 mm long, apex 5–8 mm thick, base up to 12 mm thick, clavate to ± bulbous, somewhat tapered below, surface fibrillose, white or pale lavender above, downward cream color to brownish cream with ochraceous orange tints, towards base rusty brown with violet to red tints, base and lower stipe with vermilion to cinnabar red colors, cortina whitish to brownish, sometimes leaving a slight fibrillose zone above. Exsiccatae pileus brown to dark brown or reddish brown, lamellae brown, stipe light brown to brown with distinct red base. Basidiospores (6.5–) 7–8.3 (–9.6) × (4.4–) 4.8–5.6 (–6) µm, ave 7.9 × 5.2 µm, Q 1.4–1.7, Q m 1.6, somewhat variable in shape and size, some smooth basidiospores present, ellipsoid, broadly ellipsoid to ± amygdaloid, apiculus ± curved, ± coarsely verrucose, especially at distal end, ornamentation reduced in plague area, slightly- to moderately- or more strongly dextrinoid. Basidia 4-spored. Pileipellis: epicutis thin, hyphae interwoven, radially arranged, cylindrical, 2–3 µm wide, colorless to yellowish or brownish, smooth hypocutis subcellular to cellular, ± well developed, hyphae ± radially arranged, ± interwoven, cylindrical to enlarged, up to 14 µm wide, colorless to yellowish or pale brownish yellow, smooth. Clamp connections present. ITS sequence (GenBank no. MW139747) distinct from other members of section *Uracei*, subsection *Bulliardii*. With a sister relationship to *C. rubipes* (holotype, GenBank no. MW139753) and deviating from it in the ITS regions by 12 substitutions and indel positions.

Ecology and Distribution: Scattered to gregarious, broadleaf forests, *Quercus*, *Fagus* or a mixture of *Quercus*, *Acer*, *Tilia*, and *Ulmus*; July and August; Northeastern North America.

Specimens Examined: Canada. Quebec. Saint-Bruno-de-Montarville, CMMF2438, MQCOR254-18, YL2438, coll. Y. Lamoureux (CMMF) (GenBank No. MW139748). USA. Iowa. Story County. Reactor Woods East, Ames, upland oak woods, 21 Aug 2006, coll. R. Healy 12, 454824, F-0122222 (ISC) (GenBank No. MW139747). Webster County. Bushy Creek State Preserve, 31 Aug 2007, coll. R. Healy 4, 454823, F-0122221 (ISC) (GenBank no. MW139749). Michigan. Emmet County. Pellston hardwoods, Pellston, 20 July 1952, coll. A. H. Smith, AHS39196 (MICH). Minnesota. Rice County. Nerstrand Woods State Park, scattered, hardwoods, *Quercus*, *Tilia*, *Ulmus*, *Acer*, 26 Aug 1962, coll. M. G. Weaver, 8-26-62-N7 (MICH) (GenBank no. MW139750). New York. Washington County. Hudson Falls, July 1915, coll. S. H. Burnham, No.3 (MICH) (GenBank no. MW139751).

Notes: *Cortinarius rubipes* Kauffman was described in May 1906 and *C. rubipes* Peck (Holotype, GenBank No. MW139752) in August 1906, they appear to be the same species, in which case the former name has priority. *Cortinarius kauffmanii* Bidaud, Moëgne-Locc. & Reumaux is a

nomenclatural synonym of *C. rubipes*. *Cortinarius rubipes* is sister to *C. tiffanyae*, the latter has smaller basidiospores (av. $7.9 \times 5.2 \mu\text{m}$) than *C. rubipes* (av. $8.7 \times 5.7 \mu\text{m}$). Sequences of *C. rubipes* from Steve Russell (GenBank nos. MN906227-MN906229) were used to compare these species. Etymology: Named for Lois H. Tiffany, distinguished Mycologist, Iowa State University.