

Jay Justice to Brad Bomanz

Based on the larger spores I think *Tyromyces fumidiceps* or *Tyromyces galactinus* would be better possibilities than *Tyromyces chioneus*.

Within this doc is information from North American Polypores about both of these taxa.

Habitat and images look good for *Tyromyces fumidiceps* – “seemingly restricted to annually flooded areas along lakes and streams”. This book also mentions that the inside of the tubes are often covered with numerous crystals and the pore surface can become greenish.

Looking at the info on *Tyromyces galactinus* – it indicates that the context is zonate as depicted in one of the above images, he does not make such a comment about *Tyromyces fumidiceps* – but states that the context of *Tyromyces fumidiceps* is homogeneous. *Tyromyces galactinus* also lacks the greenish to pale olivaceous colors that are often present on the pores that *Tyromyces fumidiceps* is described as having.

So based on the context being zonate I am leaning toward ***Tyromyces galactinus*** – unless you see evidence of numerous crystals inside the tubes or greening coloration on the pores – then we have to take another look.

Both species are shown to occur in Missouri and Arkansas.

Tyromyces fumidiceps

Basidiocarps annual, sessile or effused-reflexed, semicircular to fanshaped, single or imbricate, separable, 1-4 cm wide, 2-6 cm long and up to 1 cm thick at the base, soft and watery when fresh, fragile, more rigid when dry, with a fragrant scent when fresh; upper surface convex, azonate, gray, buff to pale brown, first hispid to tomentose, with age becoming scrupose to tufted, especially towards the base, often radially striate or undulated when dry; pore surface white to wood-colored, often with an olive to greenish tint, pores angular, thin-walled, in old specimens often slightly lacerated, 4-6 per mm; tubes up to 10 mm.

Deep, concolorous with pore surface when fresh, cream to ochraceous when dry, inside of tubes often covered with numerous crystals (strong lens); context white, slightly colored towards the upper surface, 4-20 mm thick, friable.

Hyphal system monomitic; generative hyphae with clamps, often with irregular lumen, hyphae of context with numerous short sidebranches, the upper ones randomly oriented, the central ones more or less parallel to the pileus surface, 2.5-6 µm wide, those of the trama also with short sidebranches, 1.5-3.5 µm. Cystidia absent; pointed cystidioles present among the basidia. Basidia clavate, 4-sterigmate, with a basal clamp, 10-18 x 4.5-6 µm. Basidiospores ellipsoid to ovoid with attenuated base, smooth, with an oil drop, I K I -, 3-4 X 2-3 µm.

Type of rot. - Reported positive for laccase by Nobles (1958), Stalpers (1978) and David and Duhem (1986). Some of our collections are associated with a brown rot.

Cultural characteristics. - See Nobles 1958; Stalpers 1978; David and Duhem 1986.

Sexuality. - Tetrapolar (David and Duhem 1986).

Substrata. - Dead hardwoods, seemingly restricted to annually flooded areas along lakes and streams.

Distribution. - Eastern United States and Canada. Rare in Europe.

Remarks. The small ellipsoid spores, the short sidebranches of the hyphae in the context, the often greenish pore surface, and the habitat should aid the identification.

Tyromyces galactinus

Basidiocarp annual, sessile, single or imbricate, semicircular, broadly attached or dimidiate, up to 8 cm wide, 12 cm long and 1-3 cm thick at the base, soft, watery and sappy when fresh, rigid when dry, taste mild, with a slight fragrant odor when fresh; upper surface white to pale gray when fresh, becoming more yellow to pale ochraceous when dry, first strigose to tomentose, by age and drying more tufted to scrupose, especially towards the base, more consistently tomentose towards the margin, normally azonate; pore surface white to cream, more yellowish to pale ochraceous when dry, pores thin-walled, angular, entire to lacerate or denticulate with age, 4-6 per mm; tubes up to 10 mm deep, concolorous with pore surface; context slightly duplex, lower part dense and zonate, often with a few resinous bands and drying cartilaginous, upper part looser and more fibrous.

Hyphal system monomitic; generative hyphae with clamps, in the context thin-walled, 4-7 μm wide and branched, in the upper part partly in strands and more sparingly branched, in the trama more narrow, 2-5 μm wide. Cystidia or other sterile hymenial elements absent. Basidia clavate, 4-sterigmate, 12-16 x 4-6 μm , with a basal clamp. Basidiospores thin-walled, hyaline, ellipsoid to oval, I K I -, 2.5-3 X 2 - 2.5 μm .

Type of rot. - White rot in dead hardwoods.

Cultural characteristics. - See Nobles 1948, 1958, 1965; Stalpers 1978.

Sexuality. - Heterothallic and bipolar (Nobles et al. 1957).

Substrata. - Dead deciduous wood.

Distribution. Eastern U.S. and Canada and Pacific Northwest.

Remarks. In the field the species may be recognized by the white sappy basidiocarp with a fragrant odor and a strigose to hispid pileus. The context is zonate or dries very dense. *Tyromyces fumidiceps* has similar small spores, but has different branched generative hyphae in the context and often the pore surface has a greenish to pale olivaceous color in dry condition. Also, *Tyromyces fumidiceps* context is homogeneous and not duplex as in *Tyromyces galactinus*.