CLITOPILUS PINSITUS (FRIES) JOSSERAND

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AN agaric which proved to be identical with a fungus examined by Josserand (collected by Pouchet) and to which he gave the name *Clitopilus pinsitus* was found growing on composted wheat straw previously treated with ammonium nitrate. Josserand's description differs very little from the fresh fruit-bodies which developed on straw fragments plated on Yeast Agar in our laboratories. The British material had, however, slightly smaller basidiospores (7–8 × 4–4·5μ as opposed to 7·5–9 × 4·6–5·3μ), slightly smaller basidia (20–25 × 6–7μ as opposed to 24–27 × 7–8μ) and slightly smaller carpophores (10–28 (45) mm as opposed to 15–40 mm) with or without a mammiform base or stipe. The gill-edge was ± fertile and had simple filaments, 1·5μ broad, and basidioles present on it. Although Josserand's description is good, recent and fairly accessible, it is still considered important to supply a full description of the British material.

Clitopilus pinsitus (Fries) Josserand in Bull. Soc. Mycol. Fr. 53: 209–213 (1937).

Syn: *Agaricus* (*Pleurotus*) *pinsitus* Fries, Systema Mycologicum 1: 184 (1821).

Pileus 10–28 (45) mm × 12–20 mm pure white or ivory then pallid or somewhat dirty greyish cream, convex then expanded, shell-shaped, spathulate or reniform with wavy margin, ± lobed, attached laterally or with small stipe or attached by resupinate portion, entirely villose tomentose at first, later silky tomentose or silky smooth, dry, not striate, fragile, margin incurved at first. Stipe usually absent or rudimentary, papillate, excentric, white, pubescent tomentose, 1 mm × 4 mm. Mycelium white abundant at base of carpophore and on colonised debris. Flesh white concolorous or with slight ochraceous zone beneath pileus epicutis, never gelatinised, thin especially towards margin. Smell ± distinctly mealy. Taste slightly to strongly mealy but often with nasty after-taste. Gills white, then for a time whitish pallid finally pinkish creamy or pink flushed faintly yellow ochre, fairly crowded, (l3) simple, up to 1 mm broad. Spore-print quite distinctly rose. Basidium 4-spored, 20–25 × 6–7μ. Sterigmata up to 1·5μ long. Gill-edge ± fertile with simple hyphal filaments 1·5μ broad and basidioles. Cheilocystidia and pleurocystidia absent. Basidiospores 7–8 × 4–4·5μ, ellipsoid to slightly amygdaliform with 6–8 very faintly longitudinal ribs just showing as obscure angles when the spore is seen end on, non-amyloid. Pileus epicutis consisting of repent interwoven hyaline hyphae 4–5μ broad, with wall hardly thickened, short-celled, a few suberect.

The present strain was obtained from Littlebury, Essex and the fungus was persistent on Yeast Dox agar isolation plates, from 30 to 60 days after the start of composting. The description above is taken from pure cultures grown on straw at Cambridge.

There is some doubt as to whether this is in fact the original *Agaricus pinsitus* of Fries for, although the carpophore characters agree very well, Fries (1821) specifically stated his fungus had "sporidia albida". Later Fries (Epicrisis Systematicus Mycologici 136: 1838) described the spores as "sordido distinctus"; our fungus has a distinctly rose spore-print. Singer (Farlowia 2, 561: 1945) considered it impossible to decide what Fries's fungus was and states that Josserand's interpretation is very probably correct after consideration of all the facts at hand. To this statement we subscribe.

Fries indicated his collections of *A. pinsitus* as growing on oak trunks; Josserand's material was "Sur dechéts de fabrication d'Antesite" and the material isolated at Cambridge was on straw. *C. hobsonii* which is closely related to our fungus, differing in its smaller pileus, more marked ribs on the basidiospores and more crowded gills, is also found on stumps, logs, twigs, herbaceous stems and rotten plant debris. The differences in habitat of different collections of these small *Clitopilus* species do not seem to be significant.

The colour of the spore-print is most important in placing agaric taxa and it may be Fries did not in fact have a thick enough deposit to indicate this correctly. Had the spore-print been coloured he would not have placed his fungus in *Pleurotus*. Fries also described the smell as freshly mealy and, although not decisive, this points more to *Clitopilus* than a *Pleurotus*. *Pleurotellus patelloides* Orton, which would have been placed in *Pleurotus* by Fries, is superficially similar but differs markedly in spore-mass colour and basidiospore morphology.

There is every possibility that Fries originally described a *Pleurotellus* species, similar to *Pleurotus chioneus* sensu Lange, and later added to his description the *Clitopilus* element i.e. "sporidiorum sordido distinctus". It is not unknown for workers since Fries to confuse pleurotoid agarics and misinterpret early names.