Mycological Notes 2: Pleurocollybia cremea, *Clitocybe albida* and their look-alikes.

Jerry Cooper June 2012

Over the years I've collected a number of white pleurotoid or eccentrically stemmed agarics on wood which were clearly not *Pleurotus*. I've always puzzled over what name to give them. Originally I called them *Pleurocollybia cremea* but was unhappy about that as the genus is supposed to have unclamped hyphae and my collections all had clamps. I was also aware that Egon Horak had collected material of similar looking fungi he tentatively assigned to *Neoclitocybe* sp and *Lactocollybia cycadicola*. Then there are images of the Australian *Clitocybe semiocculta* which look suspiciously similar, and finally two widely distributed northern hemisphere species, *Ossicaulis lignatilis* and *Neoclitocybe byssiseda* which share some characteristics. I had decided that my material best matched *Ossicaulis* but then Egon pointed out it was a brown rot fungus and my material was clearly a white rotter. Eventually I gave up and reverted to calling everything *Pleurocollybia cremea* and ignored the problem. Then a recent image from Ron Freston came to my attention of '*Clitocybe albida*' looking somewhat similar. I'd not considered that name before so I revisited the problem. I haven't sorted it out but I have a clearer idea of the range of possibilities. Below is that data arranged into a key. I've used characters based on type collections, except the two broadly distributed Northern hemisphere species.

In placing Stevenson's *Lentinellus cremeus* in *Pleurocollybia* Horak was, by definition, asserting that it does not possess clamps as that is one of the key characters of the genus. However, Stevenson, Horak and Smith in their treatment of this taxon never mentioned explicitly whether it possesses clamps or not, and that is critical for the correct application of this name to New Zealand material. In the key I have assumed it is unclamped. I have not examined Stevenson's type at Kew.

Many of my New Zealand collections, by virtue of nodulose ornamented and clamped cap hyphae and their broadly ellipsoidal spores key as *Neoclitocybe* sp. In addition I have also collected *C. albida* and confused the two.

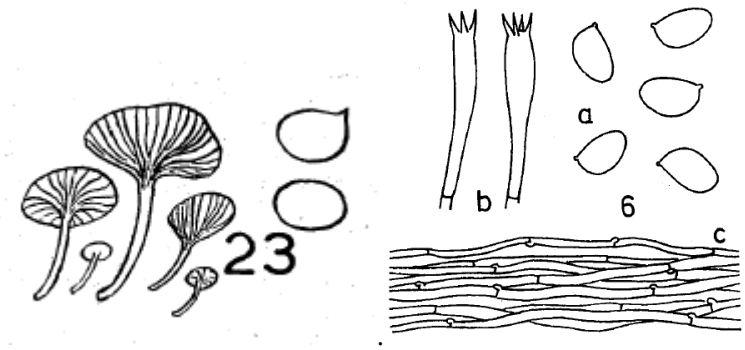
Key to the species treated

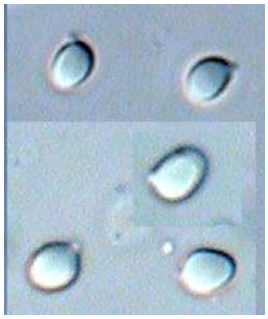
1	without any stipe (sometimes tomentose attachment point)	2
1'	with stipe, even if short	3
2	cap convex to flat, hyphae unclamped. S. America	*Pleurocollybia paradoxa*
2'	cap conchiform or petaloid, hyphae clamped. Widely distributed	*Pleurocybella porrigens*
3	stem central, cap convex, fungus agaricoid, with lactiferous hyphae and gloeocystidia. Tropical, subtropical	*Lactocollybia cycadicola* sensu Dennis
3'	stem eccentric to lateral	4
4	hyphae clamped, spores ellipsoid	5
4'	hyphae unclamped, spores 2.5-3 x 2.5, subglobose. New Zealand	*Pleurocollybia cremea*

5	cap hyphae unornamented, at most with encrustation	6
5’	Some cap hyphae swollen, or diverticulate or with nodose swellings	7
6	spores 5 x 3-4.4um, New Zealand	*Clitocybe albida*
6’	spores 3.7 x 2.8um, Australia	*Clitocybe semiocculta*
7	spores narrowly ellipsoid, Q=1.9, 4.2-5.5 x 2.4, some cheilocystidia filiform, and cap hyphae with diverticulae . Widely distributed.	*Neoclitocybe byssiseda*
7’	spores broadly ellipsoid to subglobose, Q= 1-1.6, no cheilocystidia, cap hyphae occasionally with nodose swellings	8
8	spores broadly ellipsoid, Q=1.5, 4-6 x 3-3.5, causing a brown rot. Widely distributed	*Ossicaulis lignatilis*
8’	Similar to *O. lignatilis*, causing a white rot. New Zealand	*Neoclitocybe* sp.

Clitocybe albida

Pileus 0-5-2.5 cm. diam., white becoming tinged cream, plane with downrolled margin becoming umbilicate, velvety to fibrillose, somewhat grooved or striate towards margin; flesh thin, white. Gills decurrent, white, thin, shallow, moderately distant to crowded. Stipe 0.5-2 cm. x 1-2 mm., white, centric or eccentric. Spores 5 x 3-44 non-amyloid. Cuticle of loosely woven hyphae 2-5um diam., with clamp connections, some with thickened walls. The spores are oval, smooth, neither amyloid nor dextrinoid, thinwalled, without germ-spore, 5-5.5 X 3-3.5 um. Cystidia none. Cuticle consists of cylindrical, hyaline, nongelatinised hyphae, 3-6 p, diam., with clamp-connections. HABITAT:on fallen rotting wood or tree fern stipes, arising individually but many close together from a spreading white mycelial mat, with or without white rhizomorphs

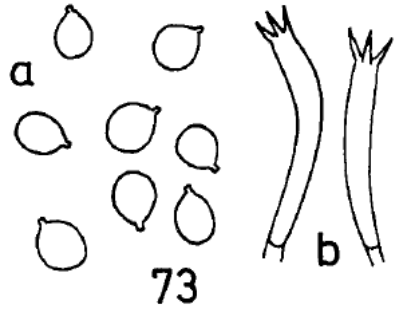


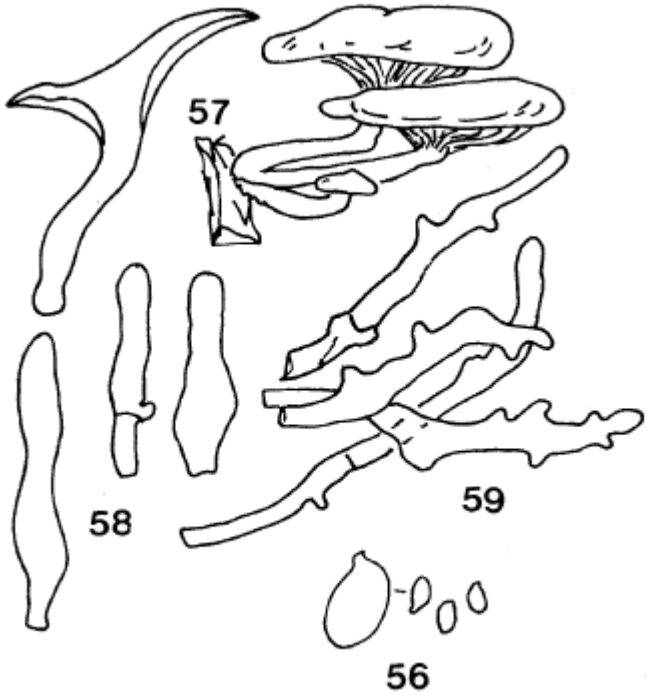
JAC10314 (PDD 87402) as *C. albida*

Pleurocollybia cremea

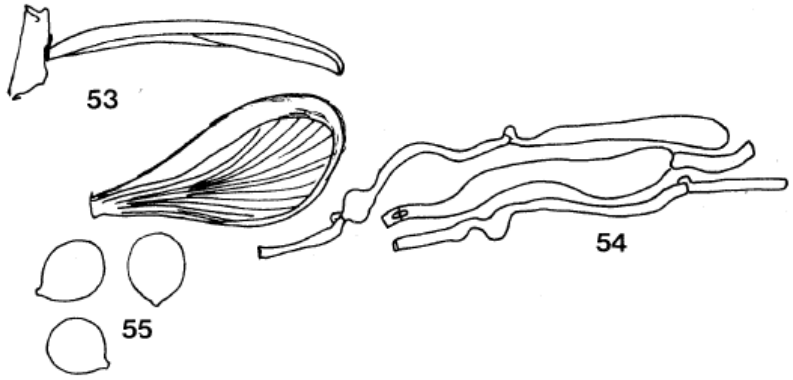
Pileus 1.5-3.5 cm diam., creamy white to deep cream, orbicular to reniform, convex becoming depressed, margin down-rolled, matt to almost velvety; flesh white, firm, continuous with that of stipe. Gills adnexed to sinuate, creamy white, thin, crowded, margins lacerate. Stipe 1-2 x 0.2- 0.3 cm, excentric to lateral, creamy, fibrillose to velutinate, tapered downwards, swollen at base, tough, solid. Spores 2.5-3.5 x 2.5 µm, faintly amyloid. Hymenophoral trama of broad hyphae, some 10 µm diam., thin walled.



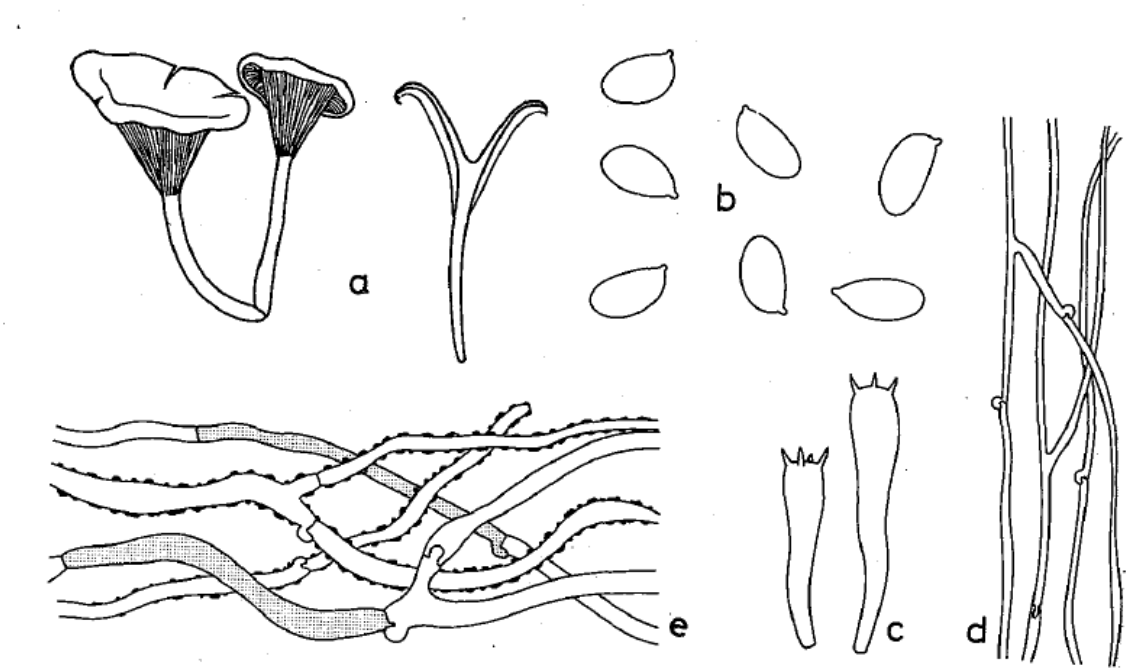
Ossicaulis lignatilis



Pleucocybella porrigens



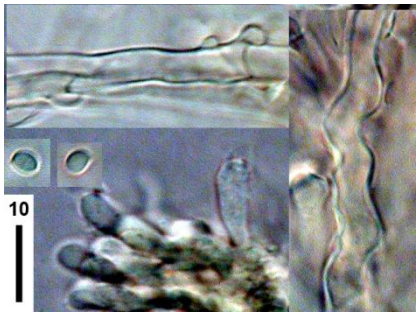
Neoclitocybe byssiseda



Neoclitocybe byssiseda (Bresadola in Rick) Singer (Holotypus):
a. Fruchtkörper (nach Exsikkat). b. Sporen. c. Basidien. d. Tramahyphen. e. Huthaut

Neoclitocybe sp

JAC9936 (PDD 87041) as *Neoclitocybe* sp



Spores and clamped irregular cap hyphae

Name	Size	Shape	Gills	insertion	Spores	Hyphae/Cap/Cystidia	Distribution
Clitocybe albida	Cap 5-25mm Stipe 5-20mm x 1-2mm	plane, downrolled margin, becoming umbilicate	decurrent	centric to eccentric	5 x 3-4.4, inamyloid	clamped hyphae 3-6um. No cystidia or hyphal ornamentation	NZ
Clitocybe semiocculta	Cap 10-60mm Stipe 12-25mm	slightly convex at first, downrolled margin, becoming depressed at centre	adnate to slightly decurrent	centric to eccentric to lateral	3.7 x 2.8, inamyloid	clamped, 3-8um, sometimes encrusted. No cystidia	Au
Pleurocollybia cremea	Cap 15-35mm Stipe 10-20x2-3mm	convex, downrolled margin, becoming dperssed	adnexed to sinuate	eccentric to lateral	2.5-3 x 2.5 faintly amyloid	unclamped [by inference from genus definition] hyphae to 10um. No cystidia	NZ

Pleurocollybia paradoxa	Cap 10-11mm	convex to flat		none	3-5 x 2-2.5, inamyloid	unclamped 8-10um, no cystidia	Chile
Ossicaulis lignatilis	Cap 30-100mm Stipe 35-80 x 7.5-15	Convex, downrolled margin, becoming depressed	adnate	slightly eccentric	4-6 x 3-3.5, inamyloid	clamped, 2-4um, no cystidia. Cap with occasional nodulose.	Europe, USA
Pleurocybella porrigens	Cap 20-100mm	conchiform/petaloid		none	7-8 x 6, inamyloid	clamped, often with swollen hyphae to 30-74um.	Boreal
Neoclitocybe byssiseda	Cap 12-50mm	convex, downrolled margin, becoming depressed.	decurrent	central to eccentric	4.2-5.5 x 2-4, inamyloid	clamped, diverticulae, 3-9um. Cheilocystidia basidiolar to filiform and sometimes with nodose swellings.	Boreal
Lactocollybia cycadicola (sensu Dennis)	-50mm	convex		central	7-9x5, inamyloid	Clamped. lactiferous hyphae in trama and gloeocystidia in hymenium (cresyl blue)	NZ?, Europe, Tropics