

Notes on two agarics described in North America:
1. *Rhodocybe smithii* nom. nov., a new name for
Clitocybe piperata A. H. Smith. 2. *Cystoderma*
adnatifolium (Peck) n. comb., a species new for Europe

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HARMAJA, H. 1974: Notes on two agarics described in North America: 1. *Rhodocybe smithii* nom. nov., a new name for *Clitocybe piperata* A.H. Smith. 2. *Cystoderma adnatifolium* (Peck) n. comb., a species new for Europe. — *Karstenia* 14: 121—122.

Clitocybe piperata A. H. Smith (*Agaricales*) was observed to possess the diagnostic features of the genus *Rhodocybe* Maire, and be a valid species. The new name *Rhodocybe smithii* is proposed for it. The diagnostic specific characters of *R. smithii* are shortly discussed. Some spore features, previously not reported in *Rhodocybe*, are also mentioned. The new combination *Cystoderma adnatifolium* (Peck) Harmaja is made, the characters of the species are discussed, and it is reported as new for Europe from Finland and the USSR.

Rhodocybe smithii Harmaja, nom. nov. (*Clitocybe piperata* A.H. Smith, Bull. Torrey Bot. Club 7: 403. 1944. — Part of the holotype [Smith 15462; MICH] studied). When transferred to *Rhodocybe* this species needs a new name because of the existence of the New Zealandic *Rhodocybe piperata* (Stevenson) Horak.

When continuing my studies on the types of species of *Clitocybe* (Fr.) Staude, also a part of the holotype of *C. piperata* A. H. Smith was available for my examination, for which I am indebted to Dr. Robert L. Shaffer, University of Michigan Herbarium, Ann Arbor, Michigan. In his paper, published as late as 1965, BIGELOW describes this species in detail, not failing to mention the clampless hyphae and the inamyloid and curiously undulate spore wall; in fact, he even emphasizes the characters of the spore wall, so deviating in the genus as delimited by him. However, he wants to include the species in *Clitocybe* in spite of these characters, so

suggestive of the genus *Rhodocybe* Maire. My microscopic studies on the spores of the type confirmed my assumption that this species should be transferred to that genus. I found that the spore wall is also weakly cyanophilic (in the hilar appendix, however, cyanophobic), which accords with my unpublished observations on several species of *Rhodocybe*, and with the records of KÜHNER (1969) and SINGER (1972). It was also observed that, in mounts of dried lamellae, a certain proportion (apparently a minority) of detached spores are adhered in clusters of four, or tetrads, and that a minority of the spores, those still attached to the sterigmata included, possess more or less strikingly collapsed walls. These two interesting features I have previously observed to be present and have taxonomical value in some genera, especially *Clitocybe* and *Lepista* (Fr.) W. G. Smith (HARMAJA 1969 and 1974), and I have previously observed them, like the cyanophily of the spore wall, in

several other species of *Rhodocybe*, e.g. *R. truncata* (Fr.) Sing. and *R. fallax* (Quél.) Sing. As far as I know, these two sporal characters have not been reported in *Rhodocybe* before.

R. smithii is apparently fairly closely related to *R. truncata*. The fruit bodies of these species are very alike, but the very sharply acrid taste and the narrower spores which are boletoid in shape and only have a weakly cyanophilic wall distinguish the former easily. *R. piperata* differs through its distinctly larger spores.

Cystoderma adnatifolium (Peck) Harmaja, n. comb. (*Lepiota adnatifolia* Peck, Bull. New York State Mus. 54: 947. 1902.)

C. adnatifolium, treated as a mere variety of *C. granulatum* (Fr.) Fayod by SMITH & SINGER (1945) and HEINEMANN & THOEN (1973), differs from the likewise orange-coloured *C. cinnabarium* (Secr.) Fayod above all through the total lack of cystidia. Secondly, the upper part of the velar remnants on its stipe are only in the form of \pm pure white flocks exclusively composed of filamentous hyphae with \pm hyaline walls while in *C. cinnabarium* the coating is up to the ring zone composed of an inner white layer homologous with those white flocks and an outer broken layer in the form of striking orange red granules mainly composed of \pm globose cells, or sphaerocysts, with thick coloured walls (in *C. adnatifolium* homologous reddish granules are sparse, very small, and

only present downwards, being very inconspicuous). The stipe is also longer and the gills more broadly adnate (even subdecurrent) in *C. adnatifolium*.

From *C. granulatum* the species firstly differs through its orange (to pale orange) colours as the pileus of *C. granulatum* is \pm chocolate brown, often with a ferruginous, rarely vinaceous, tinge, fading usually in age and then often assuming a more greyish tint. Secondly, it differs from *C. granulatum* in the structure of the velar coating of the stipe in the same way as from *C. cinnabarium*. Moreover, in *C. granulatum* the inner layer of the coating is very pale brown to brown with hyphae with similarly coloured walls. Further, on the average, the basidiocarp of *C. adnatifolium* is larger and fleshier, the stipe somewhat longer and more distinctly enlarged downwards, the gills broader and more broadly adnate (even subdecurrent), and the warts of the pileus surface less conspicuous, i.e., smaller, lower, more densely situated and at most slightly darker than the surface.

On this occasion I only state that in H I have found 20 specimens representing *C. adnatifolium*, collected in the provinces U, St. EH, ES, PK, PP and Ks. In addition, one collection is from near Viipuri (Vyborg) which locality now belongs to the USSR (Leningrad Region). These appear to be the first records of this North American species in Europe.

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