NOTES ON CLITOCYBE—I

T. W. KUYPER

Rijksherbarium, Leiden

Since 1976 I have studied the taxonomy of the genus *Clitocybe*, with special emphasis on the hygrophanous species. Results of this study have been published in a report in the Dutch language (Kuyper, *1981*). The most interesting parts of it will be published separately as short notes in this journal. In the present note some new combinations used in the report mentioned above are validated.

Kühner (*1934*, Atlas pl. LXIV) depicted—sub nomine *Clitocybe gallinaceae* (Scop. ex Fr.) Gill.—a hygrophanous species of *Clitocybe* microscopically characterized by the presence of dermatocystidia in the pileipellis and stipitepellis. Malençon (*1942*: 34–36) demonstrated however that Kühner misapplied this name, as *Agaricus gallinaceus* was, according to Fries (*1838*: 63–64), a small white opaque species with a convex cap, closely related to *A. dealbatus* Sow. ex Fr. Referring to Fries (*1867*: 71) he proposed the name *Clitocybe hydrogramma* (Bull. & Vent. ex Fr.) Kumm. His choice has been generally accepted, e.g. by Kühner & Romagnesi (*1953*: 132–133), Harmaja (*1969*: 82–83; *1974*: 113–115), and Moser (*1978*: 99–100). Kühner & Romagnesi (*1953*: 141) stated explicitly: 'Nous ne voyons pas ce que pourrait être *Omphalia hydrogramma* Fries, si ce n'est cette expèce'.

It is, however, highly improbable that *Clitocybe hydrogramma* is the correct name for this species. *Agaricus hydrogrammus* as described by Bulliard & Ventenat (*1809*: 515) and illustrated by Bulliard in the same work (pl. 564) is a mixture of different species, which have only a striate cap in common. Fries (*1821*: 169) restricted this wide concept of *A. hydrogrammus* by referring only to fig. A. of Bulliard's plate 564 which shows an almost white species.

It is remarkable that Fries, when (re)describing *A. hydrogrammus*, never mentioned the striking odour (reminding of smelt) and the astringent-bitter taste, for he was plainly aware of the importance of smell within *Clitocybe*. In the descriptions of almost all species (19 out of 22) within the taxa *Cyathiformes* and *Orbiformes* the odour is mentioned, whereas in *A. hydrogrammus* — which was, moreover, classified as an *Omphalia* (!) — no mention of it is made. Besides, Lasch (apud Fries, *1838*: 74–75) described *Agaricus fritilliformis*, which was amongst others characterized by 'sapore amaro et odore forti ingrato'.

Fries (*1825*) indicated that he had found *A. hydrogrammus* in the vicinity of Femsjö. It is, however, highly improbable both for ecological and phytogeographical reasons that *C. hydrogramma* sensu Malenç. occurs there. Its northernmost distribution seems to coincide with that of calcareous *Fagus* woods (cf. the distribution map in Harmaja (*1969*: fig. 149). Professor Moser (pers. comm.) who has been collecting fungi in Femsjö for many years, expressed as his view that *C. hydrogramma* sensu Malenç. will probably never be found around Femsjö.

It has to be admitted, however, that Malençon was right in concluding that the illustration of Fries (*1867*: pl. 71) represented the same species as Kühner's. It is not unlikely that the specimens depicted were found in the southernmost part of Sweden.

The oldest name for *C. hydrogramma* sensu Malenç. is *Agaricus phaeophthalmus* (Persoon, *1828*: 72). The type (in Leiden) has been investigated by Singer (*1961*: 38) and by me, and was found to possess the typical dermatocystidia. And although Fries (*1830*: 706) thought of *A. phaeophthalmus* as *'Agaricus hydrogrammus* semiexpallens', I propose the following new combination:

Clitocybe phaeophthalma (Pers.) Kuyper, *comb. nov.* — Basionym: *Agaricus phaeophthalmus* Pers., Mycol. eur. **3**: 72. 1828.

In addition the following new combinations in *Clitocybe* are considered necessary:

Clitocybe albofragrans (Harmaja) Kuyper, *comb. nov.* — Basionym: *Lepista albofragrans* Harmaja *in* Karstenia **18**: 53. 1978.

Clitocybe pseudo-obbata (J. E. Lange) Kuyper, *comb. & stat. nov.* — Basionym: *Clitocybe vibecina* var. *pseudo-obbata* J. E. Lange. *in* Dansk bot. Ark. **6** (5): 55. 1930.

I am much indebted to Prof. M. Moser (Innsbruck) for information about the occurrence of species of *Clitocybe* around Femsjö. Thanks are also due to Dr. C. Bas for critically reading the manuscript of this paper.

REFERENCES

BULLIARD, J. B. F. & VENTENAT, E. P. (1809). Histoire des champignons de la France, p. 509–540. Paris.
FRIES, E. M. (1821). Systema mycologicum **1**. Lundae.
—— (1825). Stirpium Agri Femsjonensis. Lundae.
—— (1830). Agaricos synonymos in Persoonii Mycologia Europaea III, et systemate suo mycologico reconciliat. *In* Linnaea **5**: 689–731.
—— (1838). Epicrisis Systematis Mycologici seu Synopsis Hymenomycetum. Upsaliae.
—— (1867). Icones selectae Hymenomycetum nondum delineatorum **1**. Holmiae.
HARMAJA, H. (1969). The genus *Clitocybe* (Agaricales) in Fennoscandia. *In* Karstenia **10**: 1–121.
—— (1974). *Singerella*, n. gen., a separate genus for *Clitocybe hydrogramma*. *In* Karstenia **14**: 113–115.
KÜHNER, R. (1934). *Clitocybe gallinacea* (Scop.) Fr. *In* Bull. Soc. mycol. Fr. **50**: Atlas, pl. 64.
KÜHNER, R. & ROMAGNESI, H. (1953). Flore analytique des champignons supérieurs. Paris.
KUYPER, T. W. (1981). *Clitocybe* subgenus *Pseudolyophyllum* in Nederland. (Photo-offset) Wageningen.
MALENÇON, G. (1942). Notes critiques sur quelques Hyménomycètes d'Europe et d'Afrique du Nord. *In* Bull. Soc. mycol. Fr. **55**: 99–113.
MOSER, M. (1978). Die Röhrlinge und Blätterpilze. *In* Gams, Kl. Kryptog. Fl. 4. Aufl. 2(b/2). Stuttgart.
PERSOON, C. H. (1828). Mycologia europaea 3. Erlangae.
SINGER, R. (1961). Type studies on Basidiomycetes—X. *In* Persoonia **2**: 1–62.