

## A new European species of *Hydropus*, *H. moserianus*, spec. nov.

C. BAS

Rijksherbarium, Schelpenkade 6, 2312 ZT Leiden, Netherlands

Summary. — A new species of *Hydropus*, viz. *H. moserianus*, is described from 5 collections from the Netherlands. Type-material of the closely related *H. arenarius* (A. H. SMITH) SING. has been studied for purposes of comparison.

### Introduction

For some time an unnamed terrestrial species of *Hydropus* has been known to occur in the Netherlands in at least three widely separated localities. Its characters do not fit any of the European species described until now, but remind of a terrestrial North American species described in *Mycena* by A. H. SMITH (1947: 376), viz. *M. arenaria*, and transferred to *Hydropus* by SINGER (1951: 350). Recently the type and a paratype of that species have been examined. It turned out that *H. arenarius* and the present species differ in several aspects. Consequently the latter is described as new.

### Description

*Hydropus moserianus* BAS, spec. nov. — Fig. 1

Basidiocarpus omphalioideus. Pileus 4–18 mm, conico-convexus vel plano-convexus, centro applanatus vel depressus, hygrophanus, fuliginosus vel griseo-brunneus, margine breviter striatus, pallescens, demum pallide griseo-brunneus, subgranulosus. Lamellae distantes, decurrentes, arcuatae vel triangulares, crassiusculae, intervenosae, griseo-brunneae. Stipes 14–26×0.3–1.5 mm, albidus, deorsum griseo-brunnescens, subpruinosis. Odor saporque indistinctus. Sporae in cumulo albae. Sporae 8–11×4–5.5 μm, amyloideae. Basidia praecipue 4-sporigera. Cheilocystidia 20–50×6–18 μm, clavata vel rostrata; pleurocystidia conformia, rara vel abundantia. Pileipellis cutis pileocystidiis brunneis, praecipue clavatis praedita. Pigmentum intracellulare. Fibulae frequentes. Typus: Netherlands; Breda, Liesbos, 13 VII 1969, leg. P. B. JANSEN (L).

Pileus 4–18 mm diam., up to 7 mm high, paraboloid, conical or hemispherical when young, later convex to plano-convex, with centre usually flattened or depressed, rarely with small central papilla, finally flat with depressed centre, with margin at first inflexed, but soon deflexed to straight, with edge slightly undulating to subcrenulate, hygrophanous, when moist fuliginous (Munsell 10 YR 2/1), later dark sepia to dark grey-brown (10 YR 3/2, 2/2, 3/3, 4/3), at margin paler (towards greyish sepia (10 YR 5/4) or dark with paler

striation, short translucently striate-sulcate at margin when moist and fully expanded, drying to pale grey-brown or sepia-tinged buff (up to 2.5 Y 6/4), with dry, mat to minutely granular or granular-patchy surface, sometimes with a slight whitish pruinosity in older pilei. - Lamellae distant to very distant ( $L = 12-16$ ,  $l = 0-1(-3)$ ), decurrent, from narrow and arcuate to rather broadly triangular, thickish, weakly to strongly intervenose, locally forked and/or anas-

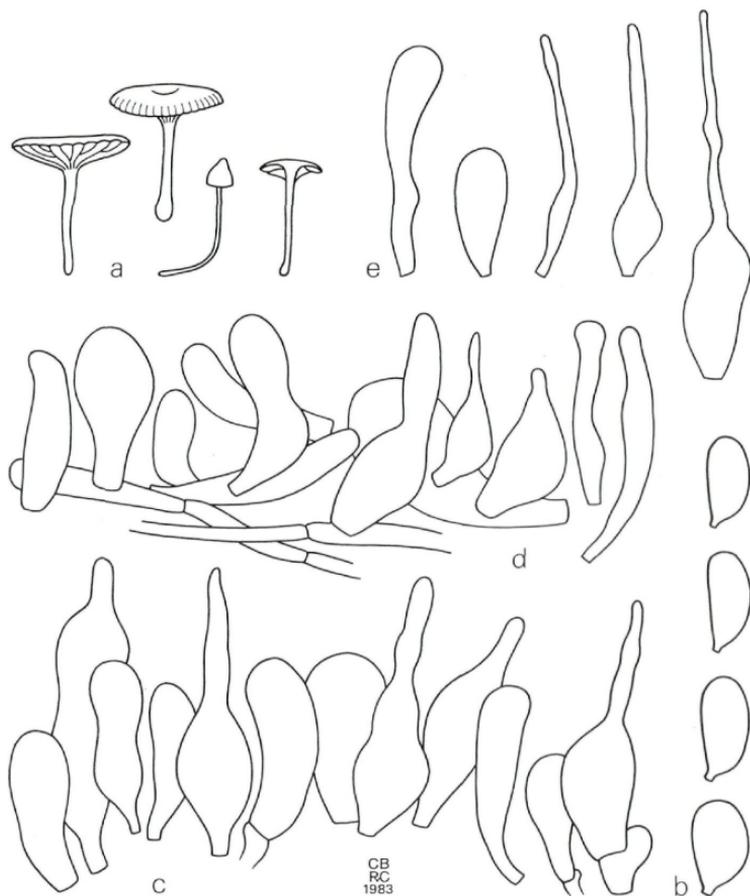


Fig. 1. *Hydropus moserianus*: a. Basidiocarps ( $\times 1$ ). - b. Spores ( $\times 1500$ ). - c. Cheilocystidia ( $\times 1000$ ). - d. Pileocystidia ( $\times 500$ ). - e. Caulocystidia ( $\times 1000$ ). (All figs. from type.)

tomosing, from pale grey to moderately dark grey-brown or brownish grey (10 YR 5/3, 6/3), slightly paler towards even or under lens slightly fimbriate edge. – Stipe 14–26×0.3–1.5 mm, cylindrical or slightly flattened, often widening towards apex, sometimes also towards base, solid, white to ivory, later on lower half becoming greyish to rather dark grey-brown from base upwards, seemingly smooth to polished-subfibrillose but under strong lens entirely minutely pruinose. – Context whitish to pale grey, not blackening, relatively thick in pileus, in stipe when quite fresh exuding watery droplets when cut. – Smell and taste indistinct (not farinaceous). – Spore print white to pale cream (not seen in fresh condition).

Spores (50 measured from 5 collections) (7.4–)8.2–11.1×(3.9–)4.2–5.7 μm, Q (1.5–)1.7–2.3, mean Q 1.8–2.0, ± adaxially flattened elongate-ellipsoid to elongate, often with slightly tapering and slightly bent base, thin-walled, colourless, glabrous, rather strongly amyloid. – Basidia 28–38 (–47)×(6.5–)7–9 μm, 4-spored but sometimes a few 2-spored, with clamp. – Cheilocystidia 20–50×6–18 μm, rather variable but mainly in two types: (i) narrowly to broadly clavate (more rarely almost spheropedunculate) and (ii) lageniform, ventricose or clavate with short to very long (up to 45 μm) often very narrow neck (1–3.5 μm wide), thin-walled, colourless, scattered to very abundant, intermixed with basidia. – Pleurocystidia similar to cheilocystidia, scarce to fairly abundant. – Pseudocystidia absent. – Trama of lamellae regular to subregular, made up of 3–18(–24) μm wide, non-agglutinate hyphae, not dextrinoid; subhymenium narrow, ± 8 μm thick, ramose. – Pileipellis an irregular cutis of subradial 5–15 μm wide, brown hyphae, with crowded to scattered, erect to ascending, variform, mainly slenderly to broadly clavate but also subcylindrical, fusiform, (sub)-lageniform, utriform or ventricose, rarely rostrate or subcapitate, brown pileocystidia, 35–70(–135)×8–24(–32) μm; pigment very distinct, intracellular. – Caulocystidia 15–75×3–16 μm, abundant at apex of stipe, more scattered downwards, thin-walled, colourless, mostly slenderly lageniform to ventricose-lageniform, often with long, thin, 1–3 μm wide necks, usually intermixed with clavate and more irregularly shaped ones. – Trama of stipe mainly composed of very long cylindrical cells with tapering ends (e. g. 700×12 μm) and thin to very slightly thickened walls; vascular refractive hyphae present but scarce. – Clamps present.

**Habitat & distribution:** Found in 3 provinces of the Netherlands in widely different habitats: loamy bank of ditch in broad-leaved forest; *Salix repens*-patch in valley of coastal sand-dunes; among *Polytrichum* on 1.5 year old burned place on sandy soil.

Collections examined: NETHERLANDS: prov. Drente, Diever, estate 'Hoekenbrink', 13 July 1969, J. GEESINK (L); prov. Noord-Holland, Petten, coastal dunes, 29 May 1968, 5 June 1968, 4 July 1968, F. A. v. d. BERG (L); prov. Noord-Brabant, Breda, Liesbos, 13 July 1969, P. B. JANSSEN (type, L).

In SINGER's (1982) infrageneric classification of *Hydropus*, *H. moserianus* has to be placed in section *Hydropus* on account of the presence of pileocystidia and the amyloid spores, and in subsection *Marginelli* because its basidiocarp does not blacken in any part.

Within subsection *Marginelli*, *H. moserianus* is characterized by: at least partly rostrate hymenial cystidia and caulocystidia, the presence of pleurocystidia, the absence of pseudocystidia, spore-size and -shape, predominantly 4-spored basidia, distant to very distant decurrent lamellae, the very dark brown colour of the pileus and the terrestrial habitat.

It was long thought that the material here described represents *H. arenarius* (A. H. SMITH) SING. (= *Mycena atenaria* A. H. SMITH, 1947: 376). A recent examination of a part of the holotype (SMITH, 1507) and a paratype (SMITH, 1590) has proved that this is not the case. *Hydropus arenarius* has shorter and relatively slightly broader spores ( $6.5-8.5 \times 3.5-4.8$ ,  $Q\ 1.6-2.0$ , mean  $Q\ 1.6^s-1.7^s$ ), cystidia on lamellae and stipe that are not rostrate, indistinct pigment in the pileipellis, and less distant lamellae ( $L = 18-25$ ).

*Mycena macilenta* BIGELOW (1976: 127) is also related and resembles *H. moserianus* in several aspects, but has more crowded gills, non-rostrate cheilocystidia and no pleurocystidia.

In MOSER's (1983: 104) key to European species of *Hydropus* the present species keys out near *H. marginellus* (PERS.: FR.) SING. That species, however, grows gregariously on decaying wood, has much more crowded gills ( $L = 29-34$  according to KÜHNER, 1938), smaller spores ( $6-7 \times 3.5-4.5\ \mu\text{m}$ ) and no pleurocystidia.

*Hydropus semimarginellus*, described by SINGER (1973: 59) from Brasil, has later been recorded by its author (SINGER, 1977: 122) from a green house in the Netherlands (Amsterdam). Although that species has rostrate cheilocystidia like *H. moserianus*, it differs from the latter by smaller spores ( $5-7.2 \times 3-5\ \mu\text{m}$ ), lacking pleurocystidia and white, rather crowded, non-intervene lamellae.

## References

- BIGELOW, H. e. (1976). Studies on New England agarics I. - *Rhodora* 78: 120-134.  
 KÜHNER, R. (1938). Le genre *Mycena*. - *Encycl. mycol.* 10: 1-710.  
 MOSER, M. (1983). Die Röhrlinge und Blätterpilze, 5. Aufl. - GAMS, H., *Kl. Kryptog. fl.* 2b/2: 1-533.

- SINGER, R. (1951). The Agaricales (mushrooms) in modern taxonomy. – *Lilloa* 22: 1–332.
- (1973). Diagnoses fungorum novorum Agaricalium III. – *Beih. Sydowia* 7: 1–106.
- (1977). Amerikanische und asiatische Agaricales, die in Europa und Nordafrika vorkommen. – *Z. Pilzk.* 43: 119–130.
- (1982). *Hydropus*. – *Fl. neotrop., Monogr.* 32: 1–153.

# ZOBODAT - [www.zobodat.at](http://www.zobodat.at)

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Sydowia](#)

Jahr/Year: 1983

Band/Volume: [36](#)

Autor(en)/Author(s): Bas C.

Artikel/Article: [A new European species of \*Hydropus\*, \*H. moserianus\*, n.spec. 6-10](#)