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NOTULAE AD FLORAM AGARICINAM NEERLANDICAM—IX

Mycenella

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Five species of *Mycenella* (Agaricales) appear to occur in the Netherlands, viz. *M. bryophila, M. margaritispora, M. rubropunctata* spec. nov., *M. salicina* and *M. trachyspora* comb. nov. A key to and descriptions and illustrations of these species are given. Moreover the following new combinations are introduced: *Mycenella bryophila* var. *caesia, Mycenella nodulosa* and *Xerula kuehneri.*

The genus *Mycenella* (J. Lange) Sing. was erected by J. Lange (1914: 16) as a subgenus of the genus *Mycena* S. F. Gray and contained species with warty spores. Singer (1938: 9) raised it to generic level. Five *Mycenella* species, viz. *M. bryophila, M. trachyspora, M. margaritispora, M. rubropunctata,* and *M. salicina* occur in the Netherlands, but they all appear to be rare to very rare.

Mycenella (J. Lange) Sing.

Mycena subg. *Mycenella* J. Lange in Dansk. bot. Ark. 1 (5): 16. 1914. — *Mycenella* (J. Lange) Sing. in Notul. syst. Sect. crypt. Inst. bot. Acad. Sci. URSS 4 (10–12): 9. 1938. — *Mycena* subg. *Para-Mycena* 'groupe *Mycenella*' Kühner, Genre Mycena: 609. 1938. — Type species: *Mycena margaritispora* J. Lange.

Marasmius sect. *Laccariosporae* Sing. in Beih. bot. Zbl. 56 B: 163. 1936. — Type species: *Marasmius cyatheae* Sing.

Basidiocarps mycenoid, small, tough. Pileus conical, convex or applanate, frequently with low umbo, thin-fleshed, somewhat hygrophanous, with centre dark greyish brown, becoming paler towards margin, striate, when fresh finely pruinose. Lamellae distant, adnate to emarginate, ventricose, whitish, cream or greyish. Stipe slender, cylindrical, frequently rooting, flexuose, at apex whitish, becoming ochraceous, brown, grey-brown or blueish grey towards base, pubescent. Smell indistinct. Taste indistinct. Spore print white to pale cream. Spores subglobose, in most species with low, broad, obtuse warts, thin-walled, hyaline, inamyloid, with conspicuous apiculus. Basidia clavate, 2- or 4-spored. Cheilocystidia ventricose or fusiform with apex obtuse, subacute, mucronate or with branched projections, thin- or rather thin-walled, sometimes with yellowish brown, resinaceous substance around apex. Pleurocystidia similar to cheilocystidia. Hymenophoral trama subregular. Stipitetrama sarcodimitic (Corner, 1966: 148, 175). Pileipellis tending to a hymeniderm (Kühner 1980: 733), made up of irregular branched clavate cells or thin repent hyphae with wart-like excrescences.

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Caulocystidia lageniform or fusiform. Clamp-connections present. Terrestrial in both coniferous and broad-leaved forests or on decayed wood. Rare. According to Singer (1975: 346) the species with warty spores have a temperate distribution.

KEY TO THE SPECIES OF MYCENELLA IN WESTERN EUROPE

1. Spores without warts (but occasionally with one or two germ tubes) . . . . . 1. *M. salicina*
1. Spores with conspicuous warts.
   2. Spores < 10 µm, with rounded warts.
      3. Apex of cystidia with simple or branched projections . . . . . 3. *M. margaritispora*
      3. Apex of cystidia without projections.
         4. Cheilo- and pleurocystidia lageniform with a long cylindrical neck with non-mucronate, obtuse apex. Basidia 2-spored.
            5. Stipe grey-brown . . . . . 5a. *M. bryophila* var. *bryophila*
            5. Stipe blueish grey . . . . . 5b. *M. bryophila* var. *caesia*
         4. Cheilo- and pleurocystidia fusiform with subacute or mucronate apex. Basidia mostly 4-spored.
            6. Lamellae and upper part of stipe with small reddish spots. Cheilo- and pleurocystidia frequently mucronate . . . . . 4. *M. rubropunctata*
            6. Without small red spots. Cheilo- and pleurocystidia not mucronate . . . . . 2. *M. trachyspora*
   2. Spores > 10 µm, with large conical warts . . . . . (6. *Xerula kuehneri*)

1. Mycenella salicina (Vel.) Sing.—Fig. 1

Mycena salicina Vel., Ceské houby: 306. 1920. — *Mycenella salicina* (Vel.) Sing. in Lilloa 22 291. 1951.

Selected descriptions.—Kühner, Genre *Mycena*: 620. 1938; Gulden & Jennsen, Arctic and Alpine Mycology, First Int. Symp. Arcto-Alpine Mycology, Eds. Laursen & Ammirati: 187. 1982; Pearson in Trans. Br. mycol. Soc. 35: 101. 1952; Pilát, Velenovskýi Species novae Basiomycetum: 94. 1948.

Basidiocarps small, solitary. Pileus up to 13–15 mm in diam., convex or campanulate, finally becoming flattened, thin-fleshed, at centre brown to dark brown, towards margin greyish brown, pallescent on drying, dull, glabrous, occasionally with centre of pileus of dried basidiocarps very slightly pruinose, becoming somewhat plicate on drying. Lamellae rather distant (L = 17–30, l = 1–3), adnexed to emarginate, ventricose or nearly triangular, pale grey, with white, finely eroded edge (lens!). Stipe 17–50 × 0.8–2.5 mm, slenderly cylindrical, fistulose, at apex whitish, towards base becoming greyish, with outermost base yellow-brown to dark brown, entirely whitish pubescent, at base with brown rhizoids. Context of pileus pale grey, of stipe white with cortex becoming brown towards base. Smell and taste indistinct.

Spores 5.0–6.7 × 4.1–5.6 µm, Q = 1.0–1.3, globose, subglobose or broadly ellipsoid, sometimes somewhat angular, occasionally with broad germ tube, thin-walled, hyaline, with conspicuously large hilar appendage. Basidia 25–32 × 5.5–7.0 µm, clavate, 4-spored, occasionally 2-spored (Huysman s.n., 15 Oct. 1957). Cheilocystidia 50–80 × 9–16 µm, ventricose-lageniform, with 3–7 µm wide obtuse neck, rather thick-walled, with resinaceous contents, sometimes near apex with surrounding resinaceous substance. Pleurocystidia similar to cheilocystidia. Pileipellis a cutis made up of 2–3 µm wide repent hyphae with scattered cylindrical pileocystidia, slightly gelatinized; elements just below surface with intracellular reddish brown pigment.

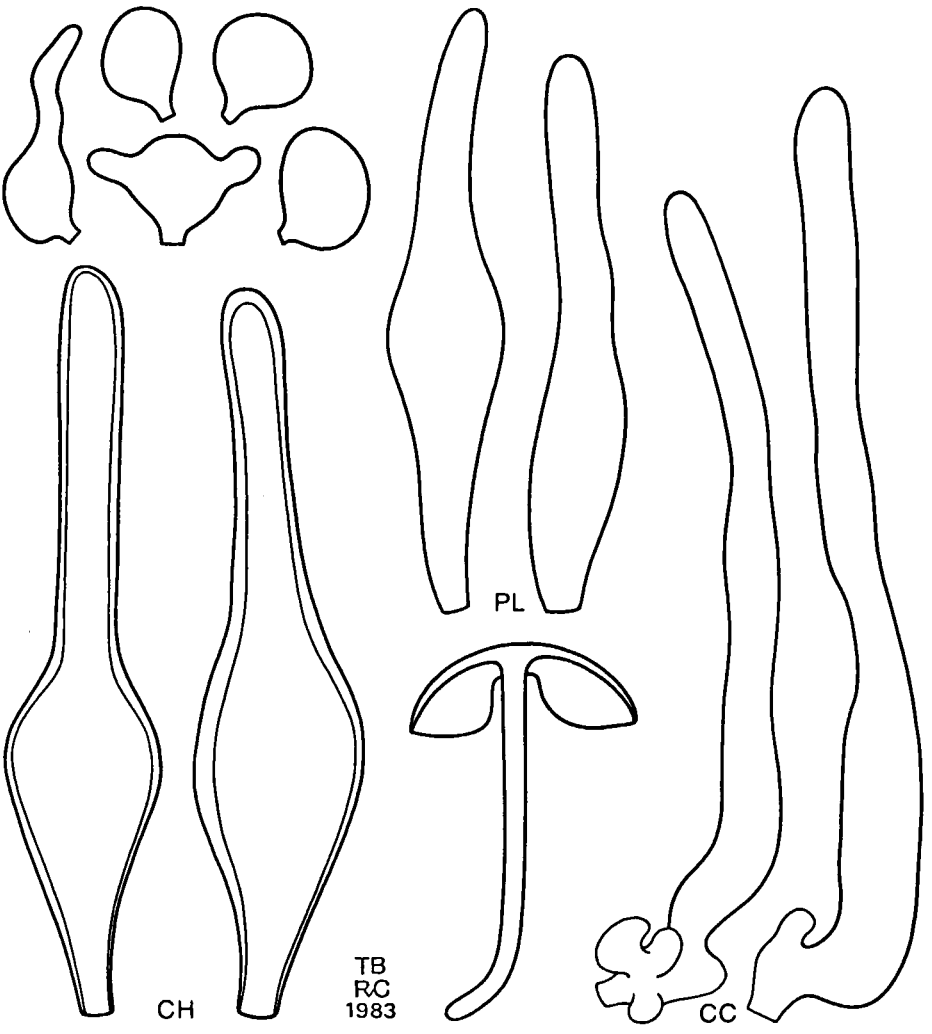

Fig. 1. *Mycenella salicina*. Habit, spores, pleurocystidia (PL), cheilocystidias (CH), and caulocystidia (CC). (Habit × 1.4, spores × 2.100, cystidia × 1.400).

Stipitepellis a cutis with many coralloid or simple protuberances, with subcylindrical caulocystidia measuring 50–120 × 3–10 μm.

Habitat & distribution.—Terrestrial in calcareous grasslands, but also found in *Pinus* forest. Very rare. In the Netherlands only known from calcareous coastal dunes and from the south-eastern limestone area.

Material examined.—NETHERLANDS: prov. Zuid-Holland, Noordwijk, 16 Nov. 1957, *C. Bas 1382* (L); prov. Limburg, Wijlre, 11 Oct. 1968, *P. B. Jansen 68–140* (L); unknown locality, 15 Oct. 1968, *H. S. C. Huysman s.n.*

Among the european *Mycenella* species *M. salicina* is easily recognized by its subglobose spores. As already indicated by Gulden & Jenssen (1982: 187) their material from Greenland has larger spores (viz. 6–9.5 μm) than european specimens.

2. Mycenella trachyspora (Rea) Boekhout, *comb. nov.*—Fig. 2

Mycena trachyspora Rea in Trans. Br. mycol. Soc. 12: 216. 1927 (basionym).

Mycena cooliana Oort in Meded. Ned. mycol. Vereen. 16–17: 248.—*Mycenella cooliana* (Oort) Sing. in Beih. Sydowia 7: 32. 1973.

Selected descriptions.—Smith, North American spec. Mycena: 445. 1947.

Basidiocarps small, growing in small groups. Pileus ca. 15 mm in diam., conico-campanulate, with low umbo, grey-brown, pallescent on drying, pruinose, striate when moist, somewhat wrinkling on drying. Lamellae rather distant, rather thick, up to c. 2 mm wide, sometimes furcate and venose, white. Stipe 20–30 × 3 mm, cylindrical, fistulose, tough, at apex pale grey, towards base becoming yellowish or even dark brown flocculose. Context whitish. Smell indistinct. Taste indistinct.

Spores 5.5–6.0 × 4.8–5.3 μm, Q = 1.05–1.25, subglobose to broadly ovoid, with low, obtuse warts, thin-walled, hyaline, with conspicuously large hilum. Basidia 23–45 × 6–7 μm, clavate, 4-spored. Cheilocystidia 55–75 × 6–11 μm, slenderly fusiform, gradually tapering towards subobtuse apex, rather thick-walled. Pleurocystidia 70–95 × 7–10 μm, slenderly fusiform. Pileipellis with subcylindrical pileocystidia, measuring 40–60 × 3–7 μm. Stipitepellis a cutis made up of hyphae with simple or coralloid projections, with subcylindrical or slenderly fusiform caulocystidia, measuring 45–85 × 5–11 μm.

Habitat & distribution.—Among mosses at base of trunk of *Ulmus*; very rare in the Netherlands. Found only once (1926) near Leiden (type locality of *Mycena cooliana*).

Material examined.—NETHERLANDS, prov. Zuid-Holland, Oegstgeest, estate 'Rhijnhof', *anonymus* (L).—U.S.A.: *A. H. Smith 218, 3731* (MICH).

The description above is based mainly on Oort's description of *Mycena cooliana*.

Mycenella trachyspora (Rea) Boekhout is considered to be conspecific with *M. cooliana* (Oort) Sing. because of similar morphology and habitat, viz. on wood of *Ulmus*.

The cheilocystidia in the holotype of *M. cooliana* seems to be somewhat more fusoid if compared with Rea's description: 'hyaline, flexuose, often ventricose at base, 40–60 × 6–10 μm, apex obtuse, sometimes constricted into a globose head.' However, the cheilocystidia in specimens from the U.S.A. are comparable to those of the Netherlands' specimen.

Maas Geesteranus (1982: 382) regards *M. cooliana* conspecific with *M. bryophila*. I disagree because the cheilocystidia of *M. bryophila* are lageniform with a cylindrical, obtuse neck.

Dr. E. Horak drew my attention to a still undescribed alpine taxon of *Mycenella* which is very close to *M. trachyspora* because of the presence of subfusiform cheilocystidia similar to those of *M. trachyspora*. It differs however, by its very dark blackish brown pileus and it alpine habitat.

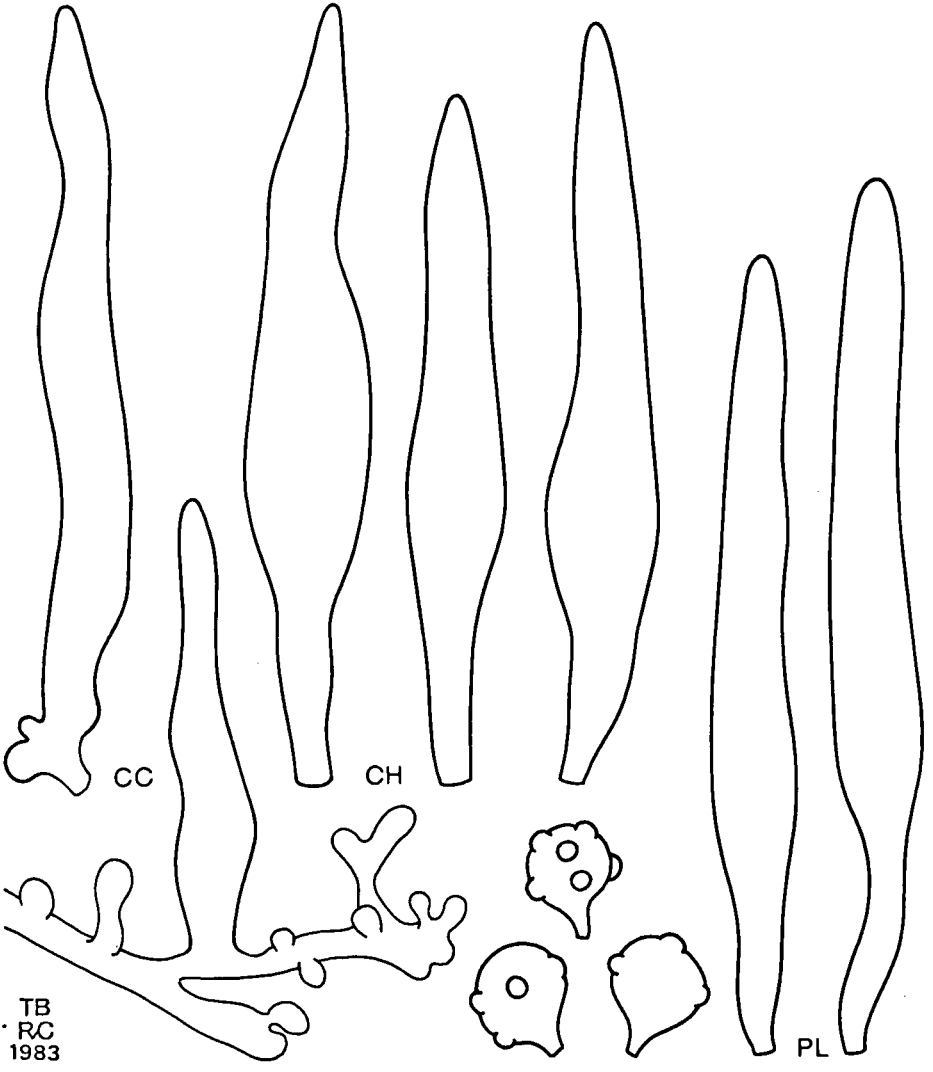

Fig. 2. *Mycenella trachyspora*. Spores, pleurocystidia (PL), cheilocystidia (CH), and caulocystidia (CC). (Spores × 2.100, cystidia × 1.400).

3. Mycenella margaritispora (J. Lange) Sing.—Fig. 3

Mycena margaritispora J. Lange in Dansk. bot. Ark. 1(5): 37. 1914. — *Mycenella margaritispora* (J. Lange) Sing. in Lilloa 22: 291. 1951.

Misapplied name.—*Mycena lasiosperma* sensu Kühner, Genre Mycena: 612. 1938.

Selected illustrations.—J. Lange, l.c., pl. 1k; Fl. agar. dan. 2, pl. 58 D, D1. 1931.

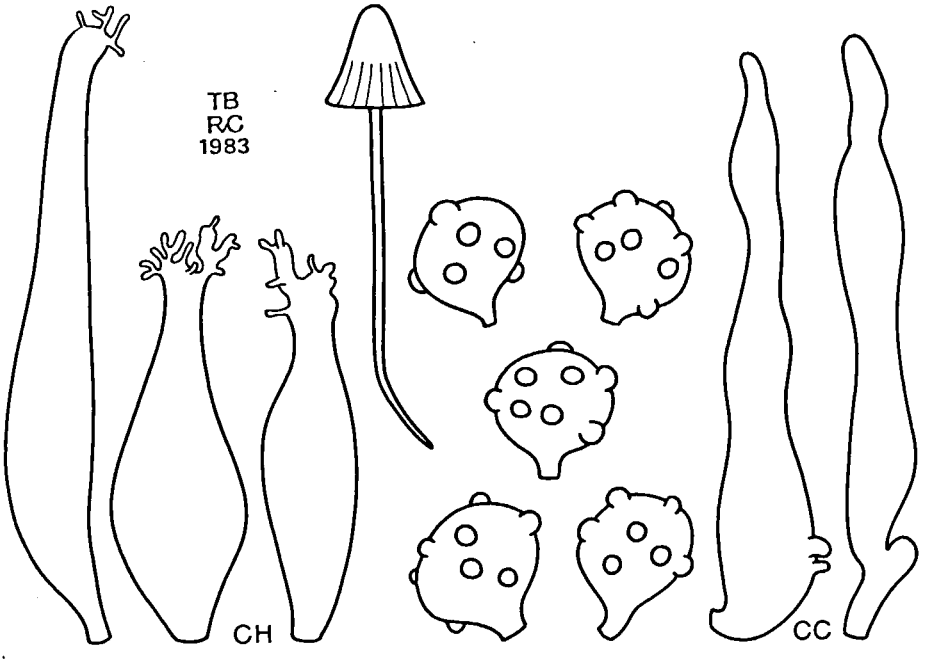

Fig. 3. *Mycenella margaritispora*. Habit, spores, cheilocystidia (CH), and caulocystidia (CC) (Habit × 1.4, spores × 2.100, cystidia × 1.400).

Selected descriptions.—J. Lange, Fl. agar. dan. 2: 50. 1936; Smith, North American spec. *Mycena*: 443. 1947.

Basidiocarps small, solitary. Pileus 5–8 mm high, conical to campanulate, hygrophanous, with centre brownish grey, grey or pearl grey, towards margin brownish, pallescent on drying, striate. Lamellae distant, adnexed, narrow, pale grey. Stipe ca. 15 × 0.5 mm, sometimes somewhat rooting, at apex whitish, becoming dark grey-brown towards base, pubescent. Context pallid, tough. Smell indistinct. Taste indistinct.

Spores (5.5–)6.3–8.1 × (4.5–)5.1–6.7(–7.4) µm, Q = 1.0–1.3, subglobose to broadly ellipsoid, with low obtuse warts, thin-walled, hyaline, with conspicuously large hilar appendage. Basidia 23–35 × 6–8 µm, clavate, 2-spored. Cheilocystidia 35–60 × 7–12 µm, fusiform or lageniform with obtuse apex, mostly with simple or coralloid excrescences, thin-walled. Pleurocystidia similar to cheilocystidia. Pileipellis hymeniform, made up of cylindrical, clavate or irregularly shaped cells covered with simple to branched wart-like or cylindrical excrescences, with fusiform, thin- to slightly thick-walled pileocystidia measuring 20–45 × 4–7 µm. Stipitepellis a cutis, made up of hyphae with wart-like protuberances, and subcylindrical caulocystidia, 20–65 × 4–7 µm, sometimes with excrescences at their apex.

Habitat & distribution.—Terrestrial, among grasses and mosses and on fallen branches of trees. Very rare. In the Netherlands only known from two localities on sandy or loamy soil in the south-western part of the country.

Material examined.—NETHERLANDS, prov. Noord-Brabant: Bergen op Zoom, estate 'Zoomland', 26 Oct. 1973, *P. B. Jansen 73–124* (L); ditto, 24 Oct. 1975, *P. B. Jansen 75–151* (L); Dorst, 24 Aug. 1968, *P. B. Jansen 68–127* (L).

Mycenella margaritispora is characterized by a small, conical to campanulate pileus and cheilocystidia with simple or coralloid excrescences at their apex. In the latter aspect this species agrees with *M. lasiosperma* (Bres.) Sing., which according to some authors (e.g. Kühner, 1938: 612, 1980: 896) is conspecific with *M. margaritispora*.

I have studied too few specimens to have a definite opinion on this problem, but to me *M. margaritispora* seems to differ from *M. lasiosperma* in smaller non-fasciculate basidiocarps, in the absence of a rooting base and in having a not very pronounced smell. The smell of *M. lasiosperma* is described by Bresadola (1883: 33) as 'forti farinaceo-rancido'.

4. Mycenella rubropunctata Boekhout, *spec. nov.*—Figs. 4–5

Misapplied name.—*Mycena bryophila* Vogl. sensu Kühner p.p. (4-spored variant), Genre *Mycena*: 614. 1938.

Pileus 5–25 mm diam., primum conicus ad convexus, deinde applanatus vel convexus, tenuis, hygrophanus, humiditate umbrinus, ad sepiaceus, marginem versus pallidior, transparenter striatus, pruinosus. Lamellae densae, emarginatae ad anguste adnatae, ventricosae, albidae vel cremeae vel griseo-flavidae, in exsiccatis rubropunctatae. Stipes 30–75 × 0.5–2.2 mm, radicans, ochraceo-brunneus, sursum albidus, pubescens. Contextus griseo-brunneus. Odor et sapor indistincti. Sporae subglobose ad late ellipsoideae, verrucis obtusis obtectae, 4.5–6.0 × 4.2–5.5 μm (in basidiis bisporis 5.8– 8.1 × 5.6–8.0 μm). Basidia quadrispora, raro bispora, 22–28 × 6–7 μm. Cheilocystidia 40–70 × 9–16 μm, fusiformia, nonnumquam modice lageniformia, sursum ampliata et truncata, saepe mucronata, fere crassitunicata, saepe sursum materia resinacea incrustata. Pleurocystidia cheilocystidiis similia. Pileipellis cutis ex hyphis angustis tenuitunicatis composita, appendicibus simplicibus vel coralloideis ornata, pileocystidiis cylindricis vel subventricosis, 30–65 × 4–7 μm praedita. Typus.—'*R. A. Maas Geesteranus 15532*, in silva coniferarum prope Wijlre, prov. Limburg in Neerlandia, 31 VIII 1977 (L)'.

Basidiocarps small, solitary. Pileus 5–25 mm, conical to convex, becoming applanate, finally concave with margin uplifted, thin-fleshed, hygrophanous, when moist dark brown to sepia (Mu. 10 YR 5/2) but towards margin pale yellowish sepia and outermost margin whitish, becoming silvery grey-brown (Mu. 10 YR 8/2–3) on drying, somewhat viscid, translucently striate, finely pruinose (lens!). Lamellae rather crowded (L = c. 25), emarginate to narrowly adnate, ventricose, up to 3 mm wide, somewhat venose, whitish, whitish cream or greyish yellow, when dried with distinct reddish spots, with concolorous edge. Stipe 30–75 × 0.5–2.0 mm, somewhat flexuose, terete or somewhat flattened, rooting, fistulose, whitish at apex, becoming ochraceous to brownish (Mu. 10 YR 5–6/3) towards base, at apex white pubescent, becoming yellowish pubescent towards base, when dried with reddish spots on upper part of stipe. Context of pileus grey-brown, of upper part of stipe pale brown, browner towards base. Smell indistinct or very weak, jodoform-like. Taste absent or somewhat herbaceous. Spore print colour unknown (not recorded in material studied).

Spores in 4-spored form 4.5–6.0 × 4.2–5.5 μm, Q = 1.0–1.25, in 2-spored form 5.8–8.1 × 5.6–8.0 μm, Q = 1.0–1.2, subglobose to broadly ellipsoid, with low, obtuse warts, thin-walled, hyaline, with conspicuously large hilar appendage. Basidia 22–28 ×

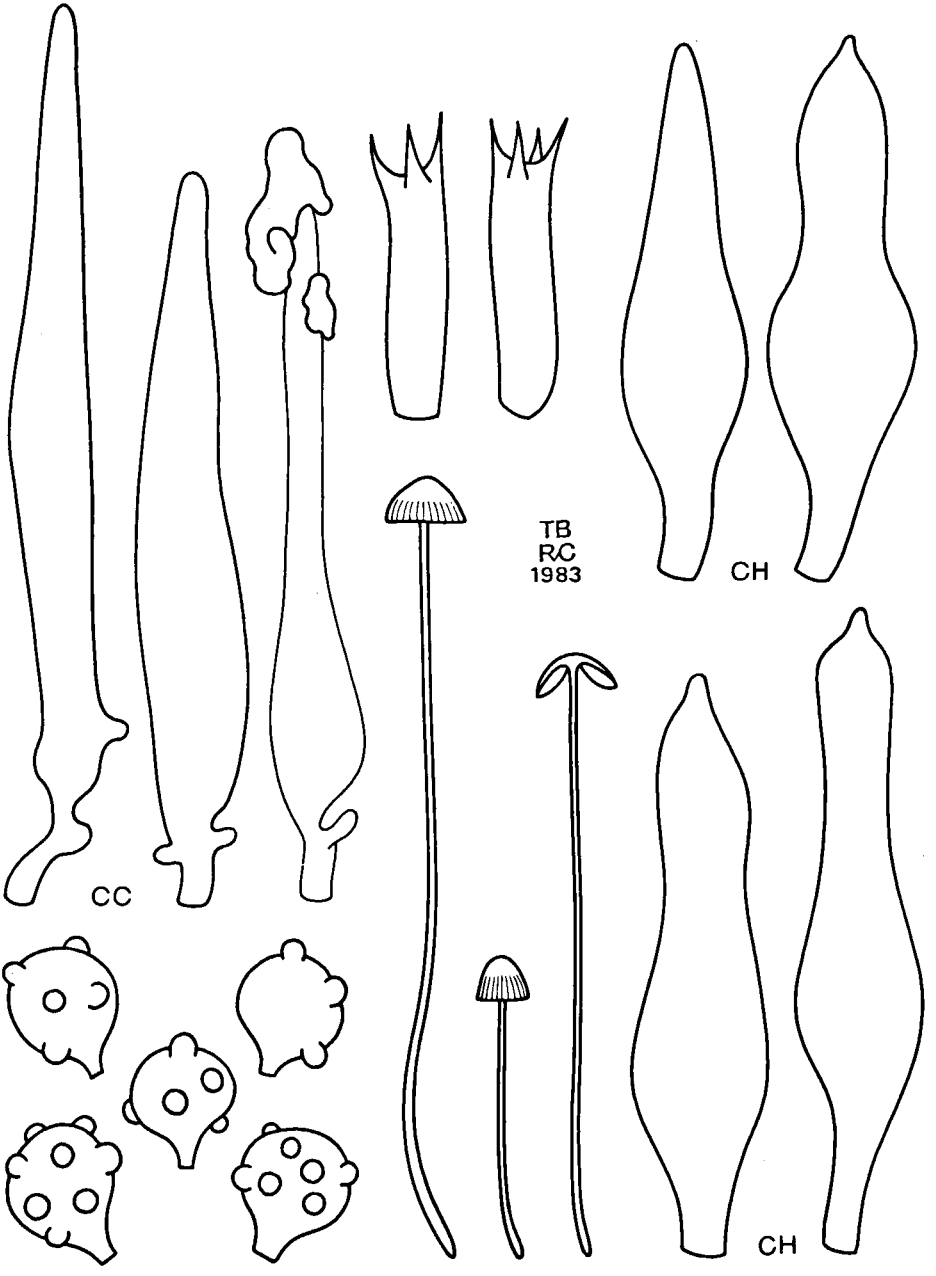

Fig. 4. *Mycenella rubropunctata*. Habit, spores, basidia, cheilocystidia (CH), and caulocystidia (CC). (Habit × 1.4, spores × 2.100, cystidia × 1.400).

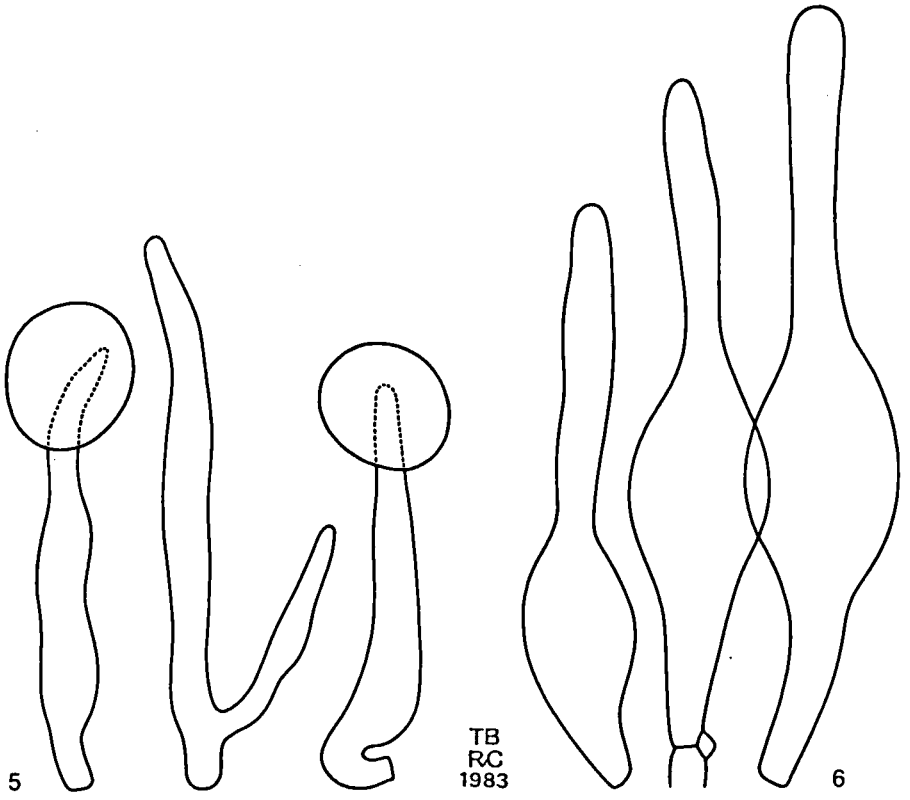

Fig. 5. *Mycenella rubropunctata*. Pileocystidia.
Fig. 6. *Mycenella nodulosa*. Cheilocystidia (from type) (all Figs. × 1.400).

6–7 μm, clavate, 4-spored; occasionally 2-spored. Cheilocystidia 40–70 × 9–16 μm, fusiform, sometimes tending to lageniform with broad tapering neck, frequently with mucronate apex, rather thick-walled, often with yellowish resinaceous substance around apex. Pleurocystidia similar to cheilocystidia. Hymenophoral trama subregular, made up of hyphae with fusiform cells measuring 50–90 × 7–12 μm. Pileipellis a cutis made up of slender hyphae with simple to branched coralloid excrescences, with cylindrical to subventricose pileocystidia, measuring c. 30–65 × 4–7 μm. Stipitepellis a cutis, made up of slender hyphae with wart-like excrescences, and fusiform, rather thick-walled caulocystidia, measuring 40–80 × 5–9 μm.

Habitat & distribution.—Terrestrial in both broad-leaved and coniferous forests, probably with preference for calcareous soils. Very rare. In the Netherlands only known from two localities; one in the south-western part (prov. Noord-Brabant) and one in the south-eastern part (prov. Limburg). Also known from Belgium (prov. Namur) and Norway (prov. Østfold and Telemark).

Material examined.—NETHERLANDS: prov. Noord-Brabant, Bergen op Zoom, estate 'Zoomland', 4 Aug. 1973, *P. B. Jansen 63–119* (L); prov. Limburg, Wijlre, 31 Aug. 1977, *R. A. Maas*

Geesteranus 15532, 15533 (L). — BELGIUM, prov. Namur: Rochefort, 5 Oct. 1978, *J. Schreurs 672* (L); Ave-et-Auffe, 28 Aug. 1980, *J. Schreurs 451* (L); ditto 2 Oct. 1977, *P. B. Jansen, 77–291* (L). — GREAT-BRITAIN, Sussex, Chichester, 5 Sept. 1967, *E. Kits van Waveren s.n.* (L). — NORWAY: prov. Østfold, Harekö, Onsoy, 10 Oct. 1984, *Ø. Weholt 69/84* (L); prov. Telemark, Gjømle, Bamble, 20 Nov. 1982, *Ø. Weholt 252/82* (L).

This species has already been reported twice in european mycological literature. First as von Höhnel's '2. *Mycena* species' (1914: 24) and later as Kühner's 4-spored form of *Mycenella bryophila* (1938: 614).

Mycenella rubropunctata is very close to *Mycena nodulosa* A. H. Smith (1936: 411, 1947: 446), because of a rather similar morphology, including the presence of reddish spots on the lamellae and the upper part of the stipe. **Mycenella nodulosa** (A. H. Smith) Boekhout, *comb. nov.*[1], differs however in its pileipellis which is made up of clavate cells, its slightly larger spores (viz. 6–7 µm). and its hymenial cystidia which are lageniform with a long cylindrical neck (Fig. 6). Moreover the pileocystidia of *M. rubropunctata* (Fig. 5) are considerably shorter than those of *M. nodulosa* (viz. 30–65 × 4–7 µm in *M. rubropunctata*, as against 100–150 × 7–9(–10) µm in *M. nodulosa* (A. H. Smith, l.c.). The type material does not show red spots on the lamellae probably owing to desintegration of the reddish substance during the long period of preservation in the herbarium.

5. Mycenella bryophila (Vogl.) Sing.—Fig. 7

Mycena bryophila Vogl. in Atti Ist. veneto Sci., ser. 6, IV: 617. 1886. — *Mycenella bryophila* (Vogl.) Sing. in Lilloa 22: 291. 1951.

Mycena meulenhoffiana Oort in Meded. ned. mycol. Vereen. 16–17: 247. 1928.

var. bryophila

Misapplied name. — *Mycena lasiosperma* sensu J. Lange in Dansk bot. Ark. 1: 36. 1914.
Selected description. — Kühner, Genre *Mycena*: 616. 1938 (2-spored form).

Basidiocarps small, solitary. Pileus 20–40 mm, conico-convex to applanate, with prominent umbo, thin-fleshed, with centre dark brown (Mu. 7.5 YR 3/2, towards margin pale brown, translucently striate up to centre by dark brown stripes. Lamellae moderately crowded (L = c. 18), adnate to nearly adnexed, ventricose, up to 5 mm wide, sometimes venose, whitish to pale greyish brown, with concolorous edge. Stipe 30–50 × 1–2.5 mm, slenderly cylindrical, with up to 5 mm broad clavate base, rooting, at apex whitish to very pale grey-brown, becoming grey-brown (Mu. 10 YR 5/3) at base, entirely white pubescent. Context of pileus and upper part of stipe pale grey-brown, towards base of stipe becoming dark grey-brown. Smell indistinct. Taste indistinct.

Spores (5.0–)6.5–9.5 × 5.0–7.8 µm, Q = 1.0–1.25, subglobose to broadly ellipsoid, with low, obtuse warts, thin-walled, hyaline, with conspicuously large hilar appendage. Basidia 25–35 × 7–12 µm, clavate, 2-spored. Cheilocystidia 45–80 × 7–14 (–16) µm, lageniform with 3–6 µm wide, long cylindrical neck, with obtuse apex, rather thick-walled. Pleurocystidia similar to cheilocystidia. Pileipellis somewhat gela-

[1] Basionym: *Mycena nodulosa* A. H. Smith in Mycologia 28: 411. 1936.

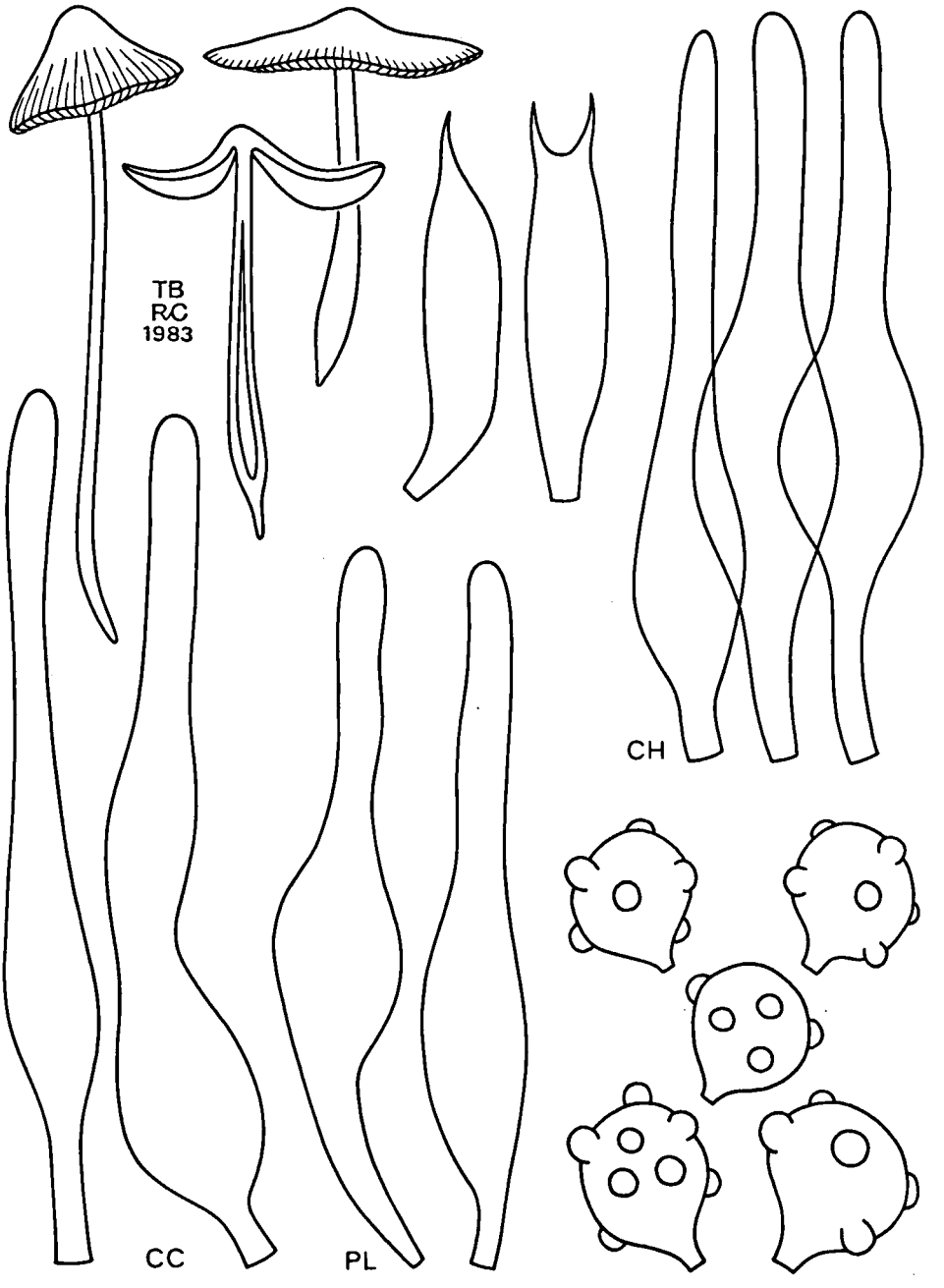

Fig. 7. *Mycenella bryophila*. Habit, spores, basidia, pleurocystidia (PL), cheilocystidia (CH), and caulocystidia (CC). (Habit × 1.4, spores × 2.100, basidia and cystidia × 1.400).

tinized, made up of thin-walled, colourless, clavate cells, with cylindrical or subventricose pileocystidia measuring c. 25–40 × 3–6 μm, with under this suprapellis a compact cutis-like subpellis made up of slender hyphae with yellowish brown cell walls. Stipitepellis a cutis, made up of hyphae with wart-like excrescences, with lageniform caulocystidia, 55–95 × 5–13 μm.

Habitat & distribution. — Terrestrial, in both coniferous and broad-leaved forests in calcareous coastal dunes and in parks on rich soils. Rather rare. In the Netherlands known from the coastal dunes (prov. Noord-Holland, Castricum: prov. Zuid-Holland, Katwijk: prov. Zeeland, Oostkapelle) and from estates along brooks and rivers (prov. Overijssel, Delden; prov. Limburg, Gulpen).

Material examined. — NETHERLANDS: prov. Overijssel, Delden, 28 Sept. 1980, *E. Kits van Waveren s.n.* (L); prov. Noord-Holland: Castricum, 7 Nov. 1964, *E. Kits van Waveren s.n.* (L); Vogelenzang, 31 Oct. 1953. *A. F. M. Reijnders s.n.* (L); prov. Zeeland: Walcheren, Zeeduin, 28 Sept. 1937, *H. S. C. Huysman* (L); Walcheren, Oostkapelle, 9 Oct. 1938, *H. S. C. Huysman* (L); prov. Limburg, Gulpen, 12 Oct. 1952, *H. S. C. Huysman* (L).—FRANCE, dept. Ain, Martignat, 31 Sept. 1957, *H. S. C. Huysman* (L).—U.S.A., *A. H. Smith 17956* (MICH).

Mycenella bryophila in its present concept differs from Voglino's original description in having 2-spored basidia and a flocculose stipe. The cystidia agree well.

According also to A. H. Smith (1947: 447, fig. 54.9), J. Lange (1914: 36, 1936: 50), and Natarajan & Raman (1980: 227) *M. bryophila* has 2-spored basidia but the cystidia described by these authors differ in being more fusiform. However, a collection (*A. H. Smith 17956*) from the U.S.A., kindly sent on loan and studied by me, shows typical lageniform cystidia with a long cylindrical neck.

Mycena meulenhoffiana Oort (1928: 247) seems conspecific with *Mycenella bryophila*, because according to the original description it differs from *M. bryophila* only by a non-striate pileus. No material is present at L.

The holotype of *Mycena meulenhoffiana* var. *caesia* Oort differs from *M. bryophila* in the blueish grey colour of the stipe. Therefore a new combination is proposed:

Mycenella bryophila var. **caesia** (Oort) Boekhout, *comb. nov.*

Mycena meulenhoffiana var. *caesia* Oort in Meded. ned. mycol. Vereen. 16–17: 247. 1928 (basionym).

Differs from the typical variety by a blueish-grey stipe.

Habitat & distribution. — Terrestrial, among grasses in broad leaved forest on clayey or sandy soil. In the Netherlands known only from two localities in the prov. Zuid-Holland: Katwijk and Voorschoten.

Material examined. — NETHERLANDS, prov. Zuid-Holland, Voorschoten, estate 'Raaphorst', 4 Nov. 1927, *C. Cool s.n.* (holotype, L).

Oort (l.c.) described both the pileus and stipe as blue or blue-grey. However, a water colour painting (*Scholtes s.n.*, 13-X-1926, near Katwijk) shows a grey-brown pileus with a rather dark centre.

The first *Mycena* species described in 1914 (: 71) by von Höhnel fully agrees with *M. bryophila* var. *caesia* because of its steel grey-blue stipe and its similar cystidia and spores ('Kugelig 6 bis 8 μm breit, locker-warzig-stachelig').

6. Xerula kuehneri (Romagn.) Bas & Boekhout *comb. nov.*

Mycenella kuehneri Romagn. in Bull. trimest. Soc. mycol. Fr. 56: 63. 1940 (basionym). — *Oudemansiella kuehneri* (Romagn.) Sing. in Sydowia 15: 59 ('1961') 1962.

This species, in 1984 collected also in the Netherlands, has been described by Romagnesi as the perfect intermediate between *Mycenella* and *Oudemansiella*: the minute fruit-body and the echinate spores pointing towards the first, but the strictly trichohymenidermal pileipellis with its long hair-like pileocystidia and the large spores and basidia pointing towards the second genus.

For us the structure of pilei- and stipitepellis and the large size of basidia and spores in addition to the information that in South America more typical *Oudemansiellas* with echinate spores do occur, viz. *O. steffenii* (Rick) Sing. and *O. macracantha* Sing., are the reasons for not accepting this species in *Mycenella*, thus following Singer and Moser.

As, in accordance with Dörfelt (1979: 365; 1981: 658), we wish to restrict *Oudemansiella* to the annulate species growing directly on wood and to exclude from it the exannulate species (dry and viscid) not directly growing on wood (*Xerula*), the new combination in *Xerula* was necessary.

A full description of the Netherlands' specimen of *Xerula kuehneri* will be published in another paper in the next fascicle of Persoonia.

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