

**TYPE STUDIES ON ENTLOMATOID SPECIES IN THE  
VELENOVSKÝ HERBARIUM—I**

**Species described in the genera *Nolanea*, *Leptonia* and *Telamonia*.**

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(With 29 Text-Figures)

All types of entolomatoid fungi available in the Velenovský Herbarium at Prague have been studied. In this first report the types of 30 species described by Velenovský in *Nolanea*, *Leptonia* and *Telamonia* (one species) are described. Species accepted here have, if necessary, been transferred to *Entoloma*, which resulted in 18 new combinations and 4 new names. One described in *Nolanea* had to be transferred to *Pluteus*.

In the course of his long life Josef Velenovský (1858–1949) described a great number of new taxa in various groups of fungi. Kotlaba (1977) in his revision of the polypores in Velenovský's herbarium gives a thorough survey of Velenovský's life and work.

Untill recently only a minor part of Velenovský's new taxa in the Agaricales have been revised: Harmaja (1970, 1974) published on those in *Clitocybe* and *Omphalina*, Horniček (1957) on those in *Tricholoma* and Svrček (1966) on those in various small genera.

The present work deals with Velenovský's species in the genera *Nolanea* and *Leptonia* and with one entolomatoid species erroneously described in *Telamonia*. A revision of his entolomatoid species described in the genera *Entoloma*, *Eccilia*, *Claudopus*, *Clitocybe* and *Arenicola* is in preparation. All entolomatoid agarics are considered by the present author to belong to one single genus, viz. *Entoloma* (Fr.) Kumm. emend. Donk (syn. *Rhodophyllus* Quéél.).

As Velenovský's library was restricted to the works of Fries, Saccardo and Ricken, one cannot be surprised that many species described as new by Velenovský appeared to be identical with species previously described in literature unknown to him. This was explicitly shown in Kotlaba's revision of Velenovsky's polypores mentioned above. In the entolomatoid fungi this phenomenon is not so manifest because this group of fungi is rather neglected in Europe, except in France, thanks to the excellend work of Romagnesi and Kühner. Moreover Velenovský's collecting sites are rather favourable for species of *Entoloma*. In some cases however it appeared to be necessary to create new names for Velenovský's taxa, as many combinations in *Entoloma* were preoccupied.

Velenovský's types are deposited in the Herbarium of the National Museum, Prague, (PRM) as exsiccata, and in the Botanical Institute of the Charles University, Prague, (PRC) in liquid. The latter collection contains most species described in České Houby (1921).

In the present paper the infrageneric taxonomy of Romagnesi (1974, 1978) is followed in great lines. However, as I use the generic name *Entoloma* instead of *Rhodophyllus* some new combinations are necessary:

*Entoloma* subgenus *Alboleptonia* (Largent & Benedict) Noordeloos, *comb. & stat. nov.* (Basionym: *Alboleptonia* Largent & Benedict in *Mycologia* 62: 439. 1970.)

*Entoloma* sect. *Papillati* (Romagn.) Noordeloos, *comb. nov.* (Basionym: *Rhodophyllus* Quélet sect. *Papillati* Romagn. in *Bull. Soc. linn. Lyon* 43: 330. 1974.)

*Entoloma* sect. *Endochromonema* (Largent & Thiers) Noordeloos, *comb. nov.* (Basionym: *Nolanea* (Fr.) Kumm. sect. *Endochromonema* Largent & Thiers in *Northwest Sci.* 46: 35. 1972.)

Velenovský's species accepted here will be treated more extensively in another publication (Noordeloos, 1980) and future papers on *Entoloma* by the present author.

#### METHODS AND PRESENTATION

The microscopical structures of the exsiccata were observed, measured and drawn in ammoniac 1% Congo Red solution after remoistening in 10%  $\text{NH}_4\text{OH}$ . The liquid preserved collections were observed in their own liquid, and usually also after staining with Congo Red. Drawings were made with the aid of a camera lucida.

The magnifications of the figures are: spores,  $\times 1000$ ; all other microscopical details,  $\times 670$ .

The following abbreviations are used:

Q.—Length-width ratio, usually given as follows:  $Q = 1.2-1.3-1.4$ , which means 'Q between 1.2 and 1.4 with an average of 1.3'. The size of the spores relates to the largest length and width, excluding the apiculus.

L-D.—Length minus width, usually given as follows:  $L-D = 1-2-3 \mu\text{m}$ , which means 'length minus width between 1 and 3  $\mu\text{m}$  with an average of 2  $\mu\text{m}$ .'

#### ACKNOWLEDGEMENTS

Sincere thanks are due to Dr. Z. Urban, head of the Mycological Department of the Charles University, Praha, for providing working facilities, and to Dr. J. Klán at the same institute for his assistance and generous hospitality. Dr. Z. Pouzar and Dr. M. Svrček at the Botanical Department of the National Museum, Praha are greatly acknowledged for their help and for the loan of specimens. I am very grateful to Dr. C. Bas for critically reading the manuscript of this paper.

#### Species described in *Nolanea*

**alba.** — *Nolanea alba* Velen., *České Houby*: 629. 1921. — Neotype (*design. mihi*): J. Velenovský, July 1940, Mnichovice, collis Rlechač (*PRM 154381*). — Fig. 10.

There is no original type material preserved in PRM or PRC. In PRM, however, there are under this name two later collections, gathered and named by J. Velenovský, viz.:

*PRM 154381*, Mnichovice, collis Rlechač, July 1940. This is obviously the collection cited by Velenovsky in 1947 (: 78).

*PRM 154481*, Mnichovice, Vsěsimy, in piceto vetere, 16 Sept. 1940. This collection contains three dark pigmented specimens of a species which is different from *PRM 154381*.

According to the protologue *Nolanea alba* is a pale coloured species common in early summer in deciduous forests. Considering this I select collection *PRM 154381* as a neotype for *Nolanea alba* Velen. The neotype collection contains one specimen in a relatively bad state, partly attacked by a mould, showing the following microscopical characters:

Spores (9.0–)9.6–10.8(–11.3) × 6.8–7.9 μm, Q = 1.2–1.35–1.4, L–D = 2.4–3.5(–4.0) μm, 5–6-angled in side-view. Basidia about 30–36 × 9–10 μm, 4-spored. Cheilocystidia scattered (?; parts of gill-edge destroyed.) 40–55 × 7–9 μm, cylindrico-subcapitate with hyaline walls often slightly thickened at apex. Pileipellis a cutis of radially arranged, 4–11 μm wide hyphae. Pileitrama regular, cells cylindrical to inflated. Pigment not seen. Vascular hyphae numerous in pileitrama. Clamp-connections numerous in hymenium, rare in trama.

*Nolanea alba* is close to *N. mammosa* Fr. sensu P. D. Orton (1960: 329) but differs in the lack of pigment. *Entoloma cuneatum* (Bres.) Moser differs in the more pronouncedly pigmented cap and the lack of cheilocystidia. *Entoloma album* Hesler is quite different in many characters and belongs to subgenus *Alboleptonia*. *Entoloma cinerascens* Hesler is more robust and more typically a member of subgenus *Entoloma*.

*Nolanea alba* seems to represent a distinct species, which still has to be transferred to *Entoloma*. The name *E. album* however is already occupied. Therefore I propose the new name **Entoloma nivescens** Noordeloos, *nom. nov.* (Basionym *Nolanea alba* Velen., České Houby: 629. 1921; non *Entoloma album* Hesler, 1967.)

**autumnalis.** — *Nolanea autumnalis* Velen. in *Mykologia* 6: 28. 1929. — No type material is left at PRM, nor at PRC.

**betulina.** — *Nolanea betulina* Velen., *Novitates mycologicae novissimae*: 79. 1947. — Holotypus: J. Velenovský, 20 July 1943, Mnichovice (*PRM 154455*) — Fig. 17.

The type consists of one specimen, partly damaged by a mould, with subglobose to broadly ellipsoidal, thin-walled spores, 7.5–8.6 × 5.0–6.8 μm.

Without any doubt this specimen represents a species belonging to the genus *Pluteus* Fr. The following transfer is made: **Pluteus betulinus** (Velen.) Noordeloos, *comb. nov.* (Basionym: *Nolanea betulina* Velen., *Novitates mycologicae novissimae*: 79. 1947.)

**crassipes.** — *Nolanea crassipes* Velen, České Houby: 627. 1921. — Holotypus: O. Zvěřina, aprílii 1920, Hvězda, Prague. (PRC; bottle 123a). — Fig. 20.

The type consists of one well preserved specimen. Cap about 30 mm broad, conico-convex. Lamellae fairly crowded, ventricose. Stipe about  $70 \times 5-6$  (at apex),  $\times 12$  mm (at base). Spores  $10.3-12.4 \times (7.5-8.3-10.2 \mu\text{m})$ ,  $Q = (1.2-1.25-1.35)$ ,  $L-D = 2-3.2 \mu\text{m}$ , 5-6-angled in side-view. Basidia  $(30-35-47 \times 9-10.5 \mu\text{m})$ ,  $Q = 3.6-4.4$ , 4-spored. Cystidia none. Hymenophoral trama regular, composed of long, inflated elements,  $230-435 \times 12-21 \mu\text{m}$ , thin-walled, colourless. Pileipellis a thin, poorly differentiated cutis of  $4-10(-12) \mu\text{m}$  wide, cylindrical hyphae. Pileitrama regular; hyphae composed of cylindrical to inflated, about  $300-520 \times 20-32 \mu\text{m}$  cells. Pigmentation inconspicuous, probably diffusely intracellular; also some hyphal walls pale yellow; no encrusting pigments seen. Stipitpellis a differentiated cutis with loosely arranged, cylindrical,  $4-10 \mu\text{m}$  wide hairs with rounded, sometimes subcapitate tip. Clamp-connections present in hymenium.

*Nolanea crassipes* is very close to *Entoloma cuneatum* (Bres.) Moser, which differs in a typical yellow papilla on the pileus and a more or less glabrous stipe. *Nolanea holoconiota* Largent & Thiers differs in having cheilocystidia. As the name *Entoloma crassipes* already exists, the following new name has to be introduced: *Entoloma lanuginosipes* Noordeloos, *nom. nov.* (Basionym: *Nolanea crassipes* Velen., České Houby: 627, 1921; non *Entoloma crassipes* Petch, 1924.)

*depressa*. — *Nolanea depressa* Velen., Novitates mycologicae: 148. 1939. — Holotypus: J. Velenovský, Aug. 1939, in formatione Calamagrostis Epigeios in colle silv. prope Mirešovice (PRM 154453) — Fig. 3.

The type consists of one partly damaged specimen, with the following microscopical characters: Spores  $9-10.7(-11.3) \times 6.8-7.9 \mu\text{m}$ ,  $Q = 1.15-1.3-1.45$ ,  $L-D = 2.4-3.5 \mu\text{m}$ , rather pronouncedly 4-5-angled in side-view. Basidia  $27-39 \times 9-12 \mu\text{m}$ , 4-spored. Pileipellis a cutis of narrow, slightly encrusted hyphae. Vascular hyphae present. Clamp-connections present in hymenium.

The convex-umbilicate pileus, the colouration, the cottony base of the stipe and, microscopically, the size and the shape of the spores and the pigmentation agree perfectly well with *Entoloma minutum* (P. Karst.) Noordeloos, *comb. nov.* var. *polymorphum* (Romagn.) Noordeloos, *comb. nov.* (Basionyms: *Nolanea minuta* P. Karst, Hattsv. 1: 281, 1879, and *Rhodophyllus minutus* (P. Karst.) Romagn. var. *Polymorphus* Romagn. in Rev. Mycol. 19: 7. 1954.)

*fracta*. — *Nolanea fracta* Velen., Novitates mycologicae: 146. 1939. — Holotypus: J. Velenovský, July 1936, Mnichovice, Struhařov. (PRM 154483)—Fig. 1.

The type consists of 6 well-preserved specimens with the following microscopical characters: Spores  $6.8-7.9 \times (4.5-5.7-6.7 \mu\text{m})$ ,  $Q = 1.1-1.2-1.4$ ,  $L-D = 1.2-1.8-2.4 \mu\text{m}$ , (4-) 5-angled in side-view. Basidia  $25-32 \times 7.6-10.2 \mu\text{m}$ , slenderly clavate, 4-spored. Cystidia none. Hymenophoral trama regular, cells cylindrical or inflated, up to  $270 \mu\text{m}$  long and  $10-24 \mu\text{m}$  wide, hyaline, thin-walled, colourless. Pileipellis a cutis with transitions to a trichodermium, composed of cylindrical to slightly inflated hyphae,  $7-17(-22) \mu\text{m}$  wide, with at centre of pileus tufts of clavate, terminal cells,  $32-60 \times 8-22 \mu\text{m}$ , with brown-encrusted walls and brown-olivaceous intracellular pigment granules. Pileitrama regular with cylindrical to slightly inflated brown-encrusted hyphae. Clamp-connections absent in all tissues studied.

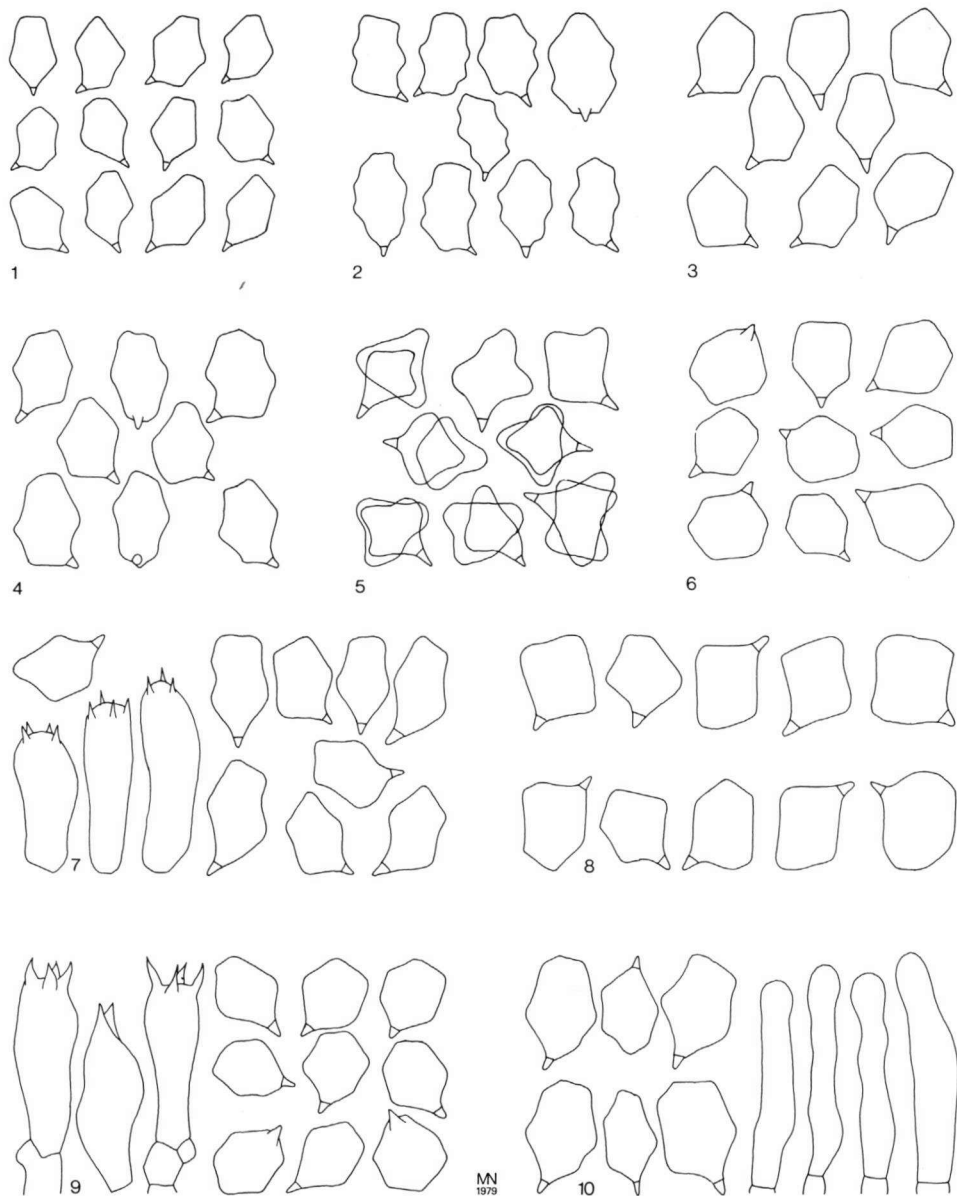


Fig. 1. *Nolanea fracta*, spores. — Fig. 2. *Nolanea tristis*, spores. — Fig. 3. *Nolanea depressa*, spores. — Fig. 4. *Nolanea robiniae*, spores. — Fig. 5. *Nolanea pusilla*, spores. — Fig. 6. *Nolanea zonata*, spores. — Fig. 7. *Leptonia omphaliaeformis* spores and basidia. — Fig. 8. *Nolanea inodora*, spores. — Fig. 9. *Nolanea globispora*, spores and basidia. — Fig. 10. *Nolanea alba*, spores and cheilocystidia. (All figs. from type.)

*Nolanea fracta* comes very close to *Entoloma fernandae* (Romagn.) Noordeloos, *comb. nov.* (Basionym: *Rhodophyllus fernandae* Romagn. in Rev. Mycol. 1: 162. 1936.) The spores, pileipellis and pigmentation are similar. The colours, however, are much darker in *N. fracta*, especially the pileus which is 'atro-fusco, centro nigro', whereas *E. fernandae* has the pileus 'umbrino-griseo'. Also the shape of the pileus is different: *N. fracta* has a pileus which is 'acute-conico'; in *E. fernandae* the pileus is 'aplani, á peine mamelonné'. *Entoloma psilopus* Arnolds & Noordeloos (1979) has a glabrous, convex, only slightly umbonate moderately grey-brown, distinctly hygrophanous pileus. *Nolanea fracta* seems to represent a distinct species. Therefore the following transfer is made: *Entoloma fractum* (Velen.) Noordeloos, *comb. nov.* (Basionym: *Nolanea fracta* Velen., Novitates mycologicae: 146. 1939.)

**galeraeformis.** — *Nolanea galeraeformis* Velen., Novitates mycologicae novissimae: 78. 1947. — No type collection is left at PRM or PRC.

**globispora.** — *Nolanea globispora* Velen., České Houby: 628. 1921. — Lectotype (*design. mihi*): J. Velenovský, July 1919, Mnichovice (PRC bottle 48a).—Fig. 9.

In Velenovský's herbarium in PRC there are two collections that agree with the protologue: Mnichovice, July 1918 (bottle 400a) and July 1919 (bottle 48a). Bottle 48a contains two well preserved specimens and bottle 400a only a fragment of one specimen in a bad state, but conspecific with the first collection. Therefore I selected bottle 48a as the lectotype of *Nolanea globispora*.

Spores (8.5–)9.0–11.3 × 7.7–9.3(–10.3)  $\mu\text{m}$ , Q = 1.0–1.1–1.2, L–D = 0–1.2  $\mu\text{m}$ . (4–)5–6-angled in side-view, isodiametrical–subglobular with rounded angles. Basidia 32–44 × 8.2–13.5  $\mu\text{m}$ , Q = 3.0–3.8, 4-spored. Cystidia none. Hymenophoral trama regular with cells in medios-tratum 200–350 × 11–35  $\mu\text{m}$ , colourless, inflated, hyaline and thin-walled. Pileipellis a thin and poorly differentiated cutis of 3.5–7(–11)  $\mu\text{m}$  wide, cylindrical hyphae with brown, encrusted walls. Pileitrama regular with cylindrical to slightly inflated hyphae with brown, encrusted walls. Clamp-connections frequent in hymenium, elsewhere rare or absent.

The additional collections: bottle 400a at PRC and no 154484, 154380 and 154377 at PRM, all collected by J. Velenovský in the vicinity of Mnichovice are all conspecific with the lectotype.

*Nolanea globispora* is undoubtedly identical with *Rhodophyllus juncinus* Kühn. & Romagn. (See discussion following the description of *Nolanea zonata* Velen., p. 255).

**hirta.** — *Nolanea hirta* Velen. in Mykologia 6: 28. 1928. — *Entoloma hirtum* (Velen.) Noordeloos in Persoonia 10: 223 1979. — Holotype: J. Velenovský, June 1926, Radotin (PRM 148449).

The type consists of 5 well-preserved specimens with the following microscopical characters: Spores (10.2–)10.7–13.0(–14.7) × (6.3–)6.8–7.9(–9.0)  $\mu\text{m}$ , Q = 1.4–1.55–1.75, L–D = (3–)3.5–

4–5.7  $\mu\text{m}$ , irregularly nodulose-angular, slightly thick-walled, brownish in water. Basidia 34–50  $\times$  10.2–11.5  $\mu\text{m}$ , 4-spored. Cheilocystidia 36–60  $\times$  16.5–24(–36)  $\mu\text{m}$ , slenderly to broadly clavate with brown-encrusted walls. Subhymenium cellular, colourless. Hymenophoral trama with distinctly developed hymenopodium of 2.5–7  $\mu\text{m}$  wide, coarsely encrusted hyphae, and mediotratum composed of cylindrical to slightly inflated cells, 70–220  $\times$  8–16  $\mu\text{m}$ . Pileipellis a cutis with transitions to a trichodermium with repent or ascending long, multiseptate, attenuate hairs with heavily yellowish brown encrusted walls. Pigment encrusting all hyphae of covering layers and trama. Clamp-connections absent.

A redescription and discussion on the taxonomical position of *E. hirtum* is given in another paper (Noordeloos, l.c.).

**inodora.** — *Nolanea inodora* Velen., České Houby: 629. 1921. — Holotype: J. Velenovský, Julio 1919, in collibus insolatis prope Myšlín (PRC; bottle 120a).—Fig. 8.

The type consists of two specimens in a very bad state. Obviously the collection dried out and has been remoistened again, which caused considerable damage to the tissues. Spores 10.2–12.4  $\times$  8.3–9.7  $\mu\text{m}$ ,  $Q = 1.1$ –1.15–1.25,  $L-D = 1$ –2  $\mu\text{m}$ , irregularly cuboid. Hymenium in such a bad state that no intact basidia could be found. Some clamp-connections were seen at the base of young basidia and at several septa in the hymenophoral trama. Pigment granular-intracellular in upper layers of pileus only. No incrustations seen.

*Nolanea inodora* is rather well characterised by the irregular cuboid spores and the intracellular pigments. The other species in Europe with similar spores, viz. *Entoloma rhombisporum* (Kühn. & Bours.) Horak and *E. prismatospermum* (Romagn.) Horak differ in having encrusting pigments and considerably smaller spores. The extra-European *Entoloma incertum* (Romagn.) Horak differs in having a non-hygrophanous pileus. In my opinion **Entoloma inodorum** (Velen.) Noordeloos, *comb. nov.* (basionym: *Nolanea inodora* Velen., České Houby: 629. 1921) is a distinct species which awaits rediscovery.

**majalis.** — *Nolanea majalis* Velen., Novitates mycologicae: 147. 1939. — Holotype: J. Velenovský, 12 may 1937, Mnichovice (PRM 154375).—Fig. 11.

The type consists of fragments of two specimens with the following microscopical characters: Spores (9–)10.2–12.4  $\times$  (6.8–)7.4–7.9  $\mu\text{m}$ ,  $Q = (1.3$ –)1.4–1.45–1.6,  $L-D = (2.4$ –)3–4.5  $\mu\text{m}$ , 6-angled in side-view. Basidia 35–46  $\times$  9–14.5  $\mu\text{m}$ ,  $Q = 3.7$ –4.2, 4-spored. Cystidia none. Hymenophoral trama regular, composed of long, strongly inflated, thin-walled, colourless cells. Pileipellis a poorly differentiated cutis of 4–10(–12)  $\mu\text{m}$  wide cylindrical hyphae, here and there with a clavate terminal cell up to 18  $\mu\text{m}$  wide. Pileitrama regular; hyphae made up of long, slightly inflated cells up to 17.5  $\mu\text{m}$  wide. Pigmentation indistinct: pale diffusely intracellular. In pileipellis and upper layer of pileitrama sometimes also hyphal walls pale-coloured, but never encrusted. Clamp-connections frequent in hymenium, but extremely rare in other parts of the carpophore.

*Nolanea majalis* agrees perfectly with **Entoloma pallescens** (P. Karst.) Noordeloos, *comb. nov.* (Basionym: *Nolanea pallescens* P. Karst. in Meddn Soc. Fauna Flora fenn. 16: 94. 1890 (Symb. Myc. fenn. 29).) This species will be discussed in another paper (Noordeloos, 1980).

**nitens.** — *Nolanea nitens* Velen., České Houby: 627. 1921. — *Rhodophyllus nitens* (Velen.) Kühn & Romagn., Fl. anal.: 190. 1953. — No type-collection is left at PRM or PRC.

Romagnesi (1974b: 372) gives an excellent description of his interpretation of Velenovský's species, which probably agrees with the original concept. Therefore I introduce the name *Entoloma nitens* (Velen.) Noordeloos, *comb. nov.* (Basionym: *Nolanea nitens* Velen., České Houby: 627. 1921.).

**paludosa.** — *Nolanea paludosa* Velen., České Houby: 628. 1921. — No type-collection is left at PRM or PRC.

**perpusilla.** — *Nolanea perpusilla* Velen. in *Mykologia* 8: 22. 1931. — No type-collection is left at PRM or PRC.

**pusilla.** — *Nolanea pusilla* Velen., České Houby: 626. 1921. — Holotypus: J. Velenovský. July 1919, Mnichovice (PRC; bottle 85).—Fig. 5.

The type-collection consists of one, well-preserved specimen with the following microscopical characters: Spores  $(9.3-10-12.4 \times 9.3-11.2 \mu\text{m})$ ,  $Q = 1.0-1.1$ ,  $L-D = 0-1.5 \mu\text{m}$ , cruciform-stellate. Basidia  $25-41 \times 8-12 \mu\text{m}$ , 4-spored. Pileipellis a simple cutis of  $4-11 \mu\text{m}$  wide, cylindrical hyphae with pale diffusely intracellular pigment, sometimes in addition minutely encrusted. Clamp-connections none.

*Nolanea pusilla* represents a slender variety of *Entoloma staurosporum* (Bres.) Hesler, characterized by its consistently slender nature and its habitat on rotten wood. *Rhodophyllus xylophilus* J. Lange (non *Entoloma xylophilum* Speg.) is identical. The following transfer is to be made: *Entoloma staurosporum* (Bres.) Hesler var. **pusillum** (Velen.) Noordeloos, *comb. & stat. nov.* (Basionym: *Nolanea pusilla* Velen., České Houby: 626. 1921.)

**robiniae.** — *Nolanea robiniae* Velen., *Novitates mycologicae novissimae*: 78. 1947. — Holotypus: J. Velenovský, July 1940, Mnichovice, in *Robiniето* (PRM 154379).—Fig. 4.

The type consists of the pileus of one specimen, partly covered with a mould, with the following microscopical characters: Spores  $9.0-10.2(-11) \times 7.4-7.9 \mu\text{m}$ ,  $Q = 1.2-1.3-1.4$ ,  $L-D = 1.8-3.4 \mu\text{m}$ , (5-) 6-angled in side-view. Basidia  $25-36 \times 10-12 \mu\text{m}$ , clavate, 4-spored. Hymenophoral trama regular, composed of cylindrical to slightly inflated, thin-walled, colourless cells,  $180-220 \times 6-14 \mu\text{m}$ . Pileipellis (difficult to interpret because of presence of mould) probably a cutis of thin,  $3.5-8 \mu\text{m}$  wide, cylindrical hyphae. Hypoderm strongly developed, about  $60-80 \mu\text{m}$  thick, composed of long chains of slightly inflated cells,  $40-62 \times 10-24 \mu\text{m}$ . Pileitrama under hypoderm regular; hyphae up to  $15 \mu\text{m}$  wide, cylindrical. Pigment difficult to locate; hyphal wall uniformly coloured, not encrusted. Clamp-connections present in hymenium, rare elsewhere.



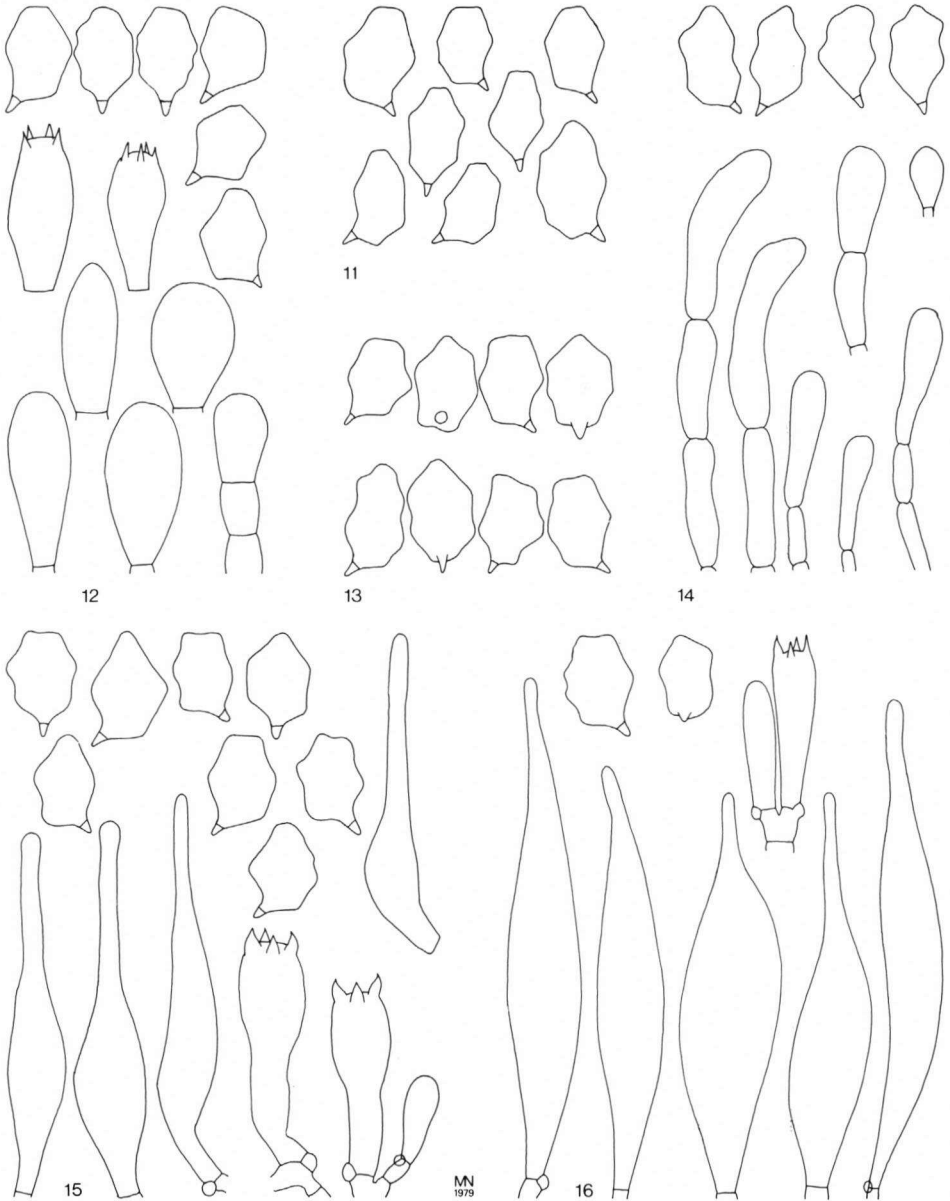


Fig. 11. *Nolanea majalis*, spores. — Fig. 12. *Leptonia brunnea*, spores, basidia and cheilocystidia. — Fig. 13. *Leptonia conica*, spores. — Fig. 14. *Nolanea setulosa*, spores and stipe-hairs. — Fig. 15. *Leptonia aurea*, spores, basidia and cheilocystidia. — Fig. 16. *Leptonia conica*, spores, basidia and cheilocystidia. (All figs. from type.)

On account of its spores and its pigmentation *Nolanea robiniae* belongs to section *Endochromonema* of subgenus *Nolanea*. *Entoloma pallescens* differs in slightly larger and more elongate spores and the lack of a hypoderm. Velenovský's name seems to stand for a distinct species: **Entoloma robiniae** (Velen.) Noordeloos, *comb. nov.* (Basionym: *Nolanea robiniae* Velen., *Novitates mycologicae novissimae*: 78. 1974.)

**setulosa.** — *Nolanea setulosa* Velen., *Novitatis mycologicae*: 147. 1939. — *Pouzarella setulosa* (Velen.) Mazzer in *Biblta. mycol.* 46: 108. 1976. — Holotypus: J. Velenovský, June 1931, Jidásky prope Mnichovice (*PRM 154485*).—Fig. 14.

The type consists of two well-preserved specimens with the following microscopical characters: Spores  $11-12.5(-14.7) \times 6.8-7.9 \mu\text{m}$ ,  $Q = 1.3-1.55-1.6(-1.8)$ ,  $L-D = 4-4.5 \mu\text{m}$ , irregularly angular-gibbose, pale brown in water. Basidia  $35-48 \times 10-16 \mu\text{m}$ , broadly clavate, 4-spored, Cheilocystidia (difficult to find; only a few measured)  $30-57 \times 14-20 \mu\text{m}$ , slightly brown-encrusted. Hymenophoral trama with distinctly developed hymenopodium of narrow, cylindrical, coarsely encrusted hyphae and with mediostratum of inflated hyphae with cells  $55-110 \times 12-22 \mu\text{m}$ , brown and minutely encrusted. Pileipellis a cutis with transitions to a trichodermium with repent or slightly ascending, long, attenuate, multiseptate, brown-encrusted hairs with cells  $12-25 \mu\text{m}$  wide (at base) to  $6-14 \mu\text{m}$  wide (at apex). Stipitepellis a simple cutis with scattered clavate hairs in upper part of stipe and with 2-3-celled, not encrusted,  $8-20 \mu\text{m}$  wide hairs in lower part of stipe. Clamp-connections absent.

Velenovský stated in his diagnosis of *Nolanea setulosa* that the spores are  $15-18 \mu\text{m}$  long. This misled Mazzer (l.c.) in interpreting it as a distinct species. The present author places *N. setulosa* in the synonymy of *Entoloma hirtum* (see Noordeloos, 1979: 223).

**tristis.** — *Nolanea tristis* Velen., *České Houby*: 630. 1921. — Holotypus: J. Velenovský, May 1920, Krč, Bohemia (*PRC*; bottle 370a).—Fig. 2.

The type consists of one specimen in a very bad state. The hyphal walls are partly desintegrated and the tissues are therefore difficult to study. The microscopical characters are: Spores  $9.3-11.3 \times (6.2-6.8-7.9 \mu\text{m})$ ,  $Q = 1.25-1.35-1.55$ , 6-7-angled in side-view. Basidia 4-spored. pileipellis a cutis of radially arranged, thin-walled,  $6-11 \mu\text{m}$  wide, cylindrical hyphae, sometimes intermixed with fusoid, up to  $15-18 \mu\text{m}$  wide terminal cells. Pileitrama regular, with long, inflated, fusiform cells measuring  $250-310 \times 27 \mu\text{m}$ . Pigment abundant, dark brown, granular-intracellular in pileipellis and in broad adjacent zone in pileitrama. No encrusting pigment observed. Clamp-connections seen in hymenium.

*Nolanea tristis* has to be placed in section *Endochromonema* of subgenus *Nolanea*. It differs from the other species in this section by its rather dark colour. It has some resemblance to *Agaricus piceus* Kalchbr., but the latter species has a non-striate stipe which is concolorous with the pileus, and has a strong, cucumber-like or fish-like smell. (It is not unlikely that Kalchbrenner's species is identical with *Macrocyttidia cucumis* (Pers. ex Fr.) Heim.) The following new combination has to be introduced: **Entoloma tristis** (Velen.) Noordeloos, *comb. nov.* (Basionym: *Nolanea tristis* Velen., *České Houby*: 630. 1921.)

**undulata.** — *Nolanea undulata* Velen., *České Houby*: 627. 1921. — No type-collection is left at PRM of PRC.

**variegata.** — *Nolanea variegata* Velen., *České Houby*: 630. 1921. — No type-collection is left at PRM or PRC.

**zonata.** — *Nolanea zonata* Velen., *Novitates mycologicae novissimae*: 78. 1947. — Holotypus: J. Velenovský, July 1940, Mnichovice, in palude inter gramine (*PRM 154454*).—Fig. 6.

The type consists of two specimens in a rather bad state, attacked by moulds and by mites. The microscopical characters are: Spores  $7.9-9 \times 7.8-8.4 \mu\text{m}$ ,  $Q=1.0-1.05$ ,  $L-D=0-0.5 \mu\text{m}$ , 5-angled in side-view, subglobose-isodiametrical. Basidia 4-spored, clamped. Because of the bad state of the material other microscopical characters could not be checked.

Judging from the microscopical characters and the protologue I am convinced that this collection represents a somewhat aberrant form of the rather common *Entoloma juncinum* (Kühn. & Romagn.) Noordeloos, *comb. nov.* (Basionym: *Rhodophyllus juncinus* Kühn. & Romagn. in *Rev. Mycol.* 19: 5. 1954.)

Synonyms: *Nolanea globispora* Velen., *České Houby*: 628. 1921; non *Entoloma globisporum* Morg.-Jones, 1971. — *Nolanea zonata* Velen., *Novitates mycologicae novissimae*: 78. 1947; non *Entoloma zonatum* Hesler, 1967.

#### Species described in *Leptonia*

**aurea.** — *Leptonia aurea* Velen., *České Houby*: 618. 1921. — Holotypus: J. Velenovský, July 1918, Jevany (PRC; bottle 146b).—Fig. 15.

The type-collection consists of one, well-preserved specimen with the following microscopical characters: Spores  $(10.3-10.8-11.3(-11.8) \times 7.2-8.2 \mu\text{m}$ ,  $Q=1.25-1.4-1.65$ ,  $L-D=2-3.2-4.5 \mu\text{m}$ , 6-angled in side-view. Basidia  $37-44 \times 12.3-14.5 \mu\text{m}$ ,  $Q=2.5-3$ , clavate, 4-spored. Cheilocystidia  $65-84 \times 12-22 \times 3-7 \mu\text{m}$ , lageniform, thin-walled, scattered, often in clusters. Pileipellis a trichodermium of broad, subcylindrical to clavate cells,  $30-100 \times 16-30 \mu\text{m}$ . Pileitrama regular, composed of short, broad elements. Pigment yellow-brown, intracellular, abundant in pileipellis and adjacent pileitrama. Clamp-connections present in hymenium.

*Leptonia aurea* belongs to subgenus *Alboleptonia* and is identical with *Entoloma kervernii* (Gill.) Noordeloos, *comb. nov.* (Basionym: *Leptonia kervernii* Gill., *Hymen. Fr.*: 413. 1876.)

**brunnea.** — *Leptonia brunnea* Velen., *České Houby*: 618. 1921. — Holotypus: J. Velenovský, coll. date & local. not indicated (PRC; bottle 320).—Fig. 12.

The type-collection contains five well-preserved specimens with the following microscopical characters: Spores  $11.2\text{--}12.8 \times 8.2\text{--}8.7 \mu\text{m}$ ,  $Q = 1.45\text{--}1.5\text{--}1.6$ ,  $L\text{--}D = 3.7\text{--}4.1\text{--}4.7 \mu\text{m}$ , 5–6-angled in side-view. Basidia  $23\text{--}31 \times 10.3\text{--}12.3 \mu\text{m}$ , 4-spored. Cheilocystidia  $25\text{--}35 \times 12\text{--}18 \mu\text{m}$ , scattered, broadly-rounded clavate, thin-walled, colourless. Hymenophoral trama regular; cells  $49\text{--}87\text{--}(110) \times 16\text{--}21 \mu\text{m}$ , cylindrical to inflated, thin-walled, colourless. Pileipellis a cutis of cylindrical, up to  $10 \mu\text{m}$  wide hyphae with transitions to a trichodermium, especially at centre of pileus, with cylindrico-clavate cells up to  $27 \mu\text{m}$  broad. Pileitrama regular; cells cylindrical,  $65\text{--}140\text{--}(200) \times 8\text{--}16 \mu\text{m}$ . Pigment brown, granular-intracellular, abundant in pileipellis and adjacent pileitrama. Clamp-connections absent.

*Leptonia brunnea* is a true *Leptonia* close to *Rhodophyllus asprellus* Fr. sensu J. Lange, Quél., Kühn. & Romagn. The group of species around *R. asprellus* is not yet disentangled in Europe. There are a lot of different interpretations of *Leptonia* species with a brown squamulose pileus and a blue-tinged stipe. For the time being I do not give *Leptonia brunnea* Velen. a new name, awaiting a revision of the *R. asprellus*-complex. (Velenovský's name cannot be transferred to *Entoloma* because of the name *Entoloma brunneum* Petch, 1924).

**cinerascens.** — *Leptonia cinerascens* Velen., České Houby: 623. 1921. — Holotypus: J. Velenovský, Julio 1919, in colle sicco graminis inter Stránčice et Božkov.' (PRC; bottle 48b).— Fig. 24.

The type-collection consists of one well-preserved specimen with the following microscopical characters: Spores  $9\text{--}11.3 \times 7.2\text{--}8.3 \mu\text{m}$ ,  $Q = 1.2\text{--}1.3\text{--}1.5$ ,  $L\text{--}D = 1.7\text{--}3.2 \mu\text{m}$ , 5–6-angled in side-view. Basidia  $34\text{--}45 \times 10.3\text{--}13.4 \mu\text{m}$ ,  $Q = 2.7\text{--}3.7$ , clavate, 4-spored. Cystidia none. Hymenophoral trama regular; cells  $320\text{--}360 \times 15\text{--}26 \mu\text{m}$ , cylindrical to inflated, thin-walled, colourless. Pileipellis a thin cutis of 4–9  $\mu\text{m}$  wide, cylindrical hyphae. Pileitrama regular, inner hyphae slightly inflated with cells  $270\text{--}350 \times 10\text{--}19 \mu\text{m}$ . Pigment minutely encrusting hyphae of pileipellis and pileitrama. Stipitepellis a cutis, at apex of stipe with clusters of cylindrical, sometimes subcapitate hairs, 4–7(–10)  $\mu\text{m}$  wide. Clamp-connections present in hymenium at base of basidia.

*Leptonia cinerascens* is both macro- and microscopically completely identical with *Entoloma tenellum* (Favre) Noordeloos, *comb. nov.* (Basionym: *Rhodophyllus tenellus* Favre, Assoc. fung. hauts-marais: 212. 1948.) Transfer of Velenovský's epithet to *Entoloma* would result in a later homonym of *E. cinerascens* Hesler, 1967.

**cinerea.** — *Leptonia cinerea* Velen., České Houby: 623. 1921. — Holotypus: J. Velenovský, Aug. 1919, Mnichovice (PRC; bottle 400b).—Fig. 23.

The type consists of one specimen in very bad state; the base of the stipe is missing. The following microscopical characters have been observed: Spores  $12.4\text{--}15 \times 7.2\text{--}8.7 \mu\text{m}$ , irregularly nodulose-angular. Basidia clavate, 4-spored. (Most basidia are damaged and impossible to measure.) Hymenophoral trama regular; mediostratum regular; hyphae inflated, 6–17  $\mu\text{m}$  wide, minutely encrusted. Pileipellis a cutis with transitions to a trichodermium of minutely encrusted, attenuate, multiseptate hairs. Pileitrama regular; hyphae brown-walled and minutely

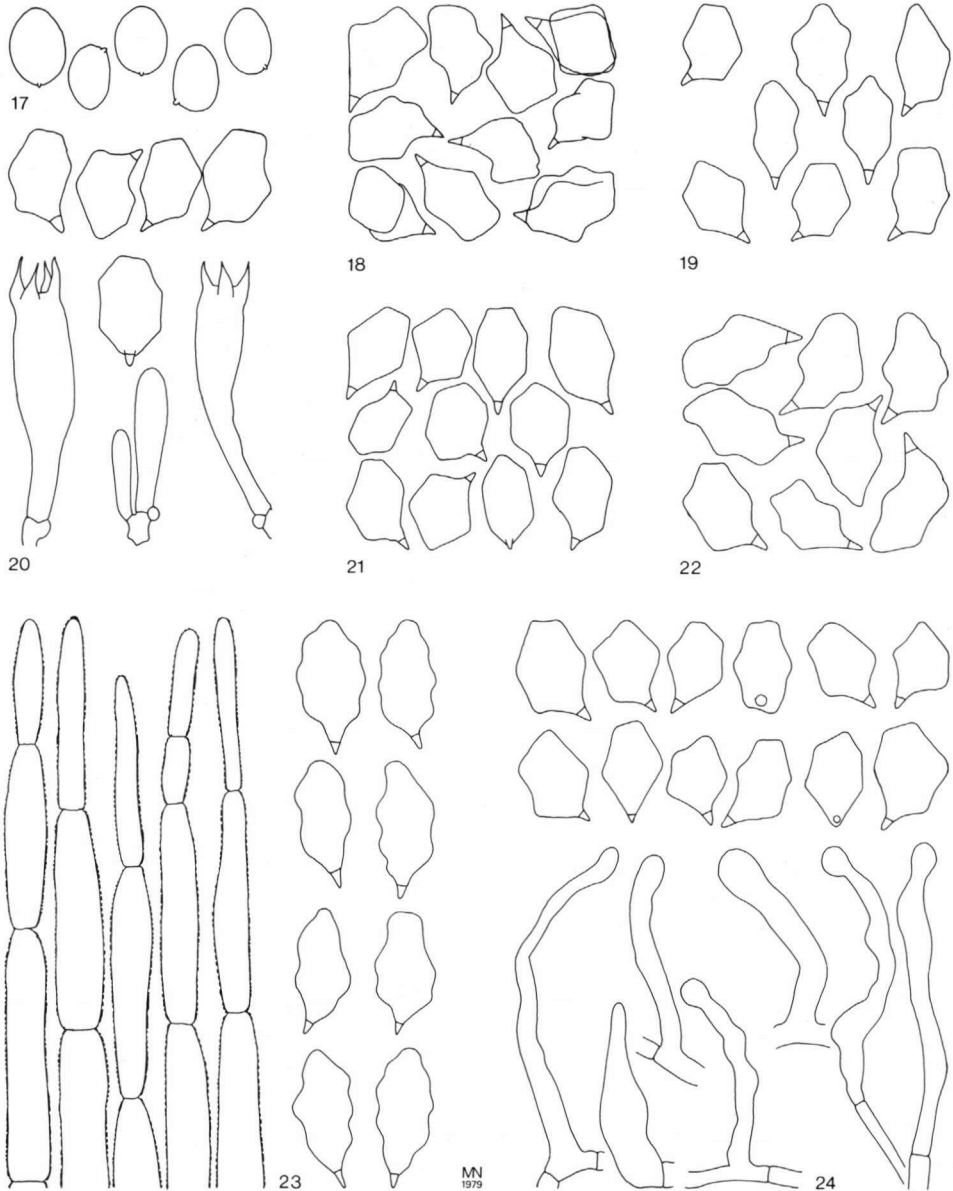


Fig. 17. *Nolanea betulina*, spores. — Fig. 18. *Leptonia citrina*, spores. — Fig. 19. *Leptonia involuta*, spores. — Fig. 20. *Nolanea crassipes*, spores and basidia. — Fig. 21. *Leptonia densifolia*, spores. — Fig. 22. *Leptonia mammillata*, spores. — Fig. 23. *Leptonia cinerea*, hairs of pileus and spores. — Fig. 24. *Leptonia cinerascens*, spores and hairs of stipe-surface. (All figs. from type.)

encrusted. Stipitepellis a cutis of cylindrical hyphae, with scarce, clavate, not encrusted hairs. Clamp-connections absent.

Judging from the microscopical data *Leptonia cinerea* is very close to *Entoloma hirtum* (Velen.) Noordeloos. But the spores seem to be slightly more elongate and Velenovský describes the stipe as being glabrous. Recombination of Velenovský's epithet would result in a later homonym of *Entoloma cinereum* Hesler (1967). Because of the bad state of the type-collection I do not want to give *Leptonia cinerea* Velen. a new name before it has been rediscovered.

**citrina.** — *Leptonia citrina* Velen., *Novitates mycologicae novissimae*: 79. 1947. — Holotypus: J. Velenovský (leg. L. Hostánova), 10 Aug. 1940, Mnichovice (PRM 152894).—Fig. 18.

The type consists of three badly dried specimens with the following microscopical characters: Spores  $8.2-11.3 \times (6.7-7-8.2) \mu\text{m}$ ,  $Q = 1.1-1.3-1.5$ ,  $L-D = 0.5-2.3-3.7 \mu\text{m}$ , rather variable in shape. Basidia 4-spored (I was unable to find intact basidia). Cystidia not found. Hymenophoral trama regular, consisting of cylindrical cells,  $(60-100-240) \times 20-35 \mu\text{m}$ . Covering layers damaged. Pigment probably intracellular, no trace of any encrusting pigment found. Clamp-connections not seen with certainty.

The bad state of the material does not permit a certain identification. Judging from the diagnosis it could be a lemon yellow *Alboleptonia* close to *Entoloma sericellum* (Bull. ex Fr.) Kumm.

**conica.** — *Leptonia conica* Velen., *České Houby*: 623. 1921. — Lectotype (design. mihi): J. Velenovský, July 1919, Mnichovice (PRC; bottle 85).—Fig. 13, 16.

Another collection in PRC, bottle 193a, is also labelled *Leptonia conica* Velen. That collection was made at Libochovický, a site quite a long distance from the type-locality Božkov, situated quite near Mnichovice. Therefore collection 85 is selected here a lectotype.

Spores  $10.3-12.5 \times 7.7-8.3 \mu\text{m}$ ,  $Q = 1.2-1.4-1.6$ ,  $L-D = 2.4-5.3 \mu\text{m}$ , mostly 6-angled in side-view. Basidia  $38-44 \times 11-14 \mu\text{m}$ ,  $Q = 3.1-3.7$ , clavate, 4-spored. Cheilocystidia scattered,  $55-90 \times 11-20 \times 2-5 \mu\text{m}$ , lageniform with moderately to distinctly swollen basal part and long slender neck, thin-walled. Hymenophoral trama regular with cells up to 250 (and more)  $\mu\text{m}$  long and 11–27  $\mu\text{m}$  wide, thin-walled, colourless. Pileipellis a thin cutis of cylindrical 4–8  $\mu\text{m}$  wide hyphae, loosely arranged, gradually passing into pileitrama. Pileitrama regular; hyphae cylindrical or slightly inflated, made up of thin-walled cells,  $220-270 \times 12-23 \mu\text{m}$ . Pigment exclusively intracellular, abundant in pileipellis and adjacent pileitrama. Clamp-connections frequent in hymenium, rare elsewhere.

*Leptonia conica* belongs to subgenus *Nolanea* but it takes a rather isolated position in having lageniform cheilocystidia and intracellular pigment. As the combination *Entoloma conicum* is preoccupied, I introduce in honour of J. Velenovský for it the new name: **Entoloma velenovskyi**

Noordeloos *nom. nov.* (Basionym: *Leptonia conica* Velen., České Houby: 623, 1921; *non Entoloma conicum* (Peck) Hesler 1967.)

*Entoloma velenovskyi* var. *longicystidium* Arnolds & Noordeloos (1979: 296) differs in the distinctly larger and more irregularly shaped spores and the longer and more fusiform cheilocystidia.

**decurrens.** — *Leptonia decurrens* Velen., České Houby: 624. 1921. — No type-collection is left at PRM or PRC.

**densifolia.** — *Leptonia densifolia* Velen., České Houby: 621. 1921. — Holotypus: J. Velenovský, July 1919, Myšlín (PRC; bottle 54b).—Fig. 21.

The type-collection contains one specimen in a very bad state. Apparently the bottle dried out and has been refilled afterwards, which made the trama 'glassy', very brittle and impossible to study. Spores  $(8.2-8.7-10.3(-11.3) \times 7.2-7.7(-8.2) \mu\text{m}$ ,  $Q=1.2-1.3-1.4$ ,  $L-D=1.7-2.0-3.7 \mu\text{m}$ . Clamp-connections not seen with certainty. Some hyphae with intracellular pigment.

It is impossible to identify this collection. It is, however, certainly a true *Leptonia*, close to *Entoloma griseocyaneum* (Fr.) Kumm. sensu Kühn. & Romagn.

**involuta.** — *Leptonia involuta* Velen., České Houby: 621. 1921. — Holotype: J. Velenovský, July 1919, Mnichovice (PRC; bottle 54a).—Fig. 19.

The type-collection contains two specimens in a very bad state, caused by the process of drying-out and remoistening. The hymenium is impossible to study. Spores  $10-10.7(-11.3) \times 7.2-7.9(-8.2) \mu\text{m}$ ,  $Q=1.25-1.42-1.7$ ,  $L-D=2-4 \mu\text{m}$ . 5-6-angled in side-view. Pileipellis a trichodermium of clavate cells up to  $15 \mu\text{m}$  wide. Vascular hyphae seen in trama of pileus and hymenophore. Clamp-connections not seen.

*Leptonia involuta* apparently belongs to subgenus *Leptonia* and is close to or identical with *Entoloma ardosiacum* (Fr.) Hesler (= *Rhodophyllus mougeotii* (Fr.) Quéél.)

**mammillata.** — *Leptonia mammillata* Velen., České Houby: 622. 1921. — Holotype: J. Velenovský, July 1919, Mnichovice (PRC; bottle 54c).—Fig. 22.

The type consists of one partly damaged specimen, with the same brittle-glassy consistency as the type of *Leptonia densifolia* has. Spores  $10.8-13.4 \times 7.2-8.7 \mu\text{m}$ ,  $Q=(1.2-1.25-1.5-1.7$ ,  $L-D=(2-2.6-4-5.3 \mu\text{m}$ , rather irregular and assymetrical in side-view. Basidia 4-spored. Cystidia none. Hyphal walls in pileipellis, pileitrama and in hymenophoral trama brown and finely to coarsely encrusted. Clamp-connections frequent in hymenium, rare elsewhere.

*Leptonia mammillata* is a form of *Entoloma papillatum* (Bres.) Hesler sensu Romagn. with slightly larger and more irregularly shaped spores. It will be discussed in another paper (Noordeloos, 1980).

**minima.** — *Leptonia minima* Velen., *Novitates mycologicae novissimae*: 79. 1947. — Holotype: J. Velenovský, 6 Sept. 1940, Mnichovice, collis Plecháč, in verrimenti (*Melampyrum*) (PRM 153890, under the manuscript-name *Leptonia nivea* Velen.).—Fig. 27.

The type consists of a fragment of the pileus of one specimen with the following microscopical characters: Spores  $9.3-10.7 \times (6.1-7.7) \mu\text{m}$ ,  $Q = 1.2-1.35-1.4$ ,  $L-D = 2-3.5 \mu\text{m}$ , 5-6-angled in side-view. Basidia  $30-40 \times 9.5-15 \mu\text{m}$ , clavate, 4-spored. Cystidia none. Pileipellis a trichodermium of clavate, 7-12  $\mu\text{m}$  wide cells. Pigment not seen. Clamp-connections numerous in hymenium and trama.

*Leptonia minima* belongs to subgenus *Alboleptonia*. It seems to be a distinct species, for which the following transfer is made: *Entoloma minimum* (Velen.) Noordeloos, *comb. nov.* (Basionym: *Leptonia minima* Velen., *Novitates mycologicae novissimae*: 79. 1947.)

*Rhodophyllus omphaliformis* Romagn. and *Entoloma cephalotrichum* (P. D. Orton) Noordeloos, *comb. nov.* (basionym: *Leptonia cephalotricha* P. D. Orton in *Trans. Br. mycol. Soc.* 43: 291, 1960), differ in having considerably narrower spores. *Entoloma olorum* (Romagn. & Favre) Noordeloos, *comb. nov.* (basionym: *Rhodophyllus olorinus* Romagn. & Favre in *Rev. Mycol.* 3: 75, 1938), differs in its omphaloid stature and more isodiametrical spores. *Entoloma subsericellum* Murr., as redescribed by Largent & Benedict (1970: 441-442), is possibly the closest related species, but differs in the far more robust stature.

**mycenoides.** — *Leptonia mycenoides* Velen., *Novitates mycologicae*: 141. 1939. — Holotypus: J. Velenovský, Oct. 1939, Mnichovice (PRM 153891).—Fig. 25.

The type-collection consists of three badly dried specimens, covered by a mould, showing the following microscopical characters: Spores  $8-10.7(-11.2) \times 6.7-7.2(-7.7) \mu\text{m}$ ,  $Q = 1.1-1.3-1.5$ ,  $L-D = 0.5-2-3 \mu\text{m}$ , 5-6-angled in side-view. Basidia  $30-35 \times 8-11 \mu\text{m}$ , clavate, 4-spored. Cystidia not found. Hymenophoral trama regular, composed of cells measuring  $100-120 \times 7-10 \mu\text{m}$ , hyaline, colourless. Pileipellis difficult to remoisten, damaged by mould; some cylindriclavate, up to 17  $\mu\text{m}$  wide cells observed. Pigment none. Clamp-connections numerous in all tissues studied.

*Leptonia mycenoides* belongs to subgenus *Alboleptonia*. It seems to be identical with *Entoloma minimum* (Velen.) Noordeloos. However, the edges of the lamellae are now entirely overgrown with moulds. It is therefore possible that originally cheilocystidia were present. In that case *L. mycenoides* would represent small specimens of *E. sericellum* (Bull. ex Fr.) Kumm.

**nigrella.** — *Leptonia nigrella* Velen., *České Houby*: 623. 1921. — Holotypus: O. Zvěřina, July 1919, locis graminis prope Babice (PRC; bottle 120b).—Fig. 26.



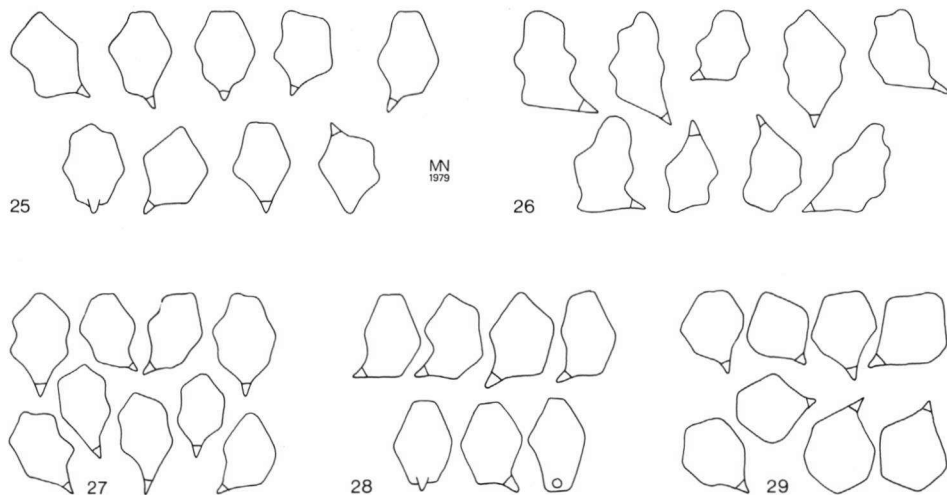


Fig. 25. *Leptonia mycenoides*, spores. — Fig. 26. *Leptonia nigrella*, spores. — Fig. 27. *Leptonia minima*, spores. — Fig. 28. *Leptonia papillata*, spores. — Fig. 29. *Telamonia brevipes*, spores. (All figs. from type.)

The type-collection consists of one partly damaged specimen. The tissues are impossible to reconstruct. The hymenial elements are also difficult to interpret. Pileus about 15 mm broad, dark brown, glabrous. Lamellae about 30, emarginate, brown tinged pink. Stipe watery grey but only the upper 10 mm left. Spores  $10\text{--}12.3 \times 6.7\text{--}8.3 \mu\text{m}$ ,  $Q = 1.3\text{--}1.5\text{--}1.7$ ,  $L\text{--}D = 3.2\text{--}4.3 \mu\text{m}$ , rather strongly asymmetrical-angular in side-view. Pigment in pileal surface layer brown, minutely encrusting. Clamp-connections observed in subhymenium.

The type of spores and the pigmentation place this species in section *Papillati* of subgenus *Nolanea*. The macroscopical characters of the type-collection are contrary to Velenovský's diagnosis which suggests a species of *Pouzaromyces*. It is very unlikely that the type-material really represents the species described by Velenovský. Some error seems to be committed. Therefore I consider *Leptonia nigrella* Velen. a nomen dubium.

**omphaliaeformis.** — *Leptonia omphaliaeformis* Velen., Novitates mycologicae novissimae: 79. 1947. — Holotype: J. Velenovský, 28 Sept. 1940, Mnichovice, Menčice, in colle (*Sarothamnus*) (PRM 153893).—Fig. 7.

The type consists of three specimens in bad condition, attacked by moulds. The following microscopical characters were observed: Spores  $(10.2\text{--})10.5\text{--}11.8\text{--}12.4 \times 7.2\text{--}8.2\text{--}8.7 \mu\text{m}$ ,  $Q = 1.3\text{--}1.45\text{--}1.5$ ,  $L\text{--}D = 3\text{--}3.5\text{--}4 \mu\text{m}$ , 5-angled in side-view. Basidia  $32\text{--}40 \times 10.5\text{--}12 \mu\text{m}$ ,  $Q = 2.7\text{--}3.3$ , rather broadly clavate or cylindrical, 4-spored. Cystidia not found. Hymenophoral trama regular, consisting of cylindrical, sometimes inflated, hyaline, thin-walled cells,  $40\text{--}100\text{--}$

150)  $\times$  12–17  $\mu$ m. Pileipellis difficult to interpret, probably a cutis, but also some inflated elements seen. Pileitrama regular with cylindrical to inflated cells. Pigment diffuse, intracellular, pale brown in pileipellis and adjacent pileitrama; without a trace of encrusting pigment. Clamp-connections absent. Vascular hyphae numerous in pileitrama.

The stature, pigmentation, clampless hyphae and simple spores place *L. omphaliaeformis* in subgenus *Eccilia* (Fr.) emend. Romagn. 1978. *Entoloma parkensis* (Fr.) Noordeloos, *comb. nov.* (basionym: *Agaricus parkensis* Fr. in Kongl. Vitensk. Akad. Förh. 18: 45. 1851) and *E. leptonipes* (Kühn. & Romagn.) Moser both differ macro- and microscopically. Therefore the following recombination is made: *Entoloma omphaliaeformis* (Velen.) Noordeloos, *comb. nov.* (Basionym: *Leptonia omphaliaeformis* Velen., *Novitatis mycologicae novissimae*: 79. 1949.)

**papillata.** — *Leptonia papillata* Velen., České Houby: 622. 1921. — Holotypus: J. Velenovský, July 1919, Mnichovice (PRC; bottle 85a).—Fig. 28.

The type consists of one specimen in relatively good state with the following microscopy: Spores 9.3–10.7(–11.3)  $\times$  7.2–8.3  $\mu$ m, Q = 1.2–1.3–1.4, L–D = 1.7–3.2  $\mu$ m, 5–6-angled in side-view. Basidia 33–44  $\times$  7.2–12.4  $\mu$ m, Q = 3–4.6(–5.7), 4-, rarely 2-spored. Cystidia none. Hymenophoral trama regular; hyphae cylindrical to inflated, composed of 270–500  $\times$  20–30  $\mu$ m cells, mixed with 4–7  $\mu$ m wide, cylindrical hyphae. Pileipellis a poorly differentiated cutis of 6–10  $\mu$ m wide, cylindrical hyphae, gradually passing into pileitrama. Pileitrama regular, consisting of cylindrical to inflated up to 20  $\mu$ m wide hyphae, intermixed with very narrow (1.5–4  $\mu$ m wide) hyphae. Pigment membranous and encrusting in hyphae of pileipellis and pileitrama and in narrow hyphae of the hymenophoral trama. Clamp-connections abundant in hymenium.

*Leptonia papillata* is identical with *Entoloma papillatum* (Bres. 1887) Hesler. (see also Noordeloos, 1980).

**xanthopa.** — *Leptonia xanthopa* Velen., České Houby: 622. 1921. — No type-collection is left in PRM or PRC.

Romagnesi (in Kühn. & Romagn., 1953: 205) introduced *Rhodophyllus poliopus* as a new name for *Leptonia xanthopa* Velen. He called attention to the very unsuitable name given by Velenovský: 'xanthopa' means with 'yellow stipe'. In the diagnosis the stipe is described 'chalybaeo-coerulescenti vel plumbeo-griseo'. Later Romagnesi described *R. poliopus* as a new species (in Kühn. & Romagn. 1954: 8). As no type is left, I consider *Leptonia xanthopa* Velen. a nomen dubium. As it will never be certain whether *L. xanthopa* is identical with *R. poliopus* Romagn. or not, it seems to be better to use the latter name for the typical *Leptonia*, excellently described by Romagnesi. Therefore the following new combination is made: *Entoloma poliopus* (Romagn.) Noordeloos, *comb. nov.* (Basionym: *Rhodophyllus poliopus* Romagn. in Rev. Mycol. 19: 8. 1954.)

A species described in *Telamonia*

**brevipes.** — *Telamonia brevipes* Velen., Česká Houby: 458. 1921. — Holotype: J. Velenovský, Aug. 1915, Mnichovice (PRC; bottle 183).—Fig. 29.

The label of the type-collection bears the following note: '*Leptonia brevipes* Velen., Mnichovice, 8. 1915, p. 458 sub *Telamonia*' The type-collection contains five well preserved specimens. Spores 8.2–9.7(–10.3) × (7.7–)8.2–8.7(–9.3) μm, Q = 1.0–1.05–1.1(–1.15), L–D = 0–0.5–1 μm, isodiametrical-subglobose, 5(–6)-angled in side-view. Basidia 35–42 × 11–15.5 μm, Q = 2.5–3.2, 4-spored. Cystidia none. Hymenophoral trama composed of cylindrical to clavate elements, 160–310 × 8–24 μm, thin-walled, colourless. Pileipellis a thin, hardly differentiated cutis of 2–6 μm wide, cylindrical hyphae, gradually passing into trama. Pileitrama regular, composed of cylindrical to inflated, up to 20 μm wide hyphae intermixed with 2–5 μm wide, narrow-cylindrical hyphae. Hyphal walls. brown in pileipellis and adjacent pileitrama, also encrusted in the narrow hyphae of pileipellis and pileitrama. Stipitpellis a simple cutis of parallel, 3.5–7 μm wide, thin-walled, yellow-brown, not encrusted hyphae. Vascular hyphae numerous in pilei- and stipitetrama. Clamp-connections frequent in hymenium, rare in trama.

*Telamonia brevipes* differs from all members of subgenus *Nolanea* section *Papillati* with isodiametrical spores in the dark pigmented, non-striate pileus and the habitat, viz. coniferous forest. Therefore I introduce the new name ***Entoloma pseudotelamonia*** Noordeloos, *nom. nov.* (Basionym: *Telamonia brevipes* Velen., Česká Houby: 458, 1921; non *Entoloma brevipes* Murrill, 1917.)

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