

TRICHOLOMELLA, A NEW GENUS, WITH THE DISTRIBUTION DATA
OF TRICHOLOMELLA CONSTRICTUM, COMB. NOV.
IN EAST EUROPE AND ASIA

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Tartu*

A new genus, *Tricholomella* Zer. ex Kalam. (Tricholomatales, fam. Tricholomataceae), is described with one species *Tricholomella constrictum* (Fr.) Zer. ex Kalam., *comb. nov.* (= *T. leucocephalum* (Fr.) Zer., *nom. inval.*) and the distribution data of this species in East Europe and Asia are presented.

Zerova (1974) proposed the generic name *Tricholomella* for two species (*T. constrictum* Zer. and *T. leucocephalum* Zer.) but did not publish a Latin description for this genus and so the name *Tricholomella* was invalid as a *nomen nudum*. Consequently nomenclatural combinations of these two species placed in *Tricholomella* Zer. (*T. constrictum* (Fr.) Zer. and *T. leucocephalum* (Fr.) Zer.; Zerova, 1979) have also been invalid.

So far the genus *Tricholomella* has been by different authors incorporated in several other genera, such as *Tricholoma* (Fr.) Staude, *Armillaria* Kumm., *Lyophyllum* P. Karst., *Calocybe* Kühner ex Donk, *Lepiota* (Pers.) S.F. Gray, *Melanoleuca* Pat. The genus *Tricholomella* differs from the five first named genera in the presence of echinulate spores and from the genus *Melanoleuca* in having inamyloid spores.

The presence or absence of siderophilous granulation of basidia in the genus *Tricholomella* is problematic. Considering its attribution to the genera *Lyophyllum* or *Calocybe*, we could assume the presence of siderophilous basidia; the investigations of the authors, however, do not confirm this. Zerova (1979), too, denies the presence of siderophilous granulation in the basidia of the genus *Tricholomella*. Fábry (1974) has placed *Calocybe leucocephala* (Fr.) Sing. to the species with siderophilous basidia. Babos (1975) does not say anything about the siderophilous basidia of *Calocybe constricta* (Fr.) Kühner. The presence or absence of siderophilous granulation in basidia has also presented a problem in some other genera (e.g., *Hypsizygus* Sing., cf. Redhead, 1984) and is evidently not a good taxonomic character.

The genus *Tricholomella* is monotypic. In the literature the species treated here (*T. constrictum* (Fr.) Zer. ex Kalam.) has mostly been regarded as two different species. One of them, *Tricholomella constrictum* (Fr.) Zer., *nom. inval.*, has been described as having a non-rooting stipe without annulus, the other, *Tricholomella leucocephalum* (Fr.) Zer., *nom. inval.*, however, as having a rooting stipe with annulus. Pilát (1968) and Babos (1975) have concluded on the basis of numerous examinations in nature that these two species represent different age stages of the same species. This standpoint is also supported in the present paper.

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Tricholomella Zerova ex Kalamees, gen. nov.

Tricholomella Zerova, Atlas Grib. Ukr.: 84. 1974, nom. nud.; Zerova, Vozn. Grib. Ukr. 5 (2): 177. 1979, nom. nud.

Basidiocarposomata sine pigmento, albae, carnosae, parvae vel magnitudine media (pileus 3–6 cm), cum habitu *Tricholomatis*. Velum album. Stipes in stadio juvenili annulatus, saepe radicans. Lamellae emarginatae. Pulvis sporarum albus. Sporae ellipsoideae vel ovoideae, verrucosae, inamyloideae, hyalinae, cyanophilae. Cystidia nulla. Basidia tetraspora. Pileipellis cum hyphis filiformis. Hyphae fibulatae. Trama lamellarum regularis. Odor et sapor farinacei. In silvis frondosis, in pratis, autumnalis.

Typus: *Tricholomella constrictum* (Fr.) Zer. ex Kalam.

Carpophores without pigment, white, tricholomatoid, thick-fleshy, small or of medium size, with white veil. Stipe with annulus when young, later without annulus, sometimes rooting. Lamellae emarginate to nearly free. Spore print white. Spores hyaline, echinulate, inamyloid, cyanophilous, elliptic to ovate, large. Basidia 4-spored. Hymenial cystidia absent. Epicutis not cellular. Hyphae clamped. Hymenophoral trama regular. Odour and taste mealy. In deciduous forests, meadows, in autumn.

Tricholomella constrictum (Fr.) Zerova ex Kalamees, comb. nov.

Agaricus constrictus Fr., Syst. mycol. 1: 28. 1821 (basionym). — *Tricholoma constrictum* (Fr.) Ricken, Blätterpilze 1, fasc. 11: 329. 1914. — *Lyophyllum constrictum* (Fr.) Sing. in Annl. mycol. 41: 100. 1943. — *Calocybe constricta* (Fr.) Kühner (in Singer) in Sydowia 15: 47. ('1961') 1962. — *Tricholomella constrictum* (Fr.) Zerova, Atlas Grib. Ukr.: 84. 1974 (nom. inval.); Zerova, Vozn. Grib. Ukr. 5 (2): 178. 1979 (nom. inval.).

Agaricus leucocephala Fr., Epicr. mycol.: 47. 1838. — *Tricholoma leucocephalum* (Fr.) Quéf. in Mém. Soc. Émul. Montbéliard, Sér. II, 5: 317. 1872. — *Lyophyllum leucocephalum* (Fr.) Sing. in Annl. mycol. 41: 100. 1943. — *Tricholomella leucocephalum* (Fr.) Zerova, Atlas Grib. Ukr.: 84. 1974 (nom. inval.); Zerova, Vozn. Grib. Ukr. 5 (2): 178. 1979 (nom. inval.). — *Calocybe leucocephala* (Fr.) Bon & Courtequisse in Docum. mycol. 18 (69): 37. 1987.

Selected illustrations.—Lange (1935) 17A, 24A. — Cetto (1979) 546, 594. ↯ Phillips (1981) p. 41. — Ryman & Holmäsén (1984) 304. — Moser & Jülich (1986) III *Calocybe* 1. — Zerova (1974) 68, 1–2.

Pileus pure white and pruinose when young, convex to convex-campanulate, then slightly brownish, yellowish or greyish at the centre, convex-plane to plane, sometimes with an obtuse umbo, silky, shiny, smooth, dry, 3–6 cm across. Lamellae white, sometimes with pinkish tinge, crowded, large, emarginate to almost free. Stipe white, dry, fibrillose-floccose when young, with narrow membranaceous quickly disappearing annulus at the apex, then fibrillose, smooth, cylindrical or slightly tapered at the base, sometimes rooting, 2–5 × 1–1.5 cm. Veil white, membranaceous, quickly disappearing. Flesh white, thick, smell and taste strong mealy. Spore print white. Spores ellipsoid to oval, distinctly echinulate, large, 7–10 × 4–6 µm.

Habitat & distribution in East Europe and Asia.—In deciduous and mixed forests, steppes, meadows, pastures, VI–X, rare. — Estonia: 7 localities (Järva & Parmasto, 1980; Urbonas, Kalamees & Lukin, 1986). — Latvia (Urbonas, Kalamees & Lukin, 1986). — Ukraine (Zerova, 1979). — Kazakhstan: 1 locality (Samgina, 1981). — Kirow district (Lebedeva, 1949). — Leningrad district (Singer, 1943). — Primorsk territory: 1 locality (Vassilieva, 1973).

Specimen examined.—ESTONIA: Lääne-Viru distr., Sagadi, Koljaku, on pasture, 16.IX.1959, *Urve Kalamees* (TAA 51279).

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