

P E R S O O N I A

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STUDIES IN INOCYBE-VI*

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Inocybe pseudoasterospora var. *microsperma* is described as a new taxon.

In the course of a revision of the nodulose-spored species of *Inocybe* in Europe, an interesting *Inocybe* was repeatedly noted. As this taxon has only been provisionally named, it is formally validated here.

Inocybe pseudoasterospora var. *microsperma* Kuyp. & Keizer, var. nov.—Fig. 1

A varietate *pseudoasterospora* differt sporibus minoribus, plerumque 5–7-nodulosis, (7.0–)8.0–10.0 (–10.5) × (6.0–)6.5–8.5 μm.

Holotypus: Netherlands, Drenthe, Pesse, Spaarbankbos, 20.VIII.1986, *Kuyp. 2695* (L; isotypus in WBS).

Pileus 20–42 mm, conical to applanate, with prominent umbo to indistinctly umbonate, with margin inflexed when young, dark brown to almost blackish brown around disc (Mu. 10 YR 3/4, 3/3, 2/3), outwards somewhat paler brown (10 YR 4/4, 5/4), smooth in centre, outwards fibrillose, with age sometimes minutely squamulose, towards margin radially rimulose (as *I. fuscidula*), somewhat greasy around disc, velipellis indistinct or absent. Lamellae, L = 35–50, l = 1(–3), thin, moderately crowded, 2–5 mm broad, slightly ventricose, almost free to narrowly adnexed, slightly greyish-tinged buff when young (10 YR 7/3, 6/3), then greyish brown or brownish buff, without olivaceous tinge; edge even to fimbriate, almost concolorous to whitish. Stipe 43–58 × 3–5 mm, equal to slightly swollen at base (to 6 mm) but not bulbous, whitish, then greyish-brownish or brownish (10 YR 7/4–7/6), with age somewhat darker brown in lower part, indistinctly fibrillose, not or hardly pruinose even at apex. Context whitish to pale brownish buff in stipe. Smell faint, indistinct to subspermatoc. Taste indistinct.

Spores (7.0–)8.0–10.0(–10.5) × (6.0–)6.5–8.5 μm, on average 8.4–9.3 × 7.2–7.8 μm, Q = (1.0–)1.1–1.4, on average 1.2–1.3, conspicuously 5–7 nodulose. Pleurocystidia (49–)50–76(–79) × (15–)16–23(–24) μm, scarce to frequent, usually fusiform, partly more tending to (sub)lageniform, sessile to pedicellate, thick-walled, with up to 1.0–1.5 μm thick, pale yellow wall, with apex crystalliferous. Cheilocystidia rather frequent, similar to pleurocystidia or somewhat less slender; paracystidia (very) frequent, (broadly) clavate, thin-walled, colourless. Basidia 24–36 × 9–12 μm, 4-spored. Stipe at extreme apex (less than 1/10th) with true caulocystidia and cauloparacystidia, but downwards soon with rather undifferentiated hairs.

Habitat & distribution.—Under frondose and coniferous trees on usually somewhat loamy soil. Associated with *Quercus*, *Corylus*, *Alnus*, *Betula*, *Tilia*, and *Picea*. Probably wide-spread in Europe. June–Oct.

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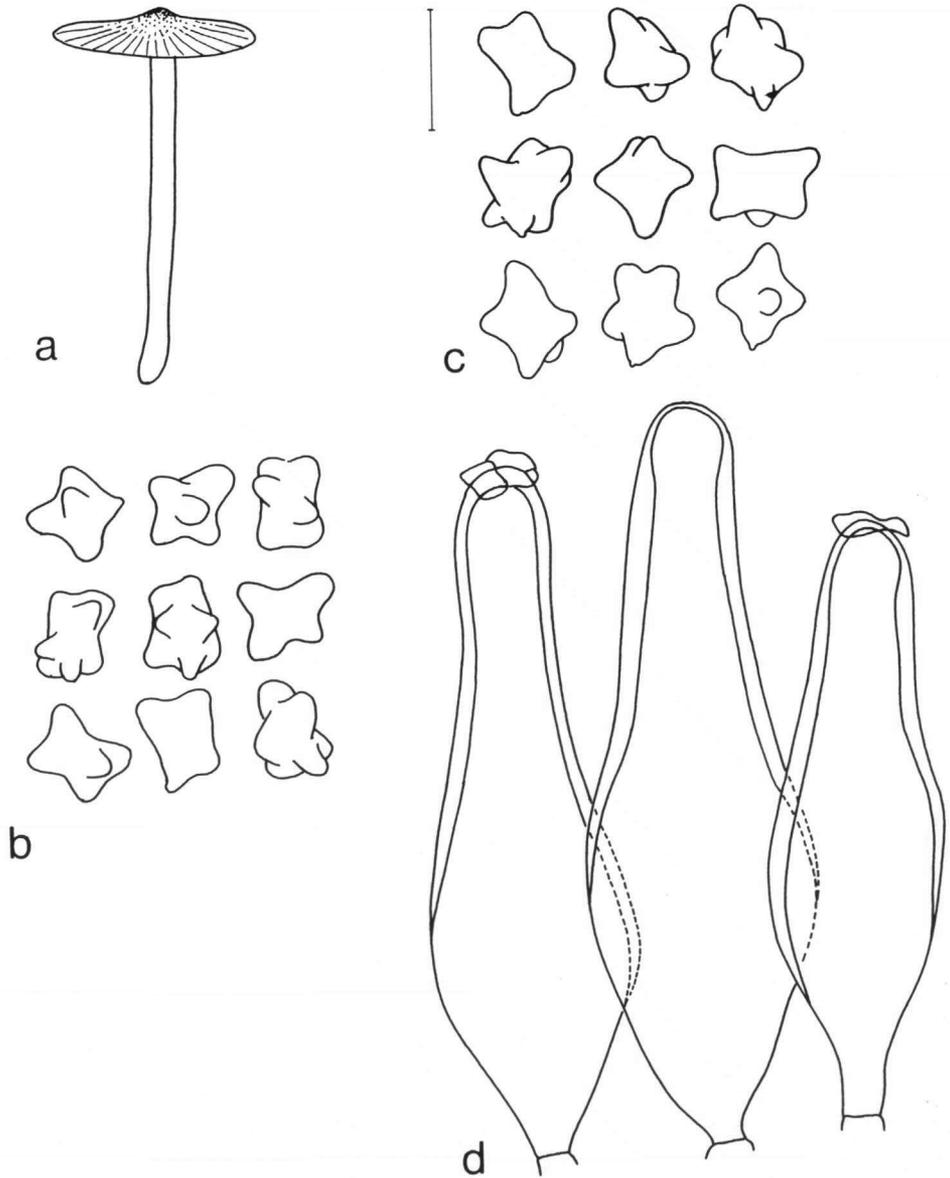


Fig. 1. *Inocybe pseudoasterospora* var. *microsperma*. — a. Habit. — b, c. Spores. — d. Pleurocystidia. (a, b, from Keizer 87.173; c, d, from Keizer 88.152. Bar = 10 μ m.)

Collections examined.—NETHERLANDS: prov. Drenthe, Eursinge, 22.VI.1960, *Barkman 6636* (WBS); Havelte, Busselterweg, 18.IX.1988, *Keizer 88.152* (WBS); Pesse, Spaarbankbos, 31.VII.1986, *Keizer* (WBS); 20.VIII.1986, *Kuyper 2695* (holotype of *I. pseudoasterospora* var. *microsperma*, L; isotype WBS); 21.IX.1987, *Keizer 87.173* (WBS); Wijster, Biological Station, 11.VII.1961, *Barkman 6980* (WBS); prov. Overijssel, Buurse, Den Braam, 20.X.1985, *Kuyper* (WBS). — ENGLAND: Kent, Bedgebury Pinetum, 19.X.1969, Reid (K). — GERMANY: Niedersachsen, Oldenburg, Zetel, Neuenburger Urwald, 23.VIII.1962, *Bas 2617* (L); Bavaria, Regensburg, Donaustauf, 18.VI.1988, *Zitzmann* (L). — NORWAY: Akershus, Flateby, Flateby Vannverk, 21.VIII.1984, *Weholt 40.84* (L); Østfold, Krakeroy, Smertu, 8.IX.1981, *Weholt* (herb. Weholt).

This taxon has been provisionally described as *Inocybe pseudoasterospora* var. *microsperma* by Weholt (1984). As more records of this taxon became available to us, he kindly allowed us to formally validate this name.

Except for spore size no essential differences with the typical variety could be noted. According to Kühner & Boursier (1932) spore size of *I. pseudoasterospora* is 9.2–13.0 × 7.2–10.0(–11.0) µm. Unfortunately, our enquiries after the type collection remained unsuccessful.

As the spore shape of var. *microsperma* does not seem to differ from that of var. *pseudoasterospora*, the relative spore volumes of both varieties can easily be calculated. Such calculations indicate that spore size of var. *microsperma* is about half of that of var. *pseudoasterospora*. Such ratios are suggestive for a difference in ploidy, but the typical variety was described as having 4-spored basidia as well.

Macroscopically this taxon could be confused with *I. acuta* Boud. or *I. striata* Bres. (= *I. acuta* sensu Kühner & Boursier), but its peculiar spore form, which is reminiscent of *Entoloma conferendum* (Britz.) Noordel., makes it easy to recognise. A scanning electron micrograph of the spores was published by Pegler & Young (1972), showing the large conical nodules and the prominent hilar appendix, which often looks like an additional nodule.

Considering the number of exsiccates, it seems likely that this taxon probably has a wide distribution in northwestern Europe. We failed to find a description of this taxon in the *Inocybe* literature from North America.

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