

**COLTRICIA CONFLUENS:
A NEW POLYPORE FROM THE NETHERLANDS**

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Recently, a fungus has been reported from young, planted parks (e.g. Keizer, 1985) which shows some resemblance to *Coltricia perennis* (L.: Fr.) Murrill, but which differs from that species in several respects: 1) growth habit; 2) zonation of the pileus; 3) colours; 4) shape of the pileus; 5) ecology. As this fungus is already known from several places in the Netherlands and invariably seems to differ from any species described in the literature it is described here as a new species.

***Coltricia confluens* Keizer, nov. spec. — Fig. 1**

Pileus 16–70 mm latus, irregularis, expansus vel infundibuliformis, clare vel interdum obscure ochraceo-cinnamomeus, splendore carens, leviter zonatus. Pori subrotundi, subangulati, 2–4 per mm, cinnamomeo-fulvi, clariore pileo, decurrentes. Stipes 7–25 × 1–4 mm, irregularis, saepe tuberosus, saepe fissus. Contextus coriaceus, cinnamomeus. Crescit gregatim, plerumque multa basidiomata lateraliter concrecentes. Sporae (6.8–)7.1–8.5(–8.9) × (4.0–)4.6–5.2(–5.5) μm, ellipsoideae vel breviter cylindraceae, laeves. Basidia 4-sporigera. Fibulae absentes.

In nemoribus et hortis frondosis.

Typus: Netherlands, prov. Utrecht, Maarsseveense plas, 15.IX.1993, Keizer 93060, Herb. Wag-W, isotypus: L.

Basidiocarps 16–70 mm broad, expanded to irregularly infundibuliform, circular or, more often, irregularly lobed, gregarious and usually few to many (2–approx. 25, often 4–7) interconnected, forming flat, multi-stipitate units; in that case individual specimens hardly recognizable; surface of pileus dark or light rusty brown, dull, velvety, weakly zonate, very weakly radially wrinkled, growing margin yellowish brown, sometimes margin distinctly blackening. Tubes 1–2(–3) mm long, light greyish brown inside, decurrent on the stipes. Pores circular or polygonal, 2–4 per mm. Stipe 7–25 × 1–4 mm, partially cylindrical, often broader upwards, usually irregularly flattened and frequently bifurcate, rusty brown, base enlarged and usually holding together a certain amount of litter; mostly several stipes under a cluster of confluent pilei. Context tough, rusty brown. Smell indistinct. Spore-print rusty brown with olive hue.

Spores [30, 3, 3] (6.8–)7.1–8.5(–8.9) × (4.0–)4.6–5.2(–5.5) μm, Q = 1.4–1.8(–1.9) and average Q = 1.51–1.70, ellipsoid or ellipsoid-oblong, smooth, very pale brownish to almost hyaline, uniguttulate. Basidia 4-spored. Surface of pileus consisting of irregularly branched, thick-walled, brown hyphae with hyaline apices, 3–6 μm broad with walls up to 2 μm thick. Context of pileus made up of thin-walled, brown, radially arranged hyphae. Subhymenium 3–4(–5) μm thick, made up of pale brown to almost hyaline, thin-walled hyphae. Clamp-connections absent from all tissues.

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Habitat — In artificial plantations of deciduous trees and shrubs (once in a grassfield) in parks on fertile soils (humose sand or clay), growing on soil, in litter or on chips of wood, apparently saprotrophic.

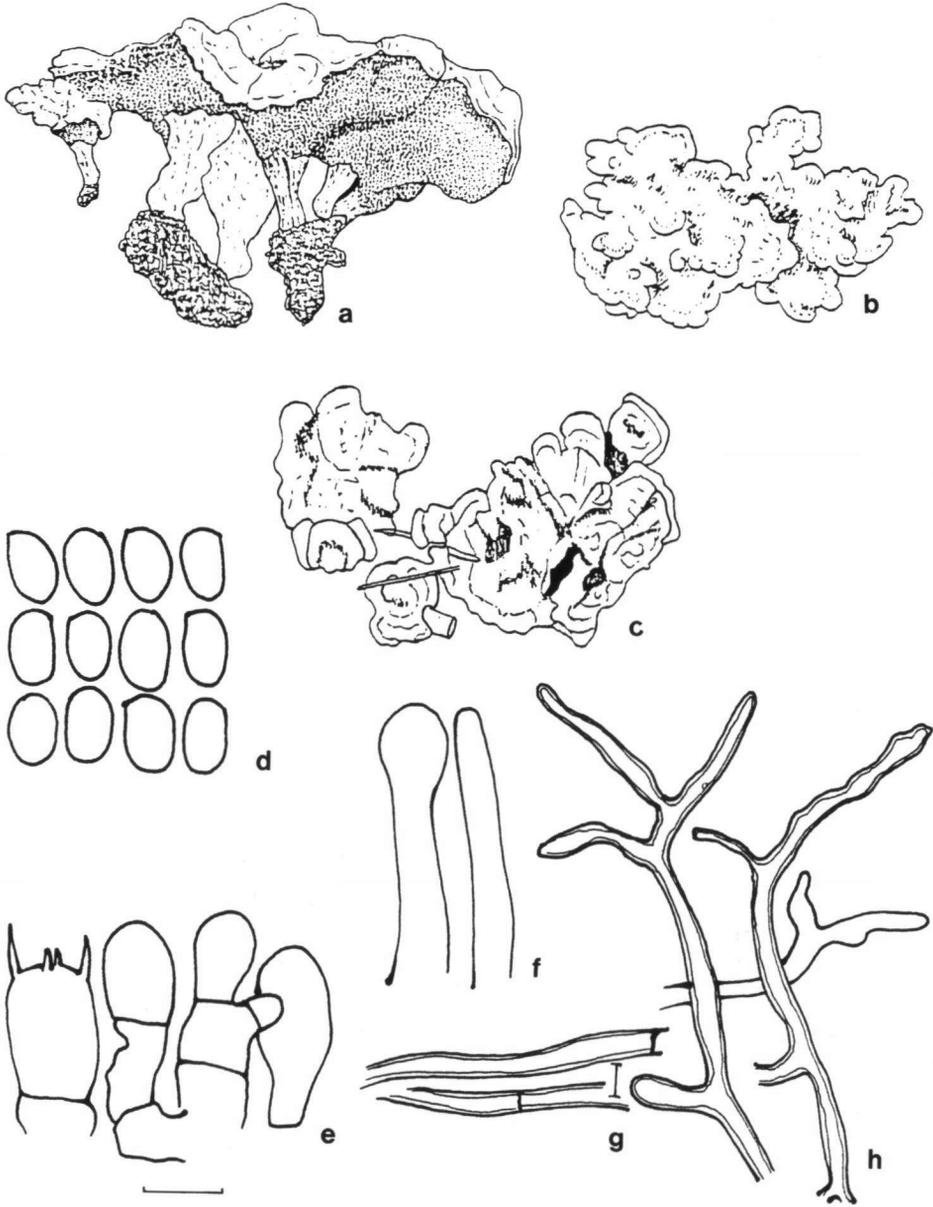


Fig. 1. *Coltricia confluens*. a. Habit in side-view; b, c. habit in top-view (all about life-size); d. spores; e. basidia; f. terminal hyphae of dissepiments; g. subicular hyphae; h. hyphae of tomentum of pileus. — Scale bar = 10 μ m.

The main differences between *Coltricia confluens* and *C. perennis* are: 1) The almost invariable growth-habit in which many carpophores are growing together. *Coltricia perennis* usually grows solitarily, occasionally with a few confluent pilei, but not as many as in *C. confluens*. 2) The weak to almost absent circular zonation of the pileus. If this zonation is present, the zones are concolorous with the rest of the pileus in *C. confluens* whereas in *C. perennis* the zones are often darker or grey to dark grey. In exsiccata of *C. confluens* the pileus is only weakly or not at all radially wrinkled, in exsiccata of *C. perennis* the pileus usually is radially wrinkled. 3) *Coltricia confluens* is often brighter and more uniformly brown (to almost yellowish brown) than *C. perennis*. The uniform colour is due to the even felty layer on the pileus. 4) *Coltricia perennis* has regular circular pilei; in *C. confluens* the pilei are mostly irregular: lobed, incised, undulate. 5) The difference in habitat is striking: *C. perennis* occurs on dry, sandy soils, usually under *Pinus*, less frequently under *Fagus* or *Quercus* and has been proven to form ectomycorrhiza (Danielson, 1984). It has strongly decreased recently in the Netherlands (Arnolds, 1989). *Coltricia confluens* grows in artificial parks and plantations, on fertile soils (humose sand, clay) under *Crataegus*, *Ulmus*, *Acer*, *Quercus*, *Prunus*, etc. and one collection was found in a grassland without neighbouring trees. Frequently it is attached to chipped wood or other organic debris. It has been observed in the Netherlands only rather recently (first collection from 1984), and is probably increasing, especially in urban or otherwise human-influenced areas. This species seems to be non-mycorrhizal, but saprotrophic instead.

No microscopical differences between *C. confluens* and *C. perennis* have been found.

Coltricia confluens may erroneously be identified as *C. cinnamomea* (Jacq.) Murrill. The latter species is clearly different from *C. confluens* (and *C. perennis*), as is pointed out by Jahn (1986): 1) The pileus has a radial sheen in *C. cinnamomea* due to the absence of a velvety layer of branched, thick-walled hyphae, which makes the radially arranged hyphae of the surface of the pileus visible. The surface of the pileus of *C. confluens* (and *C. perennis*) is covered by a layer of ascending, branched, thick-walled hyphae. 2) The length-width ratio (average Q) of the spores of *C. cinnamomea* is 1.3–1.4; in *C. confluens* (and *C. perennis*) average Q = 1.4–1.8.

The spores of *C. cinnamomea* measure 6–8 × 4.5–6 µm or 4.9–7.1 × 3.8–5.2 µm (Jahn, l.c., showing considerable variation in spore dimensions) and (6.8–)7.1–8.5(–8.9) × (4.0–)4.6–5.2(–5.5) µm in *C. confluens*.

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