

NOTES AND BRIEF ARTICLES

A NEW SPECIES OF ARPINIA

J. GEESINK

Herwen

During a collecting trip of the Dutch Mycological Society in the Belgian Ardennes in October 1977, a yellowish cup fungus was collected by Mrs. M. Tichelman on the slope of a hill near Resteigne, a locality regularly visited by Dutch mycologists. The material was handed to me for further investigation and identification.

The fungus turned out to be a still undescribed species belonging to the genus *Arpinia* Berthet.

Arpinia luteola Geesink, *sp. nov.* — Fig. 1

Apothecium superficiale, stipitatum, usque ad 25 mm diam. Receptaculum initio cupulatum, deinde expansum undulatumque, luteo-aurantiacum; superficie laevi, margine crenato, stipite 10-12 mm longo, 4-6 mm lato. Discus concavus concolorus. Excipulum tristratum. Asci cylindrici, bifurcati, 125-180 × 8-10 μm, inamyloidei. Ascosporae uniseriatae, ellipsoideae, hyalinae, 9.5-11.5 × 5.5-6.5 μm, biguttulatae, crasse tunicatae, laevis; nuclei haud carminophilei. Paraphyses recticylindraceae, septatae, c. 2.5 μm latae, ad apicem paulo inflatae usque ad 5 μm. In humo calcareo inter muscos in laricetum.

Typus: pr. Resteigne, Belgium, 4.X.1977, Mrs. M. Tichelman (L).

Apothecia in small groups, superficial, stipitate up to 25 mm diameter. Receptacle at first cup-shaped, then expanding and becoming undulate, yellowish orange (Ségui 203); surface smooth; margin crenate; stalk 10-12 mm long, 4-6 mm broad. Disc concave, yellowish orange (Ségui 203). Excipulum consisting of three layers (1) a profound layer of closely interwoven hyphae (textura intricata, cf. Eckblad, 1968: 84), (2) a median layer of thick-walled angular cells (textura angularis) here up to 25 × 15 μm, (3) an exterior layer of globular thin-walled cells (textura globulosa) reaching 20 μm in diameter and giving rise to very short hairs invisible with the unaided eye.

Asci cylindrical, bifurcate at the base, 125-180 × 8-10 μm; the wall not blued by iodine. Ascospores uniseriate, ellipsoid, hyaline, 9.5-11.5 × 5.5-6.0 μm, with two oil drops, thick-walled, smooth; nuclei non carminophilous. Paraphyses septate, c. 2.5 μm thick, slightly enlarged up to 5 μm at the tip.

HABITAT. — In a group on calcareous soil among mosses in a larch-wood.

DISTRIBUTION. — Only known from type locality.

SPECIMEN EXAMINED. — Belgium, on calcareous soil among mosses in a larch wood, near Resteigne, Ardennes, 4.X.1977, Mrs. M. Tichelman (holotype of *Arpinia luteola*, L).

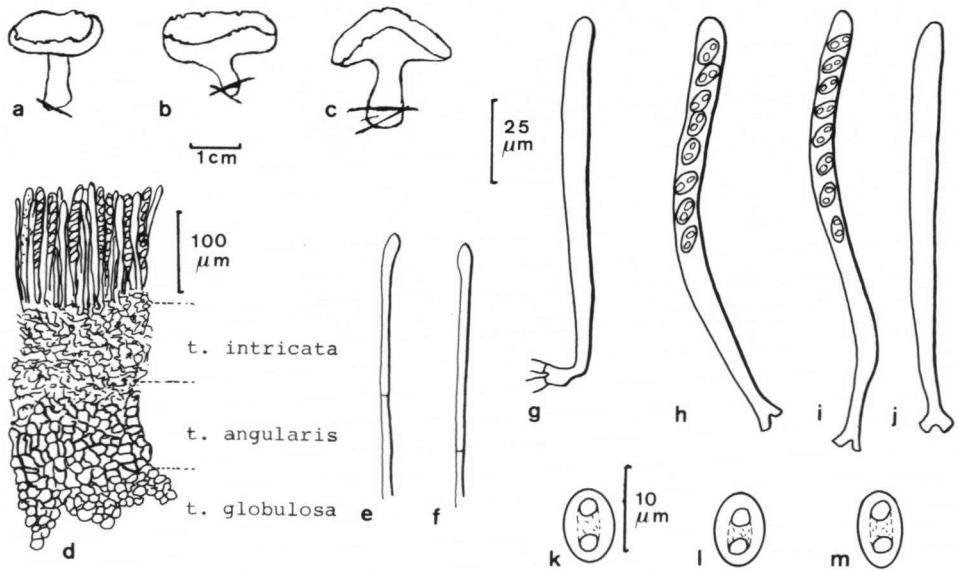


Fig. 1. *Arpinia luteola* (holotype). — a-c. Apothecia. — d. Diagrammatic section of hymenium and excipular layers. — e, f. Paraphyses. — g-j. Asci. — k-m. Ascospores.

According to Berthet (1974: 36) the presence of an excipulum differentiated like described above is characteristic of the family Otideaceae.

In my opinion the presence of a thick layer with textura intricata is responsible for the very limited shrinkage and deformation of the fruit bodies on drying. These retain their original shape almost completely.

Because of the smooth excipulum and the cup-shaped, stipitate, crenate apothecia the present species would appear very close to the genus *Tarsetta* (Cooke) Lambotte (syn. *Pustulina* Eckbl.) but on the ground of the additional furcate asci and non-carminophilous nuclei in the ascospores it fits perfectly in the genus *Arpinia*.

Arpinia luteola can easily be distinguished from *A. inops* Berthet by the larger size and the deeper yellow colour of the fruit bodies and the smaller ascospores.

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