

"September 1877" as type of var. *tarvisina*, but this choice was made without an analysis of the protologue and examination of authentic material and should be rejected.

These authors also reported *P. "tarvisina"* on rabbit dung from Belgium (Roumèguère, F. Gall. 3444) and on antelope dung from Liberia (*Podospora crinita* Thaxt. in hb., NY). I have examined a few copies of 3444, but never been able to find any specimens. *P. crinita* is, according to an enclosed drawing, a species with 8-spored asci resembling *P. communis*. The fungus seems to be absent on this collection now, but there are also one with 32-spored asci, and another polyspored species that stands close to *P. setosa*. The third mentioned is probably *P. tarvisina* sensu Mirza & Cain.

Podospora hirsuta Dang. (1907: 345) is a dubious name and probably no synonym of *P. setosa* (Mirza & Cain 1970). The type collection has not yet been found; it is not in PC.

There are two authentic samples or *Philocopra coeruleotecta* in Rehm's herbarium (S), both with a description and a drawing of a spore. One label runs: "Philocopra coeruleotecta Rehm n.sp. 18/7.10". There is also an address-label written by Jolivette, the collector. The other sample has i.a. the text "Philocopra n.sp. in litt. Rehm 23/4 10 Madison U.S.A. 4/1910 Miss Jolivette". These collections are to be regarded as two syntypes. Rehm seems to have picked out the best pieces for the last-mentioned collection; I accordingly select it as lectotype.

Rehm erected his species because of its rich, blueish vestiture. This colour cannot be seen on his dry specimens, nor have I observed it in living specimens of *P. setosa*. In other respects his material agrees with typical *P. setosa*, and the colour may be a variation within the species.

16. *Podospora bifida* Lundq. n. sp. (Fig. 34, pl. 29 a-d)

Perithecia obpyriformia, 530–720 × 335–480 μ, deorsum pilis flexuosis, dilute brunneis sparsim obtecta, sursum pilis rigidis, obtusis, 1–2-septatis, 25–120 × 3–3.5 μ instructa. *Peridium* membranaceum, semipellucidum, ochraceum vel ochraceo-brunneum, tristratum, in collo nigrum opacum, cellulis externis angulatis, 5–10 μ diam. *Paraphyses* breves, crassae. *Asci* c. 100–128-sporei, 265–310 × 60–90 (–110) μ, late clavati, apice anguste rotundato, sine annulo apicali. *Sporae* multiseriatae, maturitate bicellulares; cellula superior fusco-brunnea, late fusiformis, aequilateralis, 18–24 × 13–15 μ, poro germinali apicali instructa; pedicellus hyalinus, 11–18 × 6–7 μ, ± obclavatus, demum collabens. Tota spora strato gelatinoso tenui cincta, caudis instructa; cauda superior duobus filis attenuatis, 30–50 × 3–5 μ, composita, plerumque distaliter unitis et proximaliter bifidis, subapicaliter affixis, raro omnino liberis; cauda inferior pedicellum tegens, cylindracea, non divisa, 30–50 × 3 μ; ambae caudae persistentes, solidae. — Fimicola.

Perithecia scattered, ± immersed, non-stromatic, obpyriform, 530–720 × 335–480 μ, ostiolate, with a tapering to cylindrical neck, 95–145 × 95–115 μ, sparingly covered below with flexuous, hyaline to olivaceous brown, septate, usually simple, 2.5–3 μ

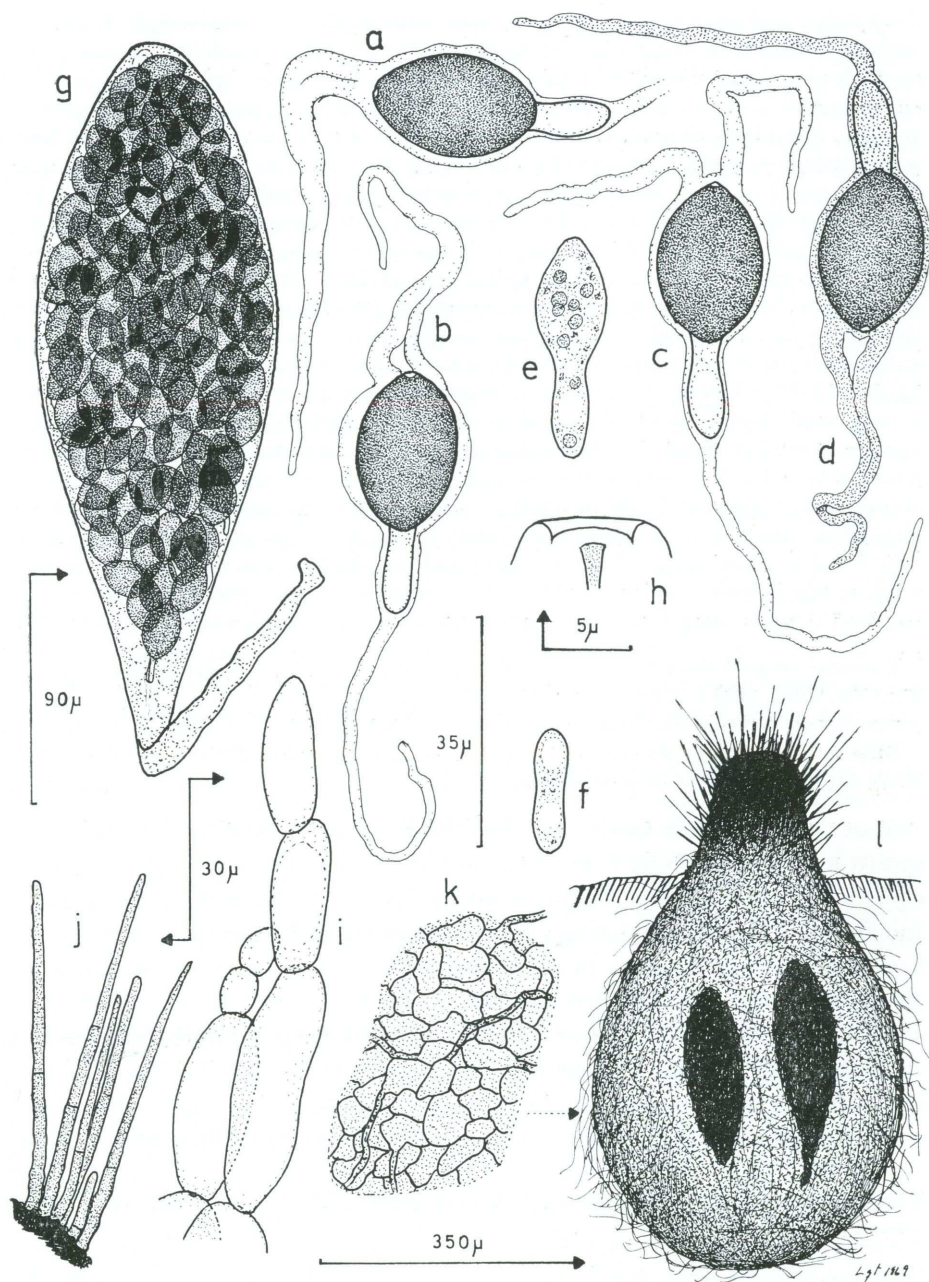


Fig. 34. *Podospora bifida*. Holotype (UPS). Drawn from living specimens. *a-d*: Mature spores; heavily stippled caudae in *d* show their appearance in Indian ink. *e, f*: Immature, hyaline spores at different stages of development. *g*: Ascus with mature spores. *h*: Invaginated ascus tip. *i*: Paraphyses. *j*: Hairs from perithecial neck. *k*: Peridium in horizontal view. *l*: Perithecium

thick hairs, and abundantly set on the neck with rigid, 1-2-septate, light brown, cylindrical, obtuse, non-agglutinated hairs, $25-120 \times 3-3.5 \mu$. *Peridium* pseudo-parenchymatous, membranaceous, semi-transparent, yellowish to light brown with an olivaceous tint, except in the black, opaque neck, 3-layered; outer layer composed of angular, irregularly shaped, thin-walled cells, $5-10 \mu$ in diam., middle layer of large, tangentially flattened, hyaline cells. *Paraphyses* short and stout, simple, soon collapsing, composed of a few large, elongated, vesicular cells. *Asci* rather few, c. 100-128-spored, $265-310 \times 60-90$ (-110μ , broadly clavate, with a moderately long stipe and a tapering apex, unitunicate, non-amyloid, easily bursting, costate after dehiscence; subapical chamber c. 2μ broad; no apical ring or light-refractive membranes. *Spores* multiseriate, forming together a fusiform body, at first one-celled, hyaline, cylindrical, then somewhat dumb-bell-shaped, then swelling above, finally becoming transversely uniseptate; upper cell ranging from olivaceous, light brown to dark brown, smooth, $18-24 \times 13-15 \mu$, broadly fusiform, equilateral, with an apical germ pore and sometimes with a small septal pore too; pedicel $11-18 \times 6-7 \mu$, cylindrical to slightly obclavate, hyaline, devoid of plasma, at last collapsing. Whole spore, including the pedicel, surrounded by a $1.5-3 \mu$ thick *gelatinous layer* that is apically and basally drawn out into appendages; upper cauda $30-50 \times 3-5 \mu$, composed of two subapically attached filaments that are free from each other (bifid) below, but mostly fusing distally into a cylindrical or tapering part; basal cauda cylindrical, $30-50 \times 3 \mu$, not divided; all cauda solid, round in cross-section, without visible microstructure, persistent, not or little swelling in water; all gelatinous equipment blackening in Indian ink. — Fimicolous.

Holotype on goat dung from Ribeira do Taborada, W of Casa das Queimadas, Madeira, 28.I.1969, Tibell 3628-c (UPS); isotypes in IMI and TRTC.

PARATYPES: **Sweden:** *Sk*, Jonstorp, Svanshall (r) 1963, J 1664-e (NY slide, UC slide, UPS).

Madeira: same data as above, T 3629-e (UPS). — Lombo dos Pecegueiros, NW of Caldeirão Verde (gt) 1968, T 3665-j (E slide, S slide, UPS).

Most typical for this species are the rigid hairs on the perithecium, the multi-spored asci, and the bifid base of the upper cauda of the spore. The gelatinous equipment, especially the sheath, is rather difficult to see without treatment in Indian ink. Its configuration is very similar to that of *P. granulostriata*, which, however, is a larger species in all respects. I have been very uncertain whether *P. platensis* might be identical with *P. bifida*. Even after a study of the poor authentic remains of the former (p. 144), its morphology is still in some essential respects rather difficult to clear up. But it seems that the following differences are sufficient to distinguish the two species: *P. platensis* has agglutinated hairs, a thinner pedicel, and possibly another type of gelatinous equipment.

17. *Podospora curvicolla* (Wint.) Niessl 1883: 156 (Fig. 35, pl. 31 c, e)

Sordaria curviolla Wint. 1871: 161. — Coll. orig. on rat dung from Öderan, Saxony, Germany, autumn 1871, leg. Winter; not known to exist; Krieger, F. Sax. 33, 1885 (S neotype). — *Philocopra curvicolla* (Wint.) Sacc. 1882: 250. — *Pleurage curvicolla* (Wint.) O.K. 1898: 505. — *Bombardia curvicolla* (Wint.) Mig. 1912: 128.

? *Philocopra curvicolla* v. *penicillato-setosa* Mouton 1886: 145. — Coll. orig. on rabbit dung from Forêt, Gomzé, and Tilff in Liège, Belgium, s. dato, Mouton; non-existent.