

## A NEW SPECIES OF CORYNESPORA

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In the course of investigations on fungi occurring on bark of deciduous trees, an unknown dematiaceous fungus was encountered. Because of its long, septate conidia, arising from the apex of dark conidiophores, the specimen was thought to represent an undescribed species of the genus *Corynespora* Güssow. This identification was kindly confirmed by Dr. M. B. Ellis, C. M. I., Kew.

***Corynespora proliferata* Loerakker, *sp. nov.*—Fig. 1**

Coloniae nigrae, irregulares, effusae. Mycelium in substrato immersum, partim et superficiale, e hyphis ramosis, levibus, hyalinis, tenuitunicatis, 2.5–4  $\mu\text{m}$  crassis constans. Stromata superficialia e singulis vel paucis stratis cellularum brunnearum, irregularium, 5–20  $\mu\text{m}$  crassarum constantia, parietibus ad 1  $\mu\text{m}$  crassis. Conidiophora singula e cellulis stromatis,

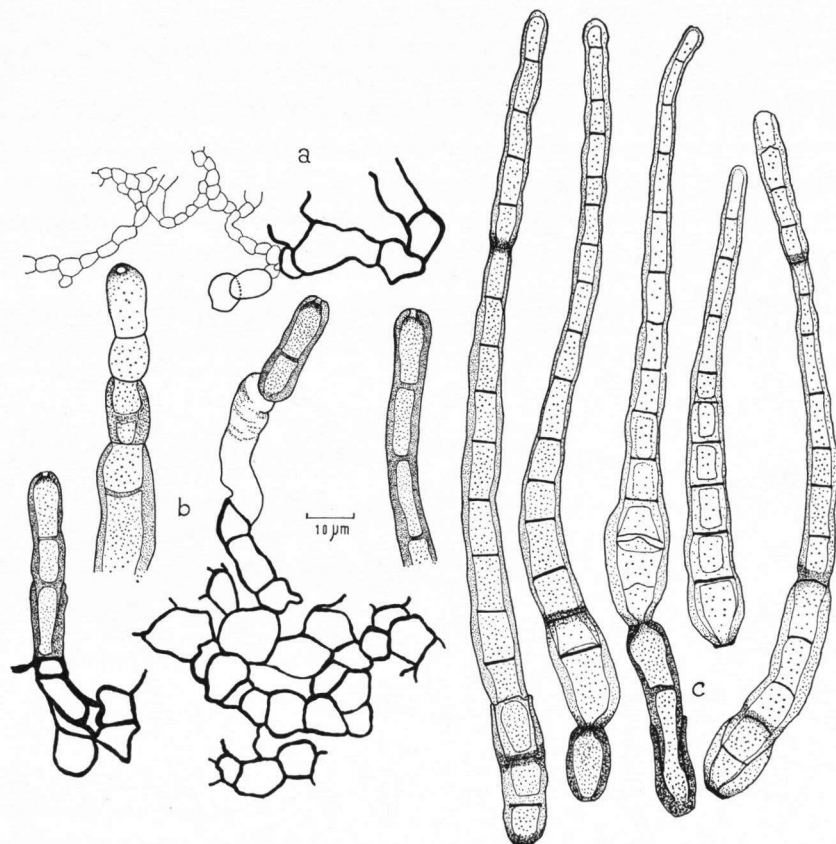


Fig. 1. *Corynespora proliferata*. — a. Mycelium. — b. Stromal cells and conidiophores. — c. Conidia.

nonnumquam et e hyphis mycelialibus oriuntur, erecta, simplicia, recta, fusca, levia et fere crassitunicata, plerumque bis vel ter septata, 30–70  $\mu\text{m}$  longa, 7–8(–10)  $\mu\text{m}$  crassa; porus apicalis circa 1.5  $\mu\text{m}$  diam., zona fuscata crassitunicata circumdatus. Conidiophora saepe percurrenter proliferant in partem secundariam uni- ad tricellularem. Conidia singula oriuntur, primum sursum hyalina et fragilia, apicem versus maturant; extensio nonnumquam interrupta et subinde continuata zonam fuscata, constrictam relinquens. Conidia matura olivaceo-brunnea, crassitunicata, levia, recta vel modice curvata, rostrata vel obclavata, 6–19 septis praedita, 90–185  $\mu\text{m}$  longa, deorsum 12–13  $\mu\text{m}$  crassa, sursum 4.5  $\mu\text{m}$ .

Typus in Herbario IMI 183.273 (in Herb. CBS 79) praeservatur, lectus in ligno *Fagi sylvaticae* prope Baarn.

*Colonies* black, irregular, effuse. *Mycelium* immersed in the substratum, occasionally superficial, composed of branched, smooth- and thin-walled hyphae consisting of

hyaline, rounded cells  $3-6 \times 2.5-4 \mu\text{m}$ , locally with somewhat inflated, pale brown, rather thick-walled cells. *Stromata* superficial, composed of one or few cell layers; cells brown, irregular in shape,  $5-20 \mu\text{m}$  in diameter, with up to  $1 \mu\text{m}$  thick walls. *Conidiophores* arising singly from cells of the stroma, occasionally directly from the mycelium, erect, simple, straight, dark brown, smooth- and rather thick-walled, (0-)2-3(-5) septate,  $30-75 \mu\text{m}$  long and  $7-8(-10) \mu\text{m}$  wide. Apical pore c.  $1.5 \mu\text{m}$  wide, surrounded by a darker thick-walled zone. Frequently the conidiophore proliferates percurrently and gives rise to a short, 1-3-celled secondary conidiophore; rarely a tertiary conidiophore is formed. *Conidia* arising singly, when young apically with a hyaline, fragile wall, ripening from the base towards the tip. Extension growth often interrupted at irregular sequences and continued afterwards, usually leaving darker, constricted zones. Mature conidia olivaceous brown, smooth-walled, straight or slightly curved, rostrate to obclavate, with 6-19 septa,  $90-185 \mu\text{m}$  long; width  $12-13 \mu\text{m}$  in the broadest part,  $4.5 \mu\text{m}$  near the apex and  $3-4 \mu\text{m}$  at the usually truncate, darkened basal scar.

Type: IMI 183.273 (slides in herb. CBS no. 79), on wood of *Fagus sylvatica* L., Baarn.

*Corynespora proliferata* is closely related to *C. gigaspora* (Berk. & Br.) M. B. Ellis, which differs by conidiophores usually arising in small fascicles from a stroma, and by narrower conidia with larger basal scars. *Corynespora polyphragmia* (Sydow) M. B. Ellis is also similar, but has broader conidia and basal scars, and longer conidiophores, which mostly arise in groups and frequently show up to four percurrent proliferations. *Corynespora vismiae* M. B. Ellis can be distinguished by smaller conidia, and *C. smithii* (Berk. & Br.) M. B. Ellis by longer conidiophores, which often occur in dense tufts, and cylindrical conidia with a larger basal scar. *Corynespora cassicola* (Berk. & Curt.) Wei possesses long conidia too, but can be recognized by the absence of any stroma. In a number of species of *Corynespora*, e.g. in *C. gigaspora*, *C. polyphragmia* and *C. vismiae*, Ellis (1957, 1961, 1963) describes similarly constricted conidia as in *C. proliferata*, but regards them as conidial chains. In *C. proliferata*, however, no fragmentation of conidia could be observed.

#### REFERENCES

- ELLIS, M. B. (1957). Some species of *Corynespora*. In Mycol. Pap. **65**: 1-15.  
— (1961). Dematiaceous Hyphomycetes III. In Mycol. Pap. **82**: 1-55.  
— (1963). Dematiaceous Hyphomycetes V. In Mycol. Pap. **93**: 1-33.