

A new species of *Helicocephalum* from Poland

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Helicocephalum tenellum sp. nov. is described from forest soil in northern Poland.

Key words: *Helicocephalum*, *Zoopagales*, new taxa, soil fungi, Poland.

The genus *Helicocephalum* was established by Thaxter (1891) for *H. sarcophilum*. Drechsler (1934, 1943) added two more species, *H. oligosporum* and *H. diplosporium*. Kitz and Embree (1989) described *H. corniculatum*. The author describes and illustrates the new species which was discovered on forest soil very close to the feed-box for roe-deers and cervines.

Helicocephalum tenellum sp. nov.
(Etym. Latin: tenellus = delicate)

Coloniae effusae, velutinae, albidae, oculo nudo vix visibiles. Sporangio-phora erecta, solitaria, non ramosa, recta vel flexuosa, subulata, hyalina, continua, usque ad 170 μm longa, 5-6 μm crassa, sursum 2-2.5 μm crassa. Merosporangium terminale, 19-25 \times 15-20 μm , ex filo 5-6.5-plo convoluo. Sporae subhyalinae, reniformes vel cylindricae apice rotundatae, 6-8 \times 3-4 μm , leves, nonseptatae, ad apicem sporangiophori in massis pallide brunneis aggregatae (Fig. 1). Habitat in solo silvae (*Tilio-Carpinetum*), Sajzy, Polonia.

Colonies on the natural substrate effuse, velvety, whitish, shining, scarcely visible to the naked eye. Sporangio-phores erect, solitary, unbranched, straight or flexuous, subulate, hyaline, continuous, up to 170 μm long, 5-6 μm in diameter at the base, tapering gradually upward to a diameter of 2-2.5 μm .

Merosporangium terminal, hyaline, $19-25 \times 15-20 \mu\text{m}$, 5-6.5 times coiled. Spores subhyaline, reniform or cylindrical with rounded ends, smooth-walled, non-septate, $6-8 \times 3-4 \mu\text{m}$, accumulating in pale brown masses at the sporangiophore apex (Fig. 1).

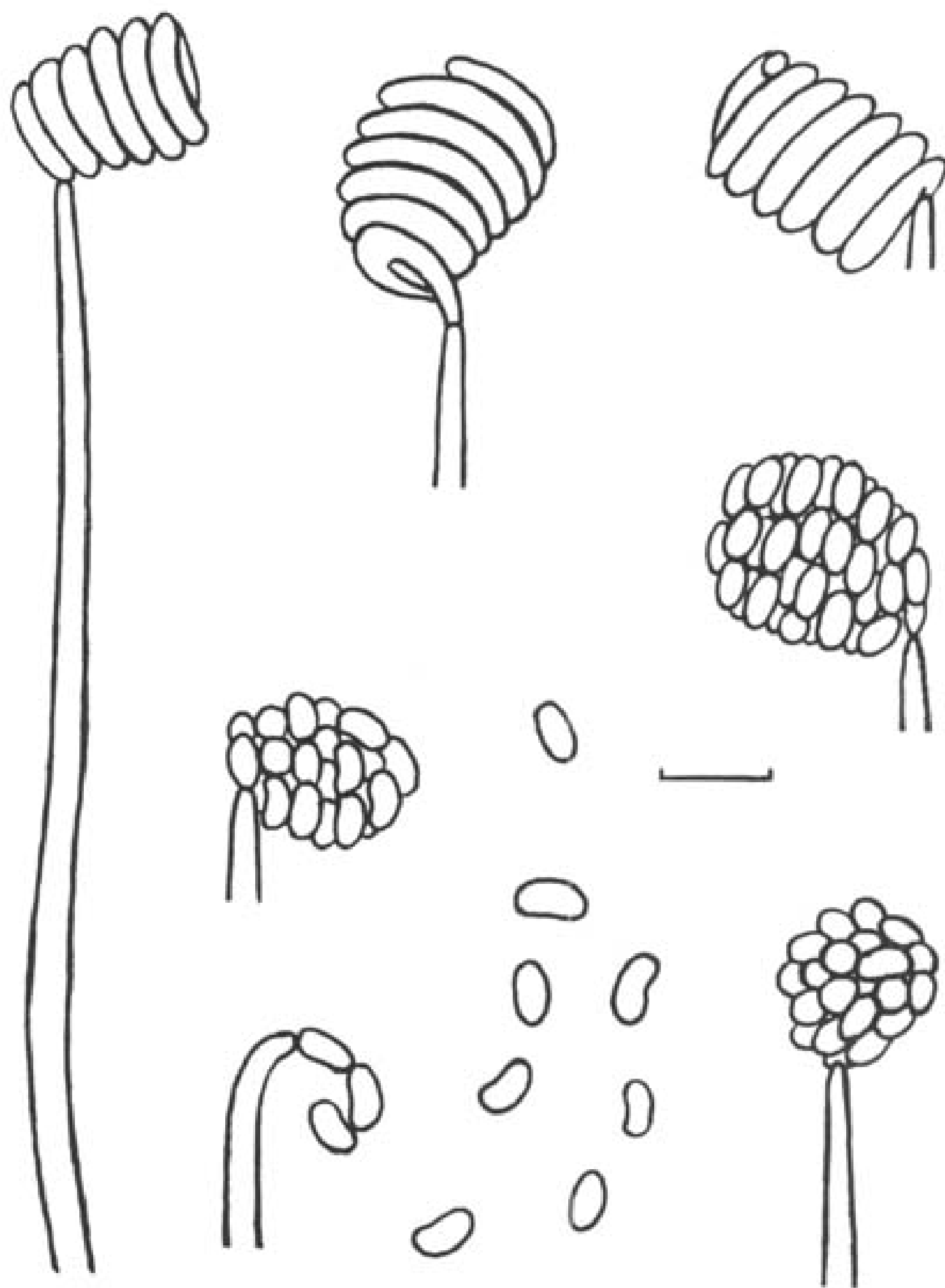


Fig. 1. *Helicocephalum tenellum* sp. nov.: sporangiophore, immature and mature merosporangia, spores (bar — $10 \mu\text{m}$)

Holotype: on soil, in rather moist deciduous forest (*Tilio-Carpinetum*), Sajzy near Elk, 20 July 1994, WA 34251.

Among previously described species of *Helicocephalum*, *H. tenellum* is unique in having very small sporangiophores, very small spores dimensions, and big number of merosporangium spirals. *H. tenellum* resembles the fungus isolated by Arnau (1952) and recorded as *H. sarcophilum* var. β .

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Nowy gatunek *Helicocephalum* z Polski

Streszczenie

H. tenellum jest piątym gatunkiem włączonym do rodzaju *Helicocephalum*. Wyrastał na glebie przesyconej odchodami zwierząt roślinożernych, obok karmnika dla saren i jeleni, w grądzie (*Tilio-Carpinetum*), w Sajzach niedaleko Elku. Można przypuszczać, że podobnie jak wcześniej opisane gatunki, jest pasożytem jaj nicieni.