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Tripospermum pinophilum (Neger) comb. nov.

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The author suggests to transfer the species *Triposporium pinophilum* Neger to the genus *Tripospermum*. A more extensive description of the fungus is given on the basis of profuse material collected in the Świętokrzyskie Mountains from honey-dew on *Abies alba*.

Neger (1918) isolated several times in W. Germany and Switzerland a fungus from honey-dew on fir and spruce, which he described as *Triposporium pinophilum*. He reports among other things that the fungus forms on medium „die charakteristischen drei-bis vierstrahligen Conidien, und zwar meist in Reihen an einem und demselben Mycelast". „An Mycelien, die ich durch Aussaat von einer *Triposporium* spore erhalten habe, beobachtete ich nun noch eine zweite kaum charakteristische Conidienfruktifikation, nämlich in Reihen geordnete flaschenförmige kurze Myceläste, die im grossen und ganzen dem Chalara Charakter entsprechen". Since that date no data are found in the mycological literature on the occurrence of this fungus. The herbarium specimens of Neger probably do not exist, since as early as 1926 Woronichin checked one of the cultures, but he did not find conidia. Hughes (1951) believed, on the basis of the description and drawing of Neger (Fig. 1) that *Triposporium pinophilum* should be transferred to the genus *Tripospermum*. A similar opinion was expressed by him in 1970, but be stated that in European herbaria this fungus is not found. He only found 3-armed conidia in Nees's herbarium, which probably belonged to *Triposporium pinophilum*.

In the Swiętokrzyskie Mountains a fungus grows frequently on fir honey-dew, which seems identical with that described by Neger. The author shares the opinion of Hughes, and after supplementing the description of this species she proposes to transfer it to the genus *Tripospermum*.

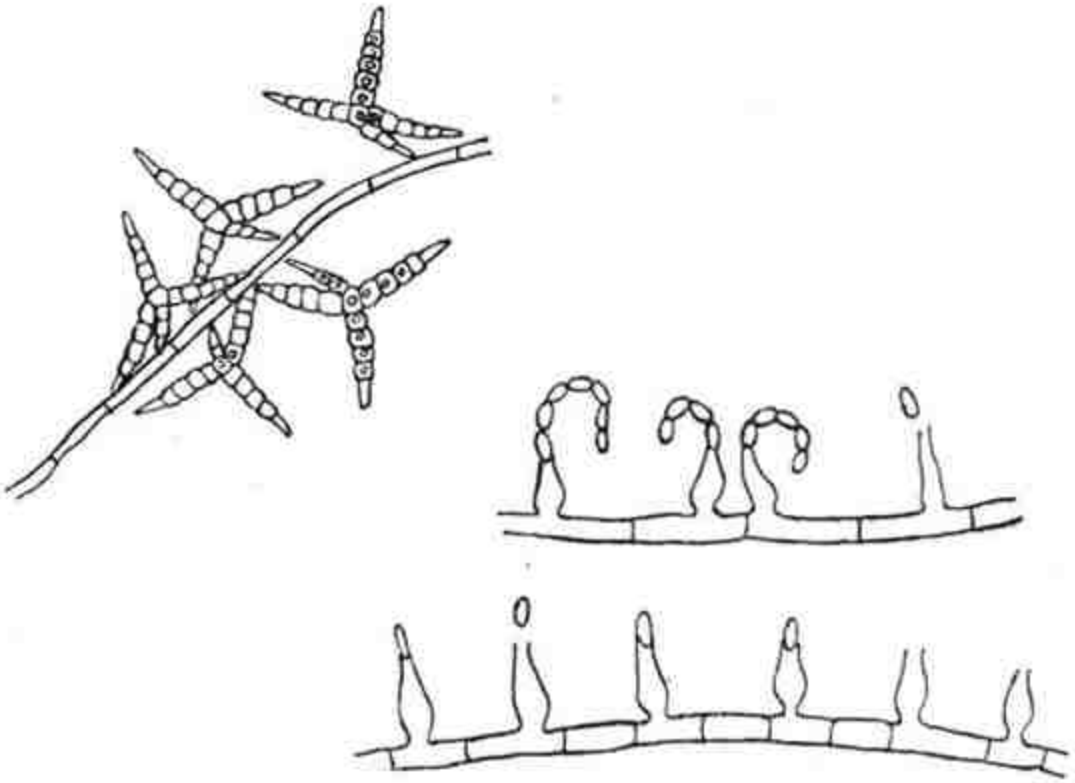

Fig. 1. *Triposporium pinophilum* Neger (reproduction of Neger's (1918) figures)

Tripospermum pinophilum (Neger) comb. nov. (Fig. 2)

(Basionym: *Triposporium pinophilum* Neger in Flora N. F,. 10: 112-116, 1918).

Colonies on fir honey-dew effuse, olive to brown-coloured, frequently growing between or within *Capnophialophora pinophila* (Nees) Borowska colonies (B o r o w s k a 1971). Superficial vegetative mycelium profusely branched and anastomosing. Hyphae of mycelium producing conidia grow above the substratum. They consist of cylindrical cells, brownish, 10-22×3.7-7.5 µm in size. Conidiogenous cells monoblastic, intercalary or terminal, determinate, doliiform, less frequently cylindrical. Conidia single acrogenous, branched, frequently grow next to one another in large numbers on the neighbouring cells of the mycelium. Ontogenesis of the conidium as described (I n g o l d and C o x, 1957) in *Tripospermum myrti* (Lind) Hughes. The stalk cells of the conidium, 0-1-septate pyriform or ellipsoidal, 7.4-18.5×3.7-5.0 µm. From the two central conidial cells 7.5-9.0×7.3-8.5 µm in size, 3-4 subulate arms grow laterally. Arms up to 50 µm long (mostly 18.5-40.0 µm) at base 4-9 µm, at tip 1.5-3.0 µm with 2-4 septa (less frequently one or five), frequently constricted at these sites, hyaline to brownish, derkest in the centre, smooth. Conidia of the second type form in phialides. The latter grow directly on the hyphae of the aerial mycelium. They are to olive-coloured,

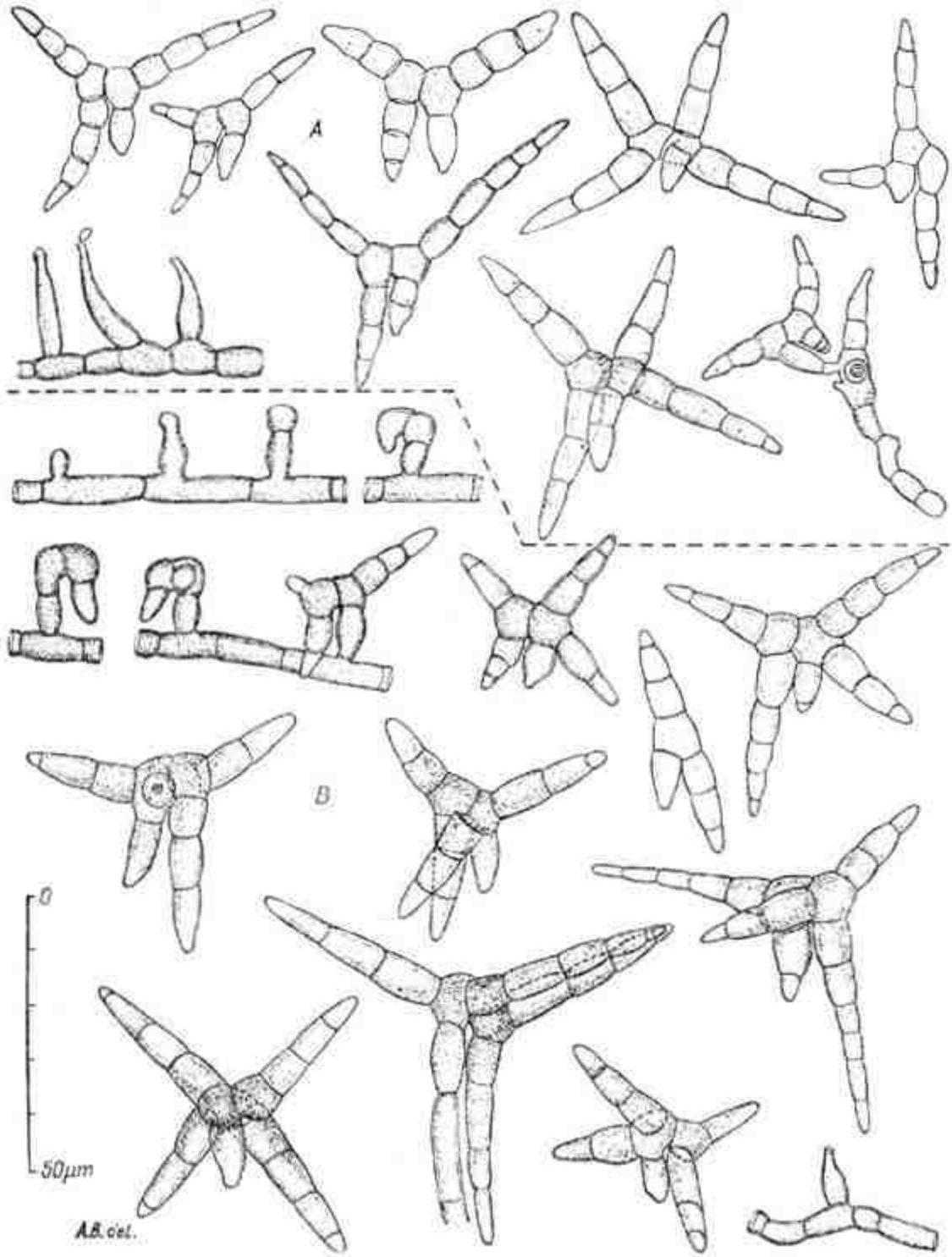

Fig. 2. *Tripospermum pinophilum* (Neger) comb. nov. conidia, phialides and conidia at various stages of development attached to the prostrate mycelium;
A — from fir honey-dew (Herb. WA. slide 19064); *B* — from one-month-old culture on Czapek-Dox (Herb. WA. slide 19065)

flask-shaped, 12-17×3.2-5.0 µm. Phialoconidia hyaline, cylindrical, 1.5-2.5×1.0-1.5 µm, forming short chains.

Tripospermum pinophilum on Czapek-Dox medium and maltose forms

dark grey-green determinate colonies, reaching after 1 month at 23-25°C at 1,5 cm diameter. Poorly branched aerial hyphae grow out of the middle of the colony immediately above the medium surface. Three- of four-armed conidia are very numerous, somewhat darker and more massive than on a natural substratum. Phialides and phaloconidia are scarse, frequently on the same hyphae as the branched conidia.

Tripospermum pinophilum is very similar to *Tripospermum acerinum* (Syd.) Speg. and *T. juglandis* (Thüm.) Hughes.

The presence of *T. pinophilum* was noted in 50 samples of honey-dew from fir branches and in honey-dew honey from various localities in the Swiętokrzyskie Mountains in the period 1967-1970 (Borowska, Demianowicz 1972; Demianowicz et al. 1972) and on honey-dew on *Taxus baccata* and *Mahonia* sp. in the Botanical Garden of the Warsaw University in the autumn of 1970.

The herbarium materials were deposited in the Herbarium of the Department of Systematics and Plant Geography of the Warsaw University (Herb. WA).

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Streszczenie

Autorka proponuje przeniesienie gatunku *Triposporium pinophilum* Neger do rodzaju *Tripospermum*. Szczegółowy opis grzyba został oparty na bogatym materiale zebranym ze spadzi na *Abies alba* w Górach Świętokrzyskich.