

Record on a New Species of Epiphytic Fungus
Aegeritella lenkoi sp. nov. (Mycophyta, Hyphomycetales)
from the Brazilian Ant *Camponotus sericeiventris* (Guerin)

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Bałazy S., J. Wiśniewski: *Record on a new species of epiphytic fungus Aegeritella lenkoi* sp. nov. (Mycophyta, Hyphomycetales) from the Brazilian Ant *Camponotus sericeiventris* (Guerin), Acta Mycol. 13 (2): 271-274, 1977.

Within the genus *Aegeritella* Bał. et Wiś. the occurrence of the only one described hitherto fungus species *A. superficialis* Bał. et Wiś. was found exclusively on species from the genus *Formica* L. (Wiśniewski 1967; Bałazy, Wiśniewski 1974; Wiśniewski 1976). Several years ago dr. Karol Lenko from the Instituto Biologico in Sao Paulo sent us a collection of Brazilian ants. In the course of studies about a dozen workers of the species *Camponotus sericeiventris* (Guerin) were found to have fungal wens, reminding much the mentioned above fungus.

MATERIAL

Ants sent by dr. Lenko were preserved in 70% alcohol. The test tube labelled as *Camponotus sericeiventris* (Guerin, 1830) ♂ Faz. Alcidia, Teodoro Sampaio, Est. Sao Paulo, Brasil, 28 VI 1969, col. K. Lenko, det. K. Lenko 1969, contained 46 workers. They all were thoroughly examined under a stereoscopic microscope with the aim to segregate individuals with fungal tumours. The structure and morphology of the fungus were examined by application an usual microscopic technique. Part of the material was used for microscopic preparations, fixed in glycero-gelatin.

RESULTS

The appearance, colour and structure of the fungus did not basically differ from the description of *Aegeritella superficialis* Bał. et Wiś. Their thalli consisted of thick-walled, spherical and ovoid cells, $4.8-11.5 (13.3) \times 8.5-15 (19) \mu\text{m}$ in size, with a formless light-brown content; towards the wen margins the cells were smaller and smaller and their colour was lighter. Many surface cells gave rise to conical aleuriophores ($8.5-12-20 (25) \times (3.3) - 3.8-5 (5.7) \mu\text{m}$ in size at the base, seldom forked, with spherical or short-oval swellings of about $5 \mu\text{m}$ in diameter on their tips (Fig. 1), particularly clearly seen in scanning pictures (Fig. 2).

The fungus under discussion differs from *A. superficialis* Bał. et Wiś. by the shape and measurements of aleuriospores, by the lack of yeast-like thin walled cells in the surface layer and by the lack of longer and more strongly branched aleuriophores. The authors propose for it the name *A. lenkoi* n. sp. with the following description:

Aegeritella lenkoi n. sp. (Fig. 1, 2): The thallus is circularly tubercular, flat-domelike, $80-220 \mu\text{m}$ in diameter, brown, consisting of thick-walled, obtusely multiangular, spherical or ovoid cells $4.8-11.5 (13.3) \times 8.5-15 (19) \mu\text{m}$ in size, gradually diminishing and more lightly coloured

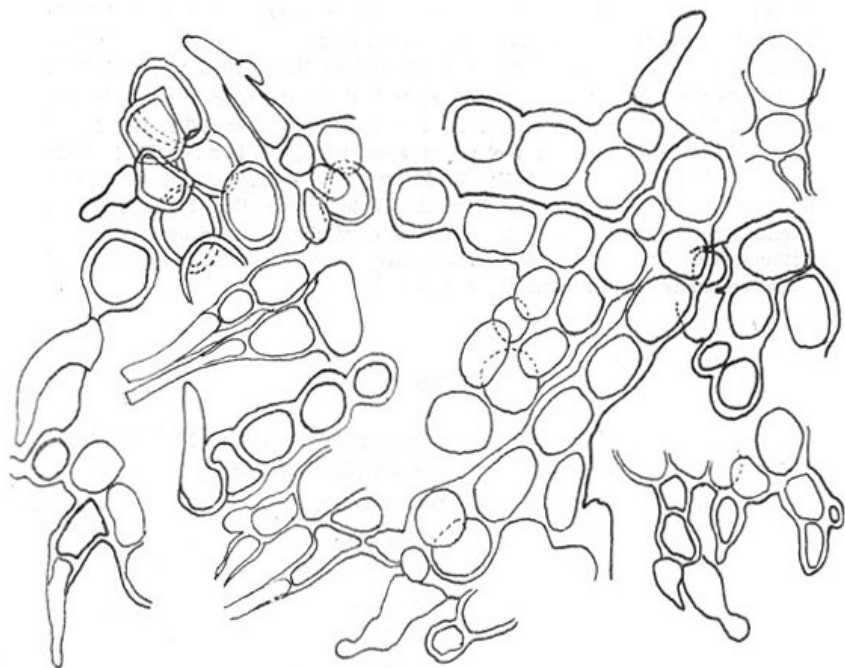


Fig. 1. *Aegeritella lenkoi* sp. nov. — microstructure ($\times 1000$)

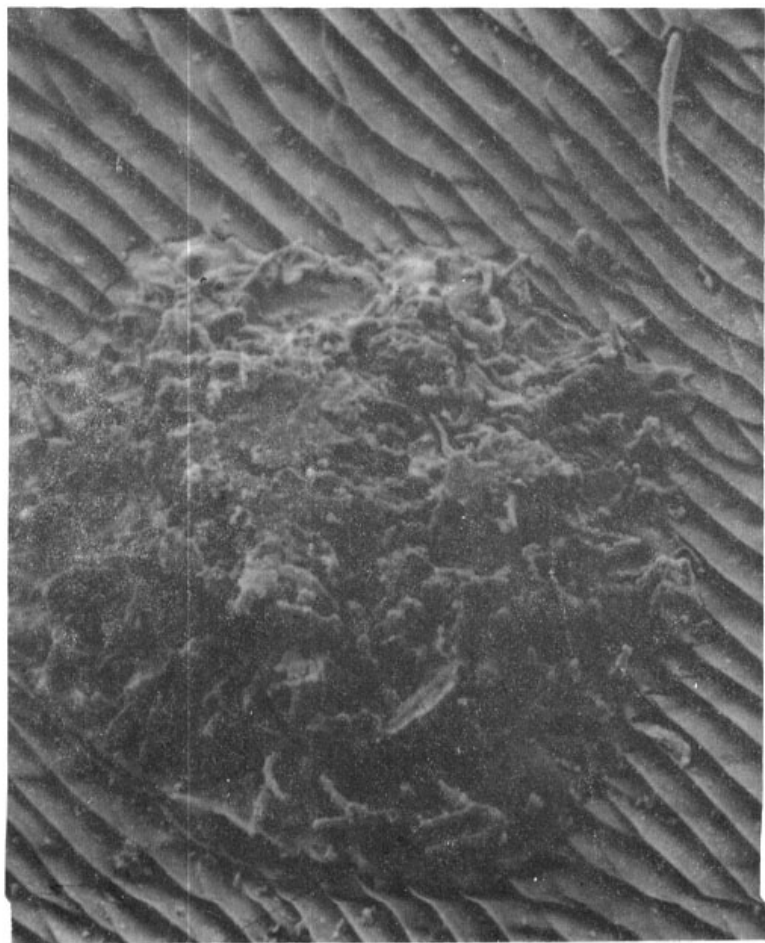


Fig. 2a. *Aegeritella lenkoi* sp. nov. — the fungus on the ant's tergite.

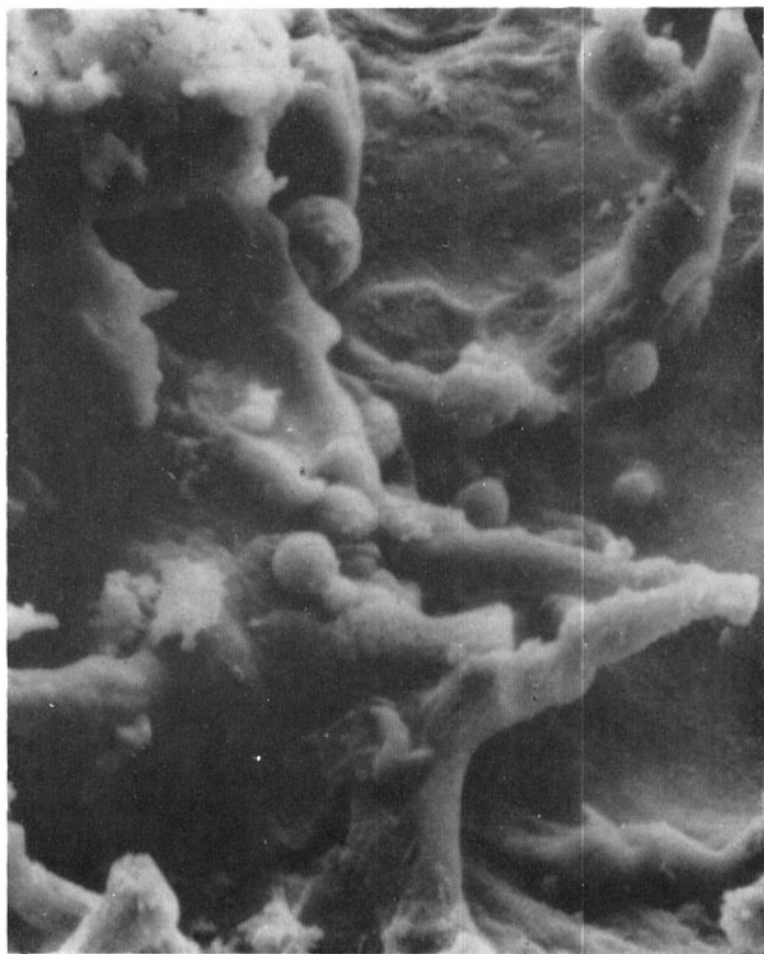


Fig. 2b. *Aegeritella lenkoi* sp. nov. — a part of surface of the fungus
(Scanning pictures were made in Electron-Microscope Laboratory in Institute of Experimental
Biology, Warszawa)

towards the margins. Surface cells give rise to conical aleuriophores, (8.5)-12-20 (25) × (3.3)-3.8-5 (5.7) μm thick at the base, rarely forked, with spherical or short-oval swellings up to nearly 5 μm in diameter on the tips. On the ant *Camponotus sericeiventris* (Guerin) collected in Faz. Alcídia, Teodoro Sampaio, Est. Sao Paulo, Brasil, 28 VI 1969, col. K. Lenko, det. K. Lenko 1969. It differs from *A. superficialis* Bał. et Wiś. by the shape and measurements of aleuriospores, by the lack of yeast-like cells in the surface and by the lack of longer and more strongly branched aleuriophores.

Type: The material together with the insect preserved in alcohol and partially in microscopic preparations, N. 2075 kept in mycological collection of the Wielkopolski National Park.

The name is in remembrance of Doctor Karol Lenko.

Aegeritella lenkoi Bał. et Wiśn.

Aegeritella lenkoi n. sp. (fig. 1, 2): *Thallus orbicularis, plane globosus, diametro 80-220 μm , brunneus, e cellulis, quarum membranae crassae, obtuse multiangulis, globosis aut ovoidalibus, quarum dimensiones 4,8-11,5-(13,3) × 8,5-15-(19) μm , ad marginem versus decrescentibus et paulo lucidius coloratis constans. Ex superficialibus cellulis aleuriophori conoidei, longitudine (8,5)-12-20-(25) et diametro (3,3)-3,8-5-(5,7) μm in basi, exrescunt, qui sunt rarissime furcati et cum globosis aut breviter ovoidalibus tumiditatibus, diametro in apicibus usuque ad 5 μm , apparent.*

In Camponotus sericeiventris (Guerin) in Faz. Alcídia, Teodoro Sampaio, Est. Sao Paulo, in Brasilia 1969 anno, collecto.

Typus: Fungi thalli una cum insecto in alcoolica solutione conservati sunt atque una cum praeparatis microscopicis in collectione mycologica Wielkopolski Park Narodowy numero 2075 designati asservantur.

Ab Aegeritella superficialis Bał. et Wiś. et forma, et aleuriospororum dimensionibus, et cellularum pullulantium in thalli strato superficiali absentia, et absentia aleuriophorum longorum ramosiorumque differt.

DISCUSSION

Having only dead material and that in a small number it would be impossible to perform more detailed comparable studies on both fungi. Great similarity of both the whole thallus and its separate elements, undoubtedly, constitutes a premise of a very close relationship of the species. *A. superficialis* and *A. lenkoi*. Informing on the occurrence of that fungus on the brasilian ant from the genus *Camponotus* Mayr, we consider that it would be worth-while to perform more detailed studies on the occurrence of similar strains in other regions.

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Aegeritella lenkoi sp. nov. (*Mycophyta*, *Hyphomycetales*),
nowy gatunek epifitycznego grzyba
z brazylijskiej mrówki *Camponotus sericeiventris* (Guerin)

Streszczenie

Opisano nowy gatunek epifitycznego grzyba z mrówki *Camponotus sericeiventris* (Guerin), zebranej w Brazylii. Grzyb, któremu nadano nazwę *Aegeritella lenkoi*, wydaje się być bardzo blisko spokrewniony z występującym w Europie gatunkiem *A. superficialis* Bał. et Wiś.