

Two phytopathogenic hyphomycetes from Canada

Uwe Braun¹ & Vadim A. Mel'nik²

¹ Martin-Luther-Universität, FB. Biologie, Institut für Geobotanik und Botanischer Garten, Herbarium, Neuwerk 21, D-06099 Halle/S., Germany

² V. L. Komarov Botanical Institute, Russian Academy of Sciences, Lab. of Systematics and Geography of Fungi, Prof. Popov street 2, 197376 St. Petersburg, Russia

Braun, U. & V. A. Mel'nik (1995). Two phytopathogenic hyphomycetes from Canada. – *Sydowia* 47 (2): 138–140.

The new species *Pseudocercospora linnaeae* spec. nov., collected in British Columbia on *Linnaea borealis*, is described. *Stenella mitellae* is recorded from the same area on the new host *Tolmiea menziesii*.

Keywords: *Pseudocercospora linnaeae*, *Stenella mitellae*, new host.

Various micromycetes were collected during an excursion in Canada, British Columbia, carried out within the programme of the Fifth International Mycological Congress in 1994. A collection on *Linnaea borealis* L. turned out to be a new species of *Pseudocercospora*. *Stenella mitellae* (Peck) U. Braun was collected on *Tolmiea menziesii* (Pursh) Torr. & A. Gray. This is a new host for this species.

Pseudocercospora linnaeae U. Braun et V. Mel'nik, sp. nov. – Fig. 1.

In foliis emortuis. Caespituli amphigeni, saepe hypophylli, punctiformes, atrobrunnei. Mycelium immersum; hyphae subhyalinae vel pallide brunneae, septatae, ramosae. Stromata substomatalia, 10–50 µm diam., interdum suberumpentia, flavida, olivacea vel brunnea, ex cellulis inflatis 2–6 µm latis composita. Conidiophora fasciculata, divergentia vel densa, per stoma emergentia, recta, subcylindrica vel leniter geniculata-sinuosa, simplicia, 5–25 x 3–5 µm, 0–1-septata, levia, subhyalina, flavo- vel olivaceo-brunnea, sursum pallidiora. Cellulae conidiogenae polyblasticae, sympodiales. Cicatrices conidiales inconspicuae, non incrassatae, non fuscae. Conidia solitaria, subcylindrica-filiformia, acicularia, 25–90 x 2–3.5 µm, obscure septata (saepe 3–8 septa), simplicia, recta, interdum ramosa vel geniculata, levia, subhyalina vel pallide flava, viridula vel olivacea, ad apicem obtusa vel subacuta, basi plus minusve truncata; hila non incrassata, non fusca.

H o l o t y p u s . – CANADA: British Columbia, WSW of Whistler, Brandywine Falls Provincial Park, ca. 450 m alt., mixed natural forest, on *Linnaea borealis* L. (Caprifoliaceae), 18. 8. 1994, V. A. Mel'nik (DAOM 214920).

I s o t y p u s . – HAL.

On brown necrotic leaves. – **C a e s p i t u l i** amphigenous, mostly hypophyllous, punctiform, blackish brown. – **M y c e l i u m** internal, hyphae subhyaline to pale brown, septate, branched, forming

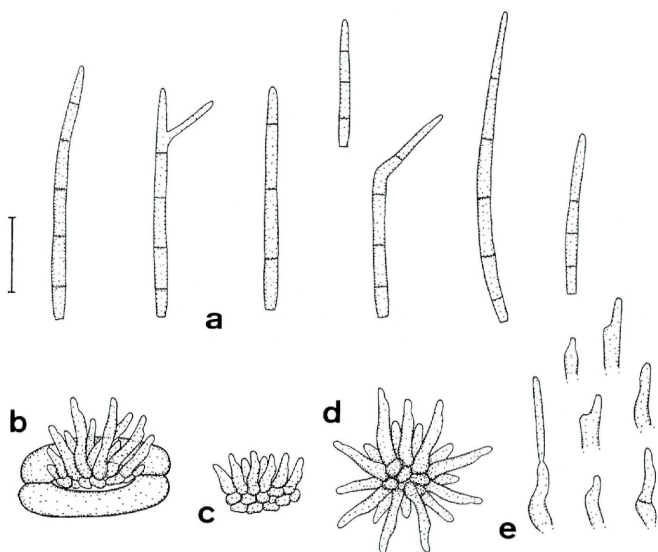


Fig. 1. - *Pseudocercospora linnaeae* sp. nov. - a. conidia. - b. fascicles of conidiophores (emerging through a stoma, in front view and seen from above). - c. conidiophores (the left one with a young conidium). - Bar = 20 μ m. U. Braun del.

substomatal stromata, 10-50 μ m diam., occasionally somewhat erumpent, yellowish, olivaceous to brown, composed of swollen hyphal cells, 2-6 μ m wide. - Conidiophores in small to moderately large fascicles, loose to dense, arising from stromata, through stomata, straight, subcylindric to somewhat geniculate-sinuuous, simple, 5-25 x 3-5 μ m, 0-1-septate, smooth, subhyaline to yellowish or olivaceous brown, often pigmented below and paler or almost subhyaline towards the apex. - Conidiogenous cells polyblastic, sympodial; conidial scars inconspicuous, neither thickened nor darkened. - Conidia solitary, subcylindric-filiform, acicular, 25-90 x 2-3.5 μ m, obscurely septate (usually 3-8 septa), simple, straight, occasionally branched or abruptly bent, apex obtuse or subacute, base more or less truncate; hilum unthickened, not darkened.

P. linnaeae is the only species on *Linnaea* belonging to the *Cercospora* complex. *Cercospora abeliae* Katsuki, known from Asia and North America on *Abelia chinensis* R. Br. (Katsuki, 1965; Farr &

al., 1989), is the only comparable species, but it causes definite leaf spots and differs by having subcylindric-obclavate conidia with obconically truncate base.

Stenella mitellae (Peck) U. Braun, Nova Hedwigia 56: 430 (1993).

= *Ramularia mitellae* Peck, Rep. (Annual) New York State Mus. Nat. Hist. 33: 30 (1880).

M a t e r i a l e x a m i n e d . – CANADA: British Columbia, WSW of Whistler, Brandywine Falls Provincial Park, ca. 450 m alt., on *Tolmiea menziesii* (Pursh) Torr. & A. Gray (Saxifragaceae), 18.8.1994, V. A. Mel'nik (HAL, LE).

This is the first record of this species on *Tolmiea menziesii*. *S. mitellae* is known on various species of the saxifragaceous genera *Heuchera* and *Mitella* from North America (Braun, 1995).

References

- Braun, U. (1995). A monograph of *Cercospora*, *Ramularia* and allied genera (phytopathogenic hyphomycetes). Vol. 2. – IHW Verlag, Eching, in press.
- Farr, D. F., G. B. Bills, P. G. Chamuris & A. Y. Rossman (1989). Fungi on Plants and Plant Products in the United States. – APS Press, St. Paul, MN, 1252 pp.
- Katsuki, S. (1965). Cercosporae of Japan. – Trans. mycol. Soc. Japan, Extra Issue 1: 1–100.

(Manuscript accepted 20th June 1995)

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Sydowia](#)

Jahr/Year: 1995

Band/Volume: [47](#)

Autor(en)/Author(s): Braun Uwe, Mel'nik Vadim A.

Artikel/Article: [Two phytopathogenic hyphomycetes from Canada. 138-140](#)