



Talpapellis solorinae sp. nov. and an updated key to the species of *Talpapellis* and *Verrucocladosporium*

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The genus *Talpapellis* Alstrup & M.S.Cole (1998: 227) was introduced for a lichenicolous hyphomycete on *Peltigera venosa* collected in British Columbia, Canada (Alstrup & Cole 1998). Details of the conidiogenesis, the generic affinity and application of this genus name have previously been unclear and largely confused. Based on a revision and reassessment of type material and examination of additional collections from North America and Asia, Heuchert *et al.* (2014) published an amended circumscription of *Talpapellis*, discussed the conidiogenesis of this genus, described a new variety of *T. peltigerae* Alstrup & M.S.Cole (1998: 227) and provided a key to the recognised taxa of *Talpapellis* and confusable species of *Verrucocladosporium* K.Schub. *et al.* (Crous *et al.* 2007, Braun *et al.* 2009).

During the course of field work in connection with a project dealing with lichenicolous fungi of the Caucasus (Zhurbenko & Kobzeva 2014), thalli of *Solorina crocea* with conspicuous colonies of an asexual ascomycete have been encountered. General habit and micro-morphological traits bear resemblance to *Talpapellis*. A closer examination and comparison with *T. peltigerae* and its two varieties revealed a new undescribed species.

Material and methods

Material of the treated species was mounted in distilled water and examined by means of light microscopy (Olympus BX 50, Zeiss Stemi 2000–CS and Axio Imager A1 equipped with Nomarski differential interference contrast optics). Digital pictures were made by B. Heuchert with a ZEISS Axioskop 2 with ZEISS AxioCam HR and occasionally optimised with the software ZEISS AxioVision. Freehand drawings were carried out on the basis of microscopic preparations by B. Heuchert. Measurements were taken from water mounts, with 30 measurements taken for each structure, the 95 % confidence intervals were determined and extreme values given in parentheses. The examined material is housed in the mycological herbarium of V. L. Komarov Botanical Institute in St.-Petersburg, Russia (LE).

Results and discussion

Talpapellis solorinae Zhurb., Heuchert & U.Braun, sp. nov.

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Figs. 1–2

Diagnosis:—Differs from *Talpapellis peltigerae* var. *rossica* which has longer unbranched conidiophores, (18–)30–65(–80) µm and usually aseptate, wider conidia, (3–)4–5.5(–6) µm.

Type:—RUSSIA. Republic of Adygeya: Northwest Caucasus, Caucasian State Nature Biosphere Reserve, north-western spur of Mt. Tybga near 17th km of trail from Guzeripl, 43°52'48" N, 40°15'59" E, elev. 2480 m, alpine vegetation, on living thallus of *Solorina crocea*, 4 August 2014, M. P. Zhurbenko 14148 (holotype LE 264367). Accompanied by *Pyrenidium actinellum* Nyl.

Colonies on discoloured host thalli, forming small to large black patches or covers on the upper surface of the host lobes, loose to mostly dense, velvety. *Mycelium* immersed, occasionally exposed; hyphae sparingly branched, 1.5–4 µm wide, septate, subhyaline to medium brown, smooth, thin-walled, up to 0.3 µm, forming small, loose stromatic hyphal aggregations composed of swollen hyphal cells, to 6 µm diam., but true stromata lacking. *Conidiophores* solitary, arising from internal