

***Microbotryum scorzonerae* (Microbotryaceae),
new to China, on a new host plant**

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Abstract — A new Chinese record, *Microbotryum scorzonerae* on *Scorzonera albicaulis*, is provided. It was collected from Saihanwula National Nature Reserve, Inner Mongolia Autonomous Region, in northern China.

Key words — *Microbotryales*, *Microbotryum piperi*, smut fungi, taxonomy

A specimen of *Microbotryum* on *Scorzonera albicaulis* was collected from Saihanwula National Nature Reserve, Inner Mongolia Autonomous Region, in the north of China in 2008. This species, which is parasitic on floral heads of host plants belonging to the *Asteraceae* family, has been identified as *Microbotryum scorzonerae*, a species new to China. *Microbotryum scorzonerae* has never previously been reported with *S. albicaulis* as host.

Microbotryum scorzonerae (Alb. & Schwein.) G. Deml & Prillinger,

in Prillinger, et al., Bot. Acta 104(1): 10, 1991.

FIGS. 1–4

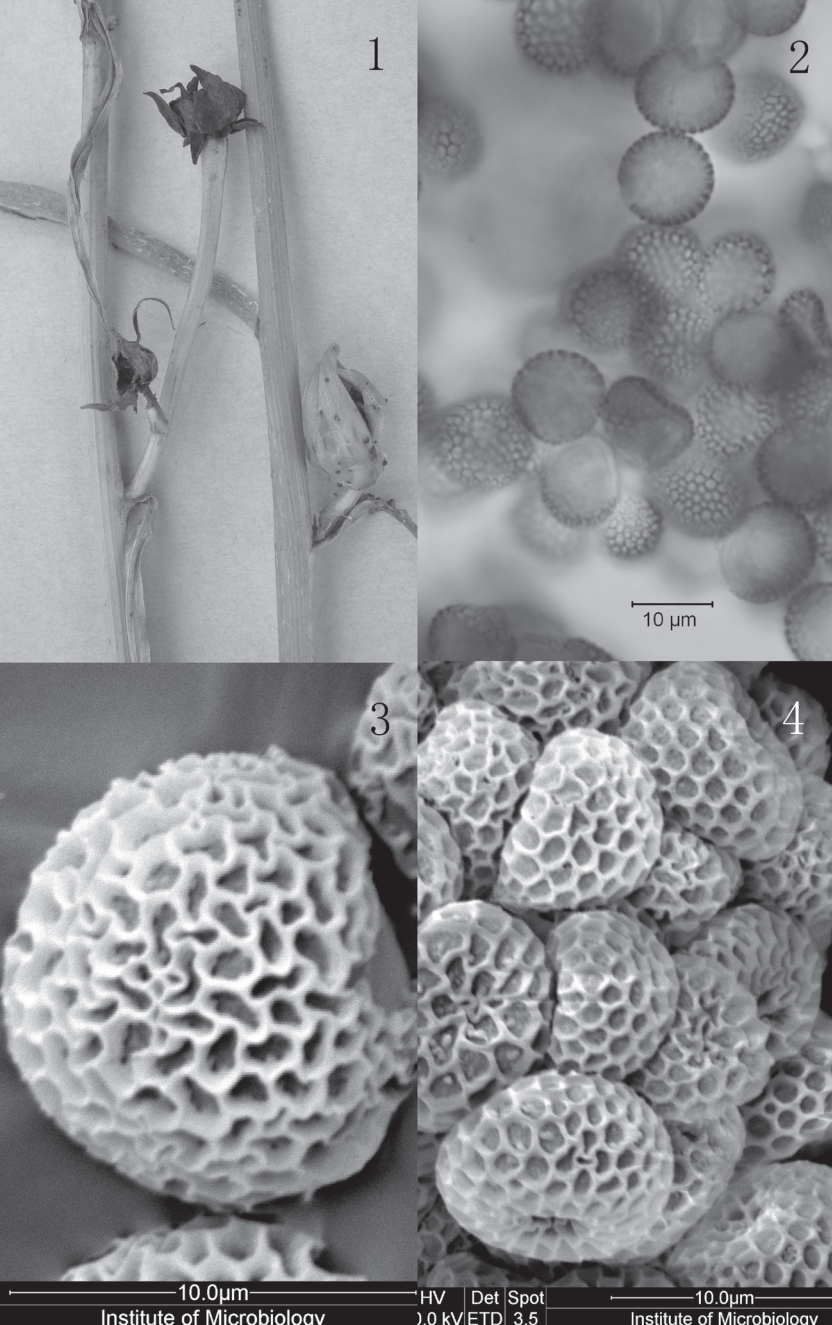
≡ *Uredo tragopogonis* β *scorzonerae* Alb. & Schwein., Consp. Fung. Lusat. p. 130, 1805.

≡ *Ustilago scorzonerae* (Alb. & Schwein.) J. Schröt., in Cohn, Krypt.-Fl. Schlesien 3(1): 274, 1887.

≡ *Bauhinus scorzonerae* (Alb. & Schwein.) R.T. Moore, Mycotaxon 45: 99, 1992.

Sori in the floral heads. Spore mass powdery, blackish-violet. Ustilospores when young agglutinated in loose, irregular groups, later single, globose, subglobose,

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ovoid, ellipsoidal or slightly irregular, 10–16 × 8.5–12.5 µm, light brownish-violet, sometimes paler at one side; wall finely reticulate, meshes 1–3 µm in diameter, muri 1–1.5 µm high, a few warts appear on the lower part of the muri as seen by SEM.

SPECIMEN EXAMINED —On *Scorzonera albicaulis* Bunge (*Asteraceae*): China, Inner Mongolia, Chifeng, Saihanwula, 2.IX.2008, T.Z. Liu, H.M. Tian & C. Sun 1406, HMAS 196087.

Previously, four species of smut fungi — *Entyloma guaraniticum* Speg. on *Bidens pilosa* L., *Entyloma dahliae* Syd. & P. Syd. on *Dahlia pinnata* Cav., *Entyloma compositarum* Farl. on *Senecio formosanus* Kitam. and *Thecaphora trailii* Cooke on *Saussurea japonica* (Thunb.) DC. — have been reported as occurring on host plants in the family *Asteraceae* in China (Guo 1991, 2000, 2009). Many more smut species remain to be discovered in the future in China. To date, eleven species of smut fungi have been recorded in Saihanwula National Nature Reserve (Zhang & Guo 2003), including another *Microbotryum* species, *M. piperi* (G.P. Clinton) Vánky on *Polygonum divaricatum* L.

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FIGS. 1–4. *Microbotryum scorzonerae* on *Scorzonera albicaulis* (HMAS 196087). 1. Sori. 2. Ustilospores agglutinated in loose, irregular groups as seen by LM. 3–4. Ustilospores as seen by SEM.

