

***Septobasidium maesae* sp. nov. (Septobasidiaceae)
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Abstract—A new species, *Septobasidium maesae* on *Maesa perlarius* associated with *Pinnaspis* sp. and *Diaspidiotus* sp. (*Diaspididae*), is described. It was collected from Wuzhi Mountain, Hainan Province, China.

Key words—*Pucciniomycetes*, *Septobasidiales*, taxonomy

An undescribed *Septobasidium* species on *Maesa perlarius* was found in Wuzhi Mountain National Nature Reserve in Hainan Province, tropical China in November 2008. It was associated with two kinds of scale insects, *Pinnaspis* sp. and *Diaspidiotus* sp., belonging to the family *Diaspididae*. This species is similar to *Septobasidium filiforme* Couch ex L.D. Gómez & Henk (Gómez & Henk 2004) but differs in producing thicker basidiomata, only 4-celled basidia, and a single layer including pillar and the hymenium. *Septobasidium filiforme* has 4-celled, 3-celled, or 2-celled basidia and a number of layers including pillars and the hymenia. In addition, the new species has brown coloured basidia and basidiospores, whereas *S. filiforme* has hyaline basidiospores. We describe the new species as:

***Septobasidium maesae* C.X. Lu & L. Guo, sp. nov.**

FIGS. 1–7

MYCOBANK MB 513274

Basidioma resupinatum, perenne, 1.5–26 × 0.8–6 cm diam., cinerascensibrunneum, margine albidum, determinatum, 1–4 mm latum; superficie laeve, maturitate rimosum separabileque, tunc stratum columnarum emergens, in sectione primum 465–525 µm crassum, deinde 1105–1720 µm crassum, e partibus tribus compositum: 1) subiculum 15–

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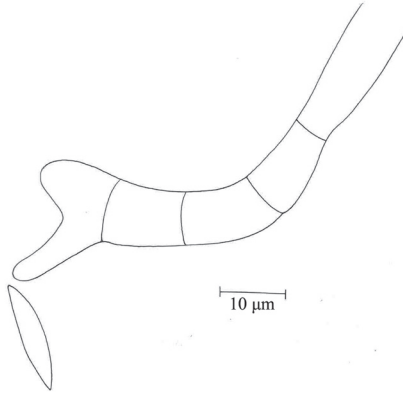


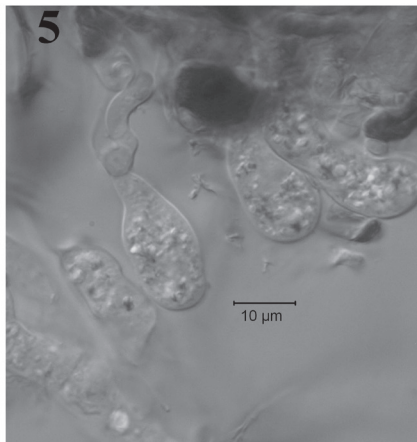
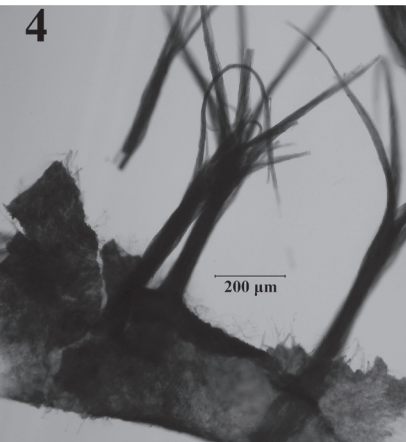
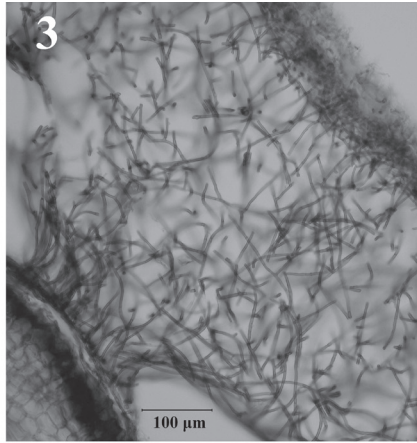
FIG. 1. A basidium and a basidiospore of *Septobasidium maesae* (HMAS 184981, holotype).

27 μm crassum; 2) pars columnae usque ad 1030–1460 μm longa; 3) hymenium 60–235 μm crassum; probasidia obovoidea 10–15 \times 6–9 μm , hyalina vel brunneola, persistentia; basidia cylindrica, curvata, 4-cellularia, 28–55 \times 7.5–11.5 μm , brunnea; sterigmata conica, ca. 12 μm longa; basidiosporae fusiformes, 18–19.5 \times 4–5 μm , brunneolae.

TYPE: On *Maesa perlaris* (Lour.) Merr. (*Myrsinaceae*): China, Hainan, Wuzhi Mountain, alt. 700 m, 28.XI.2008, S.H. He, Y.F. Zhu & L. Guo 2515, HMAS 184981 (holotype), associated with *Pinna sp.* and *Diaspidiotus sp.* (*Diaspididae*).

Basidiomata on branches and trunks, resupinate, perennial, 1.5–26 \times 0.8–6 cm in diam., greyish-brown; margin white, determinate, 1–4 mm wide; surface smooth, becoming cracked and peeled off after maturity; usually the cracked edges curling back, a layer of brown pillars emerging. In section 465–525 μm thick in young stage, up to 1105–1720 μm thick in old stage, composed of three layers: (1) a subiculum, 15–27 μm thick; (2) a region of pillars with pillars stubby, branched outwards at the top in young stage; hyphae of young pillars 2.5–3 μm thick, becoming slender and tall, up to 1030–1460 μm long and sparingly branched in old stage; hyphae of mature pillars 5–6 μm thick, (3) hymenium 60–235 μm thick in maturity; probasidia obovoid, 10–15 \times 6–9 μm , hyaline or brownish; probasidial cell remaining after the formation of the basidia; basidia cylindrical, curved, 4-celled, 28–55 \times 7.5–11.5 μm , brown; sterigmate conical, brown, up to 12 μm long; basidiospores fusiform, 18–19.5 \times 4–5 μm , brown. Haustoria consisting of irregularly coiled hyphae.

FIGS. 2–7 (right). *Septobasidium maesae* (HMAS 184981, holotype). 2. Basidiomata on branches. 3. Section in young stage. 4. Pillars in old stage. 5. Probasidia. 6. Hymenium. 7. Basidium with a persisting probasidium, sterigma, and basidiospore.



To date, 15 species of *Septobasidium* are reported in China (Sawada 1931, 1933, Couch 1938, Teng 1963, Tai 1979, Kirschner & Chen 2007). They are *Septobasidium acaciae* Sawada, *S. albidum* Pat., *S. bogoriense* Pat., *S. carbonaceum* Pat., *S. carestianum* Bres., *S. citricola* Sawada, *S. formosense* Couch ex L.D. Gómez & Henk, *S. humile* Racib., *S. leucostemum* Pat., *S. parlatoriae* Sawada, *S. petchii* Couch. ex L. D. Gómez & Henk, *S. reinkingii* Couch ex L.D. Gómez & Henk, *S. sinense* Couch ex L.D. Gómez & Henk, *S. tanakae* (Miyabe) Boedijn & B.A. Steinm., and the new species in this paper. In China there are undoubtedly many species of *Septobasidium* yet to be discovered. Extensive collecting of the genus is required for this vast country, especially in tropical and subtropical regions.

Acknowledgements

The authors would like to express their deep thanks to Drs Eric H.C. McKenzie (Auckland, New Zealand) and H. Masuya (Ibaraki, Japan) for serving as pre-submission reviewers, to Dr. Shaun Pennycook (Auckland, New Zealand) for nomenclatural review, to Prof. Zhuang Jianyun (Institute of Microbiology, Chinese Academy of Sciences) for Latin corrections, to Mr. Cao Ziyu (Institute of Botany, Chinese Academy of Sciences) for identifying the host plant, to Prof. Wu Sanan (Beijing Forestry University) for identifying the scale insects. This study was supported by the National Natural Science Foundation of China (No. 30499340) and the Ministry of Science and Technology of the People's Republic of China (No. 2006FY110500-5).

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