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***Septobasidium sichuanense* sp. nov. (Septobasidiaceae) from China**SUZHEN CHEN^{1,2} & LIN GUO^{2*}¹*Ocean University of China, Qingdao 266003, China*²*Key Laboratory of Systematic Mycology and Lichenology Institute of Microbiology,
Chinese Academy of Sciences, Beijing 100101, China** CORRESPONDENCE TO: *Chensz2009@gmail.com* & **guol@im.ac.cn*ABSTRACT — A new species, *Septobasidium sichuanense*, is described. It was collected from Sichuan Province, China.KEY WORDS — *Pucciniomycetes*, *Septobasidiales*, taxonomyA species of *Septobasidium*, recently collected from Sichuan Province, is described here as new:***Septobasidium sichuanense* S.Z. Chen & L. Guo, sp. nov.**

FIGS. 1–7

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Basidiomata resupinata, 0.4–6.5 cm longa, 0.3–4 cm lata, alba vel cinnamomeo-brunnea, margine determinata, superficie laevia, in sectione 240–1300 µm crassa. Subiculum brunneum, 15–40 µm crassum. Columnae brunneae, primum 30–60 µm altae, deinde 120–290 µm altae, 15–250 µm latae. Strata hypharum 40–620 µm alta. Interdum hyphae repullulantes, super hymenium stratum hypharum secundum 410–650 µm altum formantes. Hymenium 45–90 µm crassum. Basidia cylindrica vel clavata, recta vel curvata, 2-cellularia, 17–27 × 6–7.5 µm, hyalina vel brunneola. Sine probasidio. Basidiosporae non visae. Haustoria ex cellulis globularibus et hyphis irregulariter spiralibus constantia.

TYPE: On *Punica granatum* L. (*Punicaceae*): China, Sichuan, Mianning, alt. 1873 m, 17.IX.2010, Y.F. Zhu & L. Guo 368, HMAS 242046 (holotype), associated with *Lepidosaphes* sp. (*Diaspididae*).

Basidiomata on trunks and branches, resupinate, 0.4–6.5 cm long, 0.3–4 cm wide, patches frequently confluent, white or cinnamon-brown; margin determinate, surface smooth. In section 240–1300 µm thick. Subiculum brown, 15–40 µm thick. Pillars brown, 30–60 µm high in the young stage and 120–290 µm high in the older stage, 15–250 µm wide. Hyphal layer 40–620 µm high. Hymenial layer 45–90 µm thick, sometimes from hymenial layer the fungal hyphae renew growth to form a second layer, 410–650 µm high. Basidia arising

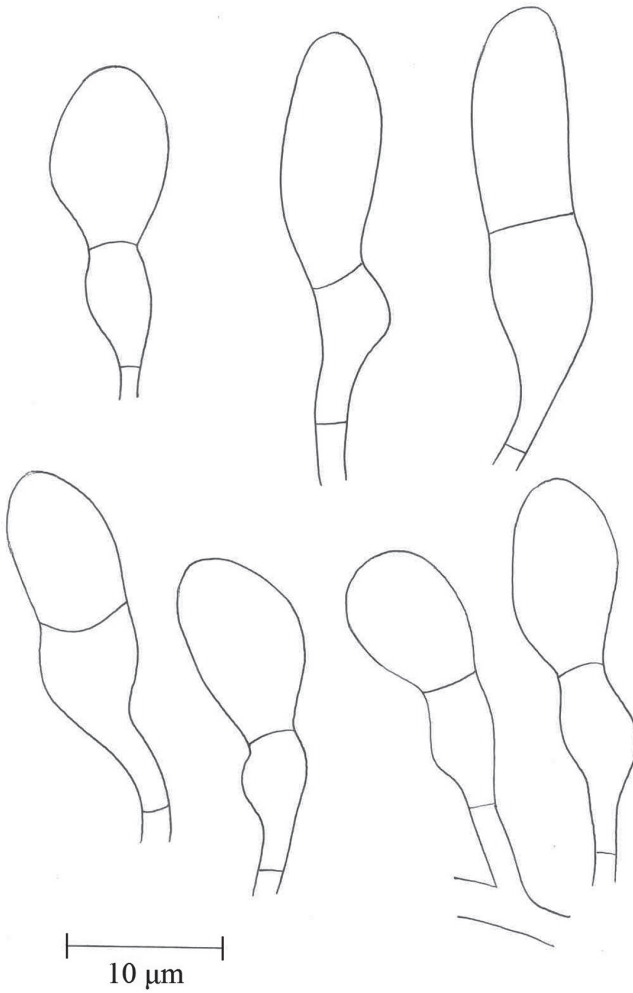
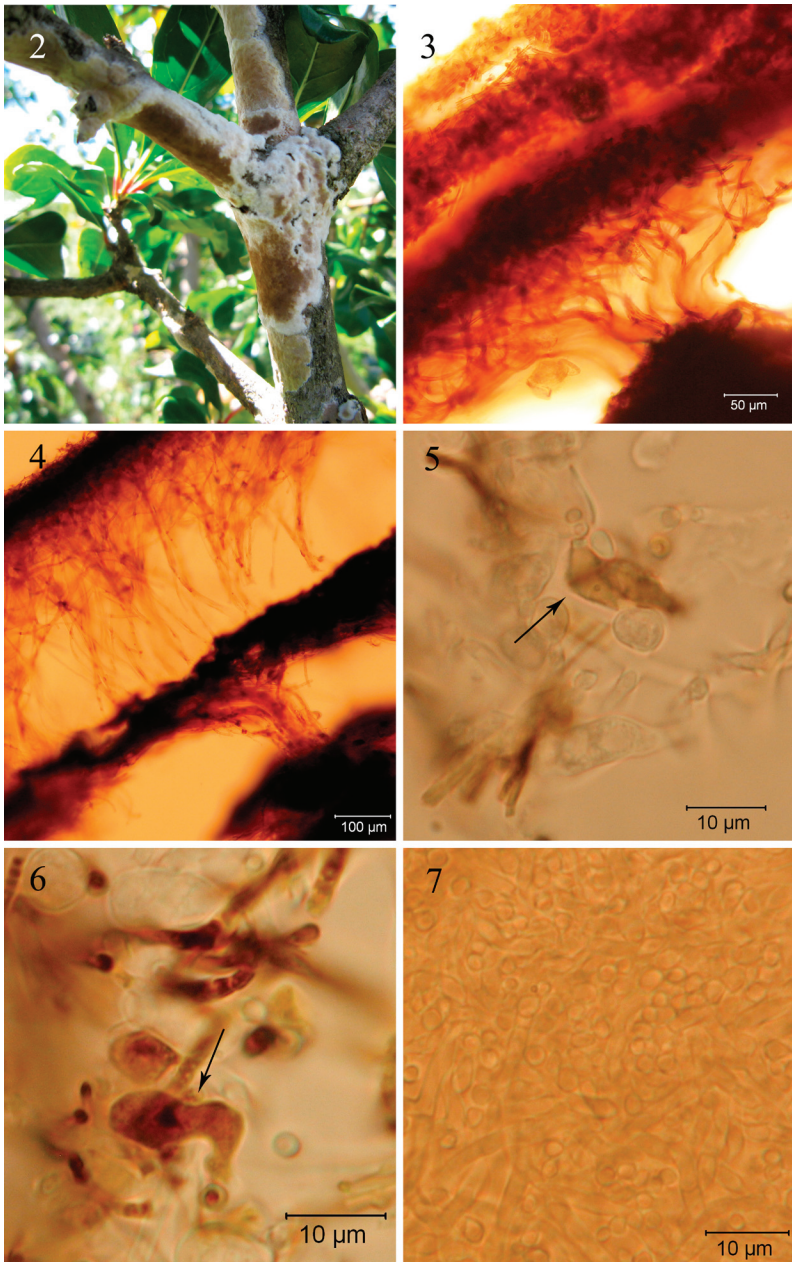


FIG. 1. Basidia of *Septobasidium sichuanense* (HMAS 242046, holotype).

directly from the hyphae without a probasidial cell, cylindrical or clavate, often constricted at the septum, straight or curved, 2-celled, $17\text{--}27 \times 6\text{--}7.5$ μm , hyaline or brownish. Basidiospores not seen. Haustoria consisting of both globose cells and irregularly coiled hyphae, hyaline.

ADDITIONAL SPECIMEN EXAMINED: On *Cotoneaster franchetii* Bois (*Rosaceae*): China, Sichuan, Yanyuan, Mianya, alt. 3164 m, 13.IX.2010, Y.F. Zhu & L. Guo 322, HMAS 250986.



FIGS. 2–7. *Septobasidium sichuanense* (HMAS 242046, holotype).
2. Basidiomata on trunk. 3–4. Sections of basidiomata. 5–6. Basidia (arrows). 7. Haustoria.

REMARKS: Morphologically, *Septobasidium sichuanense* is similar to *S. patouillardii* Burt in having 2-celled basidium but differs in forming rather regular patches of basidiomata with a smooth surface and not cracked in the older parts, lacks a purplish tint, and has thick pillars. *Septobasidium patouillardii* forms irregular patches with cracks in the older surfaces, is velvety with a purplish tint, and has slender pillars, 20–54 µm wide and in section is 300–460 µm thick.

To date, 29 species of *Septobasidium* have been reported in China (Sawada 1933, Couch 1938, Teng 1963, Tai 1979, Kirschner & Chen 2007, Lu & Guo 2009a,b,c, 2010a,b,c, Lu et al. 2010), including the new species reported in this paper.

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Literature cited

- Couch JN. 1938. The Genus *Septobasidium*. Univ. of North Carolina Press, Chapel Hill. 480 p.
- Kirschner R, Chen CJ. 2007. New reports of two hypophyllous *Septobasidium* species from Taiwan. *Fung. Sci.* 22: 39–46.
- Lu CX, Guo L. 2009a. *Septobasidium maesae* sp. nov. (*Septobasidiaceae*) from China. *Mycotaxon* 109: 103–106. doi:10.5248/109.103
- Lu CX, Guo L. 2009b. Two new species of *Septobasidium* (*Septobasidiaceae*) from China. *Mycotaxon* 109: 477–482. doi:10.5248/109.477
- Lu CX, Guo L. 2009c. *Septobasidium annulatum* sp. nov. (*Septobasidiaceae*) and *Septobasidium kameii* new to China. *Mycotaxon* 110: 239–245. doi:10.5248/110.239
- Lu CX, Guo L. 2010a. Three new species of *Septobasidium* (*Septobasidiaceae*) from Gaoligong Mountains in China. *Mycotaxon* 112: 143–151. doi:10.5248/112.143
- Lu CX, Guo L. 2010b. Two new species of *Septobasidium* (*Septobasidiaceae*) and *S. pallidum* new to China. *Mycotaxon* 113: 87–93. doi: 10.5248/113.87
- Lu CX, Guo L. 2010c. Two new species of *Septobasidium* (*Septobasidiaceae*) from Hainan province in China. *Mycotaxon* 114: 217–223. doi: 10.5248/114.217
- Lu CX, Guo L, Wei JG, Li JB. 2010. Two new species of *Septobasidium* (*Septobasidiaceae*) from southern China. *Mycotaxon* 111: 269–274. doi:10.5248/111.269
- Sawada K. 1933. Descriptive catalogue of the Formosan fungi. Part VI. Rep. Dept. Agric. Govt. Res. Inst. Formosa 61: 1–99.
- Tai FL. 1979. *Sylloge Fungorum Sinicorum*. Science Press, Beijing. 1527 p.
- Teng SC. 1963. *Fungi of China*. Science Press, Beijing. 808 p.