

Two species new for China of the lichen genus *Pertusaria*

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Abstract: Two species of *Pertusaria*, *P. variolosa* and *P. lacericans* are reported as new for China. A detailed description according to morphology, anatomy and chemistry of the two species are given in this paper. The specimens examined are deposited in the Plant Herbarium of Shandong Normal University (SDNU) and the Lichen Section, Herbarium of Mycology, Academia Sinica (HMAS-L).

Key words: *Pertusaria*; new record; taxonomy

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1 Materials and methods

Specimens from the following herbaria Shandong Normal University (SDNU) and the Lichen Section, Herbarium of Mycology, Academia Sinica (HMAS-L) were examined.

For morphological and anatomical studies, a dissecting microscope (Motic or Olympus SZ40) and a compound microscope (Olympus BX50) were used for all materials. Hand sections were made and examined with water as the mounting medium for measurement of spore size. The chemical constituents were identified using spot reactions, UV-bulb, and thin layer chromatography using solvent T-D-A (Culberson 1972; Culberson & Johnson 1982).

2 Results

Two species, *P. variolosa* (Klempelh.) Vain. and *P. lacericans* A. W. Archer, are new records for China. The chemistry and detailed morphological descriptions of the new records are given in this paper.

2.1 *Pertusaria variolosa* (Klempelh.) Vain. Acta Soc. Fauna et Fl. Fenn. 7:106(1890) (Fig. 1)

Thallus greenish-yellow to yellowish-gray, thick-

ish, isidia and soredia absent, surface cracked or wrinkled-granulate, papillate, fertile verrucae subglobose, 0.3—1.0 mm in diam, sorediate. Apothecia 1 or several per verruca, with a white pulverulent disc and irregular margin. Spores 1 in each ascus, sometimes immature, cylindrical, (135—200) $\mu\text{m} \times$ (40—44) μm . Spore wall single, 3—8 μm thick.

Chemistry: K + yellow, somewhat brown, C-, KC-, Pd + orange-red; fumarprotocetraric acid.

Pertusaria variolosa is characterized by the papillate thallus and the presence of fumarprotocetraric acid.

Specimens examined: Sichuan, Maerkang, Mengbishaan, X. Y. Wang et al. 11506-1 (HMAS-L); Anhui, Mt. huangshan, J. D. Zhao et al. 5635 (HMAS-L); Yunnan, Jianchuan, Shibaoshan, 46, 47 (SDNU).

2.2 *Pertusaria lacericans* A. W. Archer, Mycotaxon 41(1):230(1991) (Fig. 2)

Thallus greenish, somewhat cracked, surface smooth and shiny, pustulate, isidia and soredia absent, the fertile verrucae opening at the top to reveal the white underlying medulla, ca. 0.2—1.0 mm in diam. Apothecia disciform, in conspicuous, immersed in larger verrucae. Spores rare, 1 per ascus, elongate ellipsoid, (122—170) $\mu\text{m} \times$ (27—44) μm . Spore wall smooth,

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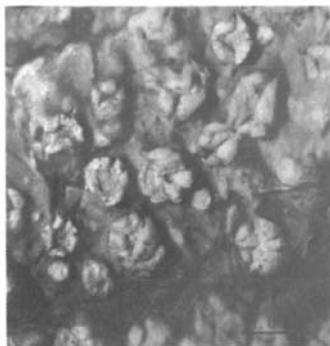


Fig. 1 The morphology of the species *Pertusaria variolosa* (Klempelh.) Vain.

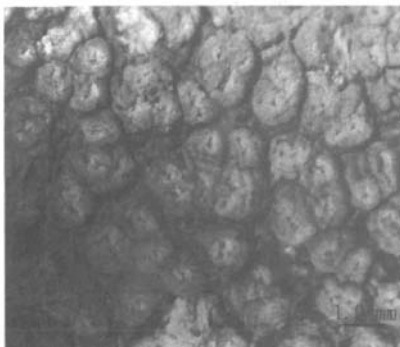


Fig. 2 The morphology of the species *Pertusaria lacericans* A. W. Archer

unzoned and untrimmed, ca. 1 μm thick.

Chemistry: K + yellowish, KC + red-brown, C + yellowish, Pd + orange-red; protocetraric acid.

Pertusaria lacericans is characterized by the greenish thallus, the open verrucae and the presence of protocetraric acid. It occurs on bark at an elevation of 1 800 to 3 100 m. The species is similar to *P. lace-*

rans, *P. sublacericans* and *P. macloviana*. *P. lacericans* contains picrolichenic acid (KC + violet). *P. sublacericans* differs in containing norstictic (K + red). *P. macloviana* is saxicolous.

Specimens examined: Lushui, Pianma, X. Y. Wang *et al.* 1818 (HMAS-L); Weixi, Xiyanmian, X. Y. Wang *et al.* 3519 (HMAS-L); Fugong, Mt. Qiaomigulu, J. J. Su 1192, 1338 (HMAS-L); Gongshan, Dongshaofang, J. J. Su 2153 (HMAS-L); Baoshan, Xishanliangzi, X. Y. Wang *et al.* 1630 (HMAS-L).

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中国鸡皮衣属地衣新记录种

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摘 要: 报道了采自云南鸡皮衣属地衣的两个中国新记录种, 即瘤疣鸡皮衣和撕裂鸡皮衣, 在形态学、解剖学和化学方面对它们进行了描述, 此外, 还提供了其形态特征照片。本研究中所用的标本保存于山东师范大学植物标本室(SDNU)和中国科学院微生物研究所地衣标本馆。

关键词: 鸡皮衣属; 新记录种; 分类

中国鸡皮衣属地衣新记录种

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