

海南蕨类植物新记录

严岳鸿 秦新生 邢福武* 陈红锋 黄忠良

(中国科学院华南植物园, 广东广州 510650)

摘要: 报道海南岛产 7 种蕨类植物新记录, 即普通铁线蕨 (*Adiantum edgeworthii*)、光脚短肠蕨 (*Allantodia doederleinii*)、岭南铁角蕨 (*Asplenium sampsoni*)、毛轴碎米蕨 (*Cheilosoria chusana*)、藤蕨 (*Lomariopsis cochinchinensis*)、网脉海金沙 (*Lygodium subareolatum*)、翠绿凤尾蕨 (*Pteris longipinnula*)。凭证标本均保存在中国科学院华南植物研究所标本馆 (IBSC)。

关键词: 植物区系; 蕨类植物; 新记录; 海南岛

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New Records for Ferns from Hainan Island, China

YAN Yue-hong QIN Xin-sheng XING Fu-wu* CHEN Hong-feng HUANG Zhong-liang

(South China Botanical Garden, the Chinese Academy of Sciences, Guangzhou 510650, China)

Abstract: Seven new recorded species of ferns from Hainan Island are reported. They are *Adiantum edgeworthii*, *Allantodia doederleinii*, *Asplenium sampsoni*, *Cheilosoria chusana*, *Lomariopsis cochinchinensis*, *Lygodium subareolatum* and *Pteris longipinnula*. All the specimens examined are preserved in Herbarium of South China Institute of Botany, the Chinese Academy of Sciences (IBSC).

Key words: Flora; Pteridophytes; New record; Hainan island

Hainan island is located at the north of tropical Asia with a total area of 34 000 km², of which one-third is mountainous. Hainan has a tropical monsoon climate. It is warm and moist in the east of the island, and dry in the west. The mean annual rainfall is between 1 500 and 2 000 mm, and the mean annual temperature is 23-35°C^[1].

Hainan island, separated from the continent in early Quaternary, has plenty of endemic species^[2] including ferns^[3]. Many botanists collected ferns from Hainan since the first collection of Dahl obtained in 1800^[4], all specimens were reviewed in Flora Kainantensis^[4] and Flora Hainanica^[5], in which 237 and 362 ferns were recorded, respectively. Hereafter, more studies on Hainan fern flora^[3, 6-19], ecology^[20], systematics^[21, 22], and many new ferns^[6, 7, 23, 24] were reported.

About 500 species, belonging to 140 genera and 54 families in Ching's system^[25], were recorded from Hainan. However, there are still many ferns unknown to Hainan. This paper presents 7 fern species newly recorded from Hainan based on our recent investigation and specimens collected in the past.

1. *Adiantum edgeworthii* Hook. Sp. Fil. 2: 14, t. 81 B, 1851; Fu, S. H. Illustr. Treat. Princ. Chin. Pl.: Pterid. 91, f. 12. 1957; Fl. Reip. Pop. Sin. 3(1): 191. f. 47; 10-12. 1990.

Specimens examined: Xing, F. W. s. n., April 5, 1989. On the naked limestone in Wangxia (王下), Changjiang(昌江).

Distribution: China (Hainan, Taiwan, Yunnan, Sichuan, Xizang, Shandong, Henan, Hebei, Beijing

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* Corresponding author

and Gansu), Vietnam, north Burma, northwest India, Nepal, Japan and Philippines. New record to Hainan.

2. *Allantodia doederleinii* (Luerss.) Ching in Acta Phytotax. Sin. **9**(1): 47. 1964; Fl. Fujian. **1**: 106. 1982. Fl. Reip. Pop. Sin. **3**(2): 388. t. 85. f.4–6. 1999. — *Asplenium doederleinii* Luerss. In Engl. Bot. Jahrb. **4**: 358. 1883.— *Diplazium doederleinii* (Luerss.) Makino in C. Chr., Ind. Fil. 231. 1906; Fu, S. H. Illustr. Treat. Princ. Chin. Pl.: Pterid. 121, f. 158. 1957.

Specimens examined: Xing, F. W. s. n., April 10, 1989. Under forest at the peak of Five Finger Mountain(五指山), Qiongzong(琼中).

Distribution: China (Hainan, Guangdong, Fujian, Hong Kong, Taiwan, Guangxi, Hunan, Zhejiang, Sichuan, Guizhou and Yunnan), Japan and north Vietnam. New record to Hainan.

3. *Asplenium sampsoni* Hance in Ann. Sci. Nat. V. **5**: 257. 1866; Ching, Ic. Fil. Sinic. **3**: pl. 112. 1935; Fl. Reip. Pop. Sin. **4**(2): 124. t. 20. f. 1–6. 1999.

Specimens examined: Xing et al, 13689, April 1, 2003. In the gap of naked limestone under forest in Wangxia(王下), Changjiang(昌江).

Distribution: endemic to China (Hainan, Guangdong, Guangxi, south Guizhou and Yunnan). New record to Hainan.

4. *Cheilosoria chusana* (Hook.) Ching et Shing in Fl. Fujian. **1**: 84. f. 77. 1982; Fl. Reip. Pop. Sin. **3**(1): 117. f. 33; 1–6. — *Cheilanthes chusana* Hook. Sp. Fil. **2**: 95. t. 106. B. 1852; Fu S. H. Illustr. Treat. Princ. Chin. Pl.: Pterid. 76, f. 93. 1957.

Specimens examined: Xing et al, 13701, April 1, 2003. On the naked limestone mountain in Wangxia(王下), Changjiang(昌江).

Distribution: China (Hainan, Guangxi, Yunnan, Sichuan, Guizhou, Jiangxi, Hunan, Hubei, Jiangsu, Zhejiang, Anhui, Shanxi, Henan, Gansu), Vietnam, Japan and Philippines. New record to Hainan.

5. *Lomariopsis cochinchinensis* Fée, Acrost. **66**, t. 26. 1845; Holtt. in Gard. Bull. Str. Settl. **9**: 266. 1937; Fl. Reip. Pop. Sin. **6**(1): 128. 1999.

Specimens examined: Yan, Y. H. 1319, March 22, 2003. Under forest near stream at Tongtieling(铜铁岭) in Xinglong(兴隆).

Distribution: China (Hainan and Yunnan), Vietnam, Malaysia and Indonesia. New record to Hainan.

6. *Lygodium subareolatum* Christ in Bull. Acad. Géogr. Bot. Mans. **17**: 151. 1907; C. Chr. Ind. Fil. Suppl. **1**: 50. 1912; Fl. Reip. Pop. Sin. **2**: 106. t. 6. f. 1. 1959; Wang. P. S. et Wang. X. Y. Pterid. Fl. Guizhou. 420. 2001.

Specimens examined: Xing et al, 13889, April 1, 2003. Under forest at the limestone mountain, at 500 m, in Wangxia(王下), Changjiang(昌江).

Distribution: China (Guizhou and Hainan) and north Vietnam. Probably distribute in Guangxi^[2a]. New record to Hainan.

7. *Pteris longipinnula* (Wall. List n. 108. 1828, nom. nud.) ex Agardh, Rec. Sp. Gen. Pterid. **19**. 1839; Hook. Sp. Fil. **2**: 179. t. 137 A. 1858; Holttum, Fl. Mal. **2**. Ferns Mal. 404. 1954. Fl. Reip. Pop. Sin. **3**(1): 60. f. 17; 3. 1990. — *Pteris umbraculifera* Mett. in Miq. Ann. Mus. Lugd. Bat. **4**: 97. 1868–1869.

Specimens examined: Li, Z. X. and Xing, F. W. 1500. May 5, 1984. Under forest at Diaoluo Mountain(吊罗山) in Yilian(一连), Danxian(儋县).

Distribution: China (Hainan and south Yunnan), India, Vietnam, Malaysia and Indonesia. New record to Hainan.

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