

中国蔓藓科两新种和五新分布种^{*}

张大成¹, 黎兴江¹, 吴声华²

(1 中国科学院昆明植物研究所隐花植物标本馆, 云南 昆明 650204; 2 台湾自然科学博物馆, 台中 台湾 400)

摘要: 报道我国蔓藓科植物 2 新种: 云南灰气藓 *Aerobryopsis yunnanensis* X. J. Li et D. C. Zhang sp. nov. 芒叶灰气藓 *Aerobryopsis aristifolia* X. J. Li, S. H. Wu et D. C. Zhang sp. nov. 以及 5 个新记录: 波叶毛扭藓 *Aerobryidium crispifolium* (Broth. et Geh.) Fleisch. ex Broth. 膜叶灰气藓 *Aerobryopsis membranacea* (Mitt.) Broth. 纤细灰气藓 *Aerobryopsis subleptostigmata* Broth. et Par., 卷叶悬藓 *Barbella convolvens* (Mitt.) Broth. 斯氏悬藓 *Barbella stevensii* (Ren. et Card.) Fleisch. ex Broth.

关键词: 新种; 云南灰气藓; 芒叶灰气藓; 新记录

中图分类号: Q 949 文献标识码: A 文章编号: 0253-2700(2003)02-0192-05

Two New Species and Five New Records of the Family Meteoriaceae from China

ZHANG Da-Cheng¹, LI Xing-Jiang¹, WU Sheng-Hua²

(1 Kunming Institute of Botany, Chinese Academy of Sciences, Kunming 650204, China;

2 Division of Botany, National Museum of Natural Science, Taiwan 400, China)

Abstract: In the present paper, two new species (*Aerobryopsis aristifolia* and *A. yunnanensis*) and five new records (*Aerobryidium crispifolium*; *Aerobryopsis membranacea* and *A. subleptostigmata*; *Barbella convolvens* and *B. stevensii*) in the Family Meteoriaceae are reported. All holotypes of the new species and cited specimens of the new records are deposited in Cryptogamic Herbarium (HKAS), Kunming Institute of Botany Academia Sinica, Kunming, Yunnan, China.

Key words: New species; *Aerobryopsis aristifolia*; *Aerobryopsis yunnanensis*; New record

Aerobryopsis aristifolia X. J. Li, S. H. Wu et D. C. Zhang sp. nov. (Fig. 1: 1—13) 芒叶灰气藓

Species nova *A. cochlearifolia* Dix. affinis sed differt foliis caulinis quam eis ramorum majoribus; foliis e medio usque ad partem superiorem caulis prodeuntibus cellulis longioribus lineari-rhomboides vel vemiculatis instructis; foliis ramorum apice in acumen gracile ex cellulis 5—18 uniseriatis constans saepissime attenuatis.

Holotype: China, Yunnan Prov. Xishuangbanna, Menglun, from Botanic Garden 52—53 km rain forest valley, 600 m alt., 23. VIII. 1989, Li Zhang 859 (HKAS: 25641).

Planta gracilis, mollissima, lutescenti-viridis, nitidiuscula. Caulis elongatus 7—14 cm longus; ramis laxiusculis elongatis, pendulis 1.3—4.5 cm longis, remote ramulosis, ramulis simplicibus, brevibus, apice obtusis 2.5—6 mm

* 基金项目: 国家自然科学基金资助项目 (39391800)

收稿日期: 2002-08-22, 2002-08-27 接受发表

作者简介: 张大成 (1954-) 男, 实验师, 主要从事苔藓植物的分类研究。

longis. Folia dimorpha, caulium laxa, triangulato-lanceolata ad 2×0.8 mm, basi decurrentia, apice sensim acuta, margine non convoluta serrulatis costis tenuibus infra apicem folii evanidis; cellulis saepe lineari-rhomboidalibus plerumque papilla unica, basilaribus brevioribus et laxioribus plerumque non papilla. Folia ramea patula sed densa, ovato-lanceolata, $1-1.7 \times 0.5-0.7$ mm, basi decurrentia, apice in acumen piliforme ex cellis $5-18$ uniseriatis constans attenuata vel breviter acuminata, margine serrulatis supra medium plus minusae undulatis costis tenuibus, infra

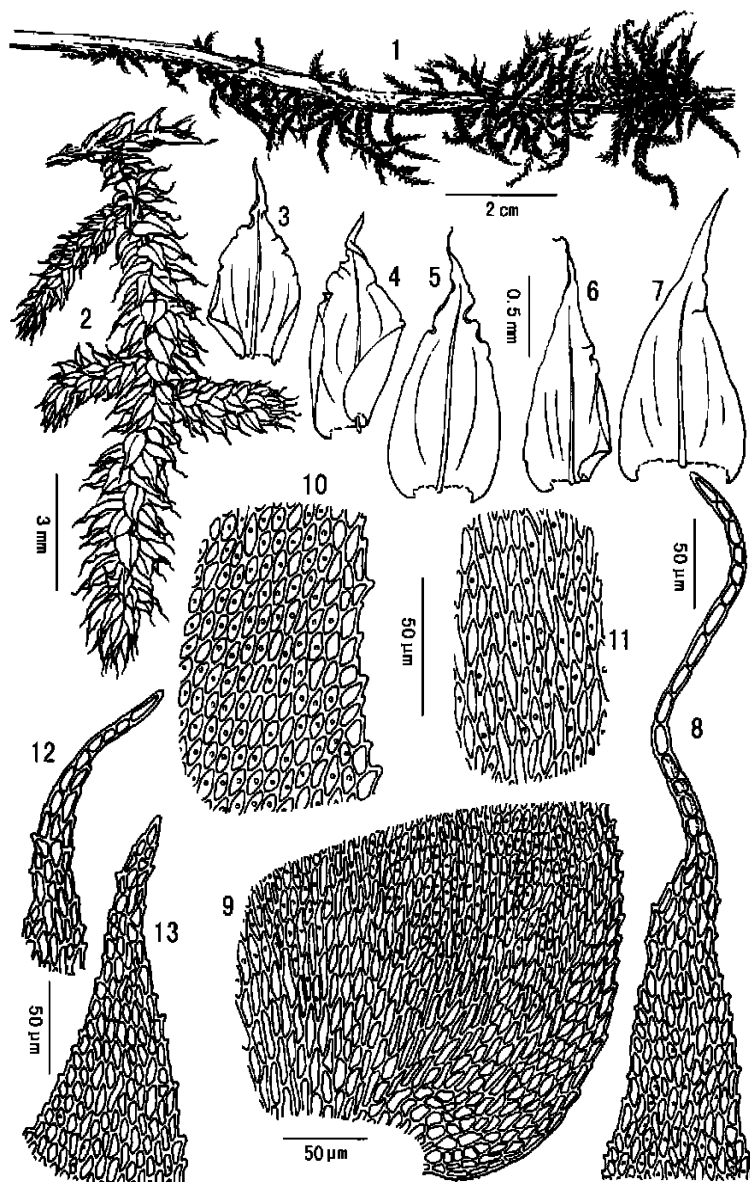


Fig. 1 *Aerbryopsis aristifolia* (Holotype) 1. Plants 2. Branches 3-6. Branch leaves 7. Stem leaf 8, 12, 13. Apical cells of branch leaves 9. Basal cells of branch leaf, 10. Medial cells of branch leaf, 11. Medial cells of stem leaf. (Drawn by D. C. Zhang)

apicem folii evanidis cellulis superioribus rhombifomibus papilla media in quaque cellula instructis.

Habitat: under monsoon rain forest, on rotten trunk and branches of *Lasianthus wallichii* Wight.

Distribution: Presently only known from the type locality.

Aerobryopsis yunnanensis X. J. Li et D. C. Zhang sp. nov. (Fig. 2: 1—9) 云南灰气藓

Species nova *A. deflexae* Broth. & Par. affinis sed differt planta robustiore rigidioresque, foliis caulis et ramosum conformibus ovato-lanceolatis apice acuminatis non convolutis cellulis foliorum majoribus parietibus tenuioribus.

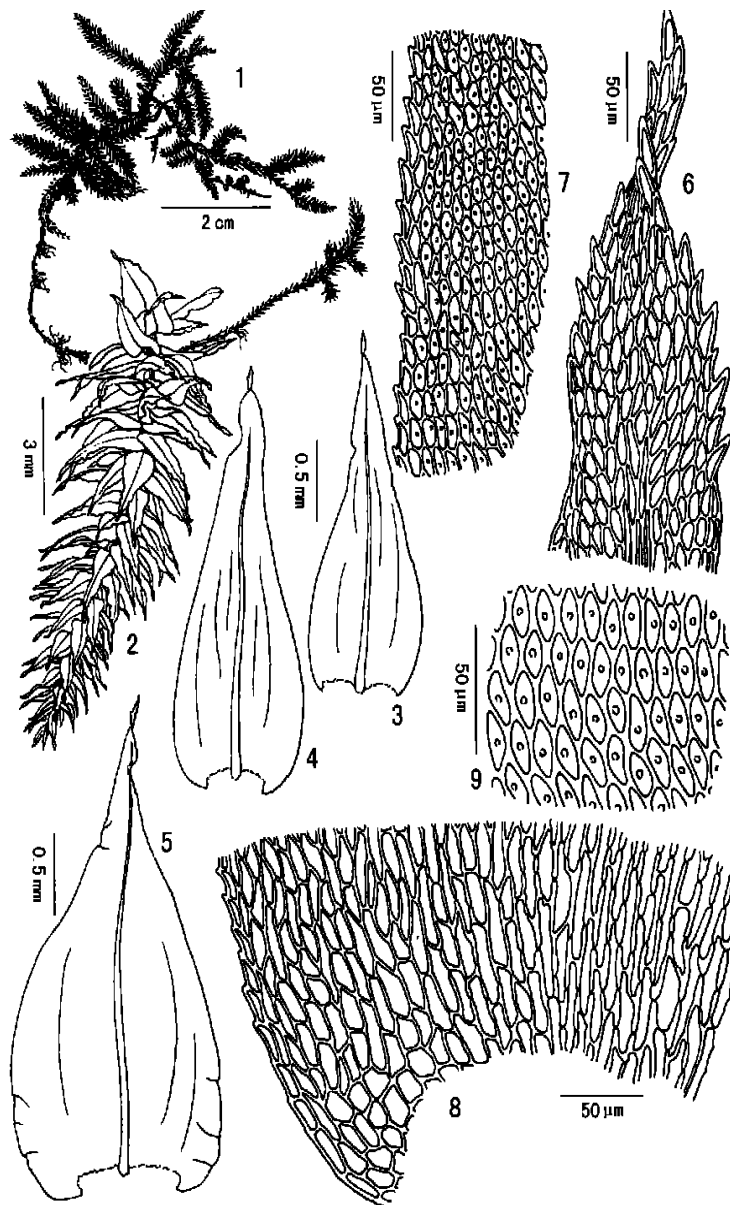


Fig. 2 *Aerobryopsis yunnanensis* (Holotype) 1. Plant, 2. Branch, 3—5. Leaves, 6. Apical cells of leaf,

7. Medial leaf cells near margin, 8. Basal cells of leaf, 9. Medial cells of leaf. (Drawn by D. C. Zhang)

Holotype: China, Yunnan Prov., Wen Shan, Xichou, Cao Guo Mts of Fadu, 25. IX. 1976. Q. A. Wu 3901 (HKAS, 42036,)

Planta robusta indurata viridis aetate prosecta fusca nitida. Caulis elongatus, 12–17 cm longus, ramis laxiusculis, 8–22 mm longis. Folia conformia densa, sed patula, ovato-lanceolata, 2–3 × 0.6–1 mm, basi decurrentia, sursum sensim acuminata, apice tortilia, margine serrulata, costis tenuibus, infra apicem folii evanidis, cellulis superioribus rhombiformibus, 12–24 × 5.1–8.5 μm , papilla media in quaque cellula instructis, inferioribus irregulariter rectangulis, interdum poris inter parietem praeditis.

Habitat: On rock surface and trunk of *Michelia fulgens* Dandy.

Specimens examined: China, Yunnan, Xishuang Banna, Meng Lun, 600m alt., 23 VIII. 1989. Zhang Li 859. (HKAS, Typus !)

The five species are newly found as follows:

Aerobryidium crispifolium (Broth. & Geh.) Fleisch. ex Broth. in Engler & Prantl, Nat. Pfl. 1 (3): 821, 1906. 波叶毛扭藓

Syn.: *Papillaria crispifolia* Broth. & Geh., Bibl. Bot. 44: 19, 1898.

Aerobryum warburgii Broth., Monunia 1: 50, 1899.

Aerobryidium longicuspis Broth., Mitteil. Inst. Allg. Bot. Hamburg 7 (2): 126, 1928.

A. subpiliferum Nog., Journ. Hatton Bot. Lab. 3: 71, 1948.

Habitat: On rock surface and trunk of trees.

Specimens examined: China, Yunnan Prov., Reili county, Nanjingli, Houshan, VIII 1976. X. J. Li 95 (HKAS).

Distribution: Indonesia (Borneo, Celebes), New Guinea and Japan.

Aerobryopsis membranacea (Mitt.) Broth. in Engler & Prantl, Nat. Pfl. I (3): 819, 1906. 膜叶灰气藓

Syn.: *Meteonium membranaceum* Mitt., Proc. Linn. Soc. Bot. Suppl. 1: 88, 1859.

Habitat: Under forest, on rock surface and branches of trees.

Specimens examined: Yunnan Prov., Yao Autonomous county of Hekou, Xiananxi, Limestone area under forest, M. Zang 4559 (HKAS); Xishuangbanna, Natural Reservation area of Menglun under forest, X. J. Li 80–2364 (HKAS).

Distribution: India, Pakistan, Myanmar, Thailand, Indochina, Malaysia, Philippine Islands, New Guinea and Japan.

Aerobryopsis subleptostigmata Broth. & Par., Rev. Bryol. 38: 54, 1911. 纤细灰气藓

Habitat: Under forest, on rotten trunk and branches of trees.

Specimens examined: Yunnan Prov., Gongshan, Dulong River area near stream, under forest, M. Zang 4559 (HKAS); Yunnan Prov., Kunming, West Mt. S. Y. Zeng 420 (HKAS).

Distribution: India, Vietnam, Malaysia and Japan.

Barbella convolvens (Mitt.) Broth., in Engler & Prantl, Nat. Pfl. 1 (3): 824, 1906. 纤细悬藓

Syn.: *Meteorium convolvens* Mitt., Proc. Linn. Soc. Bot. Suppl. 1: 90, 1859.

M. javanicum Bosch. & Lac., Bryol. Jav. 2: 88, 1863.

M. bombycinum Ren. & Card., Bull. Soc. Roy. Bot. Belg. 38: 26, 1900.

Barbella javanica (Bosch. & Lac.) Broth. in Engler & Prantl. Nat. Pfl. 1 (3): 825. 1906.

B. bombycina (Ren. & Card.) Fleisch. ex Broth. in Engler & Prantl. Nat. Pfl. 1 (3): 824. 1906.

Habitat: Under forests on rotten trunks and branches of trees.

Specimens examined: Yunnan Prov., Gongshan, Dulong River area, near stream, under forest, M. Zang 8309 (a) (HKAS).

Distribution: India, Sri Lanka.

Barbella stevensii (Ren. & Card.) Fleisch. ex Broth., in Engler & Prantl. Nat. Pfl. 1 (3): 824. 1906.

斯氏悬藓

Syn. *Metecrium stevensii* Ren. & Card., Bull. Soc. Roy. Bot. Belg. 34: 72. 1895; *Lindigia asiatica* Dix., Journ. Bombay Nat. Hist. Soc. 39: 783. 1937.

Habitat: Under forest, on rock surface and branch of trees.

Specimens examined: Yunnan Prov., Hekou, Xiananxi, Limestone area. M. Zang 4671 (HKAS).

Distribution: East Nepal, Sikkim, India (Darjeeling).

Acknowledgments: The authors extend sincere thanks to Prof. Dr. S. H. Lin (Dept. of Biology, Tsurghai University, Taichung) for his kind loan of the specimens including types and providing reference literatures. We also thank Prof. Dr. Benito C. Tan (Dept. of Biological Sciences National University of Singapore) and Prof. Dr. Dale H. Vitt (Southern Illinois University, USA.) for their critically checking up the manuscript.

References:

- Bratram EB. 1939. Mosses of the Philippines [J]. *Philipp Journ Sci*, **68**: 1—437
- Brotherus VF. 1929. Musci. In Handel-Mazzetti [M]. *Symbolae Sinicae*, **4**: 80—85
- Gangulee HC. 1977. Mosses of Eastern India and Adjacent Regions [M]. Vol. **II**: 1281—1362
- Lai MJ, Wang-Yang JR. 1976. Index Bryoflorae Formosensis [J]. *Taiwania*, **21**: 159—203
- Lin SH. 1981. Exsiccatae of the Bryophytes of Taiwan [J]. *Bryologist*, **84**: 359—362
- Luo JX. 1989. A Study on *Nabarbella* (Mosses) of the South-east Asiatic endemic Genus [J]. *Acta Bot Yunnan*, **11**: 159—164
- Noguchi A. 1976. A taxonomic revision of the family Meteoriaceae of Asia [J]. *Journ Hattori Bot Lab*, **41**: 231—357.
- Redfeam PL, Tan BC, He S. 1996. A newly updated and annotated checklist of Chinese Mosses [J]. *Journ Hattori Bot Lab*, **79**: 163—357
- Streimann H. 1991. Taxonomic Studies on Australian Meteoriaceae (Musci) [J]. *Journ Hattori Bot Lab*, **69**: 277—312