

中国蔓藓科两新种和五新分布种*

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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

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

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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 vermiculatis 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

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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

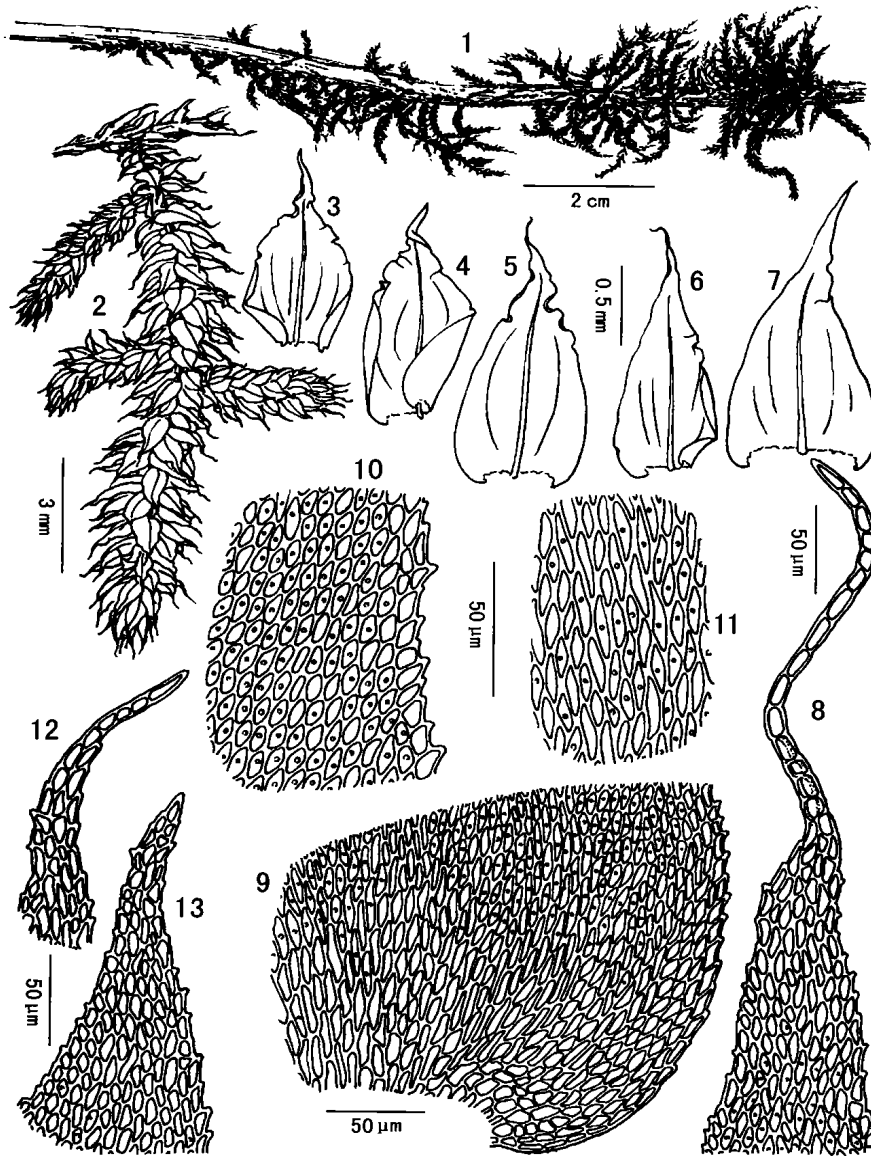


Fig. 1 *Aerbryopsis aristifolia* (Holotype) 1. Plants, 2. Branches, 3-6. Branch leaves, 7. Stem leaf, 8. 12, 13. Apical cells of branch leaves, 9. Basal cells of branch leaf, 10. Medial cells of branch leaf, 11. Medial cells of stem leaf. (Drawn by D. C. Zhang)

apicem folii evanidis, cellulis superioribus rhombiformibus, 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 rigidioreque, foliis caulis et ramosum conformibus ovato-lanceolatis apice acuminatis non convolutis, cellulis foliorum majoribus, parietibus tenuioribus.

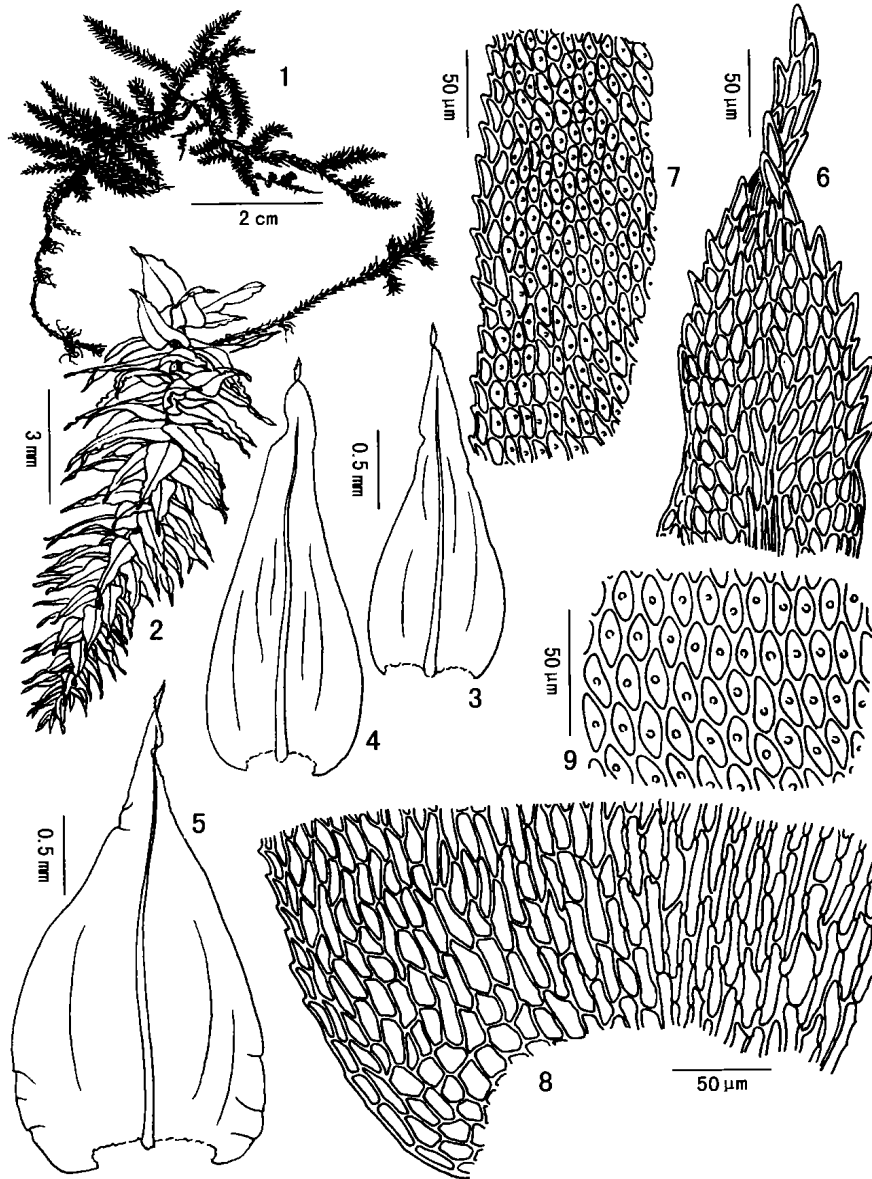


Fig. 2 *Aerobryopsis yunnanensis* (Holotype) 1. Plant, 2. Branch, 3-5. Leaves, 6. Apical cells of leaf, 7. Medial leaf cells near margin, 8. Basal cells of leaf, 9. Medial cells of leaf. (Drawn by D. C. Zhang)

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

Planta robusta indurata viridis, aetate provecta 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, 12.2 – 24.7 × 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. 600 m 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., Monsunia 1: 50, 1899.

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

A. subpiliferum Nog., Journ. Hattori 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.: *Meteorium 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, Dulung 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. *Meteorium 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).

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