

Mosses new to Hong Kong (IV)

M.L. So

Biology Department, Hong Kong Baptist University, 224 Waterloo Road, Kowloon, Hong Kong

Abstract. Sixteen moss species - *Eurhynchium asperisetum* (C. Muell.) Tak.; *Rhynchostegium pallidifolium* (Mitt.) Jaeg.; *Bryum argenteum* Hedw.; *Bryum caespiticium* Hedw.; *Bryum capillare* Hedw.; *Platyhynchium riparioides* (Hedw.) Dix.; *Dicranella varia* (Hedw.) Schimp.; *Entodon virudulus* Card.; *Fissidens strictulus* C. Muell.; *Ectropothecium obtusulum* (Card.) Iwats.; *Caduciella guangdongensis* Enroth.; *Plagiomnium cuspidatum* (Hedw.) T. Kop.; *Plagiomnium vesicatum* (Besch.) T. Kop.; *Pyrrhobryum spiniforme* (Hedw.) Mitt., *Taxithelium nepalense* (Schwaegr.) Broth. and *Claopodium aciculium* (Broth.) Broth. are reported new to Hong Kong. Among them, four are new to Guangdong Province of China.

A number of mosses show seasonal occurrence. Some rare species only appear during the rainy season in summer. This brief report lists some of the species found during the summer of 1994. Those new to Guangdong Province are marked with an asterisk.

Brachytheciaceae

**Eurhynchium asperisetum* (C. Muell.) Tak.

This is a common species which can be found along ditches in vegetable fields. Large patches virtually line the two sides of the ditches where dirty water flows through. The plants are bright green in colour, soft in texture and the branches are

densely leaved. It is tolerant to bright sunlight and is almost a weed species. No capsules were seen. (So 94617A Verified by P.C. Wu)

Platyhynchium riparioides (Hedw.) Dix.

This uncommon species was collected near a stream, on the northern slope of Tai Mo Shan, at 800m. The glossy green leaves are distinctly orbicular in shape and remain unaltered even when dry. The costa reaches 3/4 the leaf length. The stem creeps along moist rock surfaces, producing branches irregularly. No capsules were seen. (So 515A)

Rhynchostegium pallidifolium (Mitt.) Jaeg.

This is not a common moss, and has been sighted only once on moist rock surface at an elevation of 300 in deep shade. It has a rather stout creeping stem which produces short erect branches bearing complanate and glossy green leaves. The leaves have serrulate margins and the thin costa extends to 2/3 the leaf length. The leaves are ovate-lanceolate in shape, with a twisted acuminate tip.

(So 94717A Verified by P.C. Wu)

Bryaceae

Bryum argenteum Hedw.

This is a fairly common species and was first observed at an altitude of 600m in the crevices of a concrete pavement. The plants are so tightly compacted that hundreds of them can fill in a tiny crevice of 10mm². The leaves are strongly imbricate with a silvery appearance. Capsules are produced during the autumn.

(So 94830)

Bryum caespiticium Hedw.

This lowland species is fairly common locally and is found on moist rock surfaces and soil banks near streams. It can even be found in urban areas, exposed to bright light. The leaves have an extended tip and the costa is stout and red.

(So 94818X Verified by R.L. Zhu)

Bryum capillare Hedw.

This is a rare species which was found at an altitude of 700m in deep shade. A large colony was found on the surface of a moist rock together with colonies of *Philonotis thwaitesii*. Plants appear as rosettes with spreading leaves which seem to be translucent. No capsules were observed.

(So 94919A Verified by R.L. Zhu)

Dicranaceae

**Dicranella varia* (Hedw.) Schimp.

Unlike the common *Dicranella coarctata* which usually grows on fairly dry soil and rock surfaces, this species is quite rare and it was found on moist rock surfaces at 800m. The leaves are glossy, delicate in texture and spindly. A large colony was seen with capsules at varying stages of development near the summit of Tai Mo Shan at 800m.

(So 124A Identified by B.C. Tan)

Entodontaceae

Entodon viridulus Card.

This species is very common and forms large mats on forest floors and along stream banks at an elevation of 400m or above. The creeping stem produces numerous branches subpinnately, bearing very glossy flattened leaves. Capsules are erect, about 1.5 cm long, and very profusely produced.

(So 94315C Verified by P.C. Wu)

Fissidentaceae

* *Fissidens strictulus* C. Muell.

This is an extremely rare species which has been seen only once at an altitude of 200m. The five pairs of leaves are very minute and the roots are attached to the bark of a tree. The stem is only 1.5mm long.

(So & Zhu 94803 Verified by Z.H. Li)

Hypnaceae

Ectropothecium obtusulum (Card.) Iwats.

This is a very common creeping moss which grows on wet rocks in stream or near stream banks at low altitudes. Usually large dense mats are found on the substrate, together with colonies of *Ectropothecium zollingeri*, another common creeping moss on wet rocks. The leaves are glossy and complanately arranged along the stem. Among the few species of *Ectropothecium* recorded locally, this species differs from the rest in having

rounded obtuse leaf tips. No capsules were observed.
(So94124A Verified by N. Nishimura)

Leptodontaceae

Caduciella guangdongensis Enroth.

This rare species was collected on dry rock surfaces near Lantau Peak at 900m, the second highest mountain in Hong Kong. The first record of this new species was from Guangdong Province of China, hence the species name (Enroth, 1993). Hong Kong then is the second known locality of this species. A large colony was seen and the erect fronds arising from the long creeping stem presented quite a spectacular sight. No sporophytes were seen.
(So 130B Verified by B.C. Tan)

Mniaceae

Plagiomnium cuspidatum (Hedw.) T. Kop.

This species forms a thin light green mat on the surface of sandy soil as well as on rocks and tree bases. It is common on lowland as well as at high altitudes. It thrives equally well in bright light as well as in shade. The long branches ramify in all directions, producing semi-erect leaves which appear crispy.
(So931019M Verified by P.C. Wu)

Plagiomnium vesicatum (Besch.) T. Kop.

This creeping moss is rather uncommon locally and was collected at an altitude of 800m near a stream. The leaves become strongly contorted when dry, but are spreading to almost overlapping when moist. This species shares the same feature as *P. cuspidatum* in having a distinct border of 3-4 cell layers on the leaves and it resembles *P. succulentum* in having very short marginal teeth. No capsules were found in any of the *Plagiomnium* species, even though antheridia were found in all of them.
(So94914N Identified by X.-J. Li)

Rhizogoniaceae

Pyrrhobryum spiniforme (Hedw.) Mitt.

This rare species was found in deep shade at an altitude of 50m. It was observed only once, on a piece of rotten log near a stream. It forms loose tufts together with *Bazzania tridens*. The deep green colour and spiny leaves are diagnostic features of this species.
(So 94819B Verified by R.L. Zhu)

Sematophyllaceae

**Taxithelium nepalense* (Schwaegr.) Broth.

This robust species is very common in Hong Kong and can be found in all forested areas at low altitudes. The yellowish-green plants form dense mats on rock surfaces as well as tree bases. The branches are of varying lengths, but most of them are 15mm long. Capsules are profusely produced from the main stem.
(So 941129C Identified by B.C. Tan)

Thuidiaceae

Claopodium aciculum (Broth.) Broth.

This is a common species which often occurs as a thick green mat on the surface of moist soil near streams and waterfalls at an elevation of 300m or above. The leaves appear glossy and the short branches are densely leaved as well as homomalous.
(So 94909A Verified by P.C. Wu)

Conclusion

It is apparent that many mosses have a seasonal occurrence. A year-long visit to some of the spots where mosses and liverworts are found reveals that while some occur throughout the year, others only appear for a very short period. Some of these species are extremely rare and have been seen only once at one particular spot. A continued search

might turn up more “ephemeral” species.

Acknowledgements. The author thanks Dr. B.C. Tan of Farlow Herbarium, Harvard University, Professor P.C. Wu of the Herbarium, Institute of Botany, Chinese Academy of Sciences, Prof. X.J. Li of Kunming Institute of Botany, Professor R.L. Zhu of East China Normal University, Professor Z.H. Li of Zhongshan University and Dr. N. Nishimura of Okayama University of Science for their help in identifying or verifying the specimens collected.

Reference

Enroth J. 1993. Contributions to the Bryoflora of China 2. *Caduciella guangdongensis* sp. nov. (Leptodontaceae, Musci). *The Bryologist* 96(3): 471-473.

Mosses & Liverworts of Hong Kong

Author and Photography: M.L. So
 170 pages, 21.6 x 15.0 cm, soft cover
 319 colour photographs and 11 SEM micrographs
 ISBN 0-962-7350-78-8
 Price US\$30 (postage by air included)
 30% discount to individuals in developing countries and some Eastern European countries
 10% discount to subscribers of *Tropical Bryology*
 10% discount for 5 copies and more
 20% discount for 10 copies or more

Send orders to:
 Biology Department
 Hong Kong Baptist University
 224 Waterloo Road
 HONG KONG
 Fax (852) 2336 1400 Phone (852) 2339 7052
 Please make cheque or money order payable to May-Ling So