

Some Additional Species to the Bryophyte Flora of Sugadaira*

by
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The author has previously investigated the bryophyte flora of Sugadaira, and he reported 85 species of Hepaticae, 1 species of Anthocerotae and 248 species of Musci from Sugadaira (Saito 1971). But some doubtful species were not listed on previous report. By subsequent field surveys and a revision of the herbarium specimens, following 12 species of bryophytes are newly recognized from Sugadaira.

1. *Asterella yoshinagana* (Horik.) Shim. et Hatt.

Habitat: near Daimyojin Water Falls, in moist rock crevice, ca. 1200 m. alt., leg. Saito 9583; associated with *Myurella sibirica*, *Bryoxiphium norvegicum* subsp. *japonicum* and *Conocephalum conicum*.

This species is one of the rare liverworts and has been known from limestone areas of central Japan.

2. *Sphagnum subobesum* Warnst.

Habitat: Sugadaira Moor, on damp soil, ca. 1150 m. alt., leg. Saito 9627 & 9628; associated with *Bryum weigellii* and *Brachythecium* spp. This species has already been reported by Matsuda (1969) from Sugadaira.

3. *Tetraphis geniculata* Girgh. ex Milde.

Habitat: around summit area of Mt. Neko, on decaying wood, ca. 2200 m. alt., leg. Saito 11235 & 11243; associated with *Lophozia alpestris* and *Dicranum fuscescens*.

4. *Pleuroidium subulatum* (Hedw.) Rabenh.

Habitat: Sugadaira Moor, on moist soil of trunk base of *Alnus japonica*, ca. 1150 m. alt., leg. Saito 11249; associated with *Atrichum undulatum*.

5. *Dicranella palustris* (Dicks.) Crundw. ex Warb.

Habitat: Daimyojin-sawa River, on stream side damp soil, ca. 1400 m. alt., leg. Saito 9630; associated with *Philonotis falcata* and *Jungermannia thermarum*.

6. *Anoetangium aestivum* Hedw.

Habitat: around summit area of Mt. Azuma, in rock crevice, ca. 2300 m. alt., leg. Saito 11219 & 11239; associated with *Herberta adunca*, *Bryum* sp. and *Mecodium coreanum*.

7. *Anoetangium thomsonii* Mitt.

Habitat: Daimyojin-sawa River, in stream side rock crevice, ca. 1200~1400 m. alt., leg. Saito 9633, 9659, 11205 & 11230; associated with *Amphidium mougeotii* and *Trichostomum tenuirostre*.

Though this species is widely distributed in Asia, the concept of the species is still in the vague because of its vast variations of habit, leaf-shape. The tropical, high mountainous plants have long, linear-lanceolate leaves with distinct constriction above

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base; on the contrary, the temperate lowlands to mountainous plants have short, lanceolate leaves without distinct constriction above base. But there are many transitional forms between these two extreme types. Thus the length and the presence of constriction of leaf are not reliable criteria for the species, and the species is well characterized by that the leaves are always broadest at middle or above middle.

8. *Barbula convoluta* (Hedw.) P. Beauv.

Habitat: Daimyojin-sawa River, on stream side concrete wall, ca. 1250 m. alt., leg. Saito 1876; associated with *Funaria hygrometrica* and *Bryum argenteum*.

9. *Weissia controversa* Hedw.

Habitat: Dabosu, on bare soil, ca. 1400 m. alt., leg. Saito 1717; associated with *Bryum caespiticium*. The author (Saito 1971) erroneously reported *Weissia platyphylla* based on the above specimen, but it proved to be a mis-identification of this species.

10. *Amphidium lapponicum* (Hedw.) Schimp.

Habitat: around summit area of Mt. Neko, in rock crevice, ca. 2300 m. alt., leg. Saito 11240; associated with *Mecodium coreanum* and *Herberta adunca*.

11. *Amphidium mougeotii* (B.S.G.) Schimp.

Habitat: Daimyojin-sawa River, in river side rock crevice, ca. 1100~1400 m. alt., leg. Saito 1909, 2481, 2959 & 2996: Karasawa Water Falls, on moist rock, ca. 1000 m. alt., leg. Saito 2119, 2191, 2223 & 2226; associated with *Anoetangium thomsonii*, *Trichostomum tenuirostre* and *Brachythecium* spp.

The author reported *Gymnostomum aeruginosum* from Sugadaira, but the specimen previously identified as *G. aeruginosum* proved to be a mis-identification of *Amphidium mougeotii*. In Japan, this species has been known only from Shiobara (Sakurai 1936), but it seems to be commonly distributed in wide range of mountainous area.

12. *Myurella sibirica* (C. Muell) Reim.

Habitat: near Daimyojin Water Falls, in river side rock crevice, ca. 1200 m. alt., leg. Saito 9583; associated with *Asterella yoshinagana*, *Bryoxiphium norvegicum* subsp. *japonicum* and *Conocephalum conicum*.

Literature Cited

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