

## Yoshihito OHMURA<sup>a,\*</sup> and Kwang-Hee MOON<sup>b</sup>: **Materials for the Distribution of Lichens in Japan (18) *Baeomyces sanguineus* Asahina**

<sup>a</sup> Department of Botany, National Museum of Nature and Science, 4-1-1, Amakubo, Tsukuba, 305-0005 JAPAN;

<sup>b</sup> Biological Resources Research Department, National Institute of Biological Resources, Gyoungser-dong, Seo-gu, Incheon, 404-170 KOREA

\* Corresponding author: ohmura-y@kahaku.go.jp

**Summary:** New localities of *Baeomyces sanguineus* Asahina were reported from Miyazaki Pref., Kyushu, and from Mt. Myojin in Aichi Pref., Honshu, Japan. In total, four localities of this species are known in Japan.

During the course of floristic studies of Japanese lichens based on examination of specimens preserved in TNS, we recently confirmed two additional localities for *Baeomyces sanguineus* Asahina, a saxicolous species listed as endangered in Japan. One locality is at Minamikata, Saito-city in Miyazaki Prefecture, Kyushu (K. H. Moon 7341, 7358, 7383), and another is at Mt. Myojin in Aichi Prefecture, Honshu (H. Kashiwadani 13024). These specimens from the localities have following diagnostic characters: (1) thallus greenish gray, crustose with areolate and minutely verrucose surface, (2) podetia simple, unbranched and short (less than 0.8 mm high), lacking or with very few photobiont cells in podetia, (3) apothecia blood-red color at the disc, up to 1.7 mm in diameter, and (4) the presence of norstictic acid as a major chemical substance.

The diagnostic features seen in the present specimens coincide well with the type specimens reported from Chuchih, Taipei, Taiwan [for var. *sanguineus* in Asahina (1943)] and Kochi Prefecture, Shikoku, Japan [for var. *ablutum* Asahina (1943) which was reduced to a synonym of var. *sanguineus* by Kashiwadani and Gradstein (1982)] and the specimens from Yakushima Island, Kyushu, Japan. Therefore, this species is

so far known from four localities in Japan and one locality in Taiwan.

*Baeomyces sanguineus* resembles *B. absolutus* Tuck. and *B. rufus* (Huds.) Rebent., which are widely distributed in Japan, in having thin crustose thalli and small podetia. However, it is distinguished from *B. absolutus* by the blood-red apothecia and by the presence of norstictic acid as a major substance, and from *B. rufus* (containing stictic acid as a major substance) by the chemistry and the absence or only few photobionts within the podetia.

Specimens examined (all in TNS). JAPAN. Honshu. Prov. Mikawa (Pref. Aichi): Mt. Myojin, Minamishitara-gun, 750–1010 m, 11 Dec. 1974, H. Kashiwadani 13024. Shikoku. Prov. Tosa (Pref. Kochi): Agura, Aki-gun, 18 Aug. 1931, F. Fukikawa s. n. (holotype of *B. sanguineus* var. *ablutum* Asahina). Kyushu. Prov. Hyuga (Pref. Miyazaki): Minamikata, Saito-city, on rocks, 500 m, 23 Feb. 2004, K. H. Moon 7341, 7358, 7383. Prov. Ohsumi (Pref. Kagoshima), Yakushima Island: Senpiro Waterfall, Yaku-cho, Kumage-gun, on rock, ca. 500 m, 27 Oct. 1994, Y. Ohmura 796, 797, 798; Shiratanirindo to Shirataniunsuikyo, Yaku-cho, Kumage-gun, on rock, ca. 500 m, Y. Ohmura 722, 822, 823; Yakusugi-rand, ca. 1000 m, 27 Oct. 1979, H. Kashiwadani 15592. TAIWAN (Formosa). Taipei Co.: Chuchih, on rocks, 2 Jan. 1925, M. Ogata 25 (holotype of *B. sanguineus* Asahina var. *sanguinea*).

We wish to express our gratitude to H. Kashiwadani for providing a specimen for this report and critical reading of the manuscript; and to S. Y. Yoon for the correction of English grammar in the manuscript.

## References

- Asahina Y. 1943. Lichenologische Notizen XXIV. J. Jpn. Bot. **19**: 301–311.
- Kashiwadani H. and Gradstein S. R. 1982. Notes on *Baeomyces sanguineus* Asah. and *Gymnoderma coccocarpum* Nyl. Misc. Bryol. Lichenol. **9**: 79–81.

大村嘉人<sup>a</sup>, 文 光喜<sup>b</sup>: 地衣類分布資料 (18) チゾメセンニンゴケ

センニンゴケ科ヒロハセンニンゴケ属のチゾメセンニンゴケ *Baeomyces sanguineus* はこれまで台湾の屈尺および日本の屋久島, 高知県安倉からのみ知られていたが, 国立科学博物館所蔵標本を検討した結果, 宮崎県南方および愛知県明神山にも産することが判明したので報告する. 本種は薄い固着性の地衣体に短小の子柄を作る点でヒメセンニンゴケ *B. absolutus* やアカセンニン

ゴケ *B. rufus* に似るが, 血赤色の子器とノルスチクチン酸を持つことからヒメセンニンゴケから区別され, 子柄に共生藻をほとんど持たないことやスチクチン酸を主成分としない点でアカセンニンゴケから区別される.

(<sup>a</sup> 国立科学博物館植物研究部,

<sup>b</sup> 韓国・国立生物資源館)