

PHILONOTIS YEZOANA BESCH. et CARD. ex CARD.
(BARTRAMIACEAE, MUSCI) NEW TO RUSSIA

PHILONOTIS YEZOANA BESCH. et CARD. ex CARD.
(BARTRAMIACEAE, MUSCI) — НОВОСТЬ ДЛЯ БРИОФЛОРЫ
РОССИИ

IRINA V. CZERNYADJEVA¹

ИРИНА ВИТАЛЬЕВНА ЧЕРНЯДЬЕВА¹

Abstract

Philonotis yezoana, previously known only from Japan, Korea and North America, is reported from Russia (Kamchatka). Description, illustrations and ecological data of the specimens from Kamchatka are provided.

Резюме

Philonotis yezoana, ранее известный из Японии, Кореи и Северной Америки, найден на Камчатке. Приводится описание вида, даны его иллюстрации и заметки о местообитаниях.

During the field season of 1990 in Kamchatka Peninsula (Russia), several interesting specimens of *Philonotis* were collected at the Koschelevsky Volcano (1250 m alt.), South Kamchatkan Reserve. They were indentified as *Philonotis yezoana* Besch. et Card. ex Card., the species not previously recorded in Russia.

Philonotis yezoana Besch. & Card. ex Card., Bull. Soc. Bot. Geneve, ser. 2, 1: 123. 1909.

P. fontana var. *tenuicaulis* (Card.) Nog., Illustrated Moss Flora of Japan, 3: 572. 1989.

Plants slender, 1-3 cm high. Leaves sparse, erect, 0.7-1.3 mm long, ovate or ovate-lanceolate, narrowed to a rather short acumen; margins plane or recurved only at the base, serrulate throughout; costa rather long-excurrent to percurrent; cells rectangular (about 3-5:1) at the leaf apex, short-rectangular (1.5-2:1) at the middle and base, and long-rectangular near margins, with single central coarse papillae on both surfaces. Dioicous. Setae 1.5-2 cm long. Capsules 2-2.5 mm long. Spores 18-22 µm. Fig. 1.

Noguchi (1989) considers *P. yezoana* as a variety *P. fontana* (Hedw.) Brid. However, *P. yezoana* has plants slender with sparse leaves and single coarse central papillae on both surfaces of lamina cells, a combination never observed in *P. fontana*. Therefore, we consider *P. yezoana* as a distinct species.

This is the first report of *P. yezoana* for Russia. Until now it was known from Japan, Korea and North America (Crum & Anderson, 1981; Noguchi, 1989). Crum & Anderson cited also a specimen seen from the Switzerland in Europe, the type of *Didymodon mollis* Schimp. However Geissler (1984) considered the latter taxa to be *P. seriata* Mitt. (see also discussion in Corely & Crundwell, 1991).

The finding of *P. yezoana* in Kamchatka extends its distributional range considerably. Unsufficient bryological exploration of the Russian Far East allow to expect that *P. yezoana* will be found in the other mountain oceanic regions of this territory.

SPECIMENS STUDIED: Kamchatka Peninsula 51° 20' N, 156° 45' E, slope of Koschelevsky Volcano, alpine belt: 1) bank of stream, in cleft on stone, with *Thamnobryum alopecurum* (Hedw.) Gang., 29 July 1990, No 26; 2) stream, on stone in water, with *P. fontana*, *Pohlia wahlenbergii* (Web. & Mohr) Andrews, 30 July 1990, No 28; 3) alpine tundra, on soil, 5 August 1990, No 3; 4) bank of hot stream, on soil, 28 July 1990, No 20; 5) bank of hot stream, on soil with *P. fontana*, *Brachythecium starkei* (Brid.) Schimp., 31 July 1990, No 35 (with mature capsules). All specimens are in LE, coll. by I.V. Czernyadjeva.

ACKNOWLEDGEMENT

I am very grateful to Dr. A. D. Potemkin for critical reading of the manuscript and for the help with English.

¹ Komarov Botanical Institute of Russian Academy of Science, Popova 2, St.-Petersburg, 197376 Russia - Россия 197376 Санкт-Петербург, проф. Попова 2, Ботанический институт им. В. Л. Комарова РАН

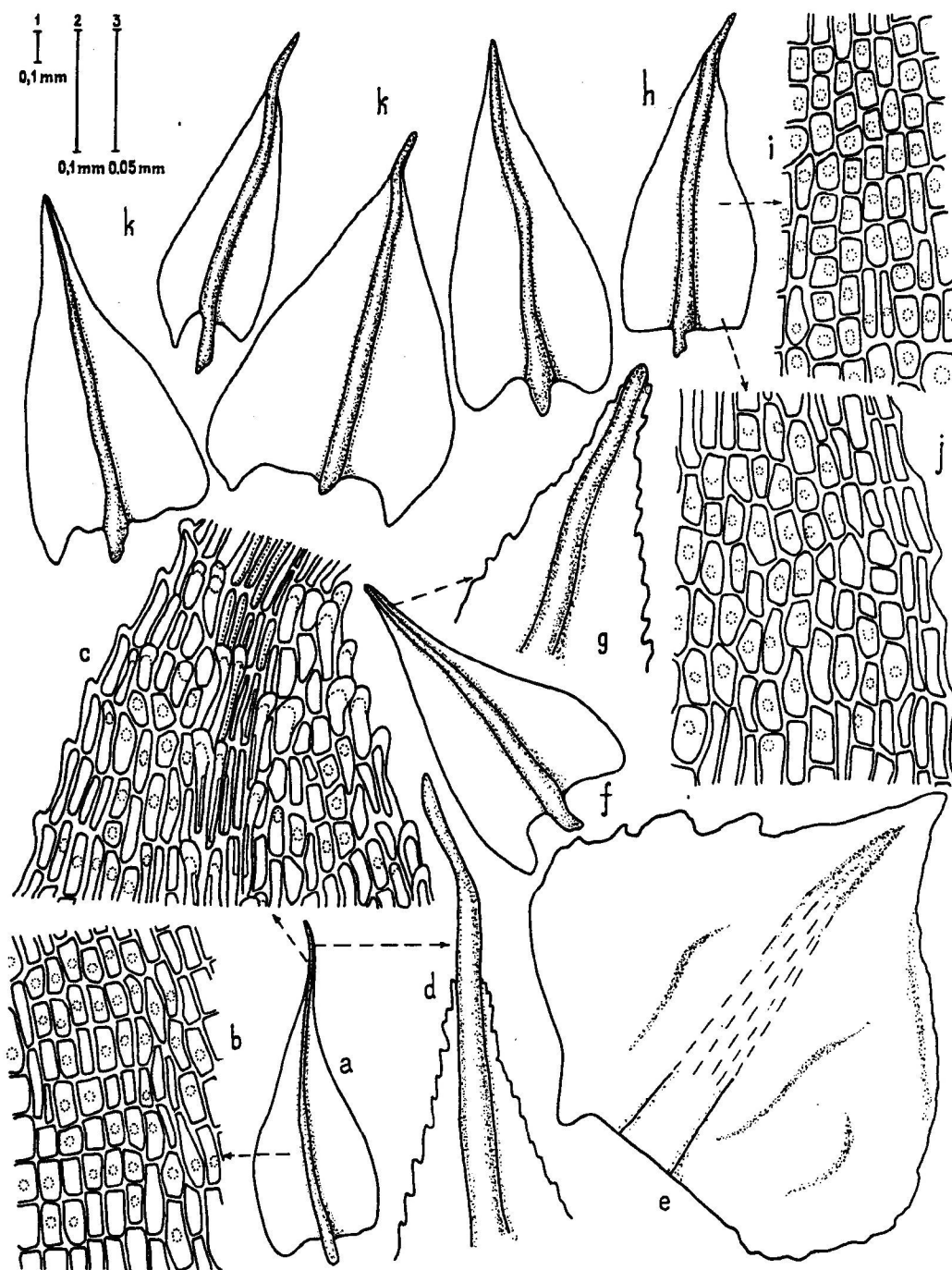


Fig. 1. *Philonotis yezoana* Besch. et Card. ex Card, Kamtchatka, 1990, Czernyadjeva, No 35, (LE), a, f, h, k - leaves, b, i - median laminal cells, c - cells at leaf apex, g, d - leaf apex, e - inner perigonial leaf, j - cells at leaf base. Scale bars: 1 - for a, f, h, e, k; 2 - for d, g; 3 - for b, c, i, j.

LITERATURE CITED

- CORLEY, M. F. V. & A. C. CRUNDWELL 1991. Additions and amendments to the mosses of Europe and the Azores. - *J. Bryol.* **16**(3): 337-356.
- CRUM, H. A. & L. E. ANDERSON 1981. Mosses of Eastern North America. - *New York, Columbia Univ. Press*, 1328.
- GEISSLER, P. 1984. Notulae bryofloristicac Helvetiae. - *Candollea* **39**: 641-646.
- NOGUCHI, A. 1989. Illustrated moss flora of Japan, pt. 3. - *Nichinan, Hattori Botanical Laboratory*, 491-742.