

New combinations in *Selliguea* (Polypodiaceae, Crypsinoideae)

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Abstract: In current circumscription, *Arthromeris* (T.Moore) J.Sm., *Crypsinus* C.Presl, *Pichisermollodes* Fraser-Jenk. and *Sellimeris* Fraser-Jenk., Sushil K.Singh & J.Fraser-Jenk. are included under synonymy of the genus *Selliguea* Bory. Therefore, *Arthromeris crassirhizoma* Fraser-Jenk., Odyuo & D.K.Roy, *Crypsinus nepalensis* Nakaïke, *Pichisermollodes* *x coronaterminalis* Fraser-Jenk. & Kandel, *P. major* Fraser-Jenk. and *Sellimeris khasiana* Fraser-Jenk., Sushil K.Singh & J.Fraser-Jenk. are transferred here to *Selliguea* Bory, resulting in four new combinations and a new name.

Keywords: *Arthromeris*, Bhutan, China, *Crypsinus*, India, Myanmar, Nepal, *Pichisermollodes*, *Sellimeris*

Introduction

Selliguea Bory (1824: 587) comprises about 120 species, distributed in tropical and subtropical Asia to Pacific. Recent molecular studies showed that the genus *Arthromeris* (Moore 1857: LXXVIII) Smith (1875: 110), *Crypsinus* Presl (1851: 123), *Pichisermollodes* Fraser-Jenkins (2010: 122) and *Sellimeris* Fraser-Jenkins, Singh & Fraser-Jenkins in Fraser-Jenkins et al. (2018: 448) are synonymous to *Selliguea* (He et al., 2018, Wei and Zhang, 2022). While working on the family Polypodiaceae Presl & Presl (1851: 159) for flora of India (Singh and Rawat, 2024), authors found that *Arthromeris crassirhizoma* Fraser-Jenkins, Odyuo & Roy (2017: 31), *Crypsinus nepalensis* Nakaïke (1987: 95), *Pichisermollodes* *x coronaterminalis* Fraser-Jenkins & Kandel in Fraser-Jenkins et al. (2019: 314), *P. major* Fraser-Jenkins in Fraser-Jenkins & Wangdi (2022: 13) and *Sellimeris khasiana* Fraser-Jenkins, Singh & Fraser-Jenkins in Fraser-Jenkins et al. (2018: 448) need to be transferred to *Selliguea*. Therefore, new combinations are made below, making *Selliguea* contain a total of 125 species.

Nomenclature

Selliguea × coronaterminalis (Fraser-Jenk. & Kandel) R.Kr.Singh & V.K. Rawat, *comb. nov.*

≡ *Pichisermollodes × coronaterminalis* Fraser-Jenkins & Kandel in Fraser-Jenkins *et al.* (2019: 314).

Holotype: NEPAL. Makawanpur District, below Simbhanjyang, ca. 1900 m, 4 September 2003, C.R. Fraser-Jenkins & G.B. Tamang 30072 (K).

Hybrid parents: *Selliguea ebenipes* (Hooker 1864: 88) Lindsay in Lindsay & Middleton (2009: 356) and *Selliguea quasidivariata* (Hayata 1911: 446) Ohashi & Ohashi (2009: 307).

Distribution: India (Sikkim) and Nepal.

Selliguea crassirhizoma (Fraser-Jenk., Odyuo & D.K.Roy) R.Kr.Singh & V.K.Rawat, *comb. nov.*

≡ *Arthromeris crassirhizoma* Fraser-Jenkins, Odyuo & Roy (2017: 31).

Holotype: INDIA. Nagaland, Mon District, Tobu village, Nyoyang Mountain, 25 April 2017, N. Odyuo & D.K. Roy 137230 (ASSAM0000000801!, Figure 1); isotypes (ASSAM0000000802!, Figure 2), (ASSAM0000000803!, Figure 3), (ASSAM0000000804!, Figure 4).

= *Arthromeris nigropaleacea* Lu (1998: 144). *Selliguea lui* Christenhusz (2018: 51). *Selliguea lushugangii* Zhang & He in He *et al.* (2018: 244), *nom. superfl.*

Holotype: CHINA. Xizang (Tibet), Mêdog Xian, 1800 m, 15 April 1983, B.S. Li & S.Z. Chen 04102 (PE).

Distribution: China (Tibet) and India (Nagaland).

Notes: The species epithet *nigropaleacea* is preoccupied in the genus *Selliguea* [*Selliguea nigropaleacea* (Ching 1964: 196) S.G.Lu, Hovenkamp & M.G.Gilbert (2013: 784)].

Selliguea dixitii R.Kr.Singh & V.K.Rawat, *nom. nov.*

≡ *Crypsinus nepalensis* Nakaike (1987: 95). *Phymatopteris nepalensis* (Nakaike) Chandra (2001: 143). *Pichisermollodes nepalensis* (Nakaike) Fraser-Jenkins in Fraser-Jenkins *et al.* (2018: 446).

Holotype: NEPAL. Central Nepal, Bagmati Province, Makwanpur District, Daman, between Naubise and Hetauda, ca. 2400 m, 23 September 1986, T. Nakaike 1858 (TNS466155!, Figure 5).

Distribution: Bhutan, China (including Tibet), India (Arunachal Pradesh, Sikkim, Uttarakhand and West Bengal), Myanmar and Nepal.

Etymology: The new name is named after Dr. Ram Das Dixit (1942–2006), Indian Pteridologist.

Notes: The species epithet *nepalensis* is preoccupied in the genus *Selliguea* [*Selliguea nepalensis* Iwatsuki (2016: 330)], therefore, a new name is herein proposed.

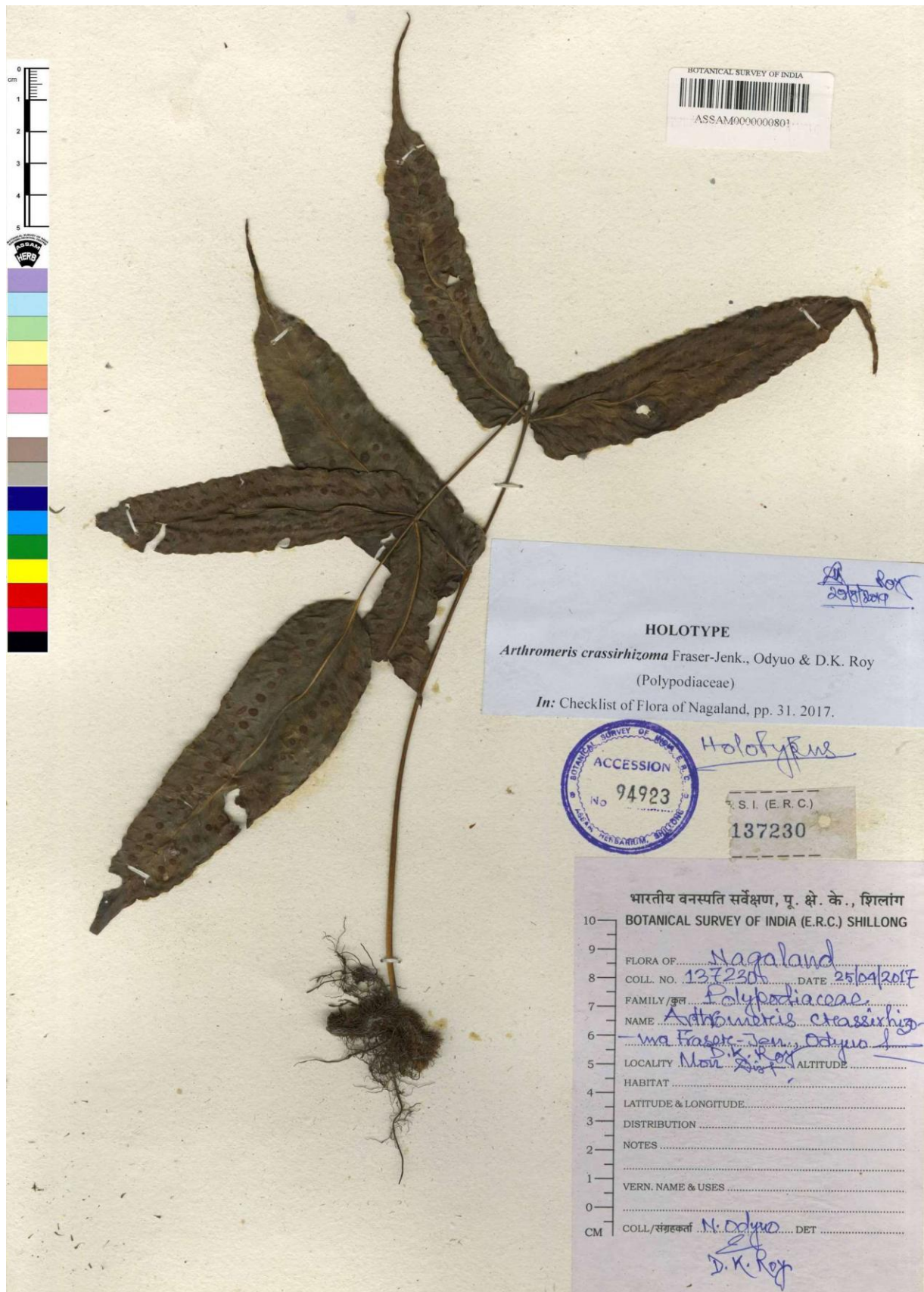


Figure 1: Holotype of *Arthromeris crassirhizoma* Fraser-Jenk., Odyuo & D.K.Roy (ASSAM000000801, © Botanical Survey of India, Eastern Regional Centre, Shillong, India)

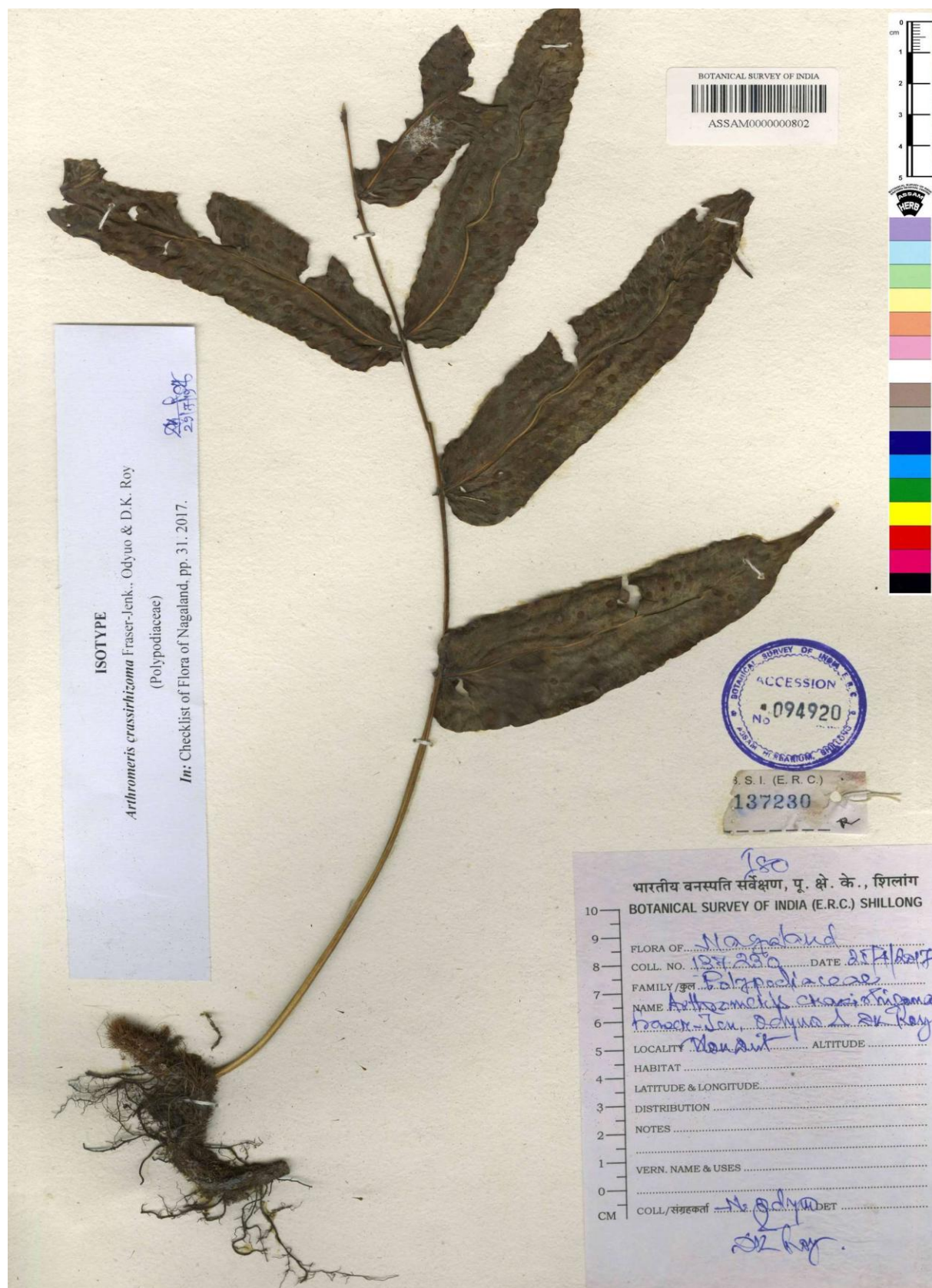


Figure 2: Isotype of *Arthromeris crassirhizoma* Fraser-Jenk., Odyuo & D.K.Roy (ASSAM0000000802, © Botanical Survey of India, Eastern Regional Centre, Shillong, India)

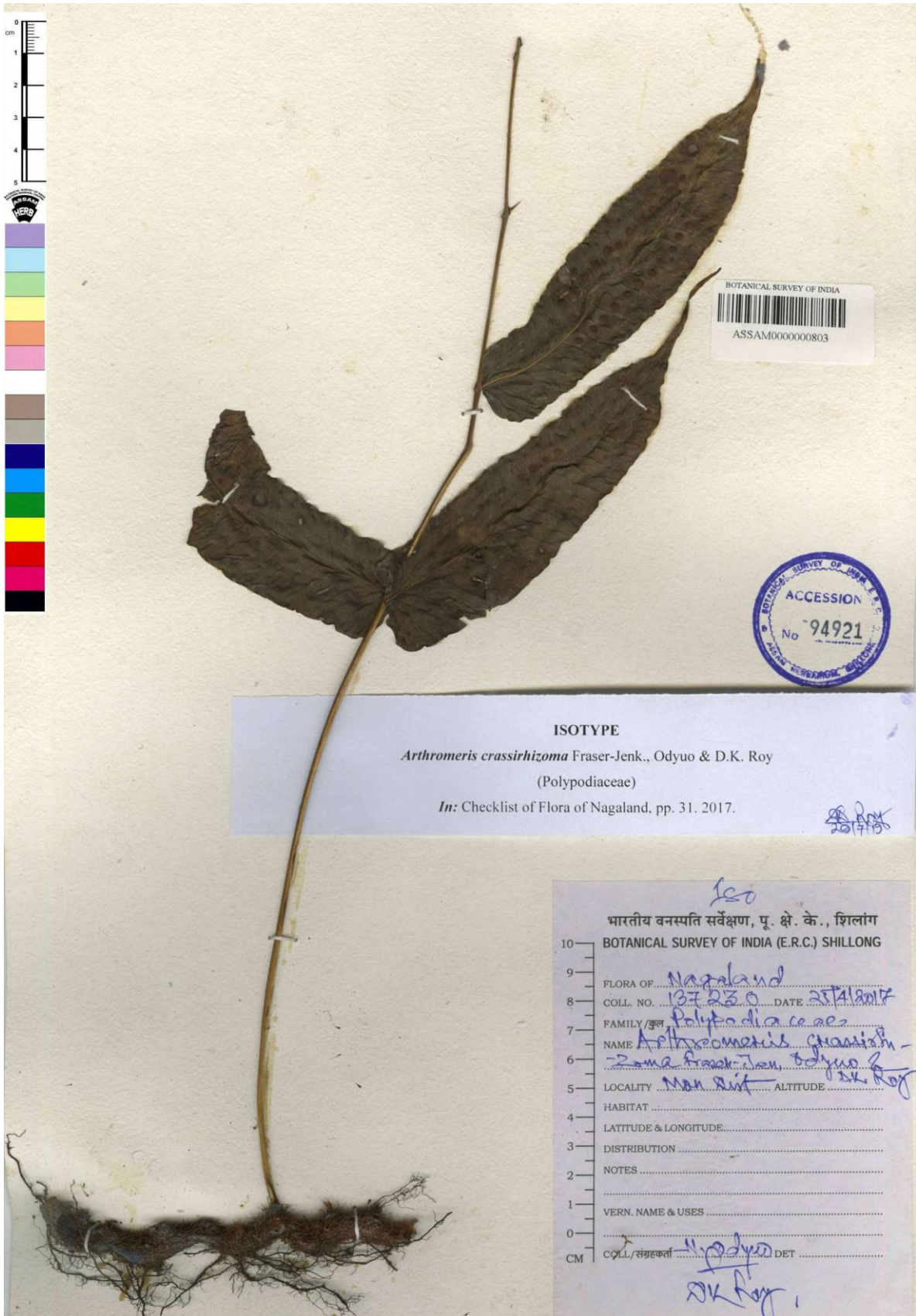


Figure 3: Isotype of *Arthromeris crassirhizoma* Fraser-Jenk., Odyuo & D.K.Roy (ASSAM0000000803, © Botanical Survey of India, Eastern Regional Centre, Shillong, India)

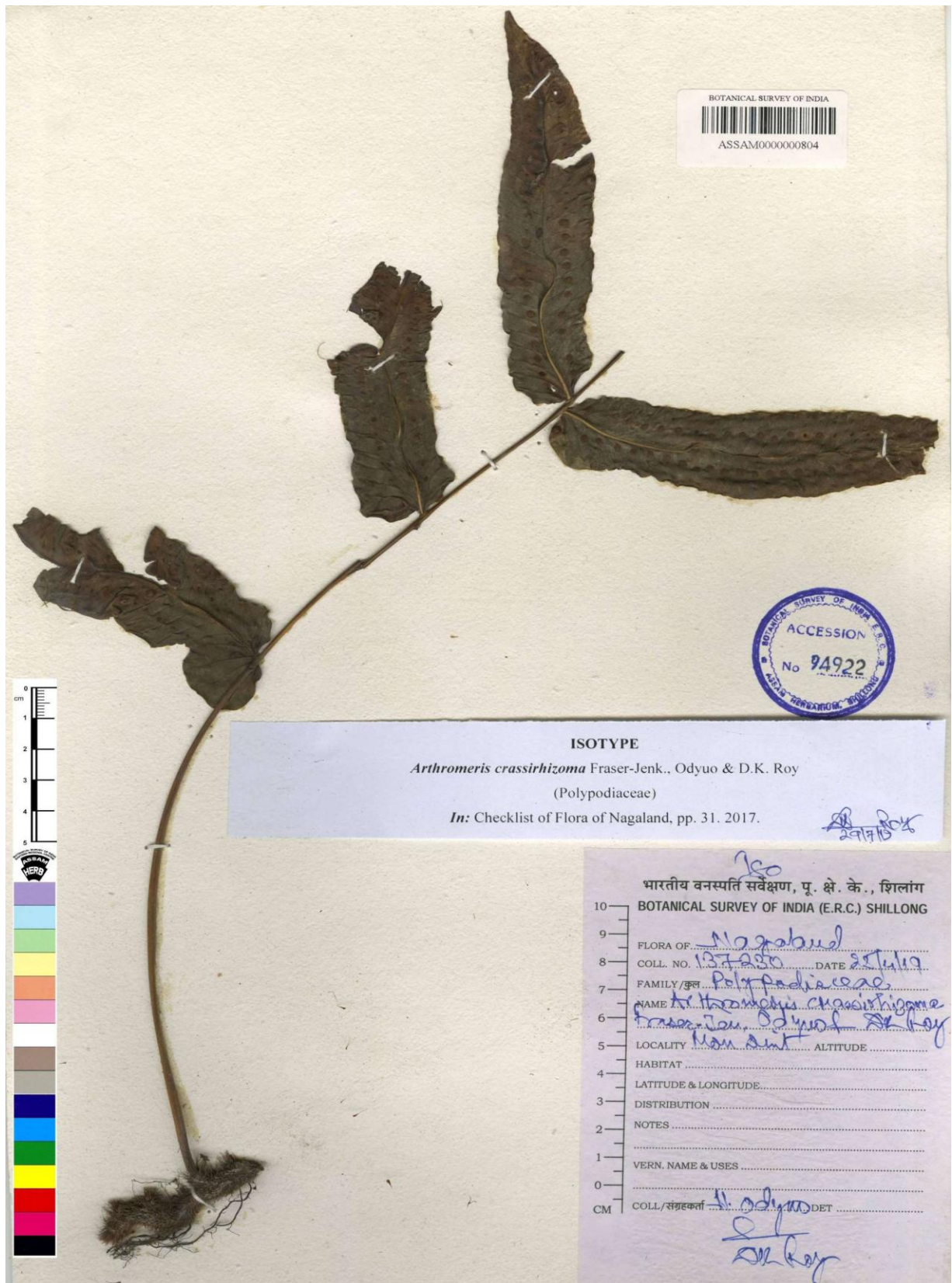


Figure 4: Isotype of *Arthromeris crassirhizoma* Fraser-Jenk., Odyuo & D.K.Roy (ASSAM0000000804, © Botanical Survey of India, Eastern Regional Centre, Shillong, India)



Figure 5: Holotype of *Crypsinus nepalensis* Nakaike (TNS466155, © National Museum of Nature and Science, Tsukuba, Japan)

Selliguea × khasiana (Fraser-Jenk., Sushil K.Singh & J.Fraser-Jenk.) R.Kr.Singh & V.K.Rawat, *comb. nov.*

≡ × *Sellimeris khasiana* Fraser-Jenkins, Singh & Fraser-Jenkins in Fraser-Jenkins *et al.* (2018: 448).

Holotype: INDIA. Meghalaya, East Khasi Hills, at the junction of the main road from Shillong to Jowai with the side-turn up to Puriang village, overlooking Soong Valley, 1316 m, 6 January 2018, *S.K. Singh et al.* 104044 (ASSAM).

Hybrid parents: *Selliguea moulmeinensis* (Beddome 1866: t. 205) Zhang & He in He *et al.* (2018: 244) and *Selliguea oxyloba* (Wallich ex Kunze 1851: 255) Fraser-Jenkins (2008: 44).

Distribution: India (Meghalaya).

Selliguea major (Fraser-Jenk.) R.Kr.Singh & V.K.Rawat, *comb. nov.*

≡ *Pichisermollodes major* Fraser-Jenkins in Fraser-Jenkins & Wangdi (2022: 13).

Holotype: BHUTAN. West Bhutan, Thimphu District, above Yanchenphug, 2900 m, 21 July 1987, *M. Bigger* 2953 (E).

Distribution: Bhutan and India (Sikkim).

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