

RESEARCH ARTICLE

Cryptogamic Type Specimens of CAL: A Comprehensive Catalogue

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ABSTRACT

The present study provides detailed documentation and an updated inventory of cryptogamic type specimens (excluding Fungi) available in the Central National Herbarium (CAL), Botanical Survey of India, Howrah, West Bengal, India. As one of the oldest and most significant botanical repositories in South Asia, CAL houses a substantial collection of non-flowering plant specimens that serve as critical nomenclatural references for Paleotropical and Oriental floristics. Our survey identified a total of 453 cryptogamic type specimens, comprising Algae (20), Bryophytes (66), Lichens (9), and Pteridophytes (358). Each entry was cross-referenced with protologues and original labels to verify its current nomenclatural status and typification category (e.g., holotype, paratype, isotype, or syntype). The collection includes historically significant materials from the 19th and 20th centuries, reflecting the intensive botanical explorations across Paleotropical and global regions. This cataloging effort aims to enhance the accessibility of these specimens for global taxonomic research and to provide a database for future revisionary studies and digitization initiatives. The data presented here underscore the pivotal role of the CAL herbarium in preserving the region's botanical heritage.

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INTRODUCTION

The Central National Herbarium (CAL), located in the AJCB Indian Botanic Garden, is one of India's oldest and most significant herbaria. Established in 1795, it is administered by the Botanical Survey of India (BSI) under the Ministry of Environment, Forest and Climate Change. CAL functions as the national repository for preserved plant specimens and plays a crucial role in taxonomic research and the documentation of India's botanical diversity. The herbarium houses more than 3 million specimens, both of phanerogams and cryptogams, including

numerous type specimens collected from across India and from various Paleotropical and global regions.

Type specimens are the fundamental reference points for botanical nomenclature; they are the physical records upon which the description of a new species is based. The authentication of taxa relies heavily on the accessibility of these "nomenclatural types," making their documentation a high priority for the scientific community (Haber 2012; Yang 2012; Mutanen *et al.*, 2015; Prosser *et al.*, 2016; Turland *et al.*, 2018). Given that many original

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descriptions of Indian flora were published centuries ago, the preservation and cataloging of type specimens are essential for resolving taxonomic ambiguities.

While phanerogamic (flowering plant) collections are often well-documented, the cryptogamic wealth—comprising algae, lichens, bryophytes, and pteridophytes—represents a significant yet often understudied portion of India’s biodiversity. The diversity of non-flowering plants preserved at CAL reflects the varied bioclimatic zones of the Indian subcontinent, from the Himalayan peaks to the tropical coasts. All specimens are maintained with special care and maintenance techniques for each

group of cryptogamic specimens present at CAL, and Type specimens are prioritized and kept separately in distinct boxes/Pigeons/rooms for enhanced safety and restricted access (Fig. 1-3).

It provides essential support for research in plant taxonomy, ecology, biodiversity conservation, and ethnobotany. In addition, CAL maintains a reference library and a digital herbarium database, offering an important resource for researchers, students, and environmentalists from India and abroad. The present study was undertaken to comprehensively document the Cryptogamic TYPE specimens (excluding Fungi) preserved in CAL. It is hoped that this work will serve

**Fig. 1: A. Entrance view of Cryptogamy section, Central National Herbarium (CAL)
 B. Arrangement of Pteridophyte Type specimens C. Arrangement of Bryophyte and Lichen Type specimens D. Arrangement of Algal Type specimens**



as a useful tool in the hands of all cryptogam lovers and researchers to promote understanding of plant species.

MATERIALS AND METHODS

The present study involved a comprehensive screening of the cryptogamic collections (excluding Fungi) preserved at the Central National Herbarium (CAL) to identify and document all primary and

secondary type specimens. Each identified specimen was physically verified against its original herbarium label and cross-referenced with protologues and taxonomic literature to confirm its current nomenclatural status and typification category. The specimens were then organized by major group (Algae, Bryophytes, Lichens, and Pteridophytes), with scientific names updated in accordance with the latest botanical literature. Finally, a detailed inventory was compiled,

Fig. 2: A. *Ulva chaugulei* M.G.Kavale & M.A.Kazi (Holotype & Isotype) B. *Avrainvillea visakhapatnamensis* A.S.Kumar & M. Palanisamy (Isotype) C. *Udaria lamellicaulis* D.K. Singh, S. Majumdar & D. Singh (Isotype) D. *Riccardia lachungensis* D. Singh & D.K. Singh (Holotype).



Fig 3.: A. *Buellia manipurensis* Kr.P. Singh & S.R. Singh (Holotype) B. *Heppsoia indica* D.D. Awasthi & Kr.P. Singh (Isotype) C. *Pteris dixitii* Fraser-Jenk. & Pariyar (Holotype) D. *Salvinia molesta* D.S.Mitch. (Isotype).



including current scientific names, collection data, and original citations to enhance global accessibility for taxonomic research.

RESULT & DISCUSSION

The systematic survey of the cryptogamic collections at the Central National Herbarium (CAL) identified a total of 453 type specimens distributed across four major taxonomic groups. The collection is predominantly Pteridophytes, with 358 types (approx. 79% of the total) distributed across 261 taxa in 19 families. This is followed by Bryophytes, which comprise 66 types (14.6%) distributed across 51 taxa under 7 families. Algae are represented by 20 types (4.4%),

encompassing 13 taxa across 9 families, while Lichens account for 9 types (2%), comprising 9 taxa across 7 families (Fig. 5-9). These specimens encompass a broad range of nomenclatural categories, including holotypes, isotypes, syntypes, and paratypes, primarily originating from 19th and 20th-century botanical explorations across various Palearctic and global regions. The distribution of specimens from various states in India is shown on the map (Fig. 4). While the majority of the collection originates from intensive botanical explorations of the Indian subcontinent (including Nepal, Sri Lanka, and Bhutan), the data

Fig. 4: Geographical representation of Cryptogamy Type specimens in CAL from India

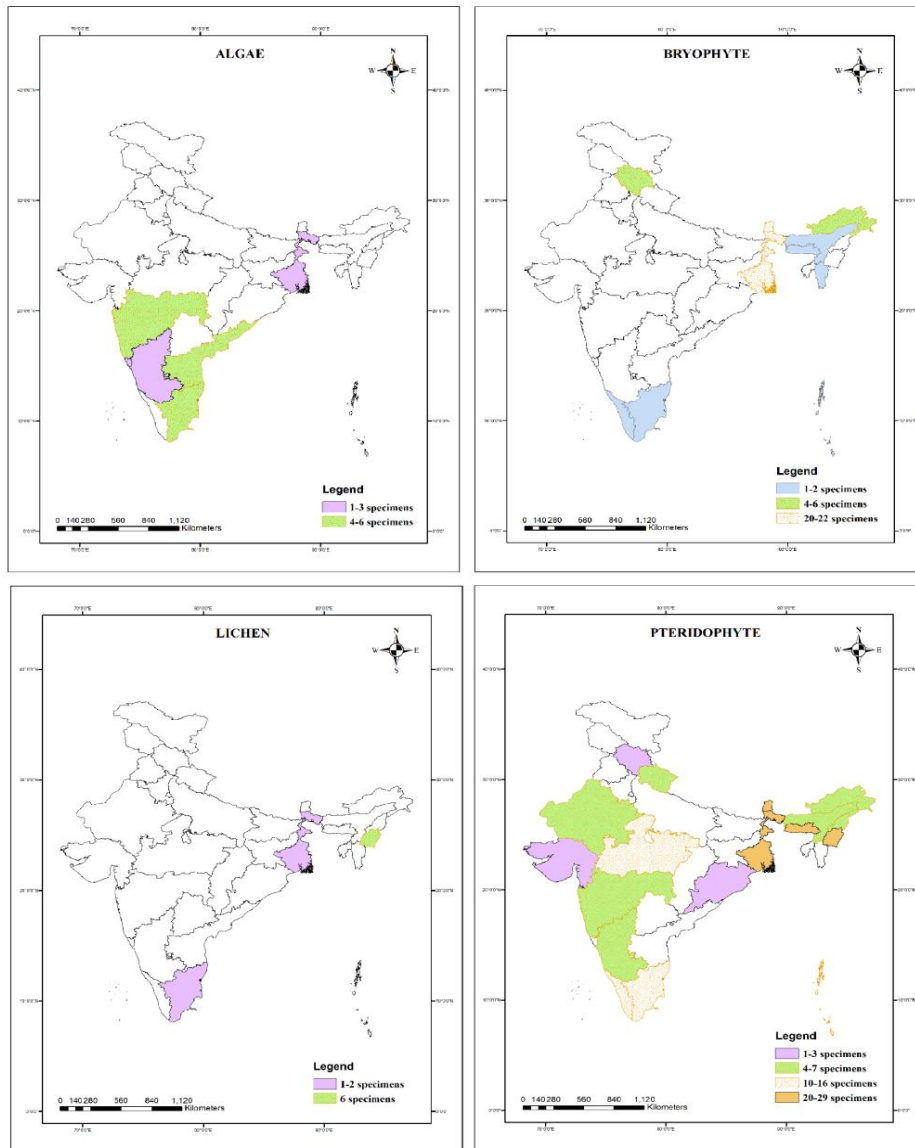
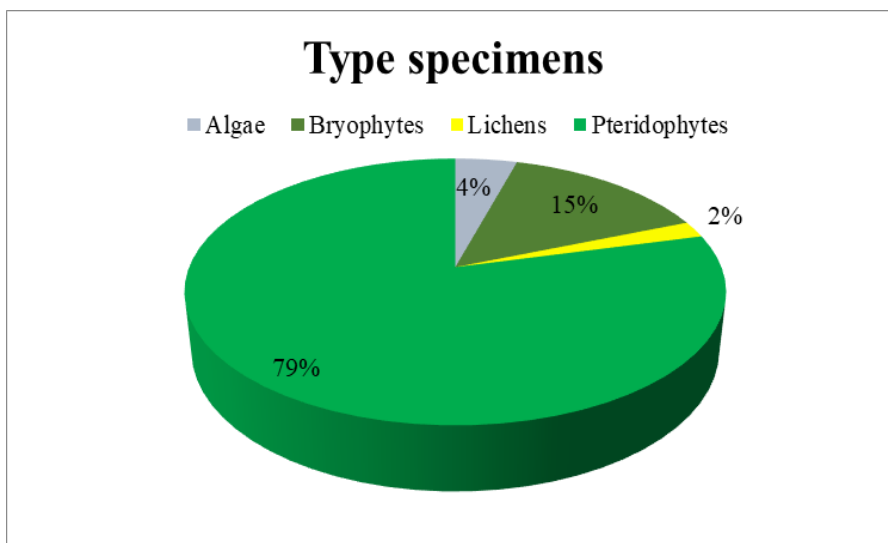


Fig. 5: Distribution of Cryptogamy Type specimens available in CAL



reveal a significant international representation. A substantial number of type specimens, particularly Pteridophytes, hail from China, followed by Southeast Asian nations such as Malaysia and the Philippines. Furthermore, the repository houses historically significant materials from diverse global regions, including Mexico, Hawaii, Fiji, and Zimbabwe (Fig. 10, 11).

The presence of specimens from such varied bioclimatic zones, ranging from the Himalayas to the Pacific Islands and African savannas, underscores the pivotal role of CAL as a premier global repository. This updated inventory provides a verified baseline for international taxonomic research and highlights the herbarium's enduring legacy in preserving the botanical heritage of both the Paleotropical and global

Fig. 6: Algal Taxa Family Wise Distribution

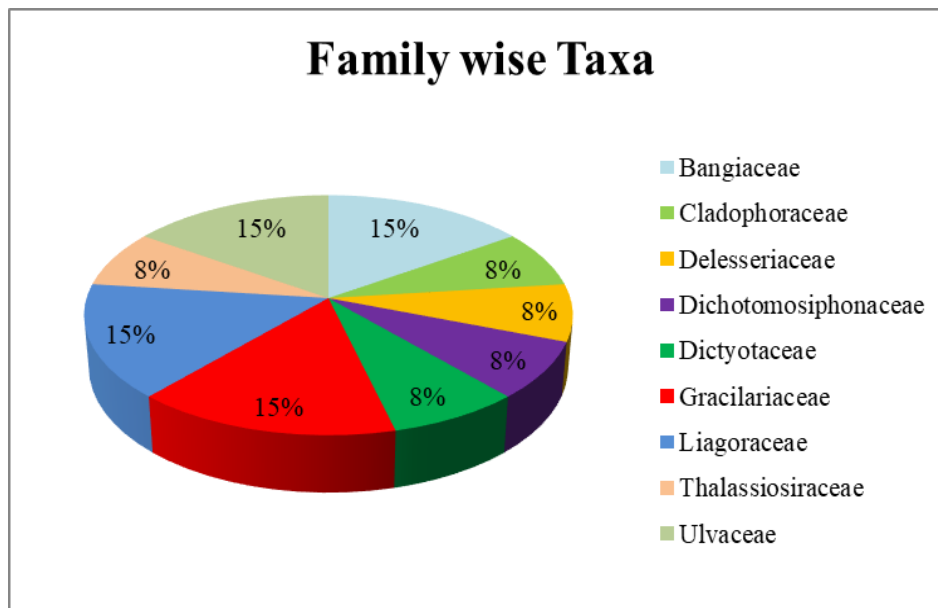


Fig. 7: Bryophyte Taxa Family Wise Distribution

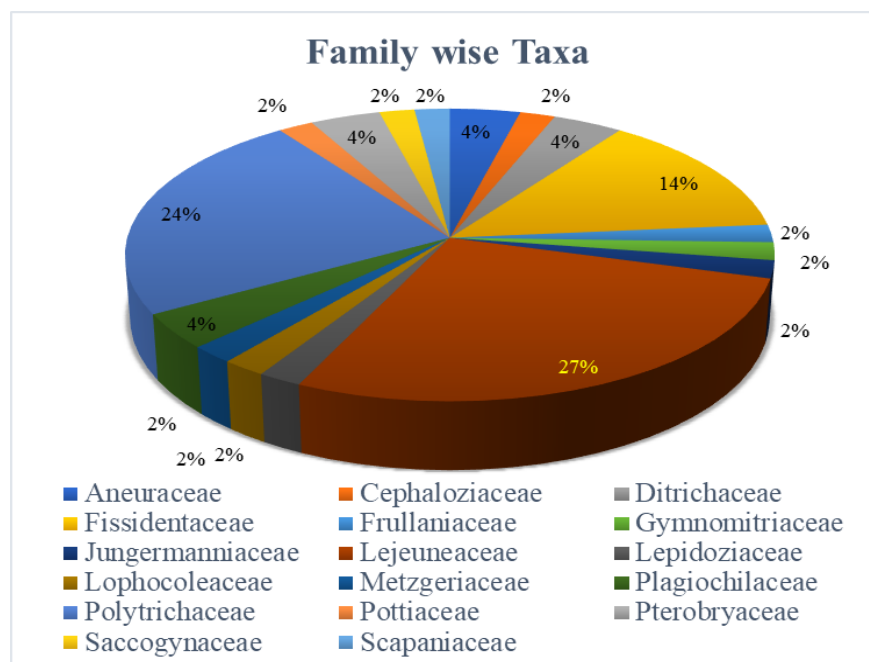


Fig. 8: Lichen Taxa Family Wise Distribution

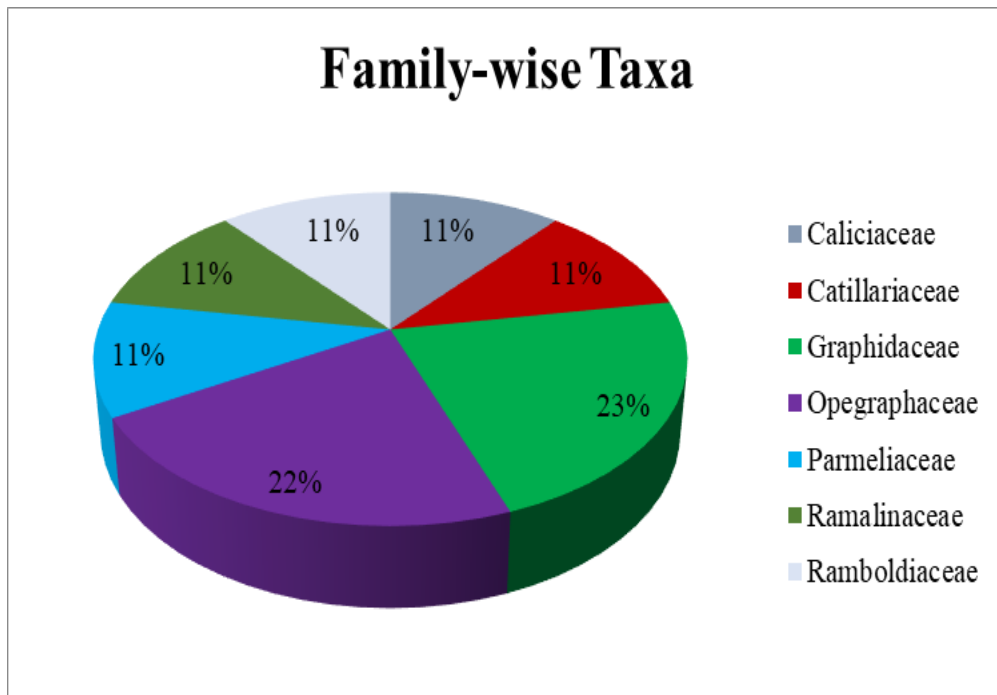


Fig. 9: Pteridophyte Taxa Family Wise Distribution

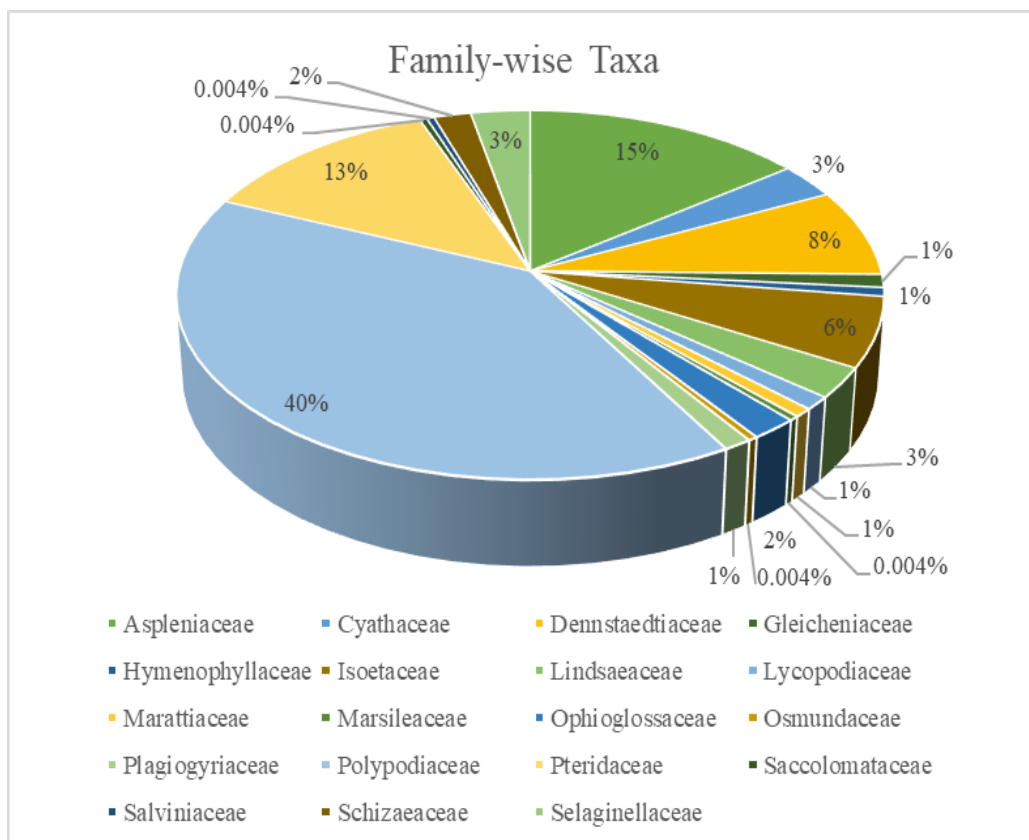


Fig. 10: Cryptogamy Type specimen representation from various states of India

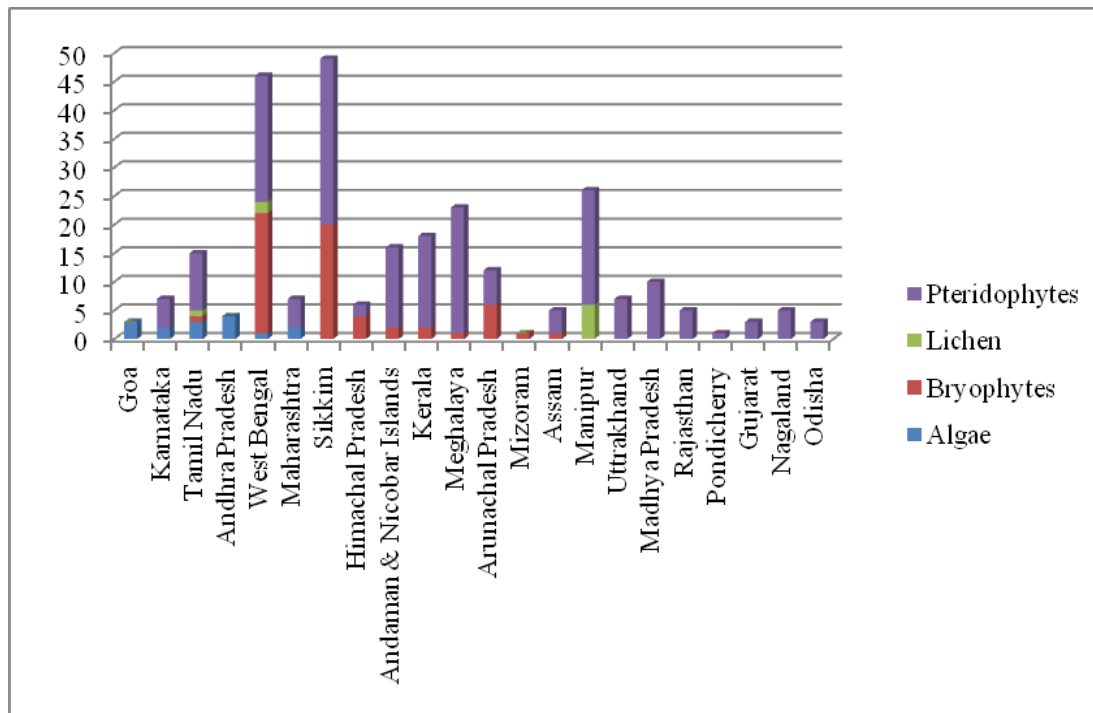
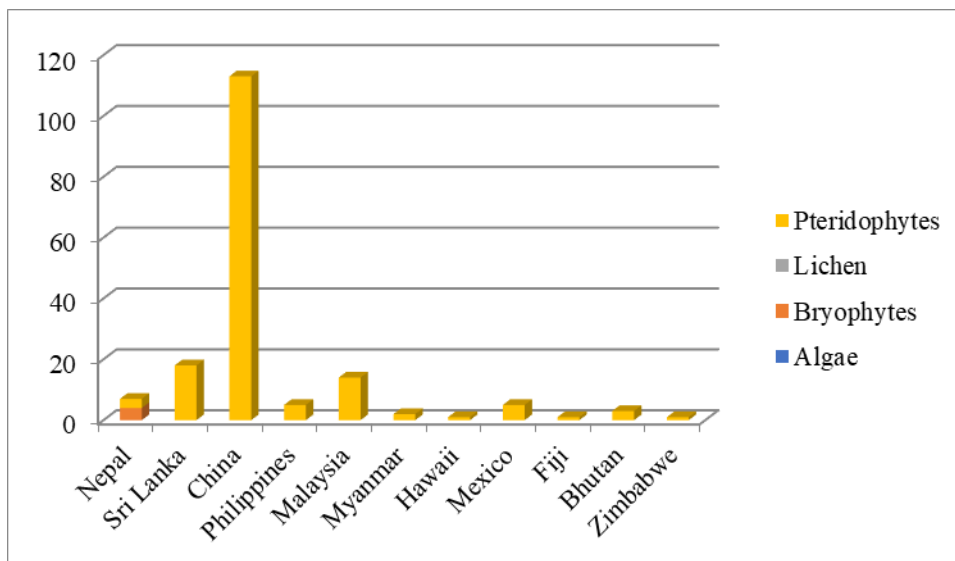


Fig. 11: Cryptogamy Type specimen representation from various Countries



floristics. Such documentation is essential for resolving taxonomic ambiguities and ensuring that these critical nomenclatural references remain accessible for modern revisionary studies and digitization initiatives.

Enumeration

ALGAE

Bangiaceae

Pyropia acanthophora var. *robusta* M.G.Kavale, M.A.Kazi & N.Sreenadhan, Indian Journal of Geo-Marine Sciences 44(6): 1-8. 2014; India, Goa, Cola,

18.08.2012, M.G. Kavale et M.A. Kazi ARC-P-126, CAL0000062761 (Holotype).

Pyropia sukshma (M.G.Kavale & M.A.Kazi) Santiañez & M.J.Wynne, Notulae Algarum 258: 1-2. 2022; India: Karnataka, Karwar, 14.08.2014, M.G. Kavale et. M.A. Kazi ARC-P-207, CAL0000062760 (Holotype).

Pyropia sukshma (M.G.Kavale & M.A.Kazi) Santiañez & M.J.Wynne, Notulae Algarum 258: 1-2. 2022; India: Karnataka, Karwar,



14.08.2014, M.G. Kavale et. M.A. Kazi ARC-P-208, CAL0000062769 (Isotype).

Cladophoraceae

Cladophora goaensis F.Bast, Indian Journal of Geo-Marine Sciences 44(12): 1874–1879. 2015, India: Goa, Vasco-Da-Gama, 15°23′32″N, 73°49′13″E, 13.09.2012, Felix Bast CUPVOUCHER-CG-2013-1, CAL0000062759 (Holotype).

Delesseriaceae

Acrosorium krishnamurthyi M.Umamaheswara Rao, Phycos 40(1/2): 1–13. 2002; India: Tamil Nadu, Kanyakumari, 18.12.1969, M. Umamaheswara Rao 336, CAL0000062756 (Holotype)

Dichotomosiphonaceae

Avrainvillea visakhapatnamensis A.S.Kumar & M. Palanisamy; Regional Studies in Marine Science 60 (2023) 102868 (Figs. 3 and 4); Doi. org/10.1016/j.rsma.2023.102868; India: Andhra Pradesh, Mangamaripeta, 17°53′34.85″N, 83°27′18.45″E, 21.03.2019, M. Palanisamy & Aron Santosh Kumar Y 140303, CAL0000230269 (Isotype)

Dictyotaceae

Lobophora variegata var. *indica* Umamaheswara Rao; In: *Taxonomy of Algae*. (Desikachary, T.V. & Raja Rao, V.N. Eds), pp. 765-773. University of Madras.1980: 772, figs. 2 H-M, pl. I [1]; India: Tamil Nadu, Mandapam, 01.02.1965, M. Umamaheswara Rao MUR 531, CAL0000062748 (Holotype).

Lobophora variegata var. *indica* Umamaheswara Rao; In: *Taxonomy of Algae*. (Desikachary, T.V. & Raja Rao, V.N. Eds), pp. 765-773. University of Madras.1980: 772, figs. 2 H-M, pl. I [1]; India: Tamil Nadu, Nallatanni Island (near Kilakarai), 12.11.1973, M. Umamaheswara Rao MUR535, CAL0000062749 (Paratype).

Gracilariaceae

Gracilariaria idinthakaraiensis Umamaheswara Roa; Seaweed Res. Utiln. 25(1&2):1-11. 2003; India: Tamil Nadu, Tirunelveli Dist., Idinthakari, 19.12.1969, M. Umamaheswara Rao 332, CAL0000062757 (Holotype)

Gracilariaria rostrata Umamaheswara Roa; Seaweed Res. Utiln. 25(1&2):1-11. 2003; India: Tamil Nadu, Gulf of Mannar, Shingle Island, 28.12.1968, M. Umamaheswara Rao 334, CAL0000062750 (Holotype)

Gracilariaria rostrata Umamaheswara Roa; Seaweed Res. Utiln. 25(1&2):1-11. 2003; India: Tamil Nadu, Shingle Island, Gulf of Mannar, 28.12.1968, M. Umamaheswara Rao 334, CAL0000062754 (Paratype)

Liagoraceae

Helminthocladia sreeramului Umamaheswara Rao; 1991: 169-173, figs. 1-18; Seaweeds of the British Isles. Volume 1. Rhodophyta. Part 1. Introduction, Nemaliales, Gigartinales. pp. [i]-xi, [1]-252, 90 figs. London: British Museum (Natural History) In Dixon, P.S. & Irvine, L.M.; India: Andhra Pradesh, Visakhapattanam, Station IV., 09.01.1975, M. Umamaheswara Rao s.n., CAL0000062758 (Holotype).

Liagora visakhapatnamensis Umamaheswara Rao; Hydrobiologia 33: 201-208. 1969; India: Andhra Pradesh, Visakhapatnam Dt., Station II, 17.01.1960, M. Umamaheswara Rao MUR 203, CAL0000062751 (Holotype).

Liagora visakhapatnamensis Umamaheswara Rao; Hydrobiologia 33: 201-208. 1969; India: Andhra Pradesh, Visakhapatnam Dt., Station II, 16.12.1960, M. Umamaheswara Rao MUR 204, CAL0000062752 (Paratype).

Thalassiosiraceae

Thalassiosira sundarbana Samanta & Bhadury, Phycological Research 63(2): 102-109. 2015; India: West Bengal, Chemaguri Creek of Sagar Island, 25.08.2014, Brajogopal Samanta s.n., CAL0000305013 (Holotype).

Ulvaceae

Ulva chaugulei M.G.Kavale & M.A.Kazi, Phycologia 55(1): 45-54. 2016; India: Maharashtra, Vayangani, 06.09.2014, M.G. Kavale et M.A. Kazi ARC-U-303, CAL0000062762 (Holotype).

Ulva chaugulei M.G.Kavale & M.A.Kazi, Phycologia 55(1): 45-54. 2016; India: Maharashtra, Vayangani, 06.09.2014, M.G. Kavale et M.A. Kazi ARC-U-303, CAL0000310341 (Isotype).

Ulva chaugulei M.G.Kavale & M.A.Kazi, Phycologia 55(1): 45-54. 2016; India: Maharashtra, Vayangani, 06.09.2014, M.G. Kavale et M.A. Kazi ARC-U-303, CAL0000062767 (Isotype).

Ulva chaugulei M.G.Kavale & M.A.Kazi, Phycologia 55(1): 45-54. 2016; India:



Maharashtra, Vayangani, 06.09.2014, M.G. Kavale et M.A. Kazi ARC-U-303, CAL0000062768 (Isotype).

Ulva paschima F.Bast, PLoS ONE 9(10): e109295. 2014: 6, fig. 1 a-x; India: Goa, Anjuna, 15° 35' 00" N, 73° 44' 00" E, 13.09.2012, Felix Bast CUPVOUCHER-UP-2013-3, CAL0000029100 (Holotype).

BRYOPHYTES

Aneuraceae

Riccardia lachungensis D. Singh & D.K. Singh, Taiwania 62(1): 36, 3. 2017; India: North Sikkim, 12 km from Lachung towards Katau (ca 3118m), 14.05.2011, D. Singh 52130A, CAL0000063858 (Holotype).

Riccardia udarii D. Singh & D.K. Singh, Taiwania 62(1): 39, 4, 5. 2017; India: South Sikkim, Shimkharkha (ca 1421 m), 14.12.2013, D. Singh 60674A, CAL0000063859 (Holotype).

Cephaloziaceae

Cephalozia schusteri Sushil K. Singh & D.K. Singh, Lindbergia 32: 1. 2007; India: Himachal Pradesh, Kullu, GHNP, Sainj valley, Shanger (ca 2100 m), 19.09.2003, S.K. Singh 104343, CAL0000063852 (Holotype).

Ditrichaceae

Ditrichum apophysatum Hampe ex Gangulee, Bull. Bot. Soc. Bengal 13: 4. f. 25. 1959.; India: Sikkim Himalaya, Tongloo to Phalut, 8-9000 ft., 15.10.1868, S. Kurz 2305, CAL0000063923 (Holotype).

Ditrichum darjeelingense Ranauld & Cardot, Bull. Soc. Roy. Bot. Belgique 41(1): 51. 1905.; India: West Bengal, Darjeeling, 00.00.1901, G.A. Miller s.n., CAL0000063922 (Isotype).

Fissidentaceae

Fissidens asperisetus var. *andamanensis* Gangulee, Mosses E. India 2: 507. 1971.; India: Andaman, Diglipur, s.d., Gangulee 5453, CAL0000063992 (Holotype).

Fissidens kalimpongensis Gangulee, Bull. Bot. Soc. Bengal 11: 71. f. 10. 1957.; India: West Bengal, Kalimpong, 1350 m, 16.10.1957, H.C. Gangulee 750 (IV), CAL0000063930 (Holotype).

Fissidens lancifolius Hampe, Gen. Musc. Frond. 62. 1900.; India: West Bengal, Darjeeling, Tongloo, 8-10000 ft, 14.10.1868, S. Kurz 2302, CAL0000063928 (Holotype).

Fissidens laxitextus Broth. ex Gangulee, Nova Hedwigia 8: 144. pl. 3. 1964.; India: West Bengal, Kurseong, Sepoydura forest, 6800 ft, 20.10.1898, P. Decoly et Schaut. s.n., CAL0000063927 (Holotype).

Fissidens manilalii K.M. Manjula, Manju & K.P. Rajesh, The Bryologist 120(3): 264, 1, 2. 2017; India: Kerala, Kozhikode District, Meenchanda, 5 m, 27.07.2016, Manjula, K.M. & Chandini, V.K. 15995, CAL0000303580 (Isotype).

Fissidens sylvaticus var. *calcuttensis* Gangulee, Mosses E. India 2: 538. f. 255. 1971.; India: West Bengal, Shibpur, Botanical Garden, 11.02.1956, H.C. Gangulee 2446 (I), CAL0000063934 (Holotype).

Fissidens sylvaticus var. *calcuttensis* Gangulee, Mosses E. India 2: 538. f. 255. 1971.; India: West Bengal, Shibpur, Botanical Garden, 11.02.1956, H.C. Gangulee 2446 (I), CAL0000310430 (Isotype).

Fissidens teraicola Mull. Hal., Linnaea 37: 164. 1873.; India: West Bengal, Darjeeling, Below Gorudom, 30.09.1868, S. Kurz 1906, CAL0000310431 (Holotype).

Frullaniaceae

Frullania larjiana Sushil K. Singh & D.K. Singh, Journal of Bryology 27: 105. f. 1-31. 2005; India: Himachal Pradesh, Kullu, GHNP, Sainj valley, Larji (ca 1300 m), 07.02.2002, S.K. Singh 99501, CAL0000063865 (Holotype).

Gymnomitriaceae

Nardia grollei Váňa & D.G. Long, Nova Hedwigia 89: 491. 2009; India: West Sikkim, Jamlinghang, Chhurong Chhu valley below Dzongri, 10.07.1992, D.G. Long 22528, CAL0000303578 (Paratype).

Jungermanniaceae

Jungermannia indrodayana Sushil K. Singh & D.K. Singh, Cryptogamie, Bryologie 28: 103. 2007; India: Himachal Pradesh, Kullu, below Marhi, 31.07.2002, S.K. Singh 101223, CAL0000063850 (Holotype).

Lejeuneaceae

Cololejeunea andamanensis M. Dey & D.K. Singh; Cryptogamie, Bryologie 37(2): 150, 1-29. 2016; India: Andaman & Nicobar Islands, South Andaman, Motor Bhanji, Chidiatapu (ca 17 m); 11° 34' 269" N, 92° 40' 356" E; 04.02.2014, D.K. Singh 61611, CAL0000063870 (Holotype).

- Cololejeunea manilalii* Manju, Chandini & K.P. Rajesh, Acta Botanica Hungarica 59(1-2): 262, 1-2. 2017; India: Kerala, Malappuram District, Nilambur, New Amarambalam Reserved Forest (bordering Mukurti National Park of Tamil Nadu); 06.02.2010, K.P. Rajesh 111812A, CAL0000303577 (Isotype).
- Cololejeunea tixieriana* M. Dey, D. Singh & D.K. Singh; Taiwania 53: 258. 2008; India: West Bengal, Darjeeling District, Rangji Rum, Bhutan road (ca 1750 m), 19.12.2004, K.P. Singh 36397, CAL0000063871 (Holotype).
- Cololejeunea tixieriana* M. Dey, D. Singh & D.K. Singh; Taiwania 53: 258. 2008; India: West Bengal, Darjeeling District, Mungpoo (ca 2000 m); 19.12.2004, K.P. Singh 36391, CAL0000063872 (Paratype).
- Drepanolejeunea devendrae* Sushil K. Singh & M. Dey, Nelumbo. The Bulletin of the Botanical Survey of India 54: 20. 2012; India: Meghalaya, Ribhoi District, Umiam (ca 900 m); 07.12.2011, S.K. Singh 124302, CAL0000063873 (Holotype).
- Lejeunea liromobana* Singh Deo & D.K. Singh; Indian Journal of Forestry 39(4): 359, 1,2. 2016; India: Arunachal Pradesh, West Siang district, Liromoba, ca. 550 m, 14.09.2011, S. Singh Deo 51281, CAL0000304968 (Holotype).
- Lejeunea liromobana* Singh Deo & D.K. Singh; Indian Journal of Forestry 39(4): 359, 1,2. 2016; India: Arunachal Pradesh, West Siang district, Liromoba, ca. 550 m, 14.09.2011, S. Singh Deo 51281, CAL0000304970 (Holotype).
- Lejeunea kashyapii* M. Dey, D.K. Singh & D. Singh, Journal of Bryology 30: 126. 2008; India: East Sikkim, Pangthang (ca 1988 m), 05.03.2005, D. Singh 36482, CAL0000063874 (Holotype).
- Lejeunea kashyapii* M. Dey, D.K. Singh & D. Singh, Journal of Bryology 30: 126. 2008; India: East Sikkim, Fatak (ca 1950 m), 05.03.2005, D. Singh 36477, CAL0000063875 (Paratype).
- Lejeunea kashyapii* M. Dey, D.K. Singh & D. Singh, Journal of Bryology 30: 126. 2008; India: East Sikkim, Fatak (ca 1950 m), 05.03.2005, D. Singh 36484, CAL0000063876 (Paratype).
- Lejeunea kashyapii* M. Dey, D.K. Singh & D. Singh, Journal of Bryology 30: 126. 2008; India: East Sikkim, Pangthang (ca 1988 m), 18.09.2007, D. Singh 40964, CAL0000063877 (Paratype).
- Lejeunea mehrana* M. Dey, D.K. Singh & D. Singh; India: East Sikkim, Rate Chhu (ca 1788 m), 21.02.2006, D. Singh 36891, CAL0000063878 (Holotype).
- Lejeunea punctiformis* Taylor; London Journal of Botany 5: 398. 1846; India: East Sikkim, Bitu (ca 1850 m), 21.02.2006, D. Singh 36880, CAL0000063879 (Paratype).
- Lepidozia kashyapii* D. Singh & D.K. Singh, Nova Hedwigia 94(1-2): 222. 2012; India, East Sikkim, Kyangnoshla (ca 3300 m), 29.04.2004, D.K. Singh & D. Singh 35188, CAL0000063861 (Holotype).
- Lepidozia kashyapii* D. Singh & D.K. Singh, Nova Hedwigia 94(1-2): 222. 2012; India: East Sikkim, Kyangnoshla (ca 3300 m), 29.04.2004, D.K. Singh & D. Singh 35188B, CAL0000063862 (Isotype).
- Lepidozia kashyapii* D. Singh & D.K. Singh, Nova Hedwigia 94(1-2): 222. 2012; India: East Sikkim, Kyangnoshla (ca 3300 m), 19.09.2007, D.K. Singh 41036B, CAL0000063863 (Paratype).
- Leptolejeunea arunachalensis* Sudipa Das & D.K. Singh, Journal of Japanese Botany 83: 343. 2008; India: Arunachal Pradesh, Mehao WLS, Ijuno, 29.11.2000, D.K. Singh 98485a, CAL0000063888 (Holotype).
- Leptolejeunea mirikana* M. Dey & D.K. Singh, Taiwania 55(4): 355. 2010; India: West Bengal, Darjeeling district, near Mirik Lake (ca 1700 m), 18.01.2005, D. Singh & M. Dey 36289, CAL0000063880 (Holotype).
- Leptolejeunea mirikana* M. Dey & D.K. Singh, Taiwania 55(4): 355. 2010; India: West Bengal, Darjeeling district, near Mirik Lake (ca 1700 m), 18.01.2005, D. Singh & M. Dey 36300, CAL0000063884 (Paratype).
- Leptolejeunea mirikana* M. Dey & D.K. Singh, Taiwania 55(4): 355. 2010; India: West Bengal, Darjeeling district, near Mirik Lake (ca 1700 m), 18.01.2005, D. Singh & M. Dey 36293, CAL0000063881 (Paratype).
- Leptolejeunea mirikana* M. Dey & D.K. Singh, Taiwania 55(4): 355. 2010; India: West Bengal, Darjeeling district, near Mirik Lake (ca 1700 m), 18.01.2005, D. Singh & M. Dey 36299, CAL0000063883 (Paratype).
- Leptolejeunea mirikana* M. Dey & D.K. Singh, Taiwania 55(4): 355. 2010; India: West Bengal, Darjeeling district, near Mirik Lake (ca 1700 m), 18.01.2005, D. Singh & M. Dey 36294, CAL0000063882 (Paratype).

Leptolejeunea udarii M. Dey & D.K. Singh; Taiwania 55(4): 359. 2010; India: East Sikkim, Rolep (ca 1300 m), 30.10.2005, D. Singh 36711, CAL0000063885 (Holotype).

Leptolejeunea udarii M. Dey & D.K. Singh; Taiwania 55(4): 359. 2010; India: East Sikkim, Busuk–near Pamtenj military house (ca 1340 m), 22.02.2006, D. Singh 36911, CAL0000063886 (Paratype).

Lopholejeunea sikkimensis var. *tenuicostata* Sushil K. Singh & D.K. Singh; Bulletin of the Botanical Survey of India 47: 189. 2005; India: Himachal Pradesh, Kullu, GHNP, Sainj Valley, Bah-lapah (ca 2000 m), 26.05.2002, S.K. Singh 99594b, CAL0000063851 (Holotype).

Rectolejeunea devendrae Sushil K. Singh; Indian Journal of Forestry 35(2): 269. 2012; India: West Bengal, Howrah botanic Garden (c. 116 m), 03.02.2006, S.K. Singh 40062, CAL0000063889 (Holotype).

Lepidoziaceae

Bazzania mizoramensis Sk.N.Ali, D.Singh & Sushil K. Singh, Phytotaxa 739(3): 297, f. 1–2; India: Mizoram, Champhai, Champahai-Khazawl, 23°28'37" N, 93°14'14" E, 936 m., 24.02.2009, S.K. Singh & Party 102163, CAL0000310697 (Isotype).

Lophocoleaceae

Udaria lamellicaulis D.K. Singh, S. Majumdar & D. Singh, Current Science 115(8): 1537. 2018; India: North Sikkim, Zakthang, 27°46'55.8" N, 88°28'09.4" E, c. 3360 m, 24.03.2013, D. Singh 60533, CAL0000048965 (Holotype).

Udaria lamellicaulis D.K. Singh, S. Majumdar & D. Singh, Current Science 115(8): 1537. 2018; India: North Sikkim, Zakthang, 27°46'55.8" N, 88°28'09.4" E, c. 3360 m, 24.03.2013, D. Singh 60533A, CAL0000304965 (Isotype).

Metzgeriaceae

Metzgeria mizoramensis Sushil K. Singh & D. Singh; Cryptogamie, Bryologie 39(1): 48, 1–42. 2018; India: Mizoram, Mamit, Dampa Tiger Reserve, Phuldungsei Range, 23°30'0.7" N, 92°25'0.2" E, 932 m, 27.11.2011, S.K. Singh & al. 124090, CAL0000304964 (Holotype).

Plagiochilaceae

Plagiochila arunachalensis S. Majumdar & D.K. Singh, NeBio: A Journal of Environment and Biodiversity

6(4): 8, 1–2. 2015; India: Arunachal Pradesh, Anjaw district, on way from Hotspring to Jachhup, 28°12'N, 97°18'E (ca 3400 m), 02.11.1985, D.K. Singh 202C, CAL0000063864 (Holotype).

Plagiochila parvivittata var. *siangensis* Singh Deo & D.K. Singh; Plant Science Today 3(1): 64, 1–2. 2016; India: Arunachal Pradesh, West Siang district, Menchukha (between Zupuk and Damingla forests), ca 3300 m, 08.05.2011, S. Singh Deo 50829, CAL0000304966 (Holotype).

Plagiochila parvivittata var. *siangensis* Singh Deo & D.K. Singh; Plant Science Today 3(1): 64, 1–2. 2016; India: Arunachal Pradesh, West Siang district, Menchukha (between Zupuk and Damingla forests), ca 3300 m, 08.05.2011, S. Singh Deo 50829, CAL0000304967 (Isotype).

Polytrichaceae

Oligotrichum semilamellatum var. *edentatum* Gangullee, Mosses E. India 1: 87. f. 35. 1969.; India: Sikkim, s.d., S. Kurz 2366, CAL0000064000 (Holotype).

Pogonatum decolyi Broth. ex Gangulee, Nova Hedwigia 13: 126. 1966.; India: West Bengal, Kurseong, 4000 ft, s.d., Brotherus 2361, CAL0000063921 (Holotype).

Pogonatum fastigiatum var. *darjeelingense* Gangullee, Nova Hedwigia 12: 417. pl. 1. 1966.; India: West Bengal, Senchal range, 00.10.1962, Coll. By students 5641 (XVII), CAL0000064001 (Holotype).

Pogonatum flexicaule Mitt., J. Proc. Linn. Soc., Bot., Suppl. 1(2): 152. 1859.; India: Assam, s.d., Mrs. Mack s.n., CAL0000063914 (Holotype).

Pogonatum papillosulum Cardot & Dixon, J. Bot. 50: 146. 517 f. 1. 1912.; India: West Bengal, Darjeeling, near Ghoom, 7000 ft., 00.00.1910, Miss Craig 9, CAL0000063920 (Paratype).

Pogonatum patulum (Harv.) Mitt., J. Proc. Linn. Soc., Bot., Suppl. 1(2): 152. 1859.; Nepal: East Nepal, s.d., Wallich Wall. H 352, CAL0000310432 (Paratype).

Pogonatum rufisetum Mitt.; J. Proc. Linn. Soc., Bot., Suppl. 1(2): 153. 1859; India: Sikkim, Regio temp., 6–8000 ft, s.d., J.D. Hooker 1204, CAL0000063913 (Holotype).

Pogonatum strictifolium Broth. ex Gangulee, Nova Hedwigia 12: 419. pl. 2. 1966.; India: West Bengal, Darjeeling, Satpancho, 3000

ft, 00.00.1901, A.C. Hartless 2664, CAL0000063919 (Holotype).

Polytrichastrum emodi G.L. Sm., J. Hattori Bot. Lab. 38: 633. f. 1–11. 1974.; Nepal: E. Nepal, between Lama Chungbu and Slesa, 4350 m, 24.06.1972, Z. Iwatsuki 1602, CAL0000063916 (Isotype).

Polytrichastrum papillatum G.L. Sm., J. Hattori Bot. Lab. 38: 633. f. 12–24. 1974.; Nepal: E. Nepal, between Thang La and Thudam, 21.06.1972, Z. Iwatsuki 1429a, CAL0000063915 (Isoparatype).

Polytrichastrum torquatum Mitt. ex Osada & G.Sm., J. Hattori Bot. Lab. 38: 636. f. 25–36. 1974.; Nepal, E. Nepal, between Topke Gola and Shewaden, 3150 m, 28.06.1972, Z. Iwatsuki 1872, CAL0000063917 (Isoparatype).

Polytrichum densifolium Wilson ex Mitt., J. Proc. Linn. Soc., Bot., Suppl. 1(2): 155. 1859; India: West Bengal, Singalila, s.d., J.D. Hooker JDH 1198, CAL0000063918 (Holotype).

Pottiaceae

Tortula pseudoprinceps Dixon, Ann. Bryol. 3: 58. 1930.; India: N.W. Himalaya, s.d., Falconer 64, CAL0000310342 (Holotype).

Pterobryaceae

Pterobryopsis siheana A.E.D. Daniels & Athira, Phytotaxa 650(2): 180, f. 2. 2024; India: Western Ghats, Kerala, Idukki District, Kadamakuzhy, Pottamkulam Estate, ca 1074m, 9.7033°N, 77.1024°E, 16.10.2022, Athira, S. 326, CAL0000303581 (Holotype).

Symphysodontella madhusoodananii Manju & K.P. Rajesh, PhytoKeys 18: 40. 2012; India: Nilambur, New Amarambalam Reserve Forest (bordering Mukurti National Park of Tamil Nadu), 1200 m, 06.02.2010, K.P. Rajesh 106933, CAL0000303576 (Isotype).

Saccogynaceae

Saccogyna darjeelingensis M. Dey & S. Majumdar; Current Science 123(2): 145, 1–2. 2022; India: West Bengal, Darjeeling district, 2 km from Jogighat towards Ahaldara, 25°56′05.59″N, 88°22′18.33″E; 08.03.2019, M. Dey 81492, CAL0000234397 (Holotype).

Scapaniaceae

Scapania davidii Potemkin, Annales Botanici Fennici 38: 83. 2001; India: West Sikkim, Between Dzongri and Prek Chhu, 18.07.1992, D.G. Long 22647, CAL0000303579 (Isotype).

LICHEN

Caliciaceae

Buellia manipurensis Kr.P. Singh & S.R. Singh, Geophytology 12(1): 128. 1982.; India: Manipur, Mao, 6200', on the way of Rubini, 05.06.1979, K.P. Singh 550372, CAL0000063901 (Holotype).

Catillariaceae

Catillaria manipurensis Kr.P. Singh, Current Science 52(4): 165. 1983; India: Manipur, Churachandpur, Kolbang, 3500 ft, 14.06.1979, Krishna Pal Singh 550705, CAL0000310438 (Holotype).

Graphidaceae

Graphis manipurensis Pushpi Singh & Kr.P. Singh, Mycosphere 5(4): 507. 2014.; India: Manipur, Tegnopal, 5000', 21.06.1979, Krishna Pal Singh 550923, CAL0000310436 (Holotype).

Graphis sirohiensis Pushpi Singh & Kr.P. Singh, Mycosphere 5(4): 505. 2014.; India: Manipur, On way to Siroi hill, 5500 ft, 11.11.1976, Krishna Pal Singh 54810, CAL0000310435 (Holotype).

Opegraphaceae

Opegrapha caerulea S. Joseph, G.P. Sinha & V.S. Ramach., Indian J. For. Add. Ser. VI: 73. 2018.; India: West Bengal, 24 Parganas, Modern Nursery, 25.07.1974, K.N. Roychowdhury 3305, CAL0000310434 (Holotype).

Opegrapha subtrilocularis S. Joseph, G.P. Sinha & V.S. Ramach., Indian J. For. Add. Ser. VI: 97. 2018.; India: West Bengal, Howrah district, Andul, 03.09.2003, Prabal Baske 620, CAL0000310433 (Holotype).

Parmeliaceae

Parmelina manipurensis Kr.P. Singh, Bryologist 83(4): 533. 1981.; India: Manipur, Ukhrul, Hungdung, c. 4700 ft, 05.11.1976, K.P. Singh 55201, CAL0000303582 (Holotype).

Ramalinaceae

Heppsora indica D.D. Awasthi & Kr.P. Singh, Bryologist 80(3): 537. 1977.; India: Tamil Nadu, Palni hills, Booparai area, near village, by road side, c. 6000 ft, 18.12.1970, K.P. Singh 70.1136, CAL0000063897 (Isotype).

Ramboldiaceae

Catillaria manipurensis Kr.P. Singh, Curr. Sci. 52(4): 165. 1983.; India: Manipur, 113| 4-6 |130



Churachandpur, Kolbang, 3500 ft, 14.06.1979, Krishna Pal Singh 550705, CAL0000310438 (Holotype).

PTERIDOPHYTES

Aspleniaceae

Asplenium affine Sw., J. Bot. (Schrader) 1800(2): 56. 1801.; Sri Lanka, s.d., s. coll. 1008, CAL0000062940 (Holotype).

Asplenium grandifrons Christ, Bull. Herb. Boissier 6: 959. 1898.; China: Yunan (7000'), 00.00.1897, Dr. A. Henry 10108, CAL0000310290 (Isotype).

Asplenium hohenackerianum Kunze, Bot. Zeitung (Berlin) 7: 771. 1849.; India: Karnataka, Mangaloe, s.d., R.F. Hohenacker 211, CAL0000062907 (Holotype).

Asplenium holosorum Christ, Bull. Herb. Boissier 7: 10. 1898.; China: Yunan, Szemao Mts., 00.00.1899, Dr. A. Henry 11543, CAL0000310250 (Isotype).

Asplenium holosorum Christ, Bull. Herb. Boissier 7: 10. 1898.; China: Yunan, Szemao Mts., 00.00.1899, Dr. A. Henry 11543, CAL0000310251 (Isotype).

Asplenium lakshmananii M.B.Viswan., Curr. Sci. 58(6): 318, figs. 1-5. 1989.; India: Tamil Nadu, North Arcot District, Melpet of Javadi hills, 1100 m, 12.11.1986, M.B. Viswanathan 1270, CAL0000062936 (Holotype).

Asplenium leptophyllum Baker, Bull. Misc. Inform. Kew 1906(1): 10. 1906.; China: Yunan, Szemao Mts., 00.00.1899, Dr. A. Henry 13106, CAL0000310242 (Isotype).

Asplenium leptophyllum Baker, Bull. Misc. Inform. Kew 1906(1): 10. 1906.; China: Yunan, Szemao Mts., 00.00.1899, Dr. A. Henry 13106, CAL0000310243 (Isotype).

Asplenium leptophyllum Baker, Bull. Misc. Inform. Kew 1906(1): 10. 1906.; China: Yunan, Szemao Mts., 00.00.1899, Dr. A. Henry 13106, CAL0000310244 (Isotype).

Athyrium nigripes (Blume) T.Moore, Index Fil. (T.Moore) 1: xlix. 1857.; India: Arunachal Pradesh, Between 53-55 km. on the road from Rupa-Kalaktang, 10.11.1970, A.S. Rao 49747, CAL0000062903 (Holotype).

Asplenium parallelosorum Baker, Bull. Misc. Inform. Kew 1906(1): 9. 1906.; China: Yunan, Szemao Mts. (6000'), 00.00.1899, Dr. A. Henry 10103, CAL0000310296 (Isotype).

Asplenium sinense Baker, Bull. Misc. Inform. Kew 1906(1): 9. 1906.; China: Yunan, (5000'), 00.00.1897, Dr. A. Henry 10101, CAL0000310299 (Isotype).

Athyrium alatum Christ, Bull. Herb. Boissier 6: 963. 1898.; China: Yunan (5500'), 00.00.1897, Dr. A. Henry 10350, CAL0000310274 (Isotype).

Athyrium anisopterum Christ, Bull. Herb. Boissier 6: 962. 1898.; China: Yunan, 00.00.1897, Dr. A. Henry 10109, CAL0000310289 (Isotype).

Athyrium fissum Christ, Notul. Syst. (Paris) 1: 47. 1909.; China: Yunan, Szemao Mts. (5000'), 00.00.1899, Dr. A. Henry 13107, CAL0000310245 (Isotype).

Athyrium nigripes Mett. var. *elongatum* Christ, Bull. Herb. Boissier 6: 13. 1899.; China: Yunan, Szemao Mts. (8000'), 00.00.1899, Dr. A. Henry 10101D, CAL0000310331 (Iso-sytype).

Athyrium paranigripes X.C.Zhang, Bull. Bot. Res., Harbin 11(3): 9. 1991.; India: Sikkim, Phallut, 14.10.1900, s. coll. s.n., CAL0000062904 (Holotype).

Athyrium roseum Christ, Bull. Herb. Boissier 6: 961. 1898.; China: Yunan, (5000'), 00.00.1897, Dr. A. Henry 9918, CAL0000310280 (Isotype).

Diplazium cognatum (Hieron.) Sledge, Bull. Brit. Mus. (Nat. Hist.), Bot. 2: 308, t.31, f.18. 1962.; Sri Lanka, s.d., Thwaites CP1347, CAL0000063114 (Holotype).

Diplazium decurrens Bedd., Ferns S. India t.229. 1863.; Sri Lanka, s.d., Thwaites CV3332, CAL0000063126 (Holotype).

Diplazium decurrens Bedd., Ferns S. India t.229. 1863.; Sri Lanka, s.d., Thwaites CV3332, CAL0000063120 (Isotype).

Diplazium paradoxum Fée, Mém. Foug., 5. Gen. Filic. 214. 1852.; Sri Lanka, s.d., Thwaites CV1350, CAL0000063116 (Holotype).

Diplazium pin-faense Ching, Lingnan Sci. J. 15: 279. 1936.; China: Yao-renshan, Sanhoa, 06.08.1930, R.C. Ching 6298, CAL0000063113 (Holotype).

Diplazium polypodioides Mett. var. *sinense* Christ, Bull. Herb. Boissier 7: 12. 1899.; China: Yunan, Szemao Mts. (7000'), 00.00.1899, Dr. A. Henry 11526, CAL0000310337 (Isotype).

Diplazium polyrhizon (Baker) Sledge, Bull. Brit. Mus. (Nat. Hist.), Bot. 2: 298, t.30, f.11. 1962.; Sri Lanka,



- s.d., *Thwaites* CV3951, CAL0000063122 (Holotype).
- Gymnogramma gigantea* Baker, J. Bot. 27: 177. 1889.; China: Central China, s.d., *Dr. A. Henry* 6517, CAL0000310266 (Isotype).
- Gymnogramma gigantea* Baker, J. Bot. 27: 177. 1889.; China: Central China, s.d., *Dr. A. Henry* 6517, CAL0000310267 (Isotype).
- Gymnogramma grammitoides* Baker, J. Bot. 27: 178. 1889.; China: Central China, s.d., *Dr. A. Henry* 7531, CAL0000310264 (Isotype).
- Matteuccia orientalis* (Hook.) Trevis., Atti Reale Ist. Veneto Sci. Lett. Arti 3(14): 586. 1869.; India: Assam, *Simons s.n.*, CAL0000063399 (Holotype).
- Phegopteris amaurophylla* Christ, Bull. Herb. Boissier 7: 14. 1899.; China: Yunan, Szemao Mts. (6000'), 00.00.1899, *Dr. A. Henry* 11536, CAL0000310252 (Isotype).
- Phegopteris amaurophylla* Christ, Bull. Herb. Boissier 7: 14. 1899.; China: Yunan, Szemao Mts. (6000'), 00.00.1899, *Dr. A. Henry* 11536, CAL0000310253 (Isotype).
- Phegopteris incrassata* Christ, Bull. Herb. Boissier 6: 963. 1898.; China: Yunan (5000'), 00.00.1897, *Dr. A. Henry* 10105, CAL0000310295 (Isotype).
- Pronephrium birii* R.D.Dixit & Balkr., Indian Fern J. 7(1-2): 20, f.1-5. 1990.; India: Arunachal Pradesh, New Itanagar, Ganga Sagar Lake, 22.05.1982, *R.D. Dixit* 32142, CAL0000063524 (Holotype).
- Pronephrium cuspidatum* (Blume) Holttum, Blumea 20: 123. 1972.; India, West Bengal, Darjeeling District, Mongpo, 05.03.1871, *C.B. Clarke* 13963E, CAL0000063508 (Holotype).
- Pronephrium lakhimpureense* (Rosenst.) Holttum, Blumea 20: 110. 1972.; India: Meghalaya, Khasia, Nunklao, 30.10.1872, *C.B. Clarke* 19330D, CAL0000063509 (Holotype).
- Pseudophegopteris aurita* (Hook.) Ching, Acta Phytotax. Sin. 8(4): 314. 1963.; India: Meghalaya, Jaintea, 19.10.1867, *C.B. Clarke* 6035, CAL0000063505 (Holotype).
- Sphaerostephanos wynadensis* B.K.Nayar & Geev., Bull. Bot. Surv. India 28(1-4): 137. 1988.; India: Kerala, Chanthanthode, 13.02.1980, *B.K. Nayar, K.K. Geevarghese, P.V. Madhusoodanan & Gopalakrishnan* CU29250, CAL0000063586 (Isotype).
- Trigonospora ciliata* (Benth.) Holttum, Blumea 19: 29. 1971.; Sri Lanka, s.d., *Thwaites* C.P.992, CAL0000063625 (Holotype).
- Trigonospora zeylanica* (Ching) Sledge, Bull. Brit. Mus. (Nat. Hist.), Bot. 8(1): 24. 1981.; Sri Lanka, s.d., *Thwaites* C.P. 3050, CAL0000063624 (Holotype).
- Woodsia andersonii* (Bedd.) Christ, Mém. Soc. Bot. France 1: 45. 1905.; India: Uttrakhand, Kumaon, 28.05.1857, *T. Anderson s.n.*, CAL0000063607 (Holotype).
- Cyathaceae
- Alsophila albosetacea* Bedd., Ferns. br. Ind. Suppl. 2. 1876.; India: Nicobar Islands, s.d., *S. Kurz s.n.*, CAL0000062947 (Holotype).
- Alsophila costularis* Baker, Bull. Misc. Inform. Kew 1906(1): 8. 1906.; China: Yunan, Szemao Mts., 00.00.1899, *Dr. A. Henry* 13136, CAL0000310236 (Isotype).
- Alsophila gammiei* R.D.Dixit, Bull. Bot. Surv. India 34(1-4): 206. 1997.; India: Sikkim, Teesta valley, 16.05.1881, *G. King s.n.*, CAL0000063295 (Holotype).
- Alsophila gammiei* R.D.Dixit, Bull. Bot. Surv. India 34(1-4): 206. 1997.; India: Sikkim, Teesta valley, 16.05.1881, *G. King s.n.*, CAL0000062924 (Isotype).
- Alsophila gammiei* R.D.Dixit, Bull. Bot. Surv. India 34(1-4): 206. 1997.; India: West Bengal, Gorumara Rd., Lataguri, Jalpaiguri 01.06.1949, *V. Narayanaswami & Party* 3134, CAL0000062924 (Paratype).
- Alsophila gammiei* R.D.Dixit, Bull. Bot. Surv. India 34(1-4): 206. 1997.; India: Sikkim, Runjio, 04.03.1886, *G.A. Gammie s.n.*, CAL0000062914 (Paratype).
- Alsophila henryi* Baker, Bull. Misc. Inform. Kew 1898 (141): 229. 1898.; China: Yunan, (4000'), 00.00.1897, *Dr. A. Henry* 11451, CAL0000310311 (Isotype).
- Cyathea balakrishnanii* R.D.Dixit & A.K.Tripathi, Bull. Bot. Surv. India 26(3-4): 170. 1986.; India: Madhya Pradesh, Pachmarhi-Dhupgarh, c. 1023 m., 17.10.1984, *R.D. Dixit* 41231, CAL0000063037 (Holotype).
- Cyrtomium beddomei* S.R.Ghosh, J. Econ. Taxon. Bot. 5(2): 495. 1984.; India: Tamil Nadu, Nilgiris, Coonoor, 00.00.1858, *Beddome* 19, CAL0000063055 (Holotype).

- Lomaria decurrens* Baker, Bull. Misc. Inform. Kew 1906(1): 9. 1906.; China: Yunan, (6000´), 00.00.1897, Dr. A. Henry 9036, CAL0000310269 (Isotype).
- Plagiogyria henryi* Christ, Bull. Herb. Boissier 7: 8. 1899.; China: Yunan, Szemao Mts. (6000´), 00.00.1899, Dr. A. Henry 9036A, CAL0000310268 (Isotype).
- Dennstaedtiaceae
- Hypolepis coerulescens* A.Biswas, J. Econ. Taxon. Bot. 7(1): 121. 1985.; India, Sikkim, Gangtok, 1548 m., 20.09.1982, S.R. Ghosh 56543 A, CAL0000063236 (Holotype).
- Hypolepis coerulescens* A.Biswas, J. Econ. Taxon. Bot. 7(1): 121. 1985.; India, Sikkim, Gangtok, c. 1548 m., 20.09.1982, S.R. Ghosh 56541, CAL0000063237 (Paratype).
- Hypolepis coerulescens* A.Biswas, J. Econ. Taxon. Bot. 7(1): 121. 1985.; India, Sikkim, Gangtok, c. 1540 m., 20.09.1982, S.R. Ghosh 56541, CAL0000063235 (Paratype).
- Hypolepis gamblei* A.Biswas, J. Econ. Taxon. Bot. 7(1): 124. 1985.; India, West Bengal, Lebong road, 1834 m., 04.09.1875, J.S. Gamble 6357A, CAL0000063250 (Holotype).
- Hypolepis gamblei* A.Biswas, J. Econ. Taxon. Bot. 7(1): 124. 1985.; India, Sikkim, 10.09.1857, J.S. Gamble s.n., CAL0000063251 (Paratype).
- Hypolepis indica* A.Biswas, J. Econ. Taxon. Bot. 7(1): 112. 1985.; India, Sikkim, Gangtok, 21.09.1982, S.R. Ghosh 56579, CAL0000063249 (Holotype).
- Hypolepis longa* A.Biswas, J. Econ. Taxon. Bot. 7(1): 112. 1985.; India, Tamil Nadu, Salem Sheveroy hills, Cannery peak, Yercaud, 1280 m., 13.06.1963, J. Ghatak 476, CAL0000063246 (Holotype).
- Hypolepis longa* A.Biswas, J. Econ. Taxon. Bot. 7(1): 112. 1985.; India, Tamil Nadu, Salem Sheveroy hills, Cannery peak, Yercaud, 1280 m., 13.06.1963, J. Ghatak 476, CAL0000063247 (Isotype).
- Hypolepis punctata* (Thunb.) Mett. ex Kuhn, Filic. Afr. [Kuhn] 120. 1868.; Malaysia: Perak, Larut, 00.10.1883, Dr. King's collector 5015, CAL0000063238 (Holotype).
- Hypolepis sikkimensis* A.Biswas, J. Econ. Taxon. Bot. 7(1): 122. 1985.; India, Sikkim, Gangtok, 5,500', 26.05.1959, S.K. Mukherjee 4908, CAL0000063245 (Holotype).
- Hypolepis viridula* A.Biswas, J. Econ. Taxon. Bot. 7(1): 123. 1985.; India, Sikkim, Lachen, c. 2550 m., 23.09.1982, S.R. Ghosh 56597 A, CAL0000063254 (Holotype).
- Hypolepis viridula* A.Biswas, J. Econ. Taxon. Bot. 7(1): 123. 1985.; India, Sikkim, Lachen, c. 2550 m., 23.09.1982, S.R. Ghosh 56597 B, CAL0000063253 (Isotype).
- Microlepia akhoensis* A.Biswas & T.Sen, Indian Fern J. 18(1-2): 1 (-3), f.1-13,42,46-47. 2001.; India: Manipur, Tamenglong, near Akhoi village, 24.03.1985, S.R. Ghosh 59418a, CAL0000063417 (Holotype).
- Microlepia akhoensis* A.Biswas & T.Sen, Indian Fern J. 18(1-2): 1 (-3), f.1-13,42,46-47. 2001.; India: Manipur, Tamenglong, near Akhoi village, 24.03.1985, S.R. Ghosh 59418b, CAL0000063418 (Isotype).
- Microlepia brevistrigosa* A.Biswas, J. Econ. Taxon. Bot. 15(1): 38. 1991.; India: Meghalaya, Barapani, 06.07.1939, G.K. Deka 4568, CAL0000063433 (Holotype).
- Microlepia brevistrigosa* A.Biswas, J. Econ. Taxon. Bot. 15(1): 38. 1991.; India: Manipur, Tamenlong, 10.03.1984, B.Ghosh 16485, CAL0000063432 (Paratype).
- Microlepia brevistrigosa* A.Biswas, J. Econ. Taxon. Bot. 15(1): 38. 1991.; India: Manipur, Tamenlong, 1440 m, 10.03.1984, S.R. Ghosh & B.Ghosh 16485, CAL0000063431 (Paratype).
- Microlepia brevistrigosa* A.Biswas, J. Econ. Taxon. Bot. 15(1): 38. 1991.; India: Manipur, Tamenlong, 1440 m, 10.03.1984, S.R. Ghosh & B.Ghosh 16485, CAL0000063430 (Paratype).
- Microlepia glaberrima* A.Biswas & T.Sen, Indian Fern J. 18(1-2): 3 (-5), f.14-23,43,48. 2001.; India: Manipur, Tamenglong, K.T. Road, 950 m, 22.03.1985, S.R. Ghosh 59370a, CAL0000063413 (Holotype).
- Microlepia glaberrima* A.Biswas & T.Sen, Indian Fern J. 18(1-2): 3 (-5), f.14-23,43,48. 2001.; India: Manipur, Tamenglong, K.T. Road, 950 m, 22.03.1985, S.R. Ghosh 59370b, CAL0000063414 (Isotype).
- Microlepia kurzii* (C.B.Clarke) Bedd., Handb. Ferns Brit. India 66. 1883.; Myanmar: Pegu, 04.02.1871, S. Kurz. 3236, CAL0000063435 (Holotype).
- Microlepia kurzii* (C.B.Clarke) Bedd., Handb. Ferns Brit. India 66. 1883.; Myanmar:

- Pegu, 04.02.1871, S. Kurz. 3236, CAL0000063434 (Isotype).
- Microlepia kurzii* var. *manipurensis* A.Biswas & T.Sen, Indian Fern J. 18(1-2): 7 (-13), f.33-41,45,50-51. 2001; India: Manipur, Lopchow, 30.03.1985, B. Ghosh 59474, CAL0000063436 (Holotype).
- Microlepia kurzii* var. *manipurensis* A.Biswas & T.Sen, Indian Fern J. 18(1-2): 7 (-13), f.33-41,45,50-51. 2001; India: Manipur, Lopchow, 30.03.1985, B. Ghosh 59474, CAL0000063437 (Isotype).
- Microlepia macrosora* A.Biswas, J. Econ. Taxon. Bot. 12(2): 322. 1989.; India: Arunachal Pradesh, Kewhead quarters to Khunipahad, 26.09.1959, G. Panigrahi 19579, CAL0000063424 (Holotype).
- Microlepia manohara* B.K.Nayar & Madhus., Fern Gaz. 12(6): 335. 1984. India: Kerala, Wynad, Chembra Peak, 10.02.1976, B.K. Nayar & P.V. Madhusoodanan 7265, CAL0000063427 (Holotype).
- Microlepia neofadenii* A.Biswas & T.Sen, Indian Fern J. 18(1-2): 5 (-7), f.24-32,44,49. 2001.; India: Sikkim, 00.00.1877, G. King 4146, CAL0000063420 (Paratype).
- Microlepia oblongifolia* A.Biswas, J. Econ. Taxon. Bot. 12(2): 321. 1989.; India: Meghalaya, Garo Hills, 00.06.1903, J. Marten s.n., CAL0000063425 (Holotype).
- Microlepia oblongifolia* A.Biswas, J. Econ. Taxon. Bot. 12(2): 321. 1989.; India: Meghalaya, Garo Hills, 00.06.1903, J. Marten s.n., CAL0000063426 (Isotype).
- Microlepia sikkimensis* A.Biswas, J. Econ. Taxon. Bot. 12(2): 322. 1989.; India: Sikkim, Gorh, 00.10.1886, Dr. King's collector s.n., CAL0000063438 (Holotype).
- Microlepia tamenlongensis* A.Biswas, J. Econ. Taxon. Bot. 12(2): 315. 1989.; India: Manipur, Tamenglong, 13.10.1982, B. Ghosh 57877A, CAL0000063439 (Holotype).
- Microlepia tamenlongensis* A.Biswas, J. Econ. Taxon. Bot. 12(2): 315. 1989.; India: Manipur, Tamenglong, 13.10.1982, B. Ghosh 57877B, CAL0000063440 (Isotype).
- Microlepia tenera* Christ, Notul. Syst. (Paris) 1: 53. 1909.; China: Yunan (4000'), 00.00.1901, Dr. A. Henry 13155A, CAL00000310235 (Isotype).
- Monachosorum henryi* Christ, Bull. Herb. Boissier 6: 869. 1898.; China: Yunan (6000'), 00.00.1897, Dr. A. Henry 10457, CAL00000310260 (Isotype).
- Monachosorum henryi* Christ, Bull. Herb. Boissier 6: 869. 1898.; China: Yunan (6000'), 00.00.1897, Dr. A. Henry 10457, CAL00000310261 (Isotype).
- Gleicheniaceae
- Dicranopteris emarginata* (T.Moore) W.J.Rob., Bull. Torrey Bot. Club 39: 240. 1912.; Hawaii: Pahao, Puna, 07.02.1967, O. Degener 31277, CAL0000063140 (Isotype).
- Dicranopteris linearis* var. *wattii* Panigrahi & R.D.Dixit, Bull. Bot. Surv. India 13(1-2): 162. 1971.; India: Manipur, Kala Naga Hills, 00.05.1882, G. Watt. 7497, CAL0000063145 (Holotype).
- Hymenophyllum henryi* Baker, J. Bot. 27: 176. 1889.; China: Central China, 1885-88, Dr. A. Henry 5457, CAL00000310283 (Isotype).
- Hymenophyllaceae
- Hymenophyllum blumeinum* Spreng., Syst. Veg., ed. 16 [Sprengel] 4(1): 131. 1827.; Sri Lanka, s.d., Thwaites CV 1391, CAL0000063224 (Holotype).
- Trichomanes intramarginale* Hook. & Grev., Icon. Filic. t.211. 1831.; India: Andaman & Nicobar Islands, East side of Mt. Harriot, s.d., S. Kurz s.n., CAL0000063078 (Holotype).
- Isoetaceae
- Isoetes bilaspurensis* Panigrahi, Biol. Mem. 6(2): 135. 1981.; India: Madhya Pradesh, Amritdhara, 26.06.1974, G. SenGupta 20649, CAL0000063262 (Paratype).
- Isoetes divyadarshanii* P.K.Shukla, G.K.Srivast. & S.K.Shukla, Taxon 54(1): 113 (-115; f.3-5). 2005.; India: Maharashtra, Lonavala, 04.10.2000, P.K. Shukla & S.K. Shukla 8400A, CAL0000063268 (Holotype).
- Isoetes indica* D.D.Pant & G.K.Srivast., Proc. Natl. Inst. Sci. India, B 28: 246, t.14-16, f.4-7. 1962.; India: Madhya Pradesh, Ram Nai (Rewa), 13.11.1960, Pant s.n., CAL0000063255 (Isotype).
- Isoetes mahadevensis* G.K.Srivast., D.D.Pant & P.K.Shukla, Amer. Fern J. 83(4): 106. 1993.; India: Madhya Pradesh, Pachmarhi, Chhota Mahadev, 00.09.1987, Dr. P.K. Srivastava & Dr. P.K. Shukla 15011A, CAL0000063272 (Holotype).

- Isoetes mexicana* Underw., Bot. Gaz. 13: 93. 1888.; Mexico: Chihuahua, Sierra Madre, 06.10.1887, C.G. Pringle 1447, CAL0000063275 (Isotype).
- Isoetes montezumae* A.A.Eaton, Fern Bull. 5: 25. 1897.; Mexico: Flor de Maria, 28.08.1890, C.G. Pringle 3459, CAL0000063277 (Isotype).
- Isoetes panchaganiensis* G.K.Srivast., D.D.Pant & P.K.Shukla, Amer. Fern J. 83: 105. 1993.; India: Maharashtra, Satara, Panchgani, 00.10.1987, Dr. G.K. Srivastava & Dr. P.K. Shukla 15001A, CAL0000063270 (Holotype).
- Isoetes panchaganiensis* var. *kemangundiensis* G.K.Srivast., D.D.Pant & P.K.Shukla, Amer. Fern J. 83: 105. 1993.; India: Karnataka, Chikmanglur, Kemangundi, 00.10.1987, Dr. P.K. Shukla 15031A, CAL0000063273 (Holotype).
- Isoetes panchananii* D.D.Pant & G.K.Srivast., Proc. Natl. Inst. Sci. India, B 28: 243, t.13,14, f.1,2. 1962.; India: Madhya Pradesh, Ram Nai (Rewa), 13.11.1960, Pant s.n., CAL0000063264 (Isotype).
- Isoetes panchananii* var. *panchmarhiensis* G.K.Srivast., Mitt.Srivast. & P.K.Shukla, Indian Fern J. 14(1-2): 44. 1998.; India, Madhya Pradesh, Pachmarhi, Jatashankar, 11.10.1993, G.K. Srivastava, Mittunjai Srivastava & P.K. Shukla 25125A, CAL0000063274 (Holotype).
- Isoetes pringlei* Underw., Zoe 1: 98. 1890.; Mexico: Jalisco, Guadalajara, 01.11.1980, C.G. Pringle 3333, CAL0000063271 (Isotype).
- Isoetes rajasthanensis* Gena & Bhardwaja, J. Bombay Nat. Hist. Soc. 81(1): 165. 1984.; India: Rajasthan, Mt. Abu., 06.10.1975, C.B. Gena s.n., CAL0000063265 (Isotype).
- Isoetes reticulata* Gena & Bhardwaja, J. Bombay Nat. Hist. Soc. 81(1): 166. 1984.; India: Rajasthan, Atru, 06.09.1976, C.B. Jena s.n., CAL0000063263 (Isotype).
- Isoetes sampathkumaranii* L.N.Rao, Curr. Sci. 13(11): 286, figs. 1-3. 1944.; India: Karnataka, Bangalore, 06.08.1944, L.N. Rao s.n., CAL0000063267 (Isotype).
- Isoetes tuberculata* Gena & Bhardwaja, J. Bombay Nat. Hist. Soc. 81(1): 167. 1984.; India: Rajasthan, Kota, Atru, 15.09.1974, C.B. Gena s.n., CAL0000063261 (Isotype).
- Isoetes udupiensis* P.K.Shukla, G.K.Srivast., S.K.Shukla & P.K.Rajagopal, Taxon 54(1): 112 (-113; f.2,4-5). 2005.; India: Karnataka, Alepoor, Udipi, 13.10.2000, P.K. Shukla & S.K. Shukla 8399A, CAL0000063269 (Holotype).
- Lindsaeaceae
- Lindsaea andamanica* R.D.Dixit & B.Ghosh, Proc. Indian Acad. Sci. Pl. Sci. 92(3): 254. 1983; India: Andaman & Nicobar Islands, S. Andaman, Patalrug stream, 02.02.1904, C.G. Rogers s.n., CAL0000063312 (Holotype).
- Lindsaea andamanica* R.D.Dixit & B.Ghosh, Proc. Indian Acad. Sci. Pl. Sci. 92(3): 254. 1983; India: Andaman & Nicobar Islands, S. Andaman, Patalrug stream, 02.02.1904, C.G. Rogers s.n., CAL0000063313 (Isotype).
- Lindsaea andamanica* R.D.Dixit & B.Ghosh, Proc. Indian Acad. Sci. Pl. Sci. 92(3): 254. 1983; India: Andaman & Nicobar Islands, S. Andaman, s.d., S. Kurz s.n., CAL0000063314 (Paratype).
- Lindsaea andamanica* R.D.Dixit & B.Ghosh, Proc. Indian Acad. Sci. Pl. Sci. 92(3): 254. 1983; India: Andaman & Nicobar Islands, S. Andaman, Wright Myoto Wyssen skyline, 09.01.1974, S. Kurz 765, CAL0000063320 (Paratype).
- Lindsaea andamanica* R.D.Dixit & B.Ghosh, Proc. Indian Acad. Sci. Pl. Sci. 92(3): 254. 1983; India: Andaman & Nicobar Islands, S. Andaman, Wright Myoto Wyssen skyline, 09.01.1974, S. Kurz 765, CAL0000063319 (Paratype).
- Lindsaea andamanica* R.D.Dixit & B.Ghosh, Proc. Indian Acad. Sci. Pl. Sci. 92(3): 254. 1983; India: Andaman & Nicobar Islands, S. Andaman, Sipighat, 06.08.1975, N.P. Balakrishnan & P. Chakraborty 2579, CAL0000063318 (Paratype).
- Lindsaea andamanica* R.D.Dixit & B.Ghosh, Proc. Indian Acad. Sci. Pl. Sci. 92(3): 254. 1983; India: Andaman & Nicobar Islands, S. Andaman, Nabee Bah, near Viper, 00.00.1890, G. Kings n., CAL0000063317 (Paratype).
- Lindsaea andamanica* R.D.Dixit & B.Ghosh, Proc. Indian Acad. Sci. Pl. Sci. 92(3): 254. 1983; India: Andaman & Nicobar Islands, S. Andaman, s.d., S. Kurz s.n., CAL0000063315 (Paratype).
- Lindsaea beddomea* R.D.Dixit & B.Ghosh, Proc. Indian Acad. Sci. Pl. Sci. 89(3): 181. 1980; India: Tamil Nadu, Shevaroy Hills, Pullyur Vellukadai, 1400

- m, 23.03.1962, *J. Ghatak* G. 72, CAL0000063321 (Syntype).
- Lindsaea glandulifera* Alderw., Bull. Jard. Bot. Buitenzorg II(1): 9. 1911; Sri Lanka, s.d., *Thwaites* C.V. 1389, CAL0000063323 (Isotype).
- Lindsaea harveyi* Carruth., Fl. Vit. [Seemann] 338. 1873; Fiji: Viti & Fiji Island, 00.00.1860, *B. Seemann* 754, CAL0000063325 (Paratype).
- Lindsaea odorata* var. *darjeelingensis* T. Sen & U. Sen, American Fern Journal 71(1): 14. 1971; India: West Bengal, Senchal, 14.09.1877, *G. King* 4718, CAL0000063308 (Holotype).
- Lindsaea odorata* var. *darjeelingensis* T. Sen & U. Sen, American Fern Journal 71(1): 14. 1971; India: West Bengal, Senchal, 14.09.1877, *G. King* 4718, CAL0000063309 (Isotype).
- Lindsaea rutlandia* R.D.Dixit & B.Ghosh, Proc. Indian Acad. Sci. Pl. Sci. 92(3): 243. 1983; India: Andaman & Nicobar Islands, South Andamans, Rutland, 08.05.1904, *C.G. Rogers* 249, CAL0000063329 (Holotype).
- Lindsaea rutlandia* R.D.Dixit & B.Ghosh, Proc. Indian Acad. Sci. Pl. Sci. 92(3): 243. 1983; India: Andaman & Nicobar Islands, South Andamans, Rutland, 08.05.1904, *C.G. Rogers* 249, CAL0000063330 (Isotype).
- Lindsaea rutlandia* R.D.Dixit & B.Ghosh, Proc. Indian Acad. Sci. Pl. Sci. 92(3): 243. 1983; India: Andaman & Nicobar Islands, South Andamans, Rutland, 08.05.1904, *C.G. Rogers* 249, CAL0000063331 (Isotype).
- Lindsaea venusta* Klff.: Kuhn, Linnaea 36(1): 79. 1869; Sri Lanka, s.d., *Thwaites* C.V. 982, CAL0000063310 (Isotype).
- Lycopodiaceae
- Huperzia dicitiana* P.Mondal & R.K.Ghosh, Fern Gaz. 15(2): 72. 1995.; India, Sikkim, Lachen valley, Youngthum, 4000 m., 26.05.1989, *R.K. Ghosh & B. Ghosh* 66439, CAL0000063208 (Holotype).
- Huperzia indica* S.R.Ghosh, Pterid. Fl. E. India 51 (53; f.7). 2004.; India, West Bengal, Darjeeling Dt., Jalapahar, 2600 m., 00.05.1880, *J.S. Gamble* 8064, CAL0000063209 (Holotype).
- Huperzia indica* S.R.Ghosh, Pterid. Fl. E. India 51 (53; f.7). 2004.; India, West Bengal, Darjeeling District, Jalapahar, 00.07.1880, *J.S. Gamble* 8200, CAL0000063210 (Paratype).
- Lycopodium hamiltonii* var. *petiolatum* C.B. Clarke, Transactions of the Linnean Society of London, 2nd series: Botany 1(9): 590, 593. 1880; India: Meghalaya, Khasia, Sohra, 19.10.1871, *C.B. Clarke* 15527A, CAL0000063293 (Holotype).
- Marattiaceae
- Angiopteris arborescens* (Blanco) Merr., Sp. Blancoanae 1918. 1918.; Philippines: Luzon, Batangas Province, 00.08.1914, *Merrill* 51, CAL0000062939 (Holotype).
- Angiopteris evecta* var. *alata* Christ, Bull. Herb. Boissier 6: 937. 1898.; China: Yunan, 00.00.1897, *Dr. A. Henry* 9399, CAL0000310327 (Isotype).
- Angiopteris evecta* var. *alata* Christ, Bull. Herb. Boissier 6: 937. 1898.; China: Yunan, 00.00.1897, *Dr. A. Henry* 9399, CAL0000310328 (Isotype).
- Marsileaceae
- Marsilea maheshwarii* Gopal, Amer. Fern J. 58: 71, f.1. 1968.; India: Pondicherry, 07.04.1967, *G. Thanikaimoni* G.T.992a, CAL0000063408 (Holotype).
- Ophioglossaceae
- Ophioglossum fibrosum* Schumach., Beskr. Guin. Pl. 452. 1827.; Sri Lanka, s.d., *Thwaites* C.P. 3993, CAL0000063558 (Holotype).
- Ophioglossum gujaratense* S.M.Patil, R.N.Kachh., R.S.Patel & K.S.Rajput, Phytotaxa 351(4): 274. 2018.; India: Gujarat, Panchmahal district, Jambughoda, Dhanpuri, 22°21.486" N-73°42.871" E, 214 m, 30.07.2017, *S.M. Patil, R.N. Kachhiyapatel & K.S. Rajput* 215, CAL0000033688 (Holotype).
- Ophioglossum gujaratense* S.M.Patil, R.N.Kachh., R.S.Patel & K.S.Rajput, Phytotaxa 351(4): 274. 2018.; India: Gujarat, Panchmahal district, Jambughoda, Dhanpuri, 23°45.583" N-73°27.155" E, 273 m, 30.07.2017, *S.M. Patil & K.S. Rajput* 501, CAL0000033687 (Paratype).
- Ophioglossum hitkishorei* M.Patel & M.N.Reddy, Bot. Lett. 166(4): 426. 2019; India: Gujarat, Ahwa, Kodmal near Don hill station, 20°76'27.61" N-73°80'42.06" E, *M. Patel* 126, CAL0000033486 (Holotype).
- Ophioglossum oleosum* S.Khandelwal, Indian Fern J. 4(1-2): 102. 1987.; India: Madhya Pradesh, Kanharjhir (near Gwalior), 13.07.1977,

- Sharda Khandelwal* 1291, CAL0000063561 (Holotype).
- Ophioglossum trilokinathii* B.L.Yadav, Meghvansi, Meena & Gena, Sci. Rep. 11(24396): 2. 2021; India: Rajasthan, Mainal District, Chittorgarh, 25°5'15" N-75°10'01" E, B.L. Yadav, C.B. Gena & Kanta Meena 065, CAL0000216000 (Holotype).
- Osmundaceae
- Osmunda regalis* var. *panigrahiana* R.D.Dixit, Indian J. Forest. 13(1): 71. 1990.; India: Madhya Pradesh, Panchmari, Tridhara, 1025 m, 20.10.1984, R.D. Dixit 41299, CAL0000063550 (Holotype).
- Plagiogyriaceae
- Plagiogyria elongata* R.D. Dixit & A. Das, Proc. Indian Acad. Sci., Pl. Sci. 90: 377, pl. 5. 1981.; India: Meghalaya, Shillong, 5th miles Check Post, 09.01.1963, S. Choudhury 29660, CAL0000063460 (Holotype).
- Plagiogyria malayensis* R.D.Dixit & A.Das, Fern Gaz. 12(3): 182. 1981.; Malaysia: Perak, Summit of Gunung Batu Poleh, s.d., L. Wray 317, CAL0000063459 (Holotype).
- Plagiogyria malayensis* R.D.Dixit & A.Das, Fern Gaz. 12(3): 182. 1981.; Malaysia: Perak, s.d., Father Scortechini 397, CAL0000063510 (Paratype).
- Plagiogyria meghalayensis* R.D. Dixit & A. Das, Proc. Indian Acad. Sci., Pl. Sci. 90: 378, pl. 7. 1981.; India: Meghalaya, Shillong, Elephant Falls, 00.03.1979, R.R. Rao 4866, CAL0000063511 (Holotype).
- Polypodiaceae
- Acrophorus paleolatus* Pic.Serm., Webbia 31(1): 252. 1977.; India: West Bengal, Darjeeling District, Bird Hill, 6800 ft., 15.09.1879, H.C. Levinge 99, CAL0000062953 (Holotype).
- Acrostichum sinense* Baker, Bull. Misc. Inform. Kew 1906(1): 14. 1906.; China: Yunan, Szemao Mts. (4800'), 00.00.1899, Dr. A. Henry 12494, CAL0000310315 (Isotype).
- Acrostichum sinense* Baker, Bull. Misc. Inform. Kew 1906(1): 14. 1906.; China: Yunan, Szemao Mts. (4800'), 00.00.1899, Dr. A. Henry 12494, CAL0000310316 (Isotype).
- Acrostichum sinense* Baker, Bull. Misc. Inform. Kew 1906(1): 14. 1906.; China: Yunan, Szemao Mts. (4800'), 00.00.1899, Dr. A. Henry 12494, CAL0000310317 (Isotype).
- Acrostichum yunnanense* Baker, Bull. Misc. Inform. Kew 1898(141): 233. 1898.; China: Yunan (5000'), 00.00.1897, Dr. A. Henry 10310, CAL0000310233 (Isotype).
- Acrostichum yunnanense* Baker, Bull. Misc. Inform. Kew 1898(141): 233. 1898.; China: Yunan (5000'), 00.00.1897, Dr. A. Henry 10310, CAL0000310234 (Isotype).
- Anemia phyllitidis* (L.) Sw., Syn. Fil. 155. 1806.; India: Assam, Sookimtari, near Nowgong, 19.09.1891, A.D. Macfaslane s.n., CAL0000062905 (Holotype).
- Araiostegia beddomei* (C.Hope) Ching in Chien & Chun, Fl. Reipubl. Popularis Sin. 2: 288. 1959.; India: Himachal Pradesh, Simla, 8800 ft, 19.10.1886, Blanf. 104343, CAL0000062937 (Lectotype).
- Araiostegia hopei* Panigrahi & Soumen K.Basu, J. Econ. Taxon. Bot. 5(4): 849. 1984.; India: Darjeeling Himalayas, Sundukpho, 3496 m., 16.10.1880, H.C. Levinge 104343, CAL0000062938 (Holotype).
- Arthromeris gamblei* S.R.Ghosh, Pterid. Fl. E. India 573 (-575; f.180). 2004.; India: West Bengal, Darjeeling Dt., Badamtam, 500 m., 00.11.1879, J.S. Gamble 7337, CAL0000062892 (Holotype).
- Arthromeris gamblei* S.R.Ghosh, Pterid. Fl. E. India 573 (-575; f.180). 2004.; India: West Bengal, Darjeeling Dt., Badamtam, 500 m., 00.11.1879, J.S. Gamble 7337, CAL0000062893 (Isotype).
- Arthromeris himalayensis* (Hook.) Ching, Contr. Inst. Bot. Natl. Acad. Peiping 2: 99. 1933.; India: Sikkim, s.d., J.D. Hooker s.n., CAL0000062887 (Holotype).
- Arthromeris lungtauensis* var. *sikkimensis* S.R.Ghosh, Pterid. Fl. E. India 570 (-571; f.178). 2004.; India: Sikkim, Rungbee, 1800 m., 18.10.1884, G.A. Gammie 245, CAL0000025811 (Holotype).
- Arthromeris tenuicauda* Ching, Contr. Inst. Bot. Natl. Acad. Peiping 2: 91. 1933.; India: Meghalaya, Khasia, s.d., Griffith 1038, CAL0000062894 (Holotype).
- Arthromeris wallichiana* var. *biserialis* (C.B.Clarke) S.R.Ghosh, Pterid. Fl. E. India 576. 2004.; India: Meghalaya, Khasia, Nunkhow, 30.11.1872, C.B. Clarke 19325H, CAL0000062889 (Holotype).
- Arthromeris wallichiana* var. *biserialis* (C.B.Clarke) S.R.Ghosh, Pterid. Fl. E. India 576. 2004.; India: Meghalaya, Khasia, 26.08.1883, C.B. Clarke 40158C, CAL0000062890 (Paratype).

- Arthromeris wardii* Ching, Contr. Inst. Bot. Natl. Acad. Peiping 2: 94. 1933.; Ropraie Chang Hill, 00.01.1853, *Lehmann s.n.*, CAL0000062884 (Holotype).
- Arthromeris wardii* Ching, Contr. Inst. Bot. Natl. Acad. Peiping 2: 94. 1933.; Bhutan, s.d., *Griffith* 2725, CAL0000062882 (Syntype).
- Aspidium aculeatum* var. *pycnopterum* Christ, Bull. Herb. Boissier 7: 14. 1899.; China: Yunan, Szemao Mts. (5000'), 00.00.1899, *Dr. A. Henry* 11560, CAL0000310246 (Iso-syntype).
- Aspidium aculeatum* var. *pycnopterum* Christ, Bull. Herb. Boissier 7: 14. 1899.; China: Yunan, Szemao Mts. (5000'), 00.00.1899, *Dr. A. Henry* 11560A, CAL0000310247 (Iso-syntype).
- Aspidium aculeatum* var. *yunnanense* Christ, Bull. Herb. Boissier 6: 964. 1898.; China: Yunan (7000'), 00.00.1897, *Dr. A. Henry* 9101, CAL0000310325 (Isotype).
- Aspidium aculeatum* var. *yunnanense* Christ, Bull. Herb. Boissier 6: 964. 1898.; China: Yunan (7000'), 00.00.1897, *Dr. A. Henry* 9101, CAL0000310326 (Isotype).
- Aspidium filix-mas* var. *chrysocoma* Christ, Bull. Herb. Boissier 6: 966. 1898.; China: Yunan, 00.00.1897, *Dr. A. Henry* 9957, CAL0000310275 (Isotype).
- Aspidium lonchitoides* Christ, Bull. Herb. Boissier 7: 16. 1899.; China: Yunan (6000'), 00.00.1899, *Dr. A. Henry* 11829, CAL0000310321 (Isotype).
- Aspidium lunanense* Christ, Bull. Herb. Boissier 6: 966. 1898.; China: Yunan, 00.00.1897, *Dr. A. Henry* 10584, CAL0000310258 (Isotype).
- Aspidium mollissimum* Christ, Bull. Herb. Boissier 6: 968. 1898.; China: Yunan (5000'), 00.00.1897, *Dr. A. Henry* 10474, CAL0000310259 (Isotype).
- Aspidium varium* Sw. var. *fructuosum* Christ, Bull. Herb. Boissier 6: 967. 1898.; China: Yunan (6000'), 00.00.1897, *Dr. A. Henry* 10095, CAL0000310329 (Isotype).
- Aspidium varium* var. *fructuosum* Christ, Bull. Herb. Boissier 6: 967. 1898.; China: Yunan (6000'), 00.00.1897, *Dr. A. Henry* 10095, CAL0000310330 (Isotype).
- Aspidium yunnanense* Christ, Bull. Herb. Boissier 6(12): 965 (-966). 1898.; China: Yunan, (5000'), 00.00.1899, *Dr. A. Henry* 9038A, CAL0000310305 (Isotype).
- Belvisia henryi* (Hieron. & C.Chr.) Raymond, Mem. Jard. Bot. Montreal 55: 32. 1962.; China: Yunan, Szemao Mts. (4000'), 00.00.1899, *Dr. A. Henry* 11461A, CAL0000310307 (Holotype).
- Belvisia henryi* (Hieron. & C.Chr.) Raymond, Mem. Jard. Bot. Montreal 55: 32. 1962.; China: Yunan, Szemao Mts. (4000'), 00.00.1899, *Dr. A. Henry* 11461A, CAL0000310308 (Isotype).
- Bolbitis nagalandensis* R.R.Rao & Jamir, Reinwardtia 10(2): 119. 1985.; India: Nagaland, Changki (alaremero forests), 21.05.1981, *N.S. Jamir* 7112, CAL0000063028 (Holotype).
- Ctenitis mannii* (C.Hope) Ching, Bull. Fan Mem. Inst. Biol. Bot. 8: 289. 1938.; India: Assam, Digbai, Lakhimpur, Mukum forest, 00.12.1889, *G. Mann s.n.*, CAL0000063074 (Polypodiaceae).
- Ctenopteris glandulosa* J.Sm., Hist. Fil. 185. 1875.; Sri Lanka, s.d., *Thwaites* C.V. 1289, CAL0000063057 (Isotype).
- Ctenopteris thwaitesii* (Bedd.) Sledge, Bull. Brit. Mus. (Nat. Hist.), Bot. 2: 155. 1960.; Sri Lanka, s.d., *Thwaites* C.V. 3900, CAL0000063056 (Holotype).
- Cyrtogonellum fraxinellum* (Christ) Ching, Bull. Fan Mem. Inst. Biol. Bot. 8: 329, t.7(1). 1938.; China: Yunan, (6000'), 00.00.1901, *Dr. A. Henry* 11550A, CAL0000310248 (Isotype).
- Cyrtogonellum fraxinellum* (Christ) Ching, Bull. Fan Mem. Inst. Biol. Bot. 8: 329, t.7(1). 1938.; China: Yunan, (6000'), 00.00.1901, *Dr. A. Henry* 11550A, CAL0000310248 (Isotype).
- Davallia rigidula* Baker, Bull. Misc. Inform. Kew 1906(1): 8. 1906.; China: Yunan (5000'), 00.00.1897, *Dr. A. Henry* 10333, CAL0000310232 (Iso-syntype).
- Davallia rigidula* Baker, Bull. Misc. Inform. Kew 1906(1): 8. 1906.; China: Yunan, Szemao Mts., (5000'), 00.00.1899, *Dr. A. Henry* 13069, CAL0000310239 (Iso-syntype).
- Drynaria rivalis* Mett. var. *yunnanensis* Christ, Bull. Herb. Boissier 7: 6. 1899.; China: Yunan, Szemao Mts. (8000'), 00.00.1899, *Dr. A. Henry* 11512, CAL0000310336 (Isotype).
- Dryopteris* × *ghatakii* Fraser-Jenk., Bull. Brit. Mus. (Nat. Hist.), Bot. 18(5): 460. 1989.; India: Tamil Nadu, Shevaroy Hills, 01.09.1964, *J. Ghatak* 730, CAL0000063106 (Isotype).



- Dryopteris × vidyae* Fraser-Jenk., Bull. Brit. Mus. (Nat. Hist.), Bot. 18(5): 466. 1989.; India: West Bengal, Darjeeling, Rungjo, 14.09.1877, G. King 4710, CAL0000063105 (Holotype).
- Dryopteris approximata* Sledge, Bull. Brit. Mus. (Nat. Hist.), Bot. 5: 11. 1973.; Sri Lanka, s.d., Thwaites C.V. 1375, CAL0000063108 (Isotype).
- Dryopteris gamblei* (C.Hope) C.Chr., Index Filic. 267. 1905.; Bhutan: Dumseng, 05.11.1916, J.S. Gamble 254A, CAL0000063107 (Syntype).
- Dryopteris lachooensis* (Bedd.) B.K.Nayar & S.Kaur, Companion Handb. Ferns Brit. India 61. 1974.; India: Sikkim, Lachung, s.d., Collector s.n., CAL0000063124 (Lecto-Isotype).
- Dryopteris obtusissima* Christ, J. Bot. (Morot) sér. 2, 1: 231. 1908.; Sri Lanka, Thwaites C.V. 1369, CAL0000063110 (Syntype).
- Dryopteris patentissima* (Franch.) N.C.Nair, Indian Forester 94: 169. 1968.; India: Meghalaya, Khasia, Nongbri, 03.11.1872, C.B. Clarke 18746B, CAL0000063080 (Lectotype).
- Dryopteris sikkimensis* (Bedd.) Kuntze, Revis. Gen. Pl. 2: 813. 1891.; India: Sikkim, Monlepcha, 10,000-12,000 ft., 27.10.1857, T. Thompson s.n., CAL0000063123 (Holotype).
- Elaphoglossum cherapunji* S.R.Ghosh & A.Biswas, J. Econ. Taxon. Bot. 4(3): 996. 1983.; India: Meghalaya, side of Chera valley, below Cherapunji, 20.12.1850, J. Fayer s.n., CAL0000063149 (Holotype).
- Elaphoglossum fasciculatum* A.Biswas & S.R.Ghosh, Proc. Indian Acad. Sci. Pl. Sci. 93(6): 595. 1984.; India: Meghalaya, Shillong, Elephant falls, 04.10.1963, P. Chandra & Party 83009, CAL0000063148 (Holotype).
- Elaphoglossum fuscopunctatum* Christ, Bull. Herb. Boissier 6: 867. 1898.; China: Yunan, S. of Red River, from Man-mei (7000'), 00.00.1897, Dr. A. Henry 9158, CAL0000310300 (Isotype).
- Elaphoglossum fuscopunctatum* Christ, Bull. Herb. Boissier 6: 867. 1898.; China: Yunan, S. of Red River, from Man-mei (7000'), 00.00.1897, Dr. A. Henry 9158, CAL0000310301 (Isotype).
- Elaphoglossum himalaycum* Biswas ex A.Biswas & S.R.Ghosh, Proc. Indian Acad. Sci. Pl. Sci. 93(6): 598. 1984.; India: Sikkim, s.d., Beddome s.n., CAL0000063151 (Holotype).
- Elaphoglossum indicum* A.Biswas & S.R.Ghosh, Proc. Indian Acad. Sci. Pl. Sci. 93(6): 592. 1984.; India: Meghalaya, 27/3th miles from shilling, 29.09.1956, G. Panigrahi 3688, CAL0000063150 (Holotype).
- Elaphoglossum jowaiense* A.Biswas & S.R.Ghosh, J. Bombay Nat. Hist. Soc. 79(3): 650. 1983.; India: Meghalaya, Jowai, 00.08.1892, Dr. King's collector s.n., CAL0000063152 (Holotype).
- Elaphoglossum jowaiense* A.Biswas & S.R.Ghosh, J. Bombay Nat. Hist. Soc. 79(3): 650. 1983.; India: Meghalaya, Jowai Punji, 00.08.1892, G. Mann s.n., CAL0000063153 (Paratype).
- Elaphoglossum khasianum* A.Biswas & S.R.Ghosh, Proc. Indian Acad. Sci. Pl. Sci. 93(6): 606. 1984.; India: Meghalaya, Khasia, Mavias, 07.11.1871, C.B. Clarke 15369A, CAL0000063154 (Holotype).
- Elaphoglossum khasianum* A.Biswas & S.R.Ghosh, Proc. Indian Acad. Sci. Pl. Sci. 93(6): 606. 1984.; India: Arunachal Pradesh, Jabrang to Thengri village, 05.04.1957, G. Panigrahi 6479, CAL0000063156 (Paratype).
- Elaphoglossum khasianum* A.Biswas & S.R.Ghosh, Proc. Indian Acad. Sci. Pl. Sci. 93(6): 606. 1984.; India: Meghalaya, Khasia Hills, 00.06.1850, G. Panigrahi 6479, CAL0000063155 (Paratype).
- Elaphoglossum meeboldii* A.Biswas & S.R.Ghosh, Proc. Indian Acad. Sci. Pl. Sci. 93(6): 591. 1984.; India: Manipur, Naga Hills, Kungba, 00.12.1907, A. Meebold 7408, CAL0000063157 (Holotype).
- Elaphoglossum prainii* S.R.Ghosh & A.Biswas, J. Econ. Taxon. Bot. 4(3): 995. 1983.; India: Nagaland, Naga Hill, Pulinabad, 00.09.1886, D. Prain s.n., CAL0000063160 (Holotype).
- Elaphoglossum sikkimense* A.Biswas & S.R.Ghosh, Proc. Indian Acad. Sci. Pl. Sci. 93(6): 600. 1984.; India: Sikkim, Lachung, 09.08.1892, G.A. Gammie 701, CAL0000063161 (Holotype).
- Elaphoglossum simonsianum* S.R.Ghosh & A.Biswas, J. Econ. Taxon. Bot. 4(3): 1001. 1983.; India: Meghalaya, Khasia, Kala Panee Hill, 00.09.1850, Simons s.n., CAL0000063164 (Holotype).
- Elaphoglossum stigmatolepis* (Fée) T.Moore, Index Fil. (T.Moore) 1: xvi. 1857.; India: Tamil Nadu, Nilgiri Hills, Ootacamund, 14.08.1878, G. King s.n., CAL0000063167 (Holotype).

- Elaphoglossum thomsonii* S.R.Ghosh & A.Biswas, J. Econ. Taxon. Bot. 4(3): 996. 1983.; India: Sikkim, West of Yoksum, 04.11.1857, *T. Thomson s.n.*, CAL0000063165 (Holotype).
- Lepidogrammitis sikkimensis* S.R.Ghosh, Pterid. Fl. E. India 508 (-510; f.154). 2004; India: Sikkim, Yoksum hills by the side of Chutha khola river, c. 1900 m, 17.03.1984, S.R. Ghosh 57811, CAL0000063306 (Holotype).
- Lepidogrammitis sikkimensis* S.R.Ghosh, Pterid. Fl. E. India 508 (-510; f.154). 2004; India: Sikkim, Yoksum hills by the side of Chutha khola river, c. 1900 m, 17.03.1984, S.R. Ghosh 57811, CAL0000063305 (Isotype).
- Lepisorus eilophyllus* Ching, Bull. Fan Mem. Inst. Biol. 4: 65. 1933.; China: Central China, s.d., *Dr. A. Henry* 6859, CAL0000310265 (Isotype).
- Leptochilus minutulus* Fée, Mém. Foug., 10. Ic. Esp. Nouv. 8. 1865; India: Meghalaya, Khasi hills, 00.09.1889, *Mann s.n.*, CAL0000063301 (Holotype).
- Leptochilus thwaitesianus* Fée, Mém. Foug., 10. Ic. Esp. Nouv.: 7. 1865; Sri Lanka, s.d., *Thwaites C.V.* 1316, CAL0000063304 (Holotype).
- Leptochilus zeylanicus* Fée, Mém. Foug., 2. Hist. Acrostich.: 8. 1865; Sri Lanka, s.d., *Thwaites C.V.* 1317, CAL0000063300 (Holotype).
- Lomagramma perakensis* Bedd., Suppl. Ferns Brit. Ind. 107. 1892; Malaysia: Perak, Thaiping, 00.11.1885, *Dr. King's Collector* 8345, CAL0000063286 (Holotype).
- Lomagramma perakensis* Bedd., Suppl. Ferns Brit. Ind. 107. 1892; Malaysia: Perak, Thaiping, 00.11.1885, *Dr. King's Collector* 8345, CAL0000063285 (Isotype).
- Loxogramme avalanchia* R.D.Dixit & Silpi Das, Bull. Bot. Surv. India 35(1-4): 134. 1997; India: Tamil Nadu, Nilgiri District, Naduvattam, 200 m, 25.07.1960, *K. Subramanyam* 10581, CAL0000063280 (Paratype).
- Loxogramme manipurensis* Silpi Das & R.D.Dixit, Bull. Bot. Surv. India 38(1-4): 80. 2001; India: Manipur, Tamenglong, 1050 m, 19.03.1985, *B. Ghosh* 59271, CAL0000063281 (Holotype).
- Loxogramme mussooriana* R.D.Dixit & Silpi Das, Indian Fern J. 11(1-2): 62. 1995; India: Uttrakhand, Mussoorie, 00.08.1898, *P.W. Mackinnon s.n.*, CAL0000063292 (Holotype).
- Loxogramme mussooriana* R.D.Dixit & Silpi Das, Indian Fern J. 11(1-2): 62. 1995; India: Uttrakhand, Mussoorie, 00.08.1898, *P.W. Mackinnon s.n.*, CAL0000063291 (Isotype).
- Nephrodium crassifolium* Hook., Sp. Fil. 4: 114. 1862.; Philippines: Luzon, s.d., *Cuming* 266, CAL0000063450 (Syntype).
- Nephrodium diffractum* Baker, Bull. Misc. Inform. Kew 1898(141): 230. 1898.; China: Yunan, 00.00.1897, *Dr. A. Henry* 9028, CAL0000310270 (Isotype).
- Nephrodium diffractum* Baker, Bull. Misc. Inform. Kew 1898(141): 230. 1898.; China: Yunan, 00.00.1897, *Dr. A. Henry* 9028, CAL0000310271 (Isotype).
- Nephrodium glaucostipes* Bedd., Suppl. Ferns Brit. Ind. 80. 1892.; Malaysia: Larut, Perak, 300–400 ft, 00.07.1881, *Dr. King's Collector* 2046, CAL0000063454 (Holotype).
- Nephrodium glaucostipes* Bedd., Suppl. Ferns Brit. Ind. 80. 1892.; Malaysia: Larut, Perak, 300–400 ft, 00.07.1881, *Dr. King's Collector* 2046, CAL0000063453 (Isotype).
- Nephrodium ligulatum* Hook., Sp. Fil. 4: 112. 1862.; Philippines: Isles of Saurar, s.d., *Cuming* 343, CAL0000063449 (Syntype).
- Nephrodium sinense* Christ., Bull. Herb. Boissier 6: 880. 1898.; China: Yunan (5000'), 00.00.1897, *Dr. A. Henry* 10434, CAL0000310335 (Isotype).
- Nephrodium unidentatum* Diels, Nat. Pflanzenfam. [Engler & Prantl] 1(4): 174. 1899.; Malaysia: Perak, Larut, 00.03.1885, *H. Kunstler* 7434, CAL0000063451 (Holotype).
- Nephrodium unidentatum* Diels, Nat. Pflanzenfam. [Engler & Prantl] 1(4): 174. 1899.; Malaysia: Perak, Larut, 00.03.1885, *H. Kunstler* 7434, CAL0000063452 (Isotype).
- Nephrolepis paucifrondosa* J.F.R.Almeida, J. Indian Bot. Soc. 5: 51, t. .1-4. 1926.; India: Maharashtra, Khandala, 00.00.1860, s. coll. s.n., CAL0000063457 (Holotype).
- Niphobolus laevis* J.Sm., Bedd. Ferns br. Ind. t.161. 1866.; India: Meghalaya, Jaintia Hills, 00.08.1889, *G. Mann s.n.*, CAL0000063448 (Holotype).
- Oleandra intermedia* Ching, Bull. Fan Mem. Inst. Biol. 2: 187, t. 2. 1931.; China: Yunan, Szemao Mts., 00.00.1899, *Dr. A. Henry* 9484C, CAL0000310297 (Isotype).

- Oleandra intermedia* Ching, Bull. Fan Mem. Inst. Biol. 2: 187, t. 2. 1931.; China: Yunan, Szemao Mts., 00.00.1899, Dr. A. Henry 9484C, CAL0000310298 (Isotype).
- Phymatodes banerjiana* S.Pal & N.Pal, Amer. Fern J. 53: 103. 1963.; India: West Bengal, Calcutta, 15 ft., 28.07.1961, Sunanda Pal & Niranjana Pal 14(3), CAL0000063493 (Isotype).
- Phymatosorus beddomei* S.R.Ghosh, J. Econ. Taxon. Bot. 6(2): 434. 1985.; India: Kerala, Devicolum, 05.05.1883, H.C. Levinge s.n., CAL0000063494 (Holotype).
- Pleurogramme robusta* Christ., Bull. Herb. Boissier 6: 867. 1898.; China: Yunan (7000'), 00.00.1897, Dr. A. Henry 9149, CAL0000310302 (Isotype).
- Polypodium aspersum* Baker, Bull. Misc. Inform. Kew 1898(141): 231. 1898.; China: Yunan (6000'), 00.00.1897, Dr. A. Henry 9054, CAL0000310304 (Isotype).
- Polypodium deltoideum* Baker, J. Bot. 26: 230. 1888.; China: Central China, 1885-88, Dr. A. Henry 3279, CAL0000310288 (Isotype).
- Polypodium henryi* Christ, Bull. Herb. Boissier 6: 873. 1898.; China: Yunan (5000'), 00.00.1897, Dr. A. Henry 9780, CAL0000310262 (Isotype).
- Polypodium henryi* Christ, Bull. Herb. Boissier 6: 873. 1898.; China: Yunan (5000'), 00.00.1897, Dr. A. Henry 9780, CAL0000310263 (Isotype).
- Polypodium inframarginale* Baker, Kew Bull. 14: 1906.; China: Yunan (5500'), 00.00.1897, Dr. A. Henry 10042, CAL0000310332 (Isotype).
- Polypodium inframarginale* Baker, Kew Bull. 14: 1906.; China: Yunan (5500'), 00.00.1897, Dr. A. Henry 10042, CAL0000310333 (Isotype).
- Polypodium maculosum* Christ, Bull. Herb. Boissier 6: 872. 1896.; China: Yunan (6000'), 00.00.1897, Dr. A. Henry 10090, CAL0000310291 (Isotype).
- Polypodium manmeiense* Christ, Bull. Herb. Boissier 6: 870. 1898.; China: Yunan (6000'), 00.00.1897, Dr. A. Henry 10081, CAL0000310294 (Isotype).
- Polypodium mengtzeanum* Baker, Bull. Misc. Inform. Kew 1906(1): 14. 1906.; China: Yunan, Szemao Mts. (6000'), 00.00.1899, Dr. A. Henry 11827, CAL0000310322 (Isotype).
- Polypodium mengtzeanum* Baker, Bull. Misc. Inform. Kew 1906(1): 14. 1906.; China: Yunan, Szemao Mts. (6000'), 00.00.1899, Dr. A. Henry 11827, CAL0000310323 (Isotype).
- Polypodium mengtzeense* Christ, Bull. Herb. Boissier 6: 869. 1898.; China: Yunan (7000'), 00.00.1897, Dr. A. Henry 10964, CAL0000310257 (Iso-syntype).
- Polypodium mengtzeense* Christ, Bull. Herb. Boissier 6: 869. 1898.; China: Yunan (5000'), 00.00.1897, Dr. A. Henry 11025, CAL0000310313 (Iso-syntype).
- Polypodium mengtzeense* Christ, Bull. Herb. Boissier 6: 869. 1898.; China: Yunan (5000'), 00.00.1897, Dr. A. Henry 11025, CAL0000310312 (Iso-syntype).
- Polypodium micropteris* Baker, Bull. Misc. Inform. Kew 1906(1): 14. 1906.; China: Yunan, Szemao Mts. (6000'), 00.00.1899, Dr. A. Henry 12630, CAL0000310314 (Isotype).
- Polypodium nigrocinctum* Christ, Bull. Herb. Boissier 6: 874. 1896.; China: Yunan (7000'), 00.00.1897, Dr. A. Henry 9264, CAL0000310284 (Iso-syntype).
- Polypodium nigrocinctum* Christ, Bull. Herb. Boissier 6: 874. 1896.; China: Yunan, 00.00.1897, Dr. A. Henry 11454, CAL0000310309 (Iso-syntype).
- Polypodium nigrocinctum* Christ, Bull. Herb. Boissier 6: 874. 1896.; China: Yunan (8000'), 00.00.1897, Dr. A. Henry 11454, CAL0000310310 (Iso-syntype).
- Polypodium oligolepis* Baker, Bull. Misc. Inform. Kew 1898(141): 231. 1898.; China: Yunan, 00.00.1897, Dr. A. Henry 9896, CAL0000310278 (Isotype).
- Polypodium ovatum* Wall. Var. *populneum* Christ, Bull. Herb. Boissier 6: 873. 1896.; China: Yunan (5000'), 00.00.1897, Dr. A. Henry 9774, CAL0000310334 (Iso-syntype).
- Polypodium palmatopedatum* Baker, Bull. Misc. Inform. Kew 1898(141): 232. 1898.; China: Yunan, 00.00.1897, Dr. A. Henry 9289, CAL0000310285 (Isotype).
- Polypodium pseudoserratum* Christ, Bull. Herb. Boissier 6: 871. 1898.; China: Yunan, 00.00.1897, Dr. A. Henry 9895, CAL0000310279 (Isotype).
- Polypodium stenopterum* Baker, J. Bot. 26: 229. 1888.; China: Central China, 1885-88, Dr. A. Henry 3682, CAL0000310306 (Isotype).
- Polypodium subhastatum* Baker, J. Bot. 27: 177. 1889.; China: Central China, s.d., Dr. A. Henry 5450, CAL0000310282 (Isotype).



- Polypodium subintegrum* Baker, Bull. Misc. Inform. Kew 1898(141): 231. 1898.; China: Yunan (7000´), 00.00.1897, Dr. A. Henry 9194, CAL0000310281 (Isotype).
- Polypodium triglossum* Baker, Bull. Misc. Inform. Kew 1898(141): 232. 1898.; China: Yunan, 00.00.1897, Dr. A. Henry 9953, CAL0000310276 (Isotype).
- Polypodium trisectum* Baker, Bull. Misc. Inform. Kew 1898(141): 232. 1898.; China: Yunan, 00.00.1897, Dr. A. Henry 9891, CAL0000310256 (Isotype).
- Polypodium valdealatum* Christ, Bull. Herb. Boissier 7: 4. 1899.; China: Yunan, Szemao Mts., (8000´), 00.00.1899, Dr. A. Henry 11513, CAL0000310255 (Isotype).
- Polypodium xiphopteris* Baker, Bull. Misc. Inform. Kew 1906(1): 13. 1906.; China: Yunan, Szemao Mts., (6000´), 00.00.1899, Dr. A. Henry 11826, CAL0000310324 (Isotype).
- Polypodium wattii* (Bedd.) Tagawa, J. Jap. Bot. 22: 163. 1949.; India: Manipur, Kupra, 00.02.1882, G. Watt 5852, CAL0000063525 (Isotype).
- Polystichum birii* Jamir & R.R.Rao, J. Jap. Bot. 58(12): 376. 1983.; India: Nagaland, Wokha forest, 24.10.1980, N.S. Jamir 6523, CAL0000063530 (Holotype).
- Polystichum controversum* (Hance) Ching, Bull. Dept. Biol. Sun Yatsen Univ. 6: 7. 1933.; China: Kwangtung, 18.05.1932, W.T. Tsang 20510, CAL0000063503 (Paratype).
- Polystichum garhwalicum* N.C.Nair & Nag, J. Jap. Bot. 51(5): 138. 1976.; India: Uttrakhand, Kumaon, Bujkoti, 00.08.1908, P.W. Mackinnon s.n., CAL0000063502 (Paratype).
- Polystichum garhwalicum* N.C.Nair & Nag, J. Jap. Bot. 51(5): 138. 1976.; India: Uttrakhand, Tehri Garhwal, Nag Tiba, 00.00.1878, P.W. Mackinnon s.n., CAL0000063501 (Paratype).
- Polystichum garhwalicum* N.C.Nair & Nag, J. Jap. Bot. 51(5): 138. 1976.; India: Uttrakhand, Tehri Garhwal, Nag Tiba, 00.11.1879, P.W. Mackinnon s.n., CAL0000063500 (Paratype).
- Polystichum garhwalicum* N.C.Nair & Nag, J. Jap. Bot. 51(5): 138. 1976.; India: Uttrakhand, Tehri Garhwal, Nag Tiba, 00.00.1878, P.W. Mackinnon s.n., CAL0000063499 (Paratype).
- Polystichum garhwalicum* N.C.Nair & Nag, J. Jap. Bot. 51(5): 138. 1976.; India: Himachal Pradesh, Bashahr, Kandar, 20.10.1891, J.H. Lace 647, CAL0000063498 (Paratype).
- Polystichum lachenense* (Hook.) Bedd., Ferns Brit. India 1: t.32. 1865.; India: Sikkim, s.d., J.D. Hooker s.n., CAL0000063518 (Syntype).
- Polystichum lentum* var. *bifurcatum* M.C.Biswas & Soumen K.Basu, J. Econ. Taxon. Bot. 3(3): 961. 1983.; India: Sikkim, Gangtok, below Hanuman top, 20.11.1980, P. Chakraborty 818, CAL0000063504 (Holotype).
- Polystichum levingei* N.C.Nair, Bull. Bot. Surv. India 11: 192. 1971.; Bhutan: Dochula, 22.09.1964, Sen Gupta 436, CAL0000063519 (Holotype).
- Polystichum levingei* N.C.Nair, Bull. Bot. Surv. India 11: 192. 1971.; Koongma, 00.11.1863, H.C. Levinge s.n., CAL0000063522 (Paratype).
- Polystichum levingei* N.C.Nair, Bull. Bot. Surv. India 11: 192. 1971.; India: West Bengal, Darjeeling District, Phalloom, 00.10.1880, H.C. Levinge 8541, CAL0000063521 (Paratype).
- Polystichum levingei* N.C.Nair, Bull. Bot. Surv. India 11: 192. 1971.; India: West Bengal, Darjeeling District, Phalloom, 15.10.1880, H.C. Levinge s.n., CAL0000063523 (Paratype).
- Polystichum levingei* N.C.Nair, Bull. Bot. Surv. India 11: 192. 1971.; India: West Bengal, Darjeeling District, Phalloom, 15.10.1880, H.C. Levinge s.n., CAL0000063520 (Paratype).
- Polystichum nephrolepioides* Christ, Bull. Acad. Int. Géogr. Bot. sér. 3, 11(153-154): 258, c. fig. 1902.; China: Kouy-Tcheou, 24.10.1898, Loborda & R.P. Bodinier 2526, CAL0000063536 (Holotype).
- Polystichum siagense* C.Chanda & Fraser-Jenk., Indian Forester 151(5): 483. 2025.; India: Arunachal Pradesh, upper Siang District, Dihang-Dibang Biosphere Reserve, Singa to Tuting, near Singa Village, 28° 49´ 57" N, 95° 10´ 2" E, c. 1500 m., 19.12.2021, C. Chanda 44865, CAL0000295771 (Isotype).
- Polystichum sikkimense* Bedd., Ferns Brit. India 1: t.127. 1866.; India: Sikkim, Mon Lepaha, 11-12000 ft, s.d., J. Thompoon s.n., CAL0000063529 (Isolectotype).
- Polystichum sinense* Christ, Bull. Soc. Bot. France 52(Mém. 1): 30. 1905.;

- China: Yunan, 13.07.1886, *M. Delavay* 2173, CAL0000063531 (Holotype).
- Polystichum yunnanense* Christ, Notul. Syst. (Paris) 1: 34. 1909.; China: Yunan (5000'), 00.00.1899, *Dr. A. Henry* 9101A, CAL0000310303 (Iso-syntype).
- Selliguea anceps* Christ, Bull. Herb. Boissier 6: 879. 1898.; China: Yunan (6000'), 00.00.1897, *Dr. A. Henry* 10089, CAL0000310292 (Isotype).
- Selliguea anceps* Christ, Bull. Herb. Boissier 6: 879. 1898.; China: Yunan (6000'), 00.00.1897, *Dr. A. Henry* 10089, CAL0000310293 (Isotype).
- Tectaria periya* B.K.Nayar & Geev., Bull. Bot. Surv. India 28(1-4): 136. 1988.; India: Kerala, Periya, Mananthawady, 15.02.1982, *B.K. nayar & K. nayar* K11691, CAL0000063621 (Holotype).
- Tectaria polymorpha* (Wall. ex Hook.) Copel., Philipp. J. Sci., C 2: 413. 1907.; India: Nagaland, Changki, 16.07.1980, *N.S. Jamir* 6207, CAL0000063627 (Holotype).
- Pteridaceae
- Adiantum indicum* J.Ghatak, Proc. Indian Sci. Congr. Assoc. 3: 370. 1963.; India: West Bengal, Belgharia, 11.03.1957, *J. Ghatak* J301, CAL0000062965 (Holotype).
- Adiantum malesianum* J.Ghatak, Bull. Bot. Surv. India 5: 78. 1963.; Malaya, Batu caves, Selangor, 04.11.1958, *R.E. Helthum* J350, CAL0000062959 (Holotype).
- Adiantum malesianum* J.Ghatak, Bull. Bot. Surv. India 5: 78. 1963.; Malaya, Batu caves, Selangor, 04.11.1958, *R.E. Helthum* J350, CAL0000062960 (Isotype).
- Adiantum malesianum* J.Ghatak, Bull. Bot. Surv. India 5: 78. 1963.; Malaya, Batu caves, Selangor, 04.11.1958, *R.E. Helthum* J350B, CAL0000062958 (Isosyntype).
- Adiantum myriosorum* Baker, Bull. Misc. Inform. Kew 1898(141): 230. 1898.; China: Yunan, 00.00.1897, *Dr. A. Henry* 9266, CAL0000310286 (Isotype).
- Adiantum myriosorum* Baker, Bull. Misc. Inform. Kew 1898(141): 230. 1898.; China: Yunan, 00.00.1897, *Dr. A. Henry* 9266, CAL0000310287 (Isotype).
- Adiantum ramyam* B.K.Nayar & Geev., Bull. Bot. Surv. India 28(1-4): 133. 1988.; India: Kerala, Vellamunda, Mananthawady, 14.02.1982, *B.K. Nayar* & *P.V. Madhusoodanan* K11637, CAL0000062954 (Holotype).
- Aleuritopteris flavopygmaea* S.R.Ghosh, Pterid. Fl. E. India 388 (-389; fig. 112). 2004.; INDIA: Sikkim, Karponang, 2400 m., 04.07.1910, *W.W. Smith*, 3026, CAL0000062932 (Holotype).
- Aleuritopteris sikkimensis* S.R.Ghosh, Pterid. Fl. E. India 395 (-396; fig. 116). 2004.; India: Sikkim, Tona, 1200-1600 m., 00.04.1905, *G.L. Searight* 104, CAL0000062930 (Holotype).
- Antrophyum petiolatum* Baker, Kew Bull. 14. 1906.; China: Yunan (7000'), 00.00.1897, *Dr. A. Henry* 9153, CAL0000310338 (Isotype).
- Antrophyum petiolatum* Baker, Kew Bull. 14. 1906.; China: Yunan (7000'), 00.00.1897, *Dr. A. Henry* 9153, CAL0000310339 (Isotype).
- Cheilanthes keralensis* N.C.Nair & S.R.Ghosh, J. Indian Bot. Soc. 55(1): 52. 1976.; India: Tamil Nadu, Kanyakumari, Nagercoil, Kiripara, 100 m., 14.01.1974, *N.C. Nair & S.R. Ghosh* 51936, CAL0000063072 (Holotype).
- Cheilanthes keralensis* N.C.Nair & S.R.Ghosh, J. Indian Bot. Soc. 55(1): 52. 1976.; India: Tamil Nadu, Kanyakumari, Nagercoil, Kiripara, 100 m., 14.01.1974, *N.C. Nair & S.R. Ghosh* 51936, CAL0000063073 (Isotype).
- Cheilanthes mysorensis* Wallich var. *giraldii* Christ, Lecomte, Not. Syst. T. 1: 51. 1909.; China: Yunan (3200'), 00.00.1901, *Dr. A. Henry* 13235, CAL0000310340 (Iso-syntype).
- Cheilanthes patula* Baker, J. Bot. 26: 225. 1888.; China: Central China, s.d., *Dr. A. Henry* 3998, CAL0000310273 (Isotype).
- Cheilanthes subrufa* Baker, Bull. Misc. Inform. Kew 1906(1): 8. 1906.; China: Yunan, Szemao Mts. (7000'), 00.00.1899, *Dr. A. Henry* 11831, CAL0000310319 (Isotype).
- Cheilanthes subrufa* Baker, Bull. Misc. Inform. Kew 1906(1): 8. 1906.; China: Yunan, Szemao Mts. (7000'), 00.00.1899, *Dr. A. Henry* 11831, CAL0000310320 (Isotype).
- Cheilanthes undulata* C.Hope & C.H.Wright, Gard. Chron. ser. 3, 34: 397. 1903.; China: Yunan (2500'), 00.00.1901, *Dr. A. Henry* 13220, CAL0000310240 (Iso-syntype).

- Cheilanthes undulata* C.Hope & C.H.Wright, Gard. Chron. ser. 3, 34: 397. 1903.; China: Yunan (2500'), 00.00.1901, Dr. A. Henry 13220, CAL0000310241 (Iso-syntype).
- Coniogramme caudata* var. *nepalia* R.D.Dixit & A.Das, New Bot. 5: 45. 1978.; Nepal: East Nepal, Zongj-lladanga, 12.11.1963, H. Kanai, G. Murata & M. Togashi 598, CAL0000063059 (Holotype).
- Coniogramme caudata* var. *nepalia* R.D.Dixit & A.Das, New Bot. 5: 45. 1978.; Nepal: Bhalma Village, 20.05.1929, Bis Ram 433, CAL0000063061 (Paratype).
- Coniogramme purpurea* R.D.Dixit & A.Das, Proc. Indian Acad. Sci., B 88(4): 264. 1979.; India: West Bengal, Darjeeling, Little Ranjit block (2420 m), 22.09.1974, R.D. Dixit 52338, CAL0000063060 (Holotype).
- Coniogramme purpurea* R.D.Dixit & A.Das, Proc. Indian Acad. Sci., B 88(4): 264. 1979.; India: West Bengal, Darjeeling, Little Ranjit block (2420 m), 22.09.1974, R.D. Dixit 52338, CAL0000063058 (Isotype).
- Coniogramme subcordata* Copel., Leaf. Philipp. Bot. 3: 823. 1910.; Philippines, 00.08.1909, A.D.E. Elmer 11484, CAL0000063062 (Isotype).
- Gymnopteris contaminans* Bedd., Suppl. Ferns S. Ind. 27. 1876.; India, Karnataka, North Kanara, 00.12.1919, L.J. Sedgwick 3338, CAL0000063200 (Holotype).
- Gymnopteris bipinnata* Christ, Notul. Syst. (Paris) 1: 55. 1909.; China: Yunan, 00.00.1897, Dr. A. Henry 9001, CAL0000310272 (Iso-syntype).
- Hemionitis arifolia* (Burm.) T.Moore, Index Fil. (T.Moore) 6: 114. 1859.; India, West Bengal, Burdwan, Kanchannagar, near bridge above canal, 30 m, 21.11.2007, J. Mazumdar 59, CAL0000063211 (Holotype).
- Notholaena pringlei* Davenp., Bull. Torrey Bot. Club 13(8): 132, t. 58. 1886.; Mexico: Santa Eulalia Mts., 23.04.1885, C.G. Pringle 441, CAL0000063445 (Holotype).
- Pteris actinopteroides* Christ, Bull. Herb. Boissier 7:6. 1899.; China: Yunan (6000'), 00.00.1899, Dr. A. Henry 11833, CAL0000310318 (Isotype).
- Pteris dixitii* Fraser-Jenk. & Pariyar, Ferns Fern-Allies Nepal 1: 329. 2015.; India: Manipur, Tupshema, 13.02.1978, R.D. Dixit 58917, CAL0000063470 (Holotype).
- Pteris dixitii* Fraser-Jenk. & Pariyar, Ferns Fern-Allies Nepal 1: 329. 2015.; India: Manipur, Tupshema, 13.02.1978, R.D. Dixit 58917, CAL0000063469 (Isotype).
- Pteris furunculata* N.C.Nair & S.R.Ghosh, J. Indian Bot. Soc. 55(1): 38. 1976.; India: Kerala, Ponmudi, 06.01.1974, N.C. Nair & S.R. Ghosh 51744A, CAL0000063481 (Holotype).
- Pteris furunculata* N.C.Nair & S.R.Ghosh, J. Indian Bot. Soc. 55(1): 38. 1976.; India: Kerala, Ponmudi, 06.01.1974, N.C. Nair & S.R. Ghosh 51744B, CAL0000063482 (Isotype).
- Pteris furunculata* N.C.Nair & S.R.Ghosh, J. Indian Bot. Soc. 55(1): 38. 1976.; India: Kerala, Ponmudi, 06.01.1974, N.C. Nair & S.R. Ghosh 51744C, CAL0000063483 (Isotype).
- Pteris furunculata* N.C.Nair & S.R.Ghosh, J. Indian Bot. Soc. 55(1): 38. 1976.; India: Kerala, Kamashi, 800 m, 14.10.1968, N.C. Nair 40455, CAL0000063486 (Paratype).
- Pteris furunculata* N.C.Nair & S.R.Ghosh, J. Indian Bot. Soc. 55(1): 38. 1976.; India: Kerala, Munnar, Idiki, 1400 m, 08.01.1973, N.C. Nair & S.R. Ghosh 50754A, CAL0000063487 (Paratype).
- Pteris furunculata* N.C.Nair & S.R.Ghosh, J. Indian Bot. Soc. 55(1): 38. 1976.; India: Kerala, Jhankamari, 800 m, 13.10.1968, N.C. Nair 40417, CAL0000063485 (Paratype).
- Pteris furunculata* N.C.Nair & S.R.Ghosh, J. Indian Bot. Soc. 55(1): 38. 1976.; India: Kerala, Munnar, Idiki, 1400 m, 08.01.1973, N.C. Nair & S.R. Ghosh 50754B, CAL0000063484 (Paratype).
- Pteris geminata* Wall., Numer. List [Wallich] n. 2180. 1829.; s.l., s.d., Wight 2180, CAL0000063095 (Holotype).
- Pteris himalayensis* S.R.Ghosh, Pterid. Fl. E. India 353 (-355; f.106). 2004.; India: West Bengal, Kalimpong, Lava western side, 2335 m, 06.04.1984, S.R. Ghosh 58587, CAL0000063472 (Holotype).
- Pteris himalayensis* S.R.Ghosh, Pterid. Fl. E. India 353 (-355; f.106). 2004.; India: West Bengal, Kalimpong, Lava western side, 2335 m, 06.04.1984, S.R. Ghosh 58587, CAL0000063473 (Isotype).
- Pteris henryi* Christ, Bull. Herb. Boissier 6: 957. 1898.; China: Yunan (5500'),

00.00.1897, *Dr. A. Henry* 9911, CAL0000310277 (Iso-syntype).

Pteris pseudoesquirollii S.R.Ghosh, Pterid. Fl. E. India 325 (327-328). 2004.; India: Manipur, Technopol District, Moreh, 29.03.1985, *B.K. Ghosh & S.R. Ghosh* 59453, CAL0000063468 (Holotype).

Pteris pseudoesquirollii S.R.Ghosh, Pterid. Fl. E. India 325 (327-328). 2004.; India: Manipur, Technopol District, Moreh, 29.03.1985, *B.K. Ghosh & S.R. Ghosh* 59453, CAL0000063477 (Isotype).

Pteris prainii S.R.Ghosh, J. Econ. Taxon. Bot. 3(2): 591. 1982.; India: Nagaland, Naga Hills, Chukhaputes, 00.08.1886, *D. Prain s.n.*, CAL0000063463 (Holotype).

Pteris roseo-lilacina Hieron., Hedwigia 55: 350. 1914.; China: Yunan (2500'), 00.00.1901, *Dr. A. Henry* 13222, CAL0000310237 (Isotype).

Pteris silent-valliensis S.R.Ghosh & R.K.Ghosh, J. Bombay Nat. Hist. Soc. 79(2): 385. 1983.; India: Kerala, Way to Kuntipuja river, 21.04.1980, *J.N. Vohra & R.K. Ghosh* 56301, CAL0000063462 (Holotype).

Pteris silent-valliensis S.R.Ghosh & R.K.Ghosh, J. Bombay Nat. Hist. Soc. 79(2): 385. 1983.; India: Kerala, Way to Kuntipuja river, 21.04.1980, *J.N. Vohra & R.K. Ghosh* 56301, CAL0000063461 (Isotype).

Pteris subiriana P.Das, Phytotaxa 391(4): 247, f.1-3. 2018.; India: Maharashtra, Mahabaleshwar, 1219 m, 00.09.1918, *L.J. Sedgwick & T.R.D. Bell* 4797, CAL0000310437 (Holotype).

Pteris tenuissima Ching, Lingnan Sci. J. 15: 394. 1936., China: Yunan, 00.00.1901, *Dr. A. Henry* 13221, CAL0000310238 (Isotype).

Pteris trifoliata Christ, Bull. Herb. Boissier 7: 7. 1899.; China: Yunan, Szemao Mts. (5500'), 00.00.1899, *Dr. A. Henry* 11519, CAL0000310254 (Isotype).

Vittaria wattii R.D.Dixit & N.C.Nair, New Bot. 5: 41. 1978.; India: Manipur, 6-7000 ft, 00.04.1882, *G. Watt* 6410, CAL0000028000 (Holotype).

Saccolomataceae

Dicksonia kingii Bedd., Suppl. Ferns Brit. Ind. 6. 1892.; Malaysia: Perak, Gunong Batu, Larut, 00.08.1885, *Dr. King's Collector* 8058, CAL0000063144 (Syntype).

Dicksonia kingii Bedd., Suppl. Ferns Brit. Ind. 6. 1892.; Malaysia: Perak, Larut, 00.07.1880, *H. Kunstler* 2118, CAL0000063142 (Syntype).

Salviniaceae

Salvinia molesta D.S.Mitch., Brit. Fern Gaz. 10: 251. 1972.; Zimbabwe: Binga District, Ruziruhuru River inlet, Lake Kariba, 26.05.1972, *D.S. Mitchell* 1330, CAL0000063580 (Isotype).

Schizaeaceae

Anemia phyllitidis (L.) Sw., Syn. Fil. 155. 1806.; India: Assam, Sookimtari, near Nowgong; 19.09.1891, *A.D. Macfarlane s.n.*, CAL0000062905 (Holotype).

Anemia tomentosa (Sav.) Sw., Syn. Fil.157. 1806.; s.l., 06.06.1859, *Beddome* 110, CAL0000062906 (Holotype).

Lygodium andamanicum R.D.Dixit, J.B.Bhandari & R.Mukhop., Nordic J. Bot. 21(4): 427. 2002.; India: North Andaman, Saddle Peak, c. 650 m., 00.12.1992, *R.D. Dixit* 53396, CAL0000026261 (Isotype).

Lygodium circinnatum (Burm.f.) Sw., Syn. Fil. (Swartz) 153. 1806.; Phillipines: Antipolo, Luzon, 00.11.1914, *Merrill* 106, CAL0000063298 (Holotype).

Lygodium mexicanum C.Presl, Reliq. Haenk. 1: 72. 1825.; Mexico: Las Palmas, 15.10.1890, *C.G. Pringle* 3318, CAL0000063297 (Holotype).

Selaginellaceae

Selaginella jainii R.D.Dixit, Bull. Bot. Surv. India 25(1-4): 225. 1985.; India: Madhya Pradesh, Siang, 22.02.1972, *G. Panigrahi* 16838, CAL0000063567 (Holotype).

Selaginella keralensis R.D.Dixit, Bull. Bot. Surv. India 27(1-4): 123. 1987.; India: Kerala, Kuttikanam, 22.10.1968, *N.C. Nair* 40195, CAL0000063566 (Holotype).

Selaginella panchghaniana R.D.Dixit, Bull. Bot. Surv. India 25(1-4): 226. 1985.; India: Maharashtra, Mahabaleshwar, Panchgoni, 07.11.1966, *G. Panigrahi* 11739, CAL0000063568 (Holotype).

Selaginella panigrahi R.D.Dixit, Bull. Bot. Surv. India 25(1-4): 226. 1985.; India: Madhya Pradesh, Kangra valley, Kutumsar, 19.02.1963, *G. Panigrahi & Arora* 1119, CAL0000063565 (Holotype).

Selaginella nairii R.D.Dixit, Bull. Bot. Surv. India 26(1-2): 106. 1985.; India: Odisha, Jeypore, 17.09.1970, *N.C. Nair* 40637A, CAL0000063572 (Isotype).

Selaginella nairii R.D.Dixit, Bull. Bot. Surv. India 26(1-2): 106. 1985.; India: 113| 4-6 |145



Odisha, Jeypore, 17.09.1970, N.C. Nair 40637B, CAL0000063573 (Isotype).

Selaginella nairii R.D.Dixit, Bull. Bot. Surv. India 26(1-2): 106. 1985.; India: Odisha, Jeypore, 12.09.1970, N.C. Nair 40692 (Paratype).

Selaginella nayarii R.D.Dixit, Bull. Bot. Surv. India 27(1-4): 123. 1987.; India: Kerala, Kuttikanam, 02.07.1971, N.C. Nair 818, CAL0000063569 (Holotype).

Selaginella rajasthanensis Gena, Bhardwaja & A.K.Yadav, Amer. Fern J. 69(4): 119. 1979.; India: Rajasthan, Kundakhoh, Shahabad, 14.10.1977, C.G. Gena & A.K. Yadav PBL/77/Sl.-6/29/672, CAL0000063571 (Isotype).

Selaginella wightii Hieron., Hedwigia 39: 319. 1900.; Peninsula India Orientalis, s.d., s. Coll. 15, CAL0000063570 (Syntype).

CONCLUSION

This systematic survey underscores the exceptional scientific and historical significance of the cryptogamic collections housed at the Central National Herbarium (CAL). By documenting 453 type specimens, it reveals a striking predominance of Pteridophyte types (79%), while also establishing a verified inventory for type specimens of Bryophytes, Algae, and Lichens. Far from being a regional repository, CAL emerges as a global center of biodiversity, safeguarding critical 19th and 20th century materials that span the Indian subcontinent, China, Southeast Asia, and the Pacific. This updated record provides a vital baseline for resolving taxonomic ambiguities and lays the foundation for future digitization and revisionary studies. Ultimately, these findings reaffirm CAL's stature as a premier institution dedicated to preserving the botanical heritage of the Paleotropical world—and extending its relevance well beyond.

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Scientific Abbreviation used

s.n. – Without collection no., s.d. – Without collection Date, s. coll. – Without collector, s.l. – Without location.

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No specific permits were required for field studies as no human or animal subjects were involved.

Originality and Plagiarism:

All authors hereby certify that the manuscript is an original work and has not been published previously, nor is it currently under consideration for publication elsewhere. All sources used in this work have been properly cited and acknowledged in accordance with standard academic referencing practices. We confirm that there is no plagiarised content within this article.

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There are no conflicts of interest.

Data Availability:

All data supporting the findings of the study has either been included within the manuscript or cited appropriately from authenticated sources. And all listed herbarium specimens are physically available at CAL for any reference and also can be accessed at Indian Virtual Herbarium using the given Barcode number or other details provided in the article.

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REFERENCES

Haber, M.H. 2012. How to misidentify a type specimen.



- Biol. Philos.* 27: 767-784. <https://doi.org/10.1007/s10539-012-9336-0>.
- Mutanen, M., Kekkonen, M., Prosser, S.W.J., Hebert, P.D.N. and L. Kaila. 2015. One species in eight: DNA barcodes from type specimens resolve a taxonomic quagmire. *Mol. Ecol. Resour.* 15(4): 967-984. <https://doi.org/10.1111/1755-0998.12361>.
- Prosser, S.W.J., Dewaard, J.R., Miller, S.E. and P.D.N. Hebert. 2016. DNA barcodes from century-old type specimens using next-generation sequencing. *Mol. Ecol. Resour.* 16(2): 487-497. <https://doi.org/10.1111/1755-0998.12474>.
- Turland, N. J., Wiersema, J. H., Barrie, F. R., Greuter, W., Hawksworth, D. L., Herendeen, P. S., Knapp, S., Kusber, W.-H., Li, D.-Z., Marhold, K., May, T. W., McNeill, J., Monro, A. M., Prado, J., Price, M. J. and G. F. Smith. 2018. International Code of Nomenclature for algae, fungi, and plants (Shenzhen Code) adopted by the Nineteenth International Botanical Congress Shenzhen, China, July 2017. *Regnum Vegetabile* 159. Glashütten: Koeltz Botanical Books. <https://doi.org/10.12705/Code.2018>.
- Yang, Y. 2012. Holdings of type specimens of plants in herbaria of China. *Biodiv. Sci.* 20(4): 512-516. <https://doi.org/10.3724/SP.J.1003.2012.05076>.