

Notes on the Botanical Expedition to Makalu-Barun National Park (Eastern Nepal), with Two New Records for the Flora of Nepal

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Abstract

A botanical exploration was carried out in August 2021 in the Arun and Barun Valleys of Makalu Barun National Park, Sankhuwasabha District, Koshi Province, Eastern Nepal, to document the gymnosperm and angiosperm diversity along an elevational gradient from 700 to 4,800 meters. A total of 179 plant specimens were collected, representing 150 species of gymnosperms and angiosperms, belonging to 39 families and 89 genera. The flora was dominated by Cyperaceae, Orchidaceae, Asteraceae, and Gentianaceae. Notably, two species endemic to Nepal (*Carex esbirajbhandarii* and *Swertia barunensis*) were collected, along with the Himalayan endemic *Begonia flagellaris* (Balsaminaceae). Two rare mycoheterotrophic orchids (*Cyrtosia lindleyana* and *Epipogium aphyllum*) and several protected species (*Abies spectabilis*, *Gnetum montanum* and *Neottia tenuis*) were also collected. The expedition resulted in two taxa newly reported for the flora of Nepal: *Hoya globulosa* (Apocynaceae) and *Neottia alternifolia* (Orchidaceae), extending their known geographical ranges. These findings update floristic information of the Makalu Barun National Park, highlighting its conservation importance, and emphasize the need for continued botanical exploration to support initiatives such as the Flora of Nepal project.

Keywords: Botanical exploration, Eastern Himalaya, Endemic species, Flora of Nepal, *Hoya globosa*, *Neottia alternifolia*

Introduction

Botanical exploration is crucial for documenting biodiversity. In Eastern Nepal, botanical exploration dates back to the mid-nineteenth century, when the British botanist Joseph Dalton Hooker visited the Mai Valley of Ilam and the Tamur Valley of Taplejung District in 1848 (Hooker, 1854; Rajbhandari, 2016; Rajbhandari et al., 2020). Since then, numerous national and international plant explorers have visited Eastern Nepal, notably Banerjii (1958), Zimmerman (1954-1956), Stainton, who visited the Arun and Tamur Valleys in 1956, and Hara and other Japanese colleagues, in collaboration with the Department of Medicinal Plants, since 1963 (Rajbhandari, 2016). These successive botanical explorations resulted in the collection of hundreds of thousands of plant specimens, which are now deposited in national and international herbaria worldwide (Shrestha et al., 2022). Based on these collections, several local floras were published through the collaborative efforts of Nepalese and international researchers,

including Flora of Eastern Himalaya (Hara, 1966, 1971; Ohashi, 1975), Alpine Flora of Jaljale Himal, East Nepal (Ohba & Akiyama, 1992), and Flora of Hinku and Hunku Valleys, East Nepal (Ohba & Ikeda, 2000). Collectively, these explorations established Eastern Nepal as one of the major centres of plant diversity in the country, harboring more than 3,400 species of flowering plants, 2% of which are endemic to eastern Nepal (Rajbhandari et al., 2020).

Sankhuwasabha is one of the floristically rich districts of Nepal (Bhandari, 2024a; Pendry et al., 2018), benefiting from several plant expeditions conducted over different periods (Rajbhandari, 2016). Stainton explored the Arun Valley in 1956 and collected over 50 plant specimens. Similarly, Banerjii, Upadhaya, and Barchola visited the Arun Valley in 1965 and collected around 100 plant specimens (National Herbarium and Plant Laboratories [KATH], 2026).

Tabata and his team visited several districts of Eastern Nepal, including Sankhuwasabha, in 1978

(Rajbhandari, 2016). In October 1981, a team led by C. Grey-Wilson explored Makalu Barun National Park, during which several new species were described. In 1988, a team from the University of Tokyo led by M. Suzuki explored the Arun and Barun Valleys and collected over 800 plant specimens. Similarly, another team led by M. Minaki collected more than 400 dried plant specimens from the Arun and Barun Valleys in 1990. In 1991, 'Edinburgh Makalu Expedition 1991' was organized, led by D.G. Long, with over 400 plant specimens collection from the Arun and Barun Valleys of Sankhuwasabha District. In October 2013, M.L. Pathak and his team visited lower Sankhuwasabha and collected the rare *Gnetum montanum* Markgr. (barcode: KATH022173). In 2018, a team from the Department of Plant Resources visited the Milke-Tinjure areas of Sankhuwasabha District (Rajbhandari et al., 2020). All these efforts have resulted in the collection and preservation of over 5,000 plant specimens from Sankhuwasabha District at KATH (KATH, 2026). Among these, Rajbhandari et al. (2020) cited 698 plant species from Sankhuwasabha District in the book "Flowering Plants of Province No. 1, East Nepal".

The above account highlights the long history of botanical exploration and the remarkable floristic richness of Sankhuwasabha District. Nevertheless, floral wealth has not been thoroughly documented despite large historical collections, and a number of plant hotspots have not been revisited. In particular, updated information on endemic and narrowly distributed plant species from the Makalu Barun Valley remains limited. To address this gap, a botanical expedition was conducted by the Department of Plant Resources in August 2021 in Makalu Barun National Park, with the objective of retracing the routes of earlier explorations and documenting endemic, rare and common plant species from the region.

Materials and Methods

Study area

The present study was carried out in the Arun and Barun Valleys of the Makalu Barun National Park (MBNP), Sankhuwasabha District, Koshi Province, Eastern Nepal (Figure 1). Makalu Barun

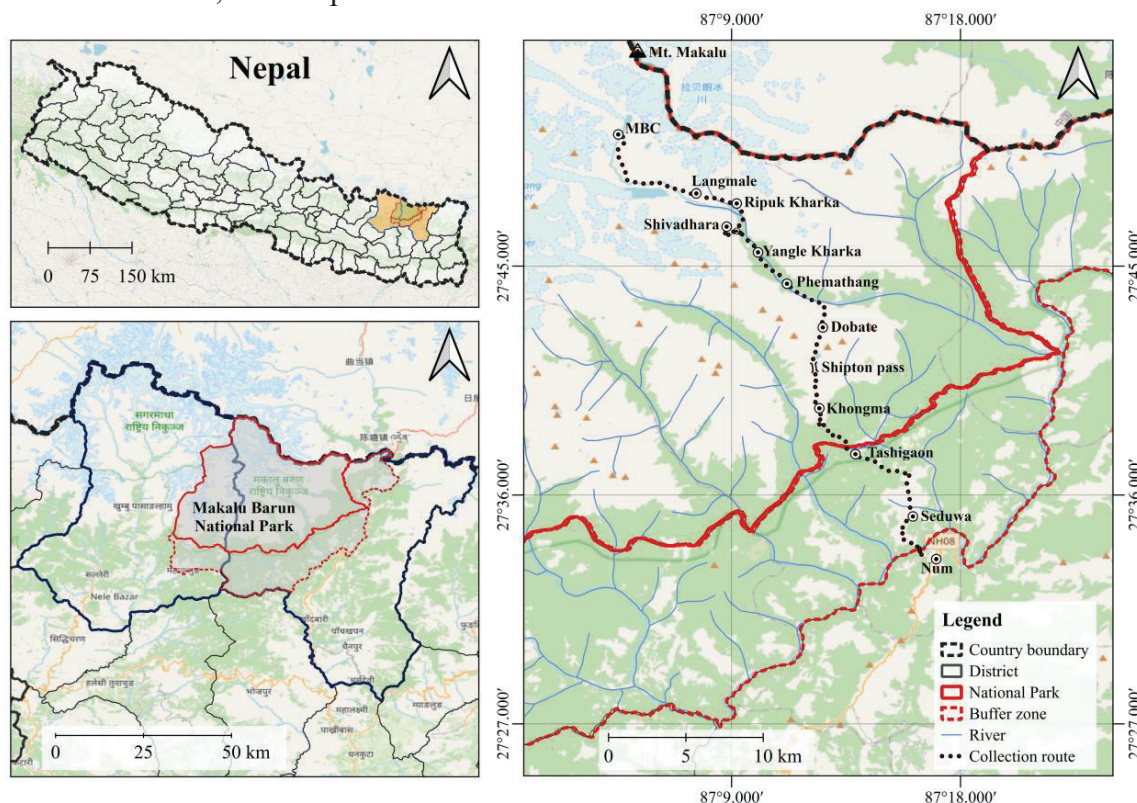


Figure 1: Map of Makalu Barun National Park, Sankhuwasabha District, Nepal, showing the collection route

National Park was established in 1992 and covers an area of 1500 km². The park spans an exceptional elevational range from about 400 meter to over 8000 meter above sea level, making it one of the world's longest elevational gradient within a protected area (Department of National Parks and Wildlife Conservation [DNPWC], 2019).

This park is famous for its geographical and natural features and includes several world-famous Himalayan peaks, such as Mt. Makalu (8463 m), and Mera Peak (6654 m). The park exhibits a wide range of climatic zones from warm tropical at low elevation, to subtropical, temperate and alpine climates at higher elevations. It provides prime habitat for the iconic Red Panda (*Ailurus fulgens*), along with several rare mammals and bird species. Floristically, the area supports more than two dozens of wild *Rhododendron* species (Shrestha et al., 1990), as well as rare taxa such as *Gnetum montanum*, and the primitive angiosperm *Tetracentron sinense* Oliv.

Collection of herbarium specimens

A team led by the Department of Plant Resources (DPR) visited the Makalu Barun National Park, Sankhuwasabha District between 28 August and 09 September 2021. Flowering and fruiting plant specimens were collected along an elevational gradient ranging from 700 meter to 4800 meter above sea level. The lowest elevation represents the Arun River bank near Seduwa, while the highest elevation was reached near Makalu Base Camp. Fresh specimens were collected in polythene bags, and subsequently pressed in the herbarium press. Upon return to KATH, the specimens were dried using a heat-drying method.

Plant identification and nomenclature

The pressed and dried specimens were identified using protologues, standard floristic literature (Bhandari, 2024b; Hara, 1966, 1971; Hara et al., 1978-1982; Hooker, 1885; Li et al., 1995; Ohashi, 1975; Ohba & Akiyama, 1992; Pearce & Cribb, 2002; Polunin & Stainton, 1984; Rajbhandari et al., 2022; Shrestha et al., 2022; Watson, 1999; Watson

et al., 2011), comparison with herbarium specimens at KATH, examination of online images from the Natural History Museum (BM), the Royal Botanic Garden Edinburgh (E) and the Herbarium of the Tokyo University (TI), and expert consultation. Plant nomenclature follows the International Plant Names Index (<https://www.ipni.org/>) and Plants of the World Online (<https://powo.science.kew.org/>). All the collected and identified plant specimens are deposited at KATH.

Results and Discussion

The botanical exploration conducted in August 2021 resulted in the collection of a total of 179 plant specimens from the Makalu Barun National Park of Sankhuwasabha District. Based on critical examination and identification, this study reports three species of gymnosperms (3 genera and 3 families) and 176 species of angiosperms (86 genera, 36 families) (Appendix 1). The collection was dominated by Cyperaceae (27 species), followed by Orchidaceae (26 species), Asteraceae (16 species), Gentianaceae (9 species) and other families (Appendix 1). Among the life forms, herbs dominated the collection with 167 species, followed by shrubs (8 species) and trees (4 species).

Among the recorded taxa, two species endemic to Nepal: *Carex esbirajbhandarii* (Rajbh. & H. Ohba) O. Yano, (Cyperaceae), and *Swertia barunensis* Chassot (Gentianaceae) were collected during this study. *Carex esbirajbhandarii* was previously reported from Ramechhap and Solukhumbu Districts (Rajbhandari & Rai, 2017), and the present collection represents the eastern most record of this species. *Swertia barunensis* was originally described from Sankhuwasabha District (Chassot, 2003), and the present collection reconfirms their occurrence from the type locality. In addition, *Begonia flagellaris* H. Hara (Balsaminaceae), a Himalayan endemic species, was collected from the Tashigaon area, Arun Valley. The occurrence of these endemic species highlights the biogeographic significance of the Makalu Barun National Park as an important refuge for narrowly distributed Himalayan flora.

Furthermore, two rare mycoheterotrophic orchid species, *Cyrtosia lindleyana* Hook.f. & Thomson and *Epipogium aphyllum* Sw., were collected during the expedition. *Cyrtosia lindleyana*, previously reported from Kalikot, Kaski and Sankhuwasabha Districts (KATH, 2026; Rajbhandari & Rai, 2017; Shrestha et al., 2022), is here recollected from Sankhuwasabha District after a gap of 30 years. *Epipogium aphyllum*, previously known only from Dolpa District, Western Nepal (Rajbhandari & Rai, 2017), is reported here for the first time from Eastern Nepal. The presence of these species is ecologically noteworthy, as mycoheterotrophic orchids are strongly associated with mature, undisturbed forest ecosystems characterized by complex fungal networks (Besi et al., 2023; Roy et al., 2009). This expedition also resulted in the collection of several protected plant species including *Abies spectabilis* (D.Don) Mirb. (IUCN: Near Threatened) *Gnetum montanum* (CITES appendix III), and *Neottia tenuis* (Lindl.) Szlach. (CITES appendix II). Other notable collections of medicinal importance include *Aconitum spicatum* (Brühl) Stapf, *Dactylorhiza hatagirea* (D.Don) Soó, *Fritillaria cirrhosa* D.Don, *Neopicrorhiza scrophulariiflora* (Pennell) D.Y.Hong, and *Podophyllum hexandrum* Royle.

One of the major outcomes of the present expedition is the documentation of the two taxa as new records for the flora of Nepal: *Hoya globulosa* Hook.f. ex Dean (Apocynaceae) and *Neottia alternifolia* (King & Pantl.) Szlach. (Orchidaceae). *Scleria terrestris* (L.) Fassett (Cyperaceae), which represents the first collection from Eastern Nepal (Rajbhandari & Rai, 2017; Shrestha et al., 2022), was collected above Arun River bridge, near Seduwa. The discovery of these taxa represents an extension of their known geographical ranges and highlights the importance of botanical exploration, even in historically explored regions.

New records for the Flora of Nepal

1. *Hoya globulosa* Hook.f. ex Dean, Fl. Mag. (London) n.s., 9(no. 102): [list of illustr.], t. 406 (1880). Figure 2A, 3A.

Note: *Hoya globulosa* was previously known from northeast India, Bhutan, China, Laos, and Vietnam (Li, 1995; Plant of World Online[POWO], 2026; Watson, 1999); its collection from Eastern Nepal extends its known western distribution limit. This species is an extensive climber, recognized by having oblong leaves, which are relatively larger, more than 3 cm wide, primary veins not perpendicular to midrib, and the flowers are pubescent and densely arranged in globose umbels (Li, 1995; Watson, 1999). Among the Nepali members of *Hoya*, *H. globulosa* is morphologically similar to *H. fusca*, but differs in leaves with primary veins not perpendicular to the midrib (vs. perpendicular) and creamy-yellow corolla (vs. yellow-brown).

Collection details: Eastern Nepal, Koshi Province, Sankhuwasabha District, Seduwa, near Arun River bridge, 942 m, 08 September 2021, A. KC, P. Bhandari, T.R. Pandey and D. Dawadi MB195 (KATH175629). Sankhuwasabha District, Arun Valley, 700 m, 27 May 2011, M.L. Pathak & L.R. Tharu 20110505 (KATH118191).

2. *Neottia alternifolia* (King & Pantl.) Szlach., Fragm. Florist. Geobot. Supp. 3: 117. (1995); *Listera alternifolia* King & Pantl., J. Asiat. Soc. Bengal, Pt. 2, Nat. Hist. 65: 126 (1896). Figure 2B, 3B.

Note: The present report of *Neottia alternifolia*, previously recorded from Lachen Valley, Sikkim (Pearce & Cribb 2002), Arunachal Pradesh (Bhaumik & Pathak 2003), and Yunnan Province, China (Jin et al., 2014), represents the western most distributional record of the species. This species is distinguished by its alternate leaves well above ground on a long stem. The rachis is puberulous, floral bracts are ovate-lanceolate, and labellum is narrowly oblanceolate to oblong, with the epichile shortly bilobed (Pearce & Cribb, 2002). Morphologically, it resembles *N. longicaulis*, but differs having alternate or subopposite leaves (vs. opposite leaves).

Collection details: Eastern Nepal, Koshi Province, Sankhuwasabha District, Dobate-Phemathang, 3440 m, 02 September 2021, A. KC, P. Bhandari, T.R. Pandey and D. Dawadi MB083 (KATH175672).



Figure 2: Plant habit, **A.** *Hoya globulosa*; **B.** *Neottia alternifolia* (Photographed by P. Bhandari, September 2021)



Figure 3. Herbarium specimen, **A.** *Hoya globulosa*; **B.** *Neottia alternifolia*

Conclusion

The present floral exploration of the Makalu Barun National Park resulted in the collection of three gymnosperms and 147 angiosperms species of considerable taxonomical and ecological importance. The discovery of new national records, along with range expansion of endemic plant species suggests more exploration is needed even in the historically well-explored region.

Author Contributions

A. KC did field work, specimens curation and digitization, and final editing. P. Bhandari did field work, plant identification, preparation of draft and final editing.

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Appendix 1 : Detail of the plant species collected during the expedition

SN	Family	Latin name	Life form	Elevation (m)	Locality	Date of collection	Specimen details
Gymnosperms							
1	Cupressaceae	<i>Juniperus indica</i> Bertol.	Shrub	3665–4015	Ripuk Kharka–Yangle Kharka	2021.09.06	A. KC et al. MB160 (KATHI 76844)
2	Gnetaceae	<i>Gnetum montanum</i> Markgr.	Shrub	942	near Arun bridge, Seduwa–Num	2021.09.08	A. KC et al. MB194 (KATHI 76914)
3	Pinaceae	<i>Abies spectabilis</i> (D.Don) Mirb.	Tree	3665–4015	Ripuk Kharka–Yangle Kharka	2021.09.06	A. KC et al. MB158 (KATHI 76791)
Angiosperms							
4	Acanthaceae	<i>Thunbergia coccinea</i> Wall. ex D.Don	Climbing herb	1870	Khandari–Num	2021.08.28	A. KC et al. MB003 (KATHI 76930)
5	Aceraceae	<i>Acer pectinatum</i> Wall. ex Brandis	Tree	3441	Dobate–Temathang	2021.09.02	A. KC et al. MB076 (KATHI 76857)
6	Apiaceae	<i>Sinocarum clarkeanum</i> P.K.Mukh. & Constance	Herb	4240	Shipton La	2021.09.07	A. KC et al. MB167 (KATHI 76855)
7	Apiaceae	<i>Oreocome candollei</i> (DC.) Edgew.	Herb	4195	Keke La	2021.09.07	A. KC et al. MB174 (KATHI 76769)
8	Apocynaceae	<i>Hoya globulosa</i> Hook.f. ex Dean	Climbing herb	942	near Arun river bridge, Seduwa–Num	2021.09.08	A. KC et al. MB195 (KATHI 75629)
9	Asteraceae	<i>Leontopodium himalayana</i> DC.	Herb	3790–4405	Nehe Kharka–Shiva Dhara	2021.09.03	A. KC et al. MB103 (KATHI 76826)
10	Asteraceae	<i>Saussurea eriostemon</i> Wall. ex C.B.Clarke	Herb	4173–4443	Tadosha–Langmale	2021.09.04	A. KC et al. MB111 (KATHI 76787)
11	Asteraceae	<i>Dubyaea hispida</i> DC.	Herb	4173–4443	Tadosha–Langmale	2021.09.04	A. KC et al. MB113 (KATHI 76834)
12	Asteraceae	<i>Taraxacum eriopodium</i> (D.Don) DC.	Herb	4173–4443	Tadosha–Langmale	2021.09.04	A. KC et al. MB114 (KATHI 76835)
13	Asteraceae	<i>Erigeron multiradiatus</i> (Lindl. ex DC.) Benth. & Hook.f.	Herb	4173–4443	Tadosha–Langmale	2021.09.04	A. KC et al. MB115 (KATHI 76835)
14	Asteraceae	<i>Anaphalis nepalensis</i> (Spreng.) Hand.-Mazz.	Herb	4173–4443	Tadosha–Langmale	2021.09.04	A. KC et al. MB118 (KATHI 76848)
15	Asteraceae	<i>Leontopodium jacotianum</i> Beauverd	Herb	4173–4443	Tadosha–Langmale	2021.09.04	A. KC et al. MB123 (KATHI 76846)
16	Asteraceae	<i>Youngia racemifera</i> (Hook.f.) Babc. & Stebbins	Herb	4173–4443	Tadosha–Langmale	2021.09.04	A. KC et al. MB124 (KATHI 76845)

SN	Family	Latin name	Life form	Elevation (m)	Locality	Date of collection	Specimen details
17	Asteraceae	<i>Allardia glabra</i> Decne.	Herb	4844	MBC	2021.09.05	A. KC et al. MB144 (KATHI 76842)
18	Asteraceae	<i>Hippolytia gossypina</i> (Hook.f. & Thomson ex C.B.Clarke) C.Shih	Herb	4844	MBC	2021.09.05	A. KC et al. MB146 (KATHI 76897)
19	Asteraceae	<i>Soroiseris pumila</i> Stebbins	Herb	4844	MBC	2021.09.05	A. KC et al. MB149 (KATHI 76868)
20	Asteraceae	<i>Melanoseris lessertiana</i> (DC.) Decne.	Herb	4450–4695	Merek–Langmale	2021.09.05	A. KC et al. MB157 (KATHI 76852)
21	Asteraceae	<i>Tanacetum atkinsonii</i> (C.B.Clarke) Kitam.	Herb	4240	Shipton La	2021.09.07	A. KC et al. MB164 (KATH)
22	Asteraceae	<i>Cremanthodium pinnatifidum</i> Benth.	Herb	4240–4046	Shipton La–Sano Pokhari	2021.09.07	A. KC et al. MB170 (KATHI 76894)
23	Asteraceae	<i>Cremanthodium reniforme</i> (DC.) Benth.	Herb	4240–4046	Shipton La–Sano Pokhari	2021.09.07	A. KC et al. MB171 (KATHI 76896)
24	Asteraceae	<i>Jacobaea raphanifolia</i> (Wall. ex DC.) B.Nord.	Herb	4240–3624	Shipton La–Khongma	2021.09.07	A. KC et al. MB175 (KATHI 76854)
25	Asteraceae	<i>Saussurea eriostemon</i> Wall. ex C.B.Clarke	Herb	4240	Shipton La	2021.09.07	A. KC et al. MB189 (KATHI 76831)
26	Balsaminaceae	<i>Impatiens bicornuta</i> Wall.	Herb	1978–2000	Chyaksedanda–Tasigaon	2021.08.30	A. KC et al. MB011 (KATHI 76774)
27	Balsaminaceae	<i>Impatiens prainii</i> Hook.f.	Herb	2100–2930	Tasigaon–Danda Kharka	2021.08.31	A. KC et al. MB043 (KATHI 76779)
28	Balsaminaceae	<i>Impatiens stenantha</i> Hook.f.	Herb	3441	Dobate–Temathang	2021.09.02	A. KC et al. MB078 (KATHI 76812)
29	Balsaminaceae	<i>Impatiens laxiflora</i> Edgew.	Herb	3510–3863	Vhremathang–Dobate	2021.09.07	A. KC et al. MB163 (KATHI 76767)
30	Balsaminaceae	<i>Impatiens occultans</i> Hook.f.	Herb	4240	Shipton La	2021.09.07	A. KC et al. MB166 (KATHI 76895)
31	Begoniaceae	<i>Begonia hatacoa</i> Buch.-Ham. ex D.Don	Herb	942	near Arun river bridge, near Seduwa	2021.08.29	A. KC et al. MB007 (KATHI 76926)
32	Begoniaceae	<i>Begonia flagellaris</i> H.Hara	Herb	1978–2000	Chyaksedanda–Tasigaon	2021.08.30	A. KC et al. MB012 (KATHI 76927)
33	Begoniaceae	<i>Begonia gemmipara</i> Hook.f. & Thomson	Herb	2100–2930	Tasigaon–Danda Kharka	2021.08.31	A. KC et al. MB047 (KATHI 76799)
34	Berberidaceae	<i>Podophyllum hexandrum</i> Royle	Herb	4173–4443	Tadosha–Langmale	2021.09.04	A. KC et al. MB110

SN	Family	Latin name	Life form	Elevation (m)	Locality	Date of collection	Specimen details
35	Campanulaceae	<i>Pseudocodon convolvulaceus</i> (Kurtz) D.Y.Hong & H.Sun	Climbing herb	3608–3875	Khongma – Khongma La	2021.09.01	(KATHI76773) A. KC et al. MB054 (KATH)
36	Campanulaceae	<i>Codonopsis benthamii</i> Hook.f. & Thomson	Climbing herb	3608–3875	Khongma – Khongma La	2021.09.01	A. KC et al. MB054a (KATHI76785)
37	Campanulaceae	<i>Pseudocodon convolvulaceus</i> (Kurtz) D.Y.Hong & H.Sun	Herb	3790	Nehe Kharka	2021.09.03	A. KC et al. MB088 (KATHI76780)
38	Campanulaceae	<i>Cyananthus pedunculatus</i> C.B.Clarke	Herb	4173–4443	Tadosha–Langmale	2021.09.04	A. KC et al. MB116 (KATHI76906)
39	Campanulaceae	<i>Cyananthus incanus</i> Hook.f. & Thomson	Herb	4695–4844	Shershung–MBC	2021.09.05	A. KC et al. MB153 (KATHI76805)
40	Caryophyllaceae	<i>Stellaria sikkimensis</i> Hook.f.	Herb	2930	Danda Kharka	2021.08.31	A. KC et al. MB045 (KATHI76839)
41	Caryophyllaceae	<i>Stellaria decumbens</i> Edgew.	Herb	3441	Dobate–Temathang	2021.09.02	A. KC et al. MB082 (KATHI76840)
42	Caryophyllaceae	<i>Eremogone bryophylla</i> (Fernald) Pusalkar & D.K.Singh	Herb	4695	Shershung	2021.09.05	A. KC et al. MB154 (KATHI76851)
43	Crassulaceae	<i>Rhodiola fastigiata</i> (Hook.f. & Thomson) S.H.Fu	Herb	4844	MBC	2021.09.05	A. KC et al. MB143 (KATHI76772)
44	Cyperaceae	<i>Bulbostylis densa</i> (Wall.) Hand.–Mazz.	Herb	1870	Khandari–Num	2021.08.28	A. KC et al. MB002 (KATHI76931)
45	Cyperaceae	<i>Scleria terrestris</i> (L.) Fassett	Herb	785	on the way to Seduwa	2021.08.29	A. KC et al. MB008 (KATHI76928)
46	Cyperaceae	<i>Carex baccans</i> Nees	Herb	1700–1978	Seduwa–Chyaksedanda	2021.08.30	A. KC et al. MB025 (KATHI76802)
47	Cyperaceae	<i>Fimbristylis complanata</i> (Retz.) Link	Herb	1700–1978	Seduwa–Chyaksedanda	2021.08.30	A. KC et al. MB026 (KATHI76804)
48	Cyperaceae	<i>Fimbristylis dichotoma</i> (L.) Vahl	Herb	1700–1978	Seduwa	2021.08.30	A. KC et al. MB027 (KATHI76880)
49	Cyperaceae	<i>Eleocharis congesta</i> D.Don	Herb	1700–1978	Seduwa	2021.08.30	A. KC et al. MB028 (KATHI76808)
50	Cyperaceae	<i>Fimbristylis dichotoma</i> (L.) Vahl	Herb	1700–1978	Seduwa	2021.08.30	A. KC et al. MB029 (KATHI76903)
51	Cyperaceae	<i>Carex rara</i> Boott	Herb	3608	near Khongma	2021.08.31	A. KC et al. MB030 (KATHI76901)

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52	Cyperaceae	<i>Carex rochebrunii</i> Franch. & Sav.	Herb	3608	near Khongma	2021.08.31	A. KC et al. MB031 (KATHI 76882)
53	Cyperaceae	<i>Carex himalaica</i> T.Koyama	Herb	3608	near Khongma	2021.08.31	A. KC et al. MB032 (KATHI 76881)
54	Cyperaceae	<i>Carex harae</i> (Rajbh. & H.Ohba) O. Yano	Herb	3300	Tasigaon–Khongma	2021.08.31	A. KC et al. MB033 (KATHI 76879)
55	Cyperaceae	<i>Carex rochebrunii</i> Franch. & Sav.	Herb	2100–3608	Tasigaon–Khongma	2021.08.31	A. KC et al. MB034 (KATHI 76878)
56	Cyperaceae	<i>Carex cercostachys</i> Franch.	Herb	4240	Shipton La	2021.09.01	A. KC et al. MB055 (KATHI 76904)
57	Cyperaceae	<i>Carex himalaica</i> T.Koyama	Herb	4240	Shipton La	2021.09.01	A. KC et al. MB056 (KATHI 76823)
58	Cyperaceae	<i>Carex uncinoides</i> Boott	Herb	4240–4192	Shipton La–Keke La	2021.09.01	A. KC et al. MB057 (KATHI 76824)
59	Cyperaceae	<i>Carex himalaica</i> T.Koyama	Herb	4240–4192	Shipton La–Keke La	2021.09.01	A. KC et al. MB059 (KATHI 76824)
60	Cyperaceae	<i>Carex cruenta</i> Nees	Herb	3858–4195	Keke La–Dobate	2021.09.01	A. KC et al. MB061 (KATHI 76861)
61	Cyperaceae	<i>Carex gracilentia</i> Boott ex Boeckeler	Herb	3875–4240	Khongma La–Shipton La	2021.09.01	A. KC et al. MB063 (KATHI 76865)
62	Cyperaceae	<i>Carex munda</i> Boott	Herb	3875–4040	Khongma La–Sano Pokhari	2021.09.01	A. KC et al. MB064 (KATHI 76864)
63	Cyperaceae	<i>Carex harae</i> (Rajbh. & H.Ohba) O. Yano	Herb	3875–4040	Khongma La–Sano Pokhari	2021.09.01	A. KC et al. MB065 (KATHI 76863)
64	Cyperaceae	<i>Carex cercostachys</i> Franch.	Herb	3875–4040	Khongma La–Sano Pokhari	2021.09.01	A. KC et al. MB067 (KATHI 76794)
65	Cyperaceae	<i>Carex munda</i> Boott	Herb	3701	near Khongma, towards Shipton pass	2021.09.01	A. KC et al. MB068 (KATHI 76795)
66	Cyperaceae	<i>Carex esenbeckii</i> Kunth	Herb	3875–4040	Khongma La–Sano Pokhari	2021.09.01	A. KC et al. MB069 (KATHI 76796)
67	Cyperaceae	<i>Carex curticeps</i> C.B.Clarke	Herb	3701	near Khongma, towards Shipton pass	2021.09.01	A. KC et al. MB070 (KATHI 76797)
68	Cyperaceae	<i>Carex inanis</i> Kunth	Herb	3645	near Yangle Kharka	2021.09.02	A. KC et al. MB071 (KATHI 76885)
69	Cyperaceae	<i>Carex esenbeckii</i> Kunth	Herb	3591	Yangle Kharka	2021.09.02	A. KC et al. MB080

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70	Cyperaceae	<i>Carex esbirajbhandarii</i> (Rajbh. & H.Ohba) O.Yano	Herb	4421	Barun Valley, near Shiva Dhara	2021.09.03	(KATHI76856) A. KC et al. MB092 (KATHI76911)
71	Cyperaceae	<i>Carex haematostoma</i> Nees	Herb	4405	near Shiva Dhara	2021.09.03	A. KC et al. MB094 (KATHI76899)
72	Cyperaceae	<i>Carex fucata</i> Boott ex C.B.Clarke	Herb	3880–4034	Neha Kharka to Shiva Dhara	2021.09.03	A. KC et al. MB095 (KATHI76898)
73	Cyperaceae	<i>Carex cruenta</i> Nees	Herb	4405	Barun Valley, near Shiva Dhara	2021.09.03	A. KC et al. MB096 (KATHI76900)
74	Cyperaceae	<i>Carex neesii</i> S.R.Zhang	Herb	4405	Barun Valley, near Shiva Dhara	2021.09.03	A. KC et al. MB099 (KATHI76910)
75	Cyperaceae	<i>Carex bonatiana</i> (Kük.) N.A.Ivanova	Herb	3665–4015	Yangle Kharka–Ripuk Kharka	2021.09.04	A. KC et al. MB108 (KATH)
76	Cyperaceae	<i>Carex gracilentia</i> Boott ex Boeckeler	Herb	4173–4443	Tadosha–Langmale	2021.09.04	A. KC et al. MB109 (KATHI76867)
77	Cyperaceae	<i>Blasmus compressus</i> var. <i>brevifolius</i> (C.B.Clarke) Karth.	Herb	4173–4443	Tadosha–Langmale	2021.09.04	A. KC et al. MB112 (KATHI76827)
78	Cyperaceae	<i>Carex munda</i> Boott	Herb	4173–4443	Tadosha–Langmale	2021.09.04	A. KC et al. MB125 (KATHI76818)
79	Cyperaceae	<i>Carex obscura</i> Nees	Herb	4173–4443	Tadosha–Langmale	2021.09.04	A. KC et al. MB126 (KATHI76817)
80	Cyperaceae	<i>Carex deasyi</i> (C.B.Clarke) O.Yao & S.R.Zhang	Herb	4695–4844	Shershung–MBC	2021.09.05	A. KC et al. MB129 (KATHI76920)
81	Cyperaceae	<i>Carex bonatiana</i> (Kük.) N.A.Ivanova	Herb	4695–4844	Shershung–MBC	2021.09.05	A. KC et al. MB137 (KATHI76929)
82	Cyperaceae	<i>Carex neesii</i> S.R.Zhang	Herb	4695–4844	Shershung–MBC	2021.09.05	A. KC et al. MB138 (KATHI76820)
83	Cyperaceae	<i>Carex haematostoma</i> Nees	Herb	4695–4844	Shershung–MBC	2021.09.05	A. KC et al. MB139 (KATHI76819)
84	Cyperaceae	<i>Carex cercostachys</i> Franch.	Herb	4695–4844	Shershung–MBC	2021.09.05	A. KC et al. MB152 (KATHI76870)
85	Cyperaceae	<i>Carex parvula</i> O.Yano	Herb	4450–4695	Langmale–Shershung	2021.09.05	A. KC et al. MB197 (KATH)
86	Ericaceae	<i>Rhododendron lepidotum</i> Wall. ex G.Don	Shrub	4695	near Shershung	2021.09.05	A. KC et al. MB156 (KATHI76850)

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87	Eriocaulaceae	<i>Eriocaulon nepalense</i> J.D.Prescott ex Bong.	Herb	1700–1978	Seduwa–Chyaksedanda	2021.08.30	A. KC et al. MB023 (KATH)
88	Euphorbiaceae	<i>Ostodes paniculata</i> Blume	Tree	785	Arun river bridge to Seduwa	2021.08.29	A. KC et al. MB009 (KATH176789)
89	Fabaceae	<i>Phyllolobium donianum</i> (DC.) M.L.Zhang & Podlech	Terrestrial herb	3441	Dobate–Temathang	2021.09.02	A. KC et al. MB075 (KATH176858)
90	Gentianaceae	<i>Tripterospermum volubile</i> (D.Don) H.Hara	Climbing herb	2930–3608	Danda Kharka–Khongma	2021.08.31	A. KC et al. MB041 (KATH176875)
91	Gentianaceae	<i>Gentiana recurvata</i> C.B.Clarke	Herb	2930–3608	Danda Kharka–Khongma	2021.08.31	A. KC et al. MB042 (KATH176876)
92	Gentianaceae	<i>Swertia wardii</i> C.Marquand	Tufted herb	3790	Neha Kharka	2021.09.03	A. KC et al. MB085 (KATH176909)
93	Gentianaceae	<i>Swertia hookeri</i> C.B.Clarke	Herb	3790–4405	Nehe Kharka–Shiva Dhara	2021.09.03	A. KC et al. MB100 (KATH176919)
94	Gentianaceae	<i>Swertia hookeri</i> C.B.Clarke	Herb	4481	near Parbati cave	2021.09.03	A. KC et al. MB101 (KATH176766)
95	Gentianaceae	<i>Gentiana ehwesii</i> C.B.Clarke	Herb	4173–4443	Tadosha–Langmale	2021.09.04	A. KC et al. MB120 (KATH)
96	Gentianaceae	<i>Swertia multicaulis</i> D.Don	Herb	4695–4844	Shershung–MBC	2021.09.05	A. KC et al. MB130 (KATH176828)
97	Gentianaceae	<i>Gentiana nubigena</i> Edgew.	Herb	4695–4844	Shershung–MBC	2021.09.05	A. KC et al. MB132 (KATH176815)
98	Gentianaceae	<i>Gentiana crassuloides</i> Bureau & Franch.	Herb	4695–4844	Shershung–MBC	2021.09.05	A. KC et al. MB140 (KATH176821)
99	Gentianaceae	<i>Swertia multicaulis</i> D.Don	Herb	4695	near Sashra pokhari	2021.09.05	A. KC et al. MB151 (KATH176869)
100	Gentianaceae	<i>Gentiana nubigena</i> Edgew.	Herb	4240	near Shipton pass	2021.09.07	A. KC et al. MB172 (KATH176888)
101	Gentianaceae	<i>Swertia barunensis</i> Chassot	Herb	4240–3624	Shipton La–Khongma	2021.09.07	A. KC et al. MB193 (KATH176908)
102	Gesneriaceae	<i>Didymocarpus andersonii</i> C.B.Clarke	Herb	942	along the way to Arun river, near Seduwa	2021.08.29	A. KC et al. MB004 (KATH176902)
103	Gesneriaceae	<i>Leptoboea multiflora</i> (C.B.Clarke) C.B.Clarke	Shrub	942	along the way to Arun river, near Seduwa	2021.08.29	A. KC et al. MB006 (KATH176778)
104	Gesneriaceae	<i>Lysionotus atropurpureus</i> H.Hara	Herb	2100	Tasigaon	2021.08.30	A. KC et al. MB024

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105	Hypericaceae	<i>Hypericum petiolulatum</i> Hook.f. & Thomson ex Dyer	Herb	2100–2930	Tasigaon–Danda Kharka	2021.08.31	(KATHI76776) A. KC et al. MB046 (KATHI76860)
106	Hypericaceae	<i>Hypericum reptans</i> Hook.f. & Thomson ex Dyer	Shrub	3880–3930	Nehe Kharka–Shiva dhara	2021.09.03	A. KC et al. MB107 (KATHI76811)
107	Juncaceae	<i>Juncus harae</i> Miyam. & H.Ohba	Herb	3608	Khongma	2021.09.01	A. KC et al. MB062 (KATHI76862)
108	Juncaceae	<i>Juncus khasiensis</i> Buchenau	Herb	4240	Shipton La	2021.09.07	A. KC et al. MB176 (KATHI76830)
109	Juncaceae	<i>Juncus leucanthus</i> Royle ex D.Don	Herb	4166	near Keke La	2021.09.07	A. KC et al. MB187 (KATHI76814)
110	Juncaceae	<i>Juncus sphacelatus</i> Decne.	Herb	4166	near Keke La	2021.09.07	A. KC et al. MB188 (KATHI76790)
111	Lamiaceae	<i>Salvia campanulata</i> Wall. ex Benth.	Herb	4173–4443	Tadosha–Langmale	2021.09.04	A. KC et al. MB121 (KATHI76775)
112	Lamiaceae	<i>Salvia clementiae</i> Pendry & Y.K. Wei	Herb	2100–3608	Khongma–Tasigaon	2021.09.07	A. KC et al. MB184 (KATHI76768)
113	Lentibulariaceae	<i>Utricularia furcellata</i> Oliv.	Herb	1978–2000	Chyaksedanda–Tasigaon	2021.08.30	A. KC et al. MB013 (KATHI76907)
114	Liliaceae	<i>Fritillaria cirrhosa</i> D.Don	Herb	4173–4443	Tadosha–Langmale	2021.09.04	A. KC et al. MB117 (KATHI76777)
115	Liliaceae	<i>Fritillaria cirrhosa</i> D.Don	Herb	4844	MBC	2021.09.05	A. KC et al. MB141 (KATHI76822)
116	Onagraceae	<i>Epilobium conspersum</i> Hausskn.	Herb	3441	Dobate–Temathang	2021.09.02	A. KC et al. MB081 (KATHI76777)
117	Orchidaceae	<i>Cyrtosia lindleyana</i> Hook.f. & Thomson	Herb	2004	near Chilchila, between Khandbari to Num	2021.08.28	A. KC et al. MB001 (KATHI76783)
118	Orchidaceae	<i>Cryptochilus luteus</i> Lindl.	Herb	942	along the way to Arun river, near Seduwa	2021.08.29	A. KC et al. MB005 (KATHI76887)
119	Orchidaceae	<i>Odontochilus lanceolatus</i> (Lindl.) Blume	Herb	1978–2000	Chyaksedanda–Tasigaon	2021.08.30	A. KC et al. MB015 (KATHI76781)
120	Orchidaceae	<i>Odontochilus crispus</i> (Lindl.) Hook.f.	Herb	1978–2000	Chyaksedanda–Tasigaon	2021.08.30	A. KC et al. MB016 (KATHI76925)
121	Orchidaceae	<i>Liparis petiolata</i> (D.Don) P.F.Hunt & Summerh.	Herb	1978–2000	Chyaksedanda–Tasigaon	2021.08.30	A. KC et al. MB017 (KATHI76932)

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122	Orchidaceae	<i>Oberonia anthropophora</i> Lindl.	Herb	1978–2000	Chyaksedanda–Tasigaon	2021.08.30	A. KC et al. MB018 (KATHI 76933)
123	Orchidaceae	<i>Calanthe mannii</i> Hook.f.	Herb	1978–2000	Chyaksedanda–Tasigaon	2021.08.30	A. KC et al. MB019 (KATHI 76793)
124	Orchidaceae	<i>Bulbophyllum rolfei</i> (Kuntze) Seidenf.	Herb	1978–2000	Chyaksedanda–Tasigaon	2021.08.30	A. KC et al. MB020 (KATHI 76800)
125	Orchidaceae	<i>Goodyera repens</i> (L.) R.Br.	Herb	1978–2000	Chyaksedanda–Tasigaon	2021.08.30	A. KC et al. MB021 (KATHI 76798)
126	Orchidaceae	<i>Platanthera nematocaulon</i> (Hook.f.) Kraenzl.	Herb	3608	Khongma	2021.08.31	A. KC et al. MB035 (KATHI 76877)
127	Orchidaceae	<i>Platanthera bakeriana</i> (King & Pantl.) Kraenzl.	Terrestrial herb	3608	near Khongma	2021.08.31	A. KC et al. MB038 (KATHI 76924)
128	Orchidaceae	<i>Goodyera repens</i> (L.) R.Br.	Terrestrial herb	2930–3608	Danda Kharka–Khongma	2021.08.31	A. KC et al. MB039 (KATHI 76923)
129	Orchidaceae	<i>Tipularia josephi</i> Rchb.f. ex Lindl.	Herb	2100–2930	Tasigaon–Danda Kharka	2021.08.31	A. KC et al. MB044 (KATHI 76859)
130	Orchidaceae	<i>Satyrium nepalense</i> D.Don	Terrestrial herb	2100–2930	Tasigaon–Danda Kharka	2021.08.31	A. KC et al. MB048 (KATHI 76801)
131	Orchidaceae	<i>Platanthera stenantha</i> (Hook.f.) Soó	Terrestrial herb	3608–3875	Khongma – Khongma La	2021.09.01	A. KC et al. MB052 (KATHI 76905)
132	Orchidaceae	<i>Platanthera carnosilabris</i> (Tang & F.T.Wang) X.H.Jin, Schuit. & W.T.Jin	Terrestrial herb	3875–4240	Khongma La–Shipton La	2021.09.01	A. KC et al. MB053 (KATHI 76829)
133	Orchidaceae	<i>Hemipilia chusua</i> (D.Don) Y.T.Tang & H.Peng	Terrestrial herb	3441	Dobate–Temathang	2021.09.02	A. KC et al. MB073 (KATH)
134	Orchidaceae	<i>Neottia alternifolia</i> (King & Pantl.) Szlach.	Herb	3441	Dobate–Temathang	2021.09.02	A. KC et al. MB083 (KATHI 75672)
135	Orchidaceae	<i>Malaxis muscifera</i> (Lindl.) Kuntze	Herb	3790–4405	Nehe Kharka–Shiva dhara	2021.09.03	A. KC et al. MB087 (KATHI 76912)
136	Orchidaceae	<i>Ponerorchis cucullata</i> (L.) X.H.Jin, Schuit. & W.T.Ji	Herb	3790–4405	Nehe Kharka–Shiva dhara	2021.09.03	A. KC et al. MB089 (KATHI 76917)
137	Orchidaceae	<i>Herminium macrophyllum</i> (D.Don) Dandy	Herb	4405	near Shiva Dhara	2021.09.03	A. KC et al. MB090 (KATHI 76913)
138	Orchidaceae	<i>Dactylorhiza hatagirea</i> (D.Don) Soó	Terrestrial herb	4421	Shiva Dhara–Parbati cave	2021.09.03	A. KC et al. MB104 (KATHI 76788)

SN	Family	Latin name	Life form	Elevation (m)	Locality	Date of collection	Specimen details
139	Orchidaceae	<i>Epipogium aphyllum</i> Sw.	Herb	3902	near Yangle Kharka	2021.09.04	A. KC et al. MB127 (KATHI 76922)
140	Orchidaceae	<i>Neottia tenuis</i> (Lindl.) Szlach.	Herb	3665–4015	Yangle Kharka–Ripuk Kharka	2021.09.04	A. KC et al. MB128 (KATHI 76921)
141	Orchidaceae	<i>Herminium macrophyllum</i> (D.Don) Dandy	Herb	4450–4695	Langmale–Shershung	2021.09.05	A. KC et al. MB136 (KATHI 76816)
142	Orchidaceae	<i>Goodyera fusca</i> (Lindl.) Hook.f.	Herb	4844	MBC	2021.09.05	A. KC et al. MB142 (KATHI 76841)
143	Orchidaceae	<i>Neottia pinetorum</i> (Lindl.) Szlach.	Herb	3902	near Yangle Kharka	2021.09.04	A. KC et al. MB161 (KATHI 76884)
144	Orchidaceae	<i>Platanthera urceolata</i> (C.B.Clarke) R.M.Bateman	Terrestrial herb	3902–3858	Yangle Kharka to Dobate	2021.09.09	A. KC et al. MB162 (KATHI 76883)
145	Orchidaceae	<i>Platanthera stenantha</i> (Hook.f.) Soó	Herb	3608	Khongma	2021.09.07	A. KC et al. MB192 (KATHI 76918)
146	Orobanchaceae	<i>Pedicularis gibbera</i> Prain	Herb	2100–2930	Tasigaon–Danda Kharka	2021.08.31	A. KC et al. MB049 (KATHI 76871)
147	Orobanchaceae	<i>Pedicularis gracilis</i> Wall. ex Benth.	Herb	3441	Dobate–Temathang	2021.09.02	A. KC et al. MB074 (KATHI 76866)
148	Orobanchaceae	<i>Pedicularis trichoglossa</i> Hook.f.	Herb	4695	near Sashra pokhari	2021.09.05	A. KC et al. MB150 (KATHI 76784)
149	Papaveraceae	<i>Corydalis juncea</i> Wall.	Herb	3608	Khongma	2021.08.31	A. KC et al. MB040 (KATHI 76874)
150	Papaveraceae	<i>Meconopsis horridula</i> Hook.f. & Thomson	Herb	4450–4695	Langmale–Shershung	2021.09.05	A. KC et al. MB131 (KATHI 76786)
151	Papaveraceae	<i>Corydalis juncea</i> Wall.	Herb	4240	Shipton La	2021.09.07	A. KC et al. MB165 (KATHI 76893)
152	Polygonaceae	<i>Oxyria digyna</i> (L.) Hill	Herb	4173–4443	Tadosha–Langmale	2021.09.04	A. KC et al. MB122 (KATHI 76847)
153	Polygonaceae	<i>Bistorta macrophylla</i> (D.Don) Soják	Herb	4844	MBC	2021.09.05	A. KC et al. MB147 (KATHI 76836)
154	Polygonaceae	<i>Bistorta affinis</i> (D.Don) Greene	Herb	4844	MBC	2021.09.05	A. KC et al. MB148 (KATHI 76837)
155	Polygonaceae	<i>Bistorta amplexicaulis</i> (D.Don) Greene	Herb	4240	Shipton pass	2021.09.07	A. KC et al. MB173 (KATHI 76792)
156	Polygonaceae	<i>Bistorta vacciniifolia</i> (Wall. ex	Herb	4195	Keke La	2021.09.07	A. KC et al. MB178

SN	Family	Latin name	Life form	Elevation (m)	Locality	Date of collection	Specimen details
		Meisn.) Greene					(KATHI 76886)
157	Polygonaceae	<i>Rheum acuminatum</i> Hook.f. & Thomson	Herb	4240	Shipton La	2021.09.07	A. KC et al. MB181 (KATHI 76771)
158	Primulaceae	<i>Primula crispata</i> Balf.f. & W.W.Sm.	Herb	4405	around Shiva Dhara	2021.09.03	A. KC et al. MB086 (KATHI 76770)
159	Primulaceae	<i>Primula bellidifolia</i> King ex Hook.f.	Herb	4405	near Shiva Dhara	2021.09.03	A. KC et al. MB102 (KATHI 76810)
160	Primulaceae	<i>Primula wollastonii</i> Balf.f.	Herb	4450–4695	Langnale–Shershung	2021.09.05	A. KC et al. MB133 (KATHI 76782)
161	Primulaceae	<i>Primula primulina</i> (Spreng.) H.Hara	Herb	4450–4695	Langmale–Shershung	2021.09.05	A. KC et al. MB134 (KATHI 76833)
162	Ranunculaceae	<i>Aconitum spicatum</i> (Brühl) Stapf	Herb	3790	Neha Kharka	2021.09.03	A. KC et al. MB084 (KATHI 76916)
163	Ranunculaceae	<i>Thalictrum elegans</i> Wall. ex Royle	Herb	3790–4405	Nehe Kharka–Shiva dhara	2021.09.03	A. KC et al. MB105 (KATHI 76813)
164	Rosaceae	<i>Sorbus microphylla</i> Wenz.	Tree	3665–4015	Ripuk Kharka–Yangle Kharka	2021.09.06	A. KC et al. MB159 (KATHI 76843)
165	Rosaceae	<i>Argentina peduncularis</i> (D.Don) Soják	Herb	3858–4195	Dobate–Keke La	2021.09.07	A. KC et al. MB168 (KATHI 76890)
166	Rosaceae	<i>Potentilla coriandrifolia</i> D.Don	Herb	4195	Keke La	2021.09.07	A. KC et al. MB180 (KATHI 76853)
167	Rosaceae	<i>Argentina peduncularis</i> (D.Don) Soják	Herb	4166	near Keke La	2021.09.07	A. KC et al. MB185 (KATHI 76873)
168	Rosaceae	<i>Potentilla coriandrifolia</i> D.Don	Herb	4240	Shitpon La	2021.09.07	A. KC et al. MB190 (KATHI 76832)
169	Salicaceae	<i>Salix calyculata</i> Hook.f. ex Andersson	running shrub	3875–4240	Khongna La–Shipton La	2021.09.01	A. KC et al. MB050 (KATHI 76825)
170	Salicaceae	<i>Salix lindleyana</i> Wall. ex Andersson	Herb	4695	near Sashra pokhari	2021.09.05	A. KC et al. MB155 (KATHI 76849)
171	Salicaceae	<i>Salix calyculata</i> Hook.f. ex Andersson	Shrub	4240	Shipton La	2021.09.07	A. KC et al. MB182 (KATHI 76809)
172	Salicaceae	<i>Salix calyculata</i> Hook.f. ex Andersson	Shrub	4240	Shipton La	2021.09.07	A. KC et al. MB183 (KATHI 76889)
173	Saxifragaceae	<i>Saxifraga punctulata</i> Engl.	Herb	4844	MBC	2021.09.05	A. KC et al. MB145 (KATHI 76807)

SN	Family	Latin name	Life form	Elevation (m)	Locality	Date of collection	Specimen details
174	Saxifragaceae	<i>Bergenia purpurascens</i> (Hook.f. & Thomson) Engl.	Herb	4240–4046	Shipton La–Sano Pokhari	2021.09.07	A. KC et al. MB169 (KATHI 76891)
175	Saxifragaceae	<i>Saxifraga hispidula</i> D.Don	Herb	4240	Shipton La	2021.09.07	A. KC et al. MB191 (KATHI 76915)
176	Scrophulariaceae	<i>Neopicrorhiza scrophulariiflora</i> (Pennell) D.Y.Hong	Herb	4240	Shipton La	2021.09.07	A. KC et al. MB186 (KATHI 76872)
177	Urticaceae	<i>Pilea approximata</i> C.B.Clarke	Herb	3441	Dobate–Temathang	2021.09.02	A. KC et al. MB079 (KATHI 76806)
178	Urticaceae	<i>Pilea racemosa</i> (Royle) Tuyama	Herb	3790–4405	Nehe Kharka–Shiva dhara	2021.09.03	A. KC et al. MB106 (KATHI 76838)
179	Zingiberaceae	<i>Cautleya gracilis</i> (Sm.) Dandy	Herb	1978–2000	Chyaksedanda–Tasigaon	2021.08.30	A. KC et al. MB022 (KATHI 76803)