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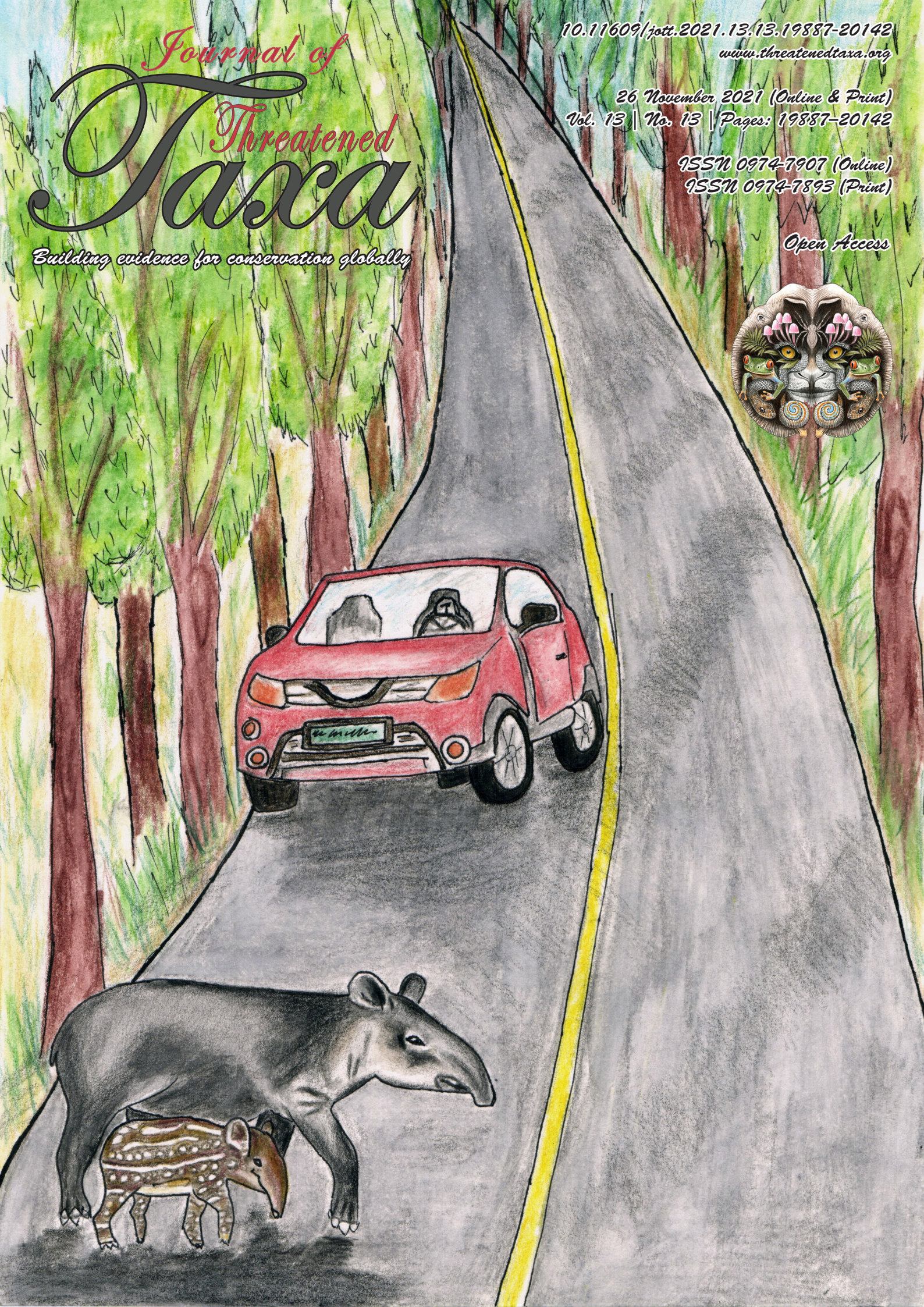
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Caption: Lowland Tapir *Tapirus terrestris* (Medium—watercolours on watercolour paper) © Aakanksha Komanduri.



An enumeration of the flowering plants of Kyongnosla Alpine Sanctuary in eastern Sikkim, India

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Abstract: The present paper is the outcome of an extensive floristic survey conducted in two phases by the authors in Kyongnosla Alpine Sanctuary, East Sikkim, India. During the study 411 taxa (400 species, 04 subspecies and 07 varieties) belonging to 173 genera and 54 families were recorded. The most dominating family was Asteraceae with 44 species followed by Ericaceae 28 species, Ranunculaceae 26 species, Polygonaceae 24 species and Rosaceae 20 species. These five families represent 34.13% of the total taxa recorded from the sanctuary. About 12 families were represented by only one species each. The most dominating genus was *Rhododendron* (18 species) followed by *Primula* (16 species), *Pedicularis* (15 species), *Gentiana* (11 species), and *Impatiens* (10 species). Among the different growth forms, herbs contributed the maximum (86.61%) followed by shrubs (7.79%), trees (4.87%), climbers 0.49%, and epiphyte (0.24%).

Keywords: checklist, eastern Himalaya, floristic survey, growth form, Himalayan forest types.

Comprehensive documentation and identification of plant diversity is one of the targets of Global Strategy for Plant Conservation (GSPC). Being a signatory of the Convention on Plant Diversity (CBD), India is committed towards achieving a complete inventory of plant diversity of all the protected and nonprotected areas (Singh & Dash 2015). India is endowed with diverse ecosystems ranging from high altitude cold deserts to hot and

humid coastlands which show rich floral diversity. Continuous survey and exploration in different habitats have facilitated an updated inventory of plants, which opens up different potential linkages among various sectors and implementation of appropriate action on management and sustainable conservation.

Kyongnosla Alpine Sanctuary (KAS) situated in the East district of Sikkim (Figure 1) between 27°22'33"N latitude and 88°44'13"E longitude covers an area of 31 km² between the elevation ranging from 3,000–4,500 m. In the initial notification 45/WL/83/625 dated 29.viii.84, the area demarcated was 4.5 km², however in the second and final notification 45/WL/F/92/1585/F&WL dated 12.v.92 the area of the sanctuary extended to 31 km². The vegetation of the KAS comprises different ecological zones depending upon the elevation, viz., mixed *Rhododendron* temperate forest, coniferous forest along open slopes and ridges and alpine scrubs on upper reaches. Though it encompasses a small area, the sanctuary supports a luxuriant temperate and alpine vegetation owing to its unique topography, variation of altitudes and high annual precipitation. All representative Himalayan forest types (Champion

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& Seth 1968; Dash & Singh 2010), such as northern montane wet temperate forests (dominated by Oaks *Quercus*, and *Acer*); Himalayan moist temperate forests (dominated by *Rhododendron* spp., *Tsuga dumosa*, *Picea spinulosa*, and *Abies densa*); Himalayan dry temperate forests (represented by gregarious growth of *Juniperus wallichiana*); sub-alpine forests (represented by *Rhododendron* spp., *Betula utilis*, *Sorbus* spp.) and alpine forests (gregarious patches of *Rhododendron* thickets, *Juniperus recurva*, and dense herbaceous growth) exist. The subalpine and alpine forests are present with climax formations, self-generating, resilience forest types. Nevertheless, this diversity is variously challenged by several driving forces such as over exploitation of medicinal plants, heavy grazing by yaks and developmental activities in the fringe areas. Extensive surveys of the study area were conducted to document the floristic composition in different altitudinal gradients of the KAS from July 2017–March 2020, being a part of our project work ‘Biodiversity Assessment through Long-term Monitoring of Plots In the Indian Himalayan Landscape’ under the National Mission of Himalayan Studies. In the paper we have enumerated 411 flowering plants occurring in the sanctuary with their correct accepted names.

MATERIALS AND METHODS

The entire area of KAS was surveyed extensively in two phases. The first phase during 1998–2000 by the first author (SSD) and the second phase during 2017–2020 by the first two authors (SSD & SL). More than 1,300 plant specimens were collected and processed following standard protocols (Jain & Rao 1977). All the collected specimens were identified consulting available literature (Hooker 1872–1897; Grierson & Long 1983; Long 1984; Grierson 1984; Grierson 1987; Grierson & Long 1987; Hajra & Verma 1996; Srivastava 1998; Aitken 1999; Aitken, Grierson & Long 1999; Grierson & Springate 2001; Lucksom 2007; Gogoi et al. 2018; Maity et al. 2018; Mao et al. 2018; Lahiri et al. 2019; Dash et al. 2020; Lahiri & Dash 2020) and voucher specimens were deposited at BSHC and CAL for future reference. Earlier collections made from KAS by different collectors and available in different herbaria (ASSAM, BSHC, and CAL) were also taken into consideration while preparing the present enumeration. In the present inventory, families are arranged as per APG IV system of classification (Chase et al. 2016) and within the family, genera, and species are arranged alphabetically. For determination of current names, the World Flora Online (<http://www.worldfloraonline.org>) and Plants of the World

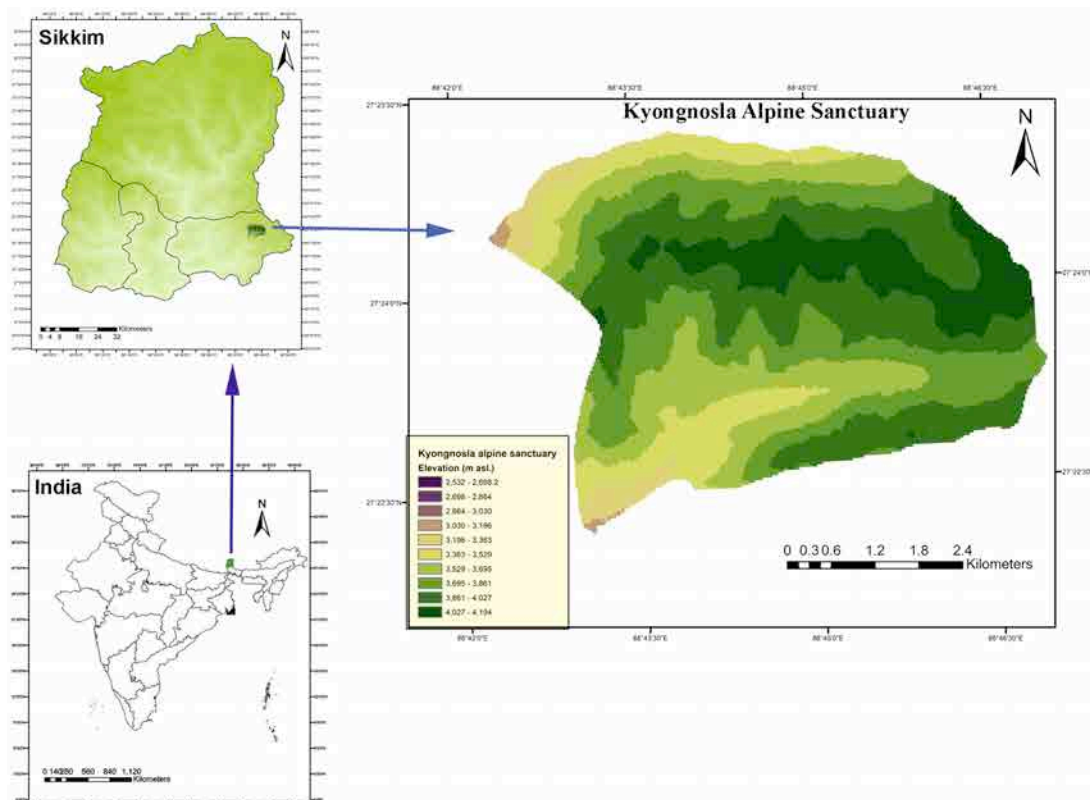


Figure 1. Location of Kyongnosla Alpine Sanctuary in eastern Sikkim.

Online (<http://www.plantsoftheworldonline.org>) were consulted. The enumeration comprises family names, correct scientific names followed by valid author citation, growth form, altitude ranges where they occur and collection details along with the field number and herbarium acronym in each of the columns. Range of distribution of a species has been determined taking into consideration the present collections and also earlier collections deposited in different herbaria.

RESULTS AND DISCUSSION

The enumeration of the flowering plants of KAS includes 411 species belonging to 173 genera and 54 families (Table 2). The family Asteraceae with 44 species is the most dominant family, followed by Ericaceae (28 species), Ranunculaceae (26 species), Polygonaceae (24 species), and Rosaceae (20 species). These families represent 34.13% of the total species recorded from the sanctuary. Among the genera, *Rhododendron* is the most dominant genus represented by 18 species, followed by *Primula* (16 species), *Gentiana* (11 species), *Impatiens* (10 species), *Corydalis* (9 species), *Saxifraga* and *Rhodiola* (7 species each). Three families, i.e., Acanthaceae, Carlemanniaceae, and Euphorbiaceae are represented by only one species.

The plants present in the sanctuary show wider distribution in other parts of the Himalaya too, such as *Allium prattii*, *Cyananthus lobatus*, *Gaultheria trichophylla*, *Juniperus recurva*, *Nardostachys jatamansii*, *Rosa sericea*, and *Streptopus simplex*, which have a wider distribution from North-West Himalayas to China. The taxa showing eastward extension are *Cassiope selaginoides*, *Gentiana stylophora*, *Morina nepalensis*, *Panax pseudo-ginseng*, *Primula sikkimensis*, and *Ribes luridum*. Many species which are restricted only to eastern Himalaya are represented by *Abies densa*, *Meconopsis villosa*, *Rhododendron lanatum*, *Impatiens cymbifera*, *Codonopsis benthamii*, *Codonopsis subsimplex*, and *Primula kingii*.

The basal angiosperm is represented by only one species *Schisandra grandiflora* (Wall.) Hook.f. & Thomson, while eudicots are represented by 85.88% and monocots by 13.86% of total species in KAS (Table 1).

The sanctuary provides a suitable habitat both for temperate and alpine species and holds many endangered and endemic species, viz. *Aconitum ferox*, *Bhutanthera albomarginata*, *Ponerorchis puberula*, *Aconitum novoluridum*, *Codonopsis benthamii*, *Codonopsis subsimplex* etc. The present study also recorded some of little-known species viz. *Bhutanthera albomarginata*, *Ponerorchis puberula*, *Aconitum novoluridum*, *Codonopsis benthamii*, *Rubus lasiostylus*, *Sinopodophyllum hexandrum*, *Gentiana leucomelaena*, *Veratrilla burkilliana*, *Tibetoseris depressa*, and *Pedicularis porrecta*. The sanctuary has been facing a continuous challenge in its community structure due to various anthropogenic interferences and heavy grazing which need to be controlled.

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Table 1. Detailed analysis of floristic diversity under various taxonomic groups (values in parentheses are percent contribution of the total).

	Total Families			Total Genera			Total taxa		
	Basal angiosperms (Austrobaileyales Takht. ex Reveal)	Mono cots	Eudicots	Basal angiosperms (Austrobaileyales Takht. ex Reveal)	Monocots	Eudicots	Basal angiosperms (Austrobaileyales Takht. ex Reveal)	Mono cots	Eudicots
Angiosperms	01 (1.85%)	13 (24.07%)	40 (74.07%)	01 (0.57%)	30 (17.34%)	142 (82.08%)	01 (0.24%)	57 (13.86%)	353 (85.88%)
Total	54			173			411		



Table 2. Enumeration of the flowering plants of Kyongnosla Alpine Sanctuary.

Family	Scientific name of taxa	*Growth form	Altitude (m)	Collection number & Herbarium acronym
Basal angiosperms				
Schisandraceae	<i>Schisandra grandiflora</i> (Wall.) Hook.f. & Thomson	C	3000–3600	S.S. Dash 24144 (BSHC)
Monocots				
Araceae	<i>Arisaema erubescens</i> (Wall.) Schott	H	2000–3400	S.S. Dash 22712 (BSHC)
	<i>Arisaema griffithii</i> Schott	H	2400–3700	S.S. Dash 27028 (BSHC); S. Lahiri 95710 (CAL)
	<i>Arisaema jacquemontii</i> Blume	H	2300–4200	S.S. Dash 22782 (BSHC); S. Lahiri 86682 (CAL)
Tofieldiaceae	<i>Tofieldia himalaica</i> Baker	H	3000–4500	B. Krishna 2068 (BSHC)
Nartheciaceae	<i>Aletris glabra</i> Bureau & Franchet	H	2400–4200	S.S. Dash 27247 (BSHC); S. Lahiri 86690 (CAL)
	<i>Aletris pauciflora</i> (Klotzsch) Hand. –Mazz.	H	2200–4900	S.S. Dash 22734 (BSHC); S. Lahiri 85719 (CAL)
Smilacaceae	<i>Smilax menispermoidea</i> A.DC.	C	2800–3600	S.S. Dash 20995, 24010 (BSHC); S. Lahiri 86685(CAL)
Liliaceae	<i>Fritillaria cirrhosa</i> D.Don	H	3200–4500	S. Lahiri & S.S. Dash 86714, 64902, 86623 (CAL)
	<i>Gagea flavonutans</i> (H. Hara) Zarrei & Wilkin	H	3800–4500	S. Lahiri & S.S. Dash 85788 (CAL)
	<i>Lilium nanum</i> Klotzsch	H	3500–4500	S. Lahiri & S.S. Dash 85784 (CAL)
	<i>Streptopus simplex</i> D. Don	H	3200–4300	S.S. Dash 22270 (BSHC); S. Lahiri 85701 (CAL)
Orchidaceae	<i>Bhutanthera albomarginata</i> (King & Pant.) Renz	H	3800–4300	S. Lahiri & S.S. Dash 85753, 95737 (CAL)
	<i>Galearis spathulata</i> (Lindl.) P.F.Hunt	H	3000–4300	S. Lahiri & S.S. Dash 86661 (CAL)
	<i>Gymnadenia orchidis</i> Lindl.	H	2800–4100	S. Lahiri & S.S. Dash 85791 (CAL)
	<i>Herminium macrophyllum</i> (D.Don) Dandy	H	2400–4100	S.S. Dash 38383 (BSHC)
	<i>Herminium monorchis</i> (L.) R.Br	H	1200–4500	S. Lahiri & S.S. Dash 95720 (CAL)
	<i>Platanthera exelliana</i> Soó Hook.f	H	3300–4500	S. Lahiri & S.S. Dash 95721 (CAL).
	<i>Platanthera leptocaulon</i> (Hook.f.) Soó	H	3000–4000	S. Lahiri & S.S. Dash 85705, 86695 (CAL).
	<i>Ponerorchis chusua</i> (D.Don) Soó	H	2500–4500	S. Lahiri & S.S. Dash 86665, 85714(CAL)
	<i>Ponerorchis puberula</i> (King & Pantl.) Verm.	H	2700–3600	S. Lahiri & S.S. Dash 85702 (CAL)
	<i>Satyrium nepalense</i> D.Don	H	1800–4000	S. Lahiri & S.S. Dash 86731(CAL)
	<i>Satyrium nepalense</i> var. <i>ciliatum</i> (Lindl.) Hook.f.	H	2500–4000	S. Lahiri & S.S. Dash 86730, 86747(CAL)
Iridaceae	<i>Iris clarkei</i> Baker ex Hook.f.	H	3300–4200	S.S. Dash 22702 (BSHC); S. Lahiri 85727 (CAL)
Amaryllidaceae	<i>Allium prattii</i> C.H. Wright	H	2500–4400	S. Lahiri & S.S. Dash 85785, 95735 (CAL)
	<i>Allium wallichii</i> Kunth	H	3000–4500	S.S. Dash 24071, 24122, 27002 (BSHC); S. Lahiri 86737 (CAL)
Asparagaceae	<i>Maianthemum oleraceum</i> (Baker) LaFrankie	H	2700–3600	S. Lahiri & S.S. Dash 95729 (CAL)
	<i>Maianthemum purpureum</i> (Wall.) LaFrankie	H	2700–4000	S. Lahiri & S.S. Dash 86691, 86692 (CAL)
	<i>Polygonatum brevistylum</i> Baker	H	2000–3300	S.S. Dash 22710 (BSHC)
	<i>Polygonatum cirrhifolium</i> (Wall.) Royle	H	2200–4200	S.S. Dash 20992(a) (BSHC)
	<i>Polygonatum verticillatum</i> (L.) All.	H	2400–4300	S.S. Dash 20992, 22710 (BSHC); S. Lahiri 86694 (CAL)
Eriocaulaceae	<i>Eriocaulon alpestre</i> Hook.f. & Thomson ex Körn.	H	2400–3900	S. Lahiri & S.S. Dash 64907 (CAL)
Juncaceae	<i>Juncus benghalensis</i> Kunth	H	2200–4200	S.S. Dash 22728 (BSHC); S. Lahiri 86696 (CAL)
	<i>Juncus bufonius</i> L.	H	2700–4500	S. Lahiri & S.S. Dash 64934 (CAL)
	<i>Juncus cephalostigma</i> Sam.	H	3300–4500	S. Pradhan 6631 (BSHC)
	<i>Juncus chrysocarpus</i> Buchenau	H	3000–3600	D.C.S. Raju 3680 (BSHC)
	<i>Juncus concinnus</i> D.Don	H	2100–4300	S.S. Dash 27016 (BSHC)
	<i>Juncus effusus</i> L.	H	2000–3400	S.S. Dash 27286 (BSHC)
	<i>Juncus grisebachii</i> Buchenau	H	2500–5000	S. Lahiri & S.S. Dash 86745 (CAL)

Family	Scientific name of taxa	*Growth form	Altitude (m)	Collection number & Herbarium acronym
Juncaceae	<i>Juncus himalensis</i> Klotzsch	H	2400–4200	S.S. Dash 24123,24130 (BSHC); S. Lahiri 86657 (CAL)
	<i>Juncus kingii</i> Rendle	H	3700–4300	S.S. Dash 27231 (BSHC)
	<i>Juncus sikkimensis</i> Hook.f.	H	3600–4800	S.S. Dash 27289
	<i>Juncus thomsonii</i> Buchenau	H	3600–3900	S.S. Dash 22208 (BSHC); S. Lahiri 64923 (CAL)
	<i>Luzula multiflora</i> (Ehrh.) Lej.	H	3000–4500	S.S. Dash 20996 (BSHC); S. Lahiri (CAL)
Cyperaceae	<i>Carex gracilentata</i> Boott ex Boeckeler	H	3200–4300	S. Lahiri & S.S. Dash 64909 (CAL)
	<i>Carex inanis</i> Kunth	H	1400–3700	S. Lahiri & S.S. Dash 64929 (CAL)
	<i>Kobresia curticeps</i> (C.B.Clarke) Kük.	H	2500–4000	G.P. Sinha & D.G. Long 17748 (BSHC)
Poaceae	<i>Agrostis inaequiglumis</i> Griseb.	H	3000–4500	S.S. Dash 24046 (BSHC); S. Lahiri 64911 (CAL)
	<i>Agrostis micrantha</i> Steud.	H	1600–3500	P. Singh & S.K. Rai. 23784 (BSHC).
	<i>Agrostis nervosa</i> Nees ex Trinius	H	3300–4000	S.S. Dash 22789 (BSHC)
	<i>Calamagrostis emodensis</i> Griseb.	H	2200–4600	S.S. Dash 24068 (BSHC)
	<i>Calamagrostis scabrescens</i> Griseb.	H	2000–3800	S. Lahiri & S.S. Dash 64931 (CAL)
	<i>Cyathopus sikkimensis</i> Stapf	H	3600–4600	S.S. Dash 24105 (BSHC)
	<i>Deschampsia cespitosa</i> (L.) P.Beauv.	H	2700–4500	S.S. Dash 24104 (BSHC)
	<i>Festuca rubra</i> L.	H	3500–4200	S.S. Dash 27228 (BSHC)
	<i>Festuca valesiaca</i> Schleicher ex Gaudin	H	2500–3700	S.S. Dash 27044 (BSHC)
	<i>Poa pagophila</i> Bor	H	3600–5200	S.S. Dash 27035 (BSHC)
	<i>Poa pratensis</i> L.	H	3000–5000	S.S. Dash 24113 (BSHC)
Eudicots				
Papaveraceae	<i>Corydalis cashmeriana</i> Royle	H	3000–5000	S. Lahiri & S.S. Dash 85773 (CAL)
	<i>Corydalis filicina</i> Prain	H	2500–3500	S.S. Dash 27250 (BSHC); S. Lahiri 85774 (CAL)
	<i>Corydalis flaccida</i> Hook.f. & Thomson	H	3300–4200	S.S. Dash 22738 (BSHC)
	<i>Corydalis juncea</i> Wall.	H	3600–4600	S.S. Dash 27226 (BSHC)
	<i>Corydalis meifolia</i> Wall.	H	3800–5200	S.S. Dash 27223 (BSHC); S. Lahiri 86612 (CAL)
	<i>Corydalis polygalina</i> Hook.f. & Thomson	H	4000–5100	D.C.S. Raju 3655 (BSHC)
	<i>Corydalis pseudolongipes</i> Lidén	H	3000–4000	S.S. Dash 24119,24018, 27276 (BSHC); S. Lahiri 86634 (CAL)
	<i>Corydalis sikkimensis</i> (Prain) Fedde	H	3000–4600	S.S. Dash 27006 (BSHC)
	<i>Corydalis trifoliata</i> Franch.	H	3600–4200	S.S. Dash 20977 (BSHC)
	<i>Meconopsis paniculata</i> (D. Don) Prain	H	3000–4200	S.S. Dash 22715 (BSHC); S. Lahiri 86659 (CAL)
	<i>Meconopsis simplicifolia</i> (D. Don) Walp.	H	3200–4500	S.S. Dash 20073 (BSHC); S. Lahiri 95705 (CAL)
<i>Meconopsis villosa</i> (Hook.f.) G.Taylor	H	2700–4300	S.S. Dash 22703(BSHC); S. Lahiri 85723(CAL)	
Berberidaceae	<i>Berberis angulosa</i> Wall. ex Hook.f. & Thomson	S	3000–4000	S.S. Dash 27008 (BSHC); S. Lahiri 85879, 86651 (CAL)
	<i>Berberis griffithiana</i> C.K.Schneid.	H	2500–3300	S.S. Dash 22776 (BSHC)
	<i>Berberis macrosepala</i> Hook.f & Thomson	H	3500–4400	S.S. Dash 22776(A) (BSHC)
	<i>Sinopodophyllum hexandrum</i> (Royle) T.S.Ying	H	2500–4500	S.S. Dash 27029 (BSHC).
Ranunculaceae	<i>Aconitum dissectum</i> D.Don	H	3200–4500	S. Lahiri & S.S. Dash 85739 (CAL)
	<i>Aconitum ferox</i> Wallich ex Sering	H	3000–5000	S.S. Dash 27225 (A) (BSHC); S. Lahiri 86754 (CAL)
	<i>Aconitum heterophylloides</i> (Brühl) Stapf	H	3300–4500	S. Lahiri & S.S. Dash 86784 (CAL)
	<i>Aconitum novoluridum</i> Munz	H	2000–3500	S.S. Dash 27225(BSHC); S. Lahiri 64905 (CAL)
	<i>Aconitum palmatum</i> D.Don	H	2500–4000	S. Lahiri & S.S. Dash 86795 (CAL)
	<i>Aconitum spicatum</i> (Bruehl) Stapf	H	3500–4000	S.S. Dash 27227 (BSHC); S. Lahiri 86783 (CAL)
	<i>Anemone obtusiloba</i> D.Don	H	2300–5300	S.S. Dash 22752 (BSHC)
	<i>Anemone rupestris</i> Wallich ex Hook.f.	H	2000–3500	S. Lahiri 95717 (CAL).



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Ranunculaceae	<i>Anemone trullifolia</i> Hook.f. & Thomson	H	2500–5000	S.S. Dash 27256 (BSHC)
	<i>Caltha palustris</i> L.	H	2000–3600	S.S. Dash 22721 (BSHC).
	<i>Caltha scaposa</i> Hook.f. & Thomson	H	2500–4500	S.S. Dash 27225 (BSHC); S. Lahiri 86649 (CAL)
	<i>Clematis montana</i> Buch. –Ham. ex DC.	H	2000–4000	S.S. Dash 22701 (BSHC); S. Lahiri 86788, 95712 (CAL)
	<i>Delphinium candelabrum</i> Ostenf.	H	4100–5300	S.S. Dash 24189 (BSHC)
	<i>Oxygraphis polypetala</i> (Raf.) Hook.f. & Thomson	H	3200–5300	S. Lahiri & S.S. Dash 73248 (CAL)
	<i>Ranunculus brotherusii</i> Freyn	H	3000–3300	S.S. Dash 22747 (BSHC)
	<i>Ranunculus diffusus</i> DC.	H	1100–3100	S.S. Dash 22741 (BSHC)
	<i>Ranunculus ficariifolius</i> Leveille & Veniot	H	1100–3200	S.S. Dash 27294 (BSHC)
	<i>Ranunculus hirtellus</i> Royle ex D.Don	H	3000–5000	Sinha & Shukla 20550 (BSHC)
	<i>Ranunculus pulchellus</i> C.A. Mey.	H	2300–3200	S.S. Dash 20993, 20973 (BSHC)
	<i>Ranunculus trichophyllus</i> Chaix	H	3200–4100	Sinha & Shukla 20550 (BSHC)
	<i>Thalictrum alpinum</i> L.	H	2800–5000	S.S. Dash 19289 (BSHC); S. Lahiri 64924 (CAL)
	<i>Thalictrum chelidonii</i> DC.	H	2300–3600	S.S. Dash 24197 (BSHC)
	<i>Thalictrum elegans</i> Wall. ex Royle	H	2700–4200	S.S. Dash 24048 (BSHC)
	<i>Thalictrum javanicum</i> Blume	H	1500–3800	S.S. Dash 24196 (BSHC)
<i>Thalictrum reniforme</i> Wall.	H	2800–3700	S. Lahiri & S.S. Dash 85711 (CAL)	
<i>Thalictrum rutifolium</i> Hook.f. & Thomson	H	2300–4300	S.K. Rai 9455 (BSHC)	
Grossulariaceae	<i>Ribes glaciale</i> Wall	S	2000–3500	S.S. Dash 27284 (BSHC)
	<i>Ribes laciniatum</i> Hook.f. & Thomson	S	2400–3900	S.S. Dash 27206 (BSHC)
	<i>Ribes luridum</i> Hook.f. & Thomson	S	2800–4200	S.S. Dash 24150 (BSHC)
	<i>Ribes takare</i> D.Don	S	2700–4200	S.S. Dash 22796, 22799 (BSHC)
Saxifragaceae	<i>Astilbe rivularis</i> Buch.–Ham. ex D. Don	H	2000–3600	S.S. Dash 20976, 24135 (BSHC); S. Lahiri 86662 (CAL)
	<i>Bergenia ciliata</i> (Haw.) Sternb.	H	2000–3500	S. Lahiri & S.S. Dash 95753 (CAL)
	<i>Bergenia purpurascens</i> (Hook.f. & Thomson) Engl.	H	3700–4800	S.S. Dash 27221 (BSHC); S. Lahiri 86718 (CAL)
	<i>Saxifraga assamensis</i> Wadhwa	H	3600–3900	S.S. Dash 24198 (BSHC)
	<i>Saxifraga brachypoda</i> D.Don	H	3000–5000	S.S. Dash 24198 (BSHC); S. Lahiri 86775, 85769 (CAL)
	<i>Saxifraga cordigera</i> Hook.f. & Thomson	H	3000–4600	S.S. Dash 27208 (BSHC) & S. Lahiri 86797 (CAL)
	<i>Saxifraga melanocentra</i> Franch.		3000–4900	Sinha & Shukla 20447 (BSHC)
	<i>Saxifraga moorcroftiana</i> (Ser.) Wall. ex Sternb.	H	2000–3500	S.S. Dash 24126, 27214 (BSHC); S. Lahiri 86776 (CAL)
	<i>Saxifraga pallida</i> Wall. ex Ser.	H	3000–5000	S. Lahiri & S.S. Dash 86617 (CAL)
<i>Saxifraga parnassifolia</i> D.Don	H	2000–3500	S.S. Dash 24001 (BSHC); S. Lahiri 86786 (CAL)	
Crassulaceae	<i>Rhodiola bupleuroides</i> (Wall. ex Hook.f. & Thomson) S.H.Fu	H	3400–5700	S.S. Dash 27274(BSHC); S. Lahiri 85730, 85757 (CAL)
	<i>Rhodiola chrysanthemifolia</i> (H. Lév.) S.H.Fu	H	3200–4200	S.S. Dash 19275 (BSHC)
	<i>Rhodiola cretinii</i> (Raymond–Hamet) H.Ohba	H	3700–4400	S. Lahiri & S.S. Dash 85752 (CAL)
	<i>Rhodiola crenulata</i> (Hook.f. & Thomson) H.Ohba	H	2800–5600	S.S. Dash 27248 (BSHC).
	<i>Rhodiola fastigiata</i> (Hook. f. & Thomson) S.H.Fu	H	3500–5400	S. Lahiri & S.S. Dash 74489 (CAL)
	<i>Rhodiola himalensis</i> (D. Don) S.H.Fu	H	3600–4200	S.S. Dash 6620, 85752 (BSHC); S. Lahiri 74416 (CAL).
	<i>Rhodiola wallichiana</i> (Hook.) S.H.Fu	H	3500–3800	S.S. Dash 27255, 24012; S. Lahiri 86715, 86748 (CAL)

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Fabaceae (= Leguminosae)	<i>Astragalus sikkimensis</i> Bunge	H	2600–4500	S. Lahiri & S.S. Dash 64922 (CAL)
	<i>Parochetus communis</i> D.Don	H	1800–3500	S. Lahiri & S.S. Dash 86654 (CAL)
Rosaceae	<i>Fragaria nubicola</i> (Lindl. ex Hook.f.) Lacaita	H	2500–3900	S.S. Dash 24045 (BSHC); S. Lahiri 86728 (CAL)
	<i>Fragaria vesca</i> L.	H	2000–3200	S. Singh 3398 (BSHC)
	<i>Potentilla eriocarpa</i> Wall. ex Lehm.	H	2700–5000	S.S. Dash 22753 (BSHC)
	<i>Potentilla fruticosa</i> var. <i>arbuscula</i> (D. Don) Maxim.	S	2600–4600	S. Lahiri & S.S. Dash 85742 (CAL)
	<i>Potentilla leuconota</i> D.Don	H	2200–4600	S. Lahiri & S.S. Dash 86640 (CAL)
	<i>Potentilla peduncularis</i> D.Don	H	3000–4800	S.S. Dash 22735 (BSHC); S. Lahiri 95754 (CAL)
	<i>Potentilla polyphylla</i> Wall. ex Lehm.	H	2500–4500	S.S. Dash 22707 (BSHC)
	<i>Potentilla saundersiana</i> Royle	H	2600–5200	S.S. Dash 22762 (BSHC)
	<i>Prunus carmesina</i> H.Hara	T	1900–3000	S.S. Dash & S. Lahiri 95760 (CAL)
	<i>Prunus cornuata</i>	T	2000–3200	S.S. Dash & S. Lahiri 95761 (CAL)
	<i>Rosa sericea</i> Wall. ex Lindl.	S	3000–4000	S.S. Dash 222705, 24036, 27246, 27041 (BSHC); S. Lahiri 86627 (CAL)
	<i>Rubus lasiostylus</i> Focke	S	2700–3200	S. Lahiri & S.S. Dash 85717 (CAL)
	<i>Rubus mesogaeus</i> Focke	S	2700–3600	S.S. Dash 24194 (BSHC)
	<i>Rubus pectinarioides</i> H.Hara	S	2000–3500	D.C.S. Raju & S. Singh 3661 (BSHC)
	<i>Rubus pedunculatus</i> D.Don	S	2600–3700	S.S. Dash 22784 (BSHC)
	<i>Rubus thomsonii</i> Focke	S	2700–3400	A.K. Sahoo 3588 (BSHC)
	<i>Sibbaldia parviflora</i> Willd.	H	2000–3500	S. Lahiri & S.S. Dash 86723 (CAL)
	<i>Sorbus foliolosa</i> (Wall.) Spach	T	2500–4200	S.S. Dash 20987 (BSHC); S. Lahiri 86780 (CAL)
	<i>Sorbus prattii</i> Koehne	T	2000–4500	S.S. Dash 24133 (BSHC)
	<i>Sorbus microphylla</i> (Wall. ex Hook.f.) Wenz.	T	3200–4200	S.S. Dash 24038 (BSHC)
<i>Spiraea arcuata</i> Hook.f.	S	2700–4000	S.S. Dash 22794 (BSHC)	
<i>Spiraea canescens</i> D.Don	S	2700–4000	S.S. Dash 24154 (BSHC); S. Lahiri 95739 (CAL)	
Betulaceae	<i>Betula utilis</i> D.Don	T	2600–4200	S.S. Dash 22751, 24019 (BSHC)
Celastraceae	<i>Euonymus tingens</i> Wall	H	1300–3700	S.S. Dash 24049 (BSHC)
	<i>Parnassia chinensis</i> Franch.	H	2500–4400	S.S. Dash 27208 (BSHC); S. Lahiri 86733, 86632, 86638 (CAL)
	<i>Parnassia cooperi</i> W.E.Evans	H	3000–3500	S.S. Dash 22741 (BSHC)
	<i>Parnassia nubicola</i> Wall. ex Royle	H	3200–4350	S.S. Dash 24131, 27203 (BSHC); S. Lahiri 86733 (CAL)
	<i>Parnassia tenella</i> Hook.f. & Thomson	H	2800–3400	S.S. Dash 22741 (BSHC)
Oxalidaceae	<i>Oxalis leucolepis</i> Diels	H	2800–4000	S. Lahiri & S.S. Dash 86664 (CAL)
Hypericaceae	<i>Hypericum choisianum</i> Wall. ex N.Robson	H	2100–4000	S.S. Dash 20980 (BSHC)
	<i>Hypericum hookerianum</i> Wight & Arn.	H	1900–3400	S.S. Dash 24077 (BSHC); S. Lahiri 86724 (CAL)
	<i>Hypericum petiolulatum</i> Hook.f. & Thomson ex Dyer	H	1000–3100	S. Lahiri & S.S. Dash 86653 (CAL)
Violaceae	<i>Viola biflora</i> L.	H	2500–4300	S.S. Dash 22733 (BSHC); S. Lahiri 85772 (CAL)
Salicaceae	<i>Salix calyculata</i> Hook.f. ex Andersson	S	3400–4700	S.S. Dash 22749 (BSHC); S. Lahiri 74463 (CAL)
	<i>Salix daltoniana</i> Andersson	S	3000–4400	S.S. Dash 24013 (BSHC)
	<i>Salix longiflora</i> Wall. ex Andersson	S	500–4000	Sinha & Shukla 20470 (BSHC)
	<i>Salix serpyllum</i> Anderson	S	3200–4500	S.S. Dash 24050 (BSHC); S. Lahiri 85878 (CAL)
	<i>Salix sikkimensis</i> Andersson	S	3350–4000	S.S. Dash 27290 (BSHC); S. Lahiri 86631 (CAL)
Euphorbiaceae	<i>Euphorbia sikkimensis</i> Boiss.	H	2500–3500	S. Lahiri & S.S. Dash 85766 (CAL)



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Geraniaceae	<i>Geranium donianum</i> Sweet	H	2400–4800	S.S. Dash 24043 (BSHC); S. Lahiri 74455 (CAL)
	<i>Geranium nepalense</i> Sweet	H	1000–3600	S.S. Dash 24040, 22757 (BSHC); S. Lahiri 85721 (CAL)
	<i>Geranium polyanthes</i> Edgew. & Hook.f.	H	2900–4000	S.S. Dash 24065 (BSHC)
Onagraceae	<i>Circaea alpina</i> subsp. <i>imaicola</i> (Asch. & Magnus) Kitam.	H	2000–4000	B. Krishna 6431 (BSHC)
	<i>Epilobium amurense</i> Hausskn.	H	2100–4000	S. Lahiri & S.S. Dash 86633 (CAL)
	<i>Epilobium sikkimense</i> Hausskn.	H	2000–3750	S. Lahiri & S.S. Dash 85741 (CAL)
	<i>Epilobium tibetanum</i> Hausskn.	H	2000–4500	Sinha & Shukla 21598 (BSHC)
	<i>Epilobium wallichianum</i> Hausskn.	H	2200–4100	Sinha & Shukla 21594 (BSHC)
	<i>Epilobium williamsii</i> P.H.Raven	H	2300–4700	S. Lahiri & S.S. Dash 74422 (CAL).
Sapindaceae	<i>Acer acuminatum</i> Wall. ex D.Don	T	3300–4700	S. Lahiri & S.S. Dash 95744 (CAL)
	<i>Acer campbellii</i> Hook.f. & Thomson ex Hiern	T	2000–3500	S. Lahiri & S.S. Dash 85708 (CAL)
Brassicaceae (= Cruciferae)	<i>Arcyosperma primulifolium</i> (Thomson) O.E.Schulz	H	3000–4500	Sinha & Shukla 20539 (BSHC)
	<i>Barbarea elata</i> Hook.f. & Thomson	H	3200–3800	S.S. Dash 22749 (A) (BSHC)
	<i>Barbarea intermedia</i> Boreau	H	2800–4200	S.S. Dash 22779 (BSHC); S. Lahiri 95716 (CAL)
	<i>Cardamine griffithi</i> Hook.f., Thomson	H	2000–3800	S.S. Dash 22739 (BSHC)
	<i>Cardamine macrophylla</i> Willd.	H	2500–4200	S.S. Dash 22754, 27053 (BSHC); S. Lahiri 86628, 85877 (CAL)
	<i>Cardamine pulchella</i> (Hook.f. & Thomson) Al-Shehbaz & G.Yang	H	3000–4100	S.S. Dash 22766 (BSHC) S. Lahiri 85716 (CAL)
	<i>Pegaeophyton minutum</i> H.Hara	H	3700–4200	S. Lahiri 95749 (CAL)
	<i>Thlaspi montanum</i> L.	H	1500–3000	S. Pradhan 6608 (BSHC)
Polygonaceae	<i>Aconogonon campanulatum</i> (Hook.f.) H.Hara	H	3000–3600	S.S. Dash 20736, 24035, 86642 (BSHC); S. Lahiri 86642 (CAL)
	<i>Aconogonon campanulatum</i> var. <i>oblongum</i> (Meisn.) H.Hara	H	3000–3600	S.S. Dash 22717 (BSHC).
	<i>Aconogonon molle</i> (D. Don) H.Hara	H	2000–4000	S.S. Dash 24081 (BSHC); S. Lahiri 86620 (CAL)
	<i>Aconogonon polystachyum</i> (Wall. ex Meisn.) M.Král	H	2000–4000	S.S. Dash 20735, 27242, 24005 (BSHC); S. Lahiri 86742 (CAL)
	<i>Aconogonon rude</i> (Meisn.) S.S.Dash & P.Singh	H	2000–3300	S.S. Dash 24138 (BSHC)
	<i>Bistorta affinis</i> (D.Don) Greene	H	3500–5000	S.S. Dash 27293 (BSHC); S. Lahiri 74426 (CAL)
	<i>Bistorta amplexicaulis</i> (D.Don) Green	H	3000–4200	S.S. Dash 20999, 24002 (BSH); S. Lahiri 85713 (CAL)
	<i>Bistorta emodi</i> (Meisn.) H.Hara	H	3200–4000	S.S. Dash 27253 (BSHC); S. Lahiri 64935 (CAL)
	<i>Bistorta macrophylla</i> (D.Don) Soják	H	3500–4200	S.S. Dash 27251 (BSHC)
	<i>Bistorta suffulta</i> (Maximowicz) Greene ex. H.Gross	H	3000–4200	S. Kumar & P. Singh 11640 (BSHC)
	<i>Bistorta vacciniifolia</i> (Wall. ex Meisn.) Greene	H	2600–3900	S.S. Dash 24109 (BSHC); S. Lahiri 86758 (CAL)
	<i>Bistorta vivipara</i> (L) S.F.Gray	H	2200–3850	S.S. Dash 22719 (BSHC); S. Lahiri 86726, 85800 (CAL)
Polygonaceae	<i>Koenigia delicatula</i> (Meisn.) H.Hara	H	2600–5000	S.S. Dash 18593, 24060, 27240 (BSHC); S. Lahiri 74492, 85720 (CAL)
	<i>Koenigia forrestii</i> (Diels) Mesicek & Soják	H	2800–5200	D.G. Long et al. 18245 (BSHC)
	<i>Koenigia nepalensis</i> D.Don	H	2800–5000	S.S. Dash 27032 (BSHC); S. Lahiri 85720, 85738 (CAL)
	<i>Koenigia nepalensis</i> D.Don var. <i>villosa</i>	H	3000–4900	S.S. Dash 24041 (BSHC)
	<i>Koenigia pilosa</i> Maxim.	H	3000–4500	Sinha & Shukla 21565 (BSHC)
	<i>Oxyria digyna</i> (L.) Hill	H	3000–5500	S.S. Dash 18532, 27283 (BSHC); S. Lahiri 86619 (CAL).
	<i>Persicaria nepalensis</i> (Meisn.) Miyabe	H	2500–3900	S.S. Dash 27032, 24041 (BSHC); S. Lahiri 86738, 86739, 85797 (CAL)
	<i>Persicaria runcinata</i> (Buch.-Ham. ex D.Don) H. Gross	H	1000–3800	S.S. Dash 24032 (BSHC); S. Lahiri 86735, 85710, 85711 (CAL)

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Polygonaceae	<i>Rheum acuminatum</i> Hook.f. & Thomson	H	3000–4100	S.S. Dash 18569 (BSHC); S. Lahiri 85735 (CAL).
	<i>Rheum nobile</i> Hook.f. & Thomson	H	3000–5200	S.S. Dash 24124 (BSHC).
	<i>Rumex dentatus</i> L.	H	2200–3800	S.S. Dash 20985 (BSHC)
	<i>Rumex nepalensis</i> Spreng.	H	1500–3600	S.S. Dash 22775, 24066, 27268 (BSHC)
Caryophyllaceae	<i>Arenaria debilis</i> Hook.f.	H	3000–4900	S. Lahiri & S.S. Dash 85726 (CAL)
	<i>Cerastium glomeratum</i> Thuill.	H	1000–4200	S.S. Dash 27287 (BSHC); S. Lahiri 86625 (CAL)
	<i>Gypsophila cerastoides</i> D.Don	H	3000–4200	S.S. Dash 22763, 22787 (BSHC); S. Lahiri 85764 (CAL)
	<i>Silene caespitella</i> F.Williams	H	2500–5100	S.S. Dash 24190 (A) (BSHC); S. Lahiri 86727 (CAL)
	<i>Silene indica</i> (Roxb.) Roxb. ex Otth	H	2500–5000	B. Krishna & B. Mitra 6414 (BSHC)
	<i>Silene nigrescens</i> (Edgew.) Majumdar	H	3000–4500	S. Lahiri & S.S. Dash 64903 (CAL)
	<i>Stellaria subumbellata</i> Edgew.	H	3500–5300	S.S. Dash 24118 (BSHC)
Balsaminaceae	<i>Impatiens bicornuta</i> Wall.	H	2400–3200	P.K. Hajra 514 (BSHC)
	<i>Impatiens cymbifera</i> Hook.f.	H	2100–3200	S. Lahiri & S.S. Dash 95746 (CAL)
	<i>Impatiens falcifer</i> Hook.f.	H	2400–3800	S. Lahiri & S.S. Dash 95747 (CAL)
	<i>Impatiens jurpia</i> Buch.-Ham.	H	2000–3000	S.S. Dash 20988 (BSHC)
	<i>Impatiens kingii</i> Hook.f.	H	2800–4000	S. Lahiri & S.S. Dash 86708 (CAL)
	<i>Impatiens racemosa</i> DC.	H	1500–3300	S.S. Dash 27207 (BSHC); S. Lahiri 95748 (CAL)
	<i>Impatiens radiata</i> Hook.f.	H	2000–3600	S. Lahiri & S.S. Dash 86639, 86641 (CAL)
	<i>Impatiens serratifolia</i> Hook.f.	H	2400–3300	S. Lahiri & S.S. Dash 85712, 86643 (CAL)
	<i>Impatiens spirifer</i> Hook.f. & Thomson	H	1200–3200	S.S. Dash 27257 (BSHC)
	<i>Impatiens urticifolia</i> Wall.	H	2300–3400	S. Lahiri & S.S. Dash 86707 (CAL)
Primulaceae	<i>Androsace croftii</i> Watt	H	3000–4000	S.S. Dash & S. Lahiri 95762 (CAL)
	<i>Primula calderiana</i> Balf.f. & Cooper	H	3500–4500	Sinha & Shukla 21589 (BSHC)
	<i>Primula capitata</i> Hook.f.	H	3500–4500	S.S. Dash 24092 (BSHC); S. Lahiri 85775 (CAL)
	<i>Primula drummondiana</i> Craib	H	3000–4200	S. Lahiri & S.S. Dash 74545 (CAL)
	<i>Primula elongata</i> Watt	H	3800–4300	S.S. Dash & S. Lahiri 95759 (CAL)
	<i>Primula glomerata</i> Pax	H	3300–5700	S. Lahiri & S.S. Dash 85775 (CAL)
	<i>Primula involucreta</i> Wall. ex Duby	H	3000–4500	S. Lahiri & S.S. Dash 85750 (CAL)
	<i>Primula kingii</i> Watt	H	3500–4300	S. Lahiri & S.S. Dash 85728 (CAL)
	<i>Primula minutissima</i> Jacquem. ex Duby	H	3700–5200	S.S. Dash 27280 (BSHC)
	<i>Primula obliqua</i> W.W.Sm.	H	3500–4500	S. Lahiri & S.S. Dash 86614 (CAL)
	<i>Primula primulina</i> (Spreng.) H.Hara	H	3400–5000	S. Lahiri & S.S. Dash 85780, 85781 (CAL)
	<i>Primula reticulata</i> Wall.	H	3000–4000	S. Pradhan 6603 (BSHC)
	<i>Primula sapphirina</i> Hook.f. & Thomson ex Watt	H	3500–4800	S. Lahiri & S.S. Dash 85796 (CAL)
	<i>Primula scapigera</i> (Hook.f.) Craib	H	2000–4000	S. Lahiri & S.S. Dash 73245 (BSHC)
	<i>Primula sikkimensis</i> Hook.f.	H	3200–4400	S.S. Dash 22722, 27212 (BSHC); S. Lahiri 85707 (CAL)
	<i>Primula vaginata</i> Watt	H	2500–4500	S. Lahiri & S.S. Dash 95726 (CAL)
	<i>Primula wattii</i> King ex Watt	H	4000–4600	S. Lahiri & S.S. Dash 95704 (CAL)
Ericaceae	<i>Cassiope fastigiata</i> (Wall.) D.Don	H	3000–4500	S. Lahiri & S.S. Dash 85787 (CAL)
	<i>Cassiope selaginoides</i> Hook.f. & Thomson	H	3000–4200	S. S. Dash 24149 (BSHC); S. Lahiri 95715 (CAL)
	<i>Enkianthus deflexus</i> (Griff.) C.K. Schneid.	S	2000–3600	S. S. Dash 24142 (BSHC)
	<i>Gaultheria griffithiana</i> Wight	H	2100–4000	P. Singh & S.K. Rai 22692 (BSHC)
	<i>Gaultheria nummularioides</i> D.Don	H	1800–3500	S.S. Dash 24045 (BSHC); S. Lahiri 86729 (CAL)
	<i>Gaultheria semi-infera</i> (C.B. Clarke) Airy Shaw	S	2100–3000	S.S. Dash 27208 (BSHC); S. Lahiri 85745 (CAL)



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Ericaceae	<i>Gaultheria trichophylla</i> Royle	H	3000–3900	S.S. Dash 27039, 22768, 27235, 24045 (BSHC); S. Lahiri 73247 (CAL)
	<i>Lyonia ovalifolia</i> (Wall.) Drude	T	1500–3400	S. Lahiri & S.S. Dash 64901, 85745 (CAL)
	<i>Lyonia villosa</i> (Wall. ex C.B. Clarke) Hand. – Mazz.	T	3000–3900	S.S. Dash 22746 (BSHC); S. Lahiri 64920 (CAL)
	<i>Rhododendron anthopogon</i> D. Don	S	2400–4900	S.S. Dash 27291 (BSHC); S. Lahiri 95751 (CAL)
	<i>Rhododendron arboreum</i> Sm.	T	1500–3800	S. Lahiri & S.S. Dash 73242 (CAL)
	<i>Rhododendron baileyi</i> Balf.f.	S	3000–4000	S. S. Dash 24151 (BSHC)
	<i>Rhododendron camelliflorum</i> Hook.f.	S	2500–3700	S.S. Dash 24146 (BSHC)
	<i>Rhododendron campanulatum</i> D. Don	T	2800–4000	S. Lahiri & S.S. Dash 73244 (CAL)
	<i>Rhododendron campanulatum</i> subsp. <i>aeruginosum</i> (Hook. f.) D.F. Chamb.	T	3500–4600	S. S. Dash 24145 (BSHC); S. Lahiri 73249 (CAL)
	<i>Rhododendron campylocarpum</i> Hook.f.	T	3000–4600	S. Lahiri & S.S. Dash 95752 (CAL)
	<i>Rhododendron cinnabarinum</i> Hook.f.	T	2400–4000	S.S. Dash 24147 (BSHC)
	<i>Rhododendron fulgens</i> Hook.f.	S	3700–4500	S.S. Dash 22723 (BSHC); S. Lahiri 73251 (CAL)
	<i>Rhododendron glaucophyllum</i> Rehder	S	2700–3700	S.S. Dash 24070, 24146 (BSHC); S. Lahiri 73240 (CAL)
	<i>Rhododendron grande</i> Wight	T	2500–3200	S.S. Dash 27219 (BSHC)
	<i>Rhododendron griffithianum</i> Wight	T	2000–3000	P.K. Hajra 2215 (BSHC)
	<i>Rhododendron hodgsonii</i> Hook.f.	T	3000–3600	S. Lahiri & S.S. Dash 73255 (CAL)
	<i>Rhododendron lanatum</i> Hook.f.	T	3000–4000	S.S. Dash 24143 (BSHC)
	<i>Rhododendron lepidotum</i> Wall. ex G. Don	S	3000–4500	S.S. Dash 24063, 22723 (BSHC); S. Lahiri 73252 (CAL)
	<i>Rhododendron niveum</i> Hook.f.	S	2900–3700	P. Singh & B.P. Uniyal 16228 (BSHC)
	<i>Rhododendron setosum</i> D. Don	S	3000–4500	P.K. Hajra 308 (BSHC); S. Lahiri & S.S. Dash 86711 (CAL)
<i>Rhododendron thomsonii</i> Hook.f.	T	3000–4200	S.S. Dash 22785 (BSHC); S. Lahiri 73243 (CAL)	
<i>Vaccinium nummularia</i> Hook.f. & Thomson ex C.B. Clarke	E	2440–3200	P.K. Hajra 341, B. Krishna 6366 (BSHC)	
Rubiaceae	<i>Galium acutum</i> Edgew.	H	2000–4100	S. Lahiri & S.S. Dash 74434 (CAL)
	<i>Galium asperifolium</i> Wall.	H	400–3500	S.S. Dash & S. Lahiri 95758 (CAL)
	<i>Galium rebae</i> R.R. Mill	H	2000–4000	S. Lahiri & S.S. Dash 86636 (CAL)
Gentianaceae	<i>Crawfordia puberula</i> C.B. Clarke	H	2700–3200	S.S. Dash 24003 (BSHC)
	<i>Gentiana bryoides</i> Burkill	H	3000–4500	S. Lahiri & S.S. Dash 73253 (CAL)
	<i>Gentiana capitata</i> Buch.-Ham. ex D. Don	H	2000–3500	S.S. Dash 24030 (a) (BSHC)
	<i>Gentiana crassuloides</i> Bureau & Franch.	H	3600–4600	S.S. Dash 22771 (BSHC)
	<i>Gentiana elwesii</i> C.B. Clarke	H	3600–4500	S.S. Dash 27281 (BSHC); S. Lahiri 86716 (CAL)
	<i>Gentiana leucomelaena</i> Maxim.	H	3000–5000	S. Lahiri & S.S. Dash 85754 (CAL)
	<i>Gentiana prolata</i> Balf.f.	H	3000–4500	S. Lahiri & S.S. Dash 74402 (CAL)
	<i>Gentiana recurvata</i> C.B. Clarke	H	3000–4300	S. Lahiri & S.S. Dash 86676 (CAL)
	<i>Gentiana recurvata</i> subsp. <i>prainii</i> (Burkill) Halda	H	3000–4300	S. Lahiri & S.S. Dash 85718 (CAL)
	<i>Gentiana sikkimensis</i> C.B. Clarke	H	2700–5200	S.S. Dash 24067, 27949 (BSHC); S. Lahiri 86772 (CAL)
	<i>Gentiana stylophora</i> C.B. Clarke	H	3000–4500	S.S. Dash 27005, 6636 (BSHC); S. Lahiri 85760 (CAL)
	<i>Gentiana tubiflora</i> (G. Don) Griseb.	H	4000–5300	S.S. Dash 24029 (BSHC); S. Lahiri 86670, 86755, 86622 (CAL)
	<i>Halenia elliptica</i> D. Don	H	2000–4200	S.S. Dash 27271, 24030 (BSHC); S. Lahiri 86740, 86644 (CAL)
	<i>Lomatogonium brachyantherum</i> (C.B. Clarke) Fernald	H	3800–4300	S. Lahiri & S.S. Dash 86762 (CAL)

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Gentianaceae	<i>Omphalogramma elwesianum</i> (King ex Watt) Franch.	H	3300–4200	P.K. Hajra 344(BSHC).
	<i>Swertia bimaculata</i> (Siebold & Zucc.) Hook.f. & Thomson ex C.B.Clarke	H	2000–3500	S.S. Dash 24047 (BSHC); S. Lahiri 74453 (CAL)
	<i>Swertia hookeri</i> C.B.Clarke	H	3700–4500	S. Lahiri & S.S. Dash 85756, 95736 (CAL)
	<i>Swertia multicaulis</i> D.Don	H	3600–4700	S. Lahiri & S.S. Dash 74451 (CAL).
	<i>Swertia teres</i> (G.Don) J.Shah	H	3000–4500	S. Lahiri & S.S. Dash 74414, 86744 (CAL)
	<i>Veratrilla burkilliana</i> (W.W.Sm.) Harry Sm.	H	3200–4600	S. Lahiri & S. S. Dash 95702 (CAL).
Boraginaceae	<i>Cynoglossum wallichii</i> G.Don	H	1300–3600	S.S. Dash 27274 (BSHC); S. Lahiri 85715 (CAL)
	<i>Cynoglossum wallichii</i> var. <i>glochidiatum</i> (Wall. ex Benth.) Kazmi	H	1300–3600	S. Lahiri & S.S. Dash 85737 (CAL)
	<i>Hackelia uncinata</i> (Benth.) C.E.C.Fisch.	H	3300–4200	S.S. Dash 22758 (BSHC); S. Lahiri 86675 (CAL)
	<i>Maharanga emodi</i> (Wall.) A.DC.	H	2500–3300	S.S. Dash 22751, 24019 (BSHC); S. Lahiri 85732 (CAL)
Carlemaniaceae	<i>Carlemania griffithii</i> Benth.	H	1000–2900	S.S. Dash 13892 (BSHC)
Calceolariaceae	<i>Calceolaria tripartita</i> Ruiz & Pav.	H	1900–5000	S. Lahiri & S.S. Dash 64936 (CAL)
Plantaginaceae	<i>Lagotis kunawurensis</i> Rupr.	H	2700–5600	S. Lahiri & S.S. Dash 85761 (CAL)
	<i>Neopicrorhiza scrophulariiflora</i> (Pennell) D.Y.Hong	H	3600–4400	S. Lahiri & S.S. Dash 86700 (BSHC)
	<i>Plantago depressa</i> Willd.	H	2600–3900	S. Lahiri & S.S. Dash 86725 (BSHC)
	<i>Veronica cana</i> Wall. ex Benth.	H	2743–4115	S.S. Dash 22736, 27043, 24089 (BSHC); S. Lahiri 86669 (CAL)
	<i>Veronica szechuanica</i> subsp. <i>sikkimensis</i> (Hook.f.) D.Y.Hong	H	2900–4200	S. Lahiri & S.S. Dash 86673 (CAL)
	<i>Hemiphragma heterophyllum</i> Wall.	H	2600–4100	S.S. Dash 24026 (BSHC); S. Lahiri 73249 (CAL).
Scrophulariaceae	<i>Scrophularia elatior</i> Wall. ex Benth.	H	2000–3200	S.S. Dash 22998 (BSHC)
	<i>Euphrasia bhutanica</i> Pugsley	H	3000–4200	S. Lahiri & S.S. Dash 64904, 85771 (CAL)
Acanthaceae	<i>Strobilanthes wallichii</i> Nees	H	2500–3700	S. Lahiri & S. S. Dash 85740, 86635 (CAL)
Lentibulariaceae.	<i>Utricularia brachiata</i> Oliver	H	2500–4200	S. Lahiri & S.S. Dash 86698 (CAL)
	<i>Utricularia christopheri</i> P.Taylor	H	2100–3900	S. Lahiri & S.S. Dash 86768 (CAL)
	<i>Utricularia multicaulis</i> Oliv.	H	3050–4115	S. Lahiri & S.S. Dash 85734 (CAL)
Lamiaceae	<i>Ajuga integrifolia</i> Buch.-Ham.	H	1200–2900	S.S. Dash 22785 (BSHC)
	<i>Elsholtzia blanda</i> (Benth.) Benth.	H	1000–3000	S.S. Dash 27233, 27288 (BSHC)
	<i>Elsholtzia densa</i> Benth.	H	2500–3600	S.S. Dash 24116 (BSHC)
	<i>Elsholtzia strobilifera</i> (Benth.) Benth.	H	2300–4000	S.S. Dash 24969 (BSHC); S. Lahiri 86759, 86756 (CAL)
	<i>Paraphlomis brevifolia</i> C.Y.Wu & H.W.Li	H	2000–3200	S. Lahiri & S.S. Dash 85706 (CAL)
	<i>Phlomooides tibetica</i> (C.Marquand & A.Shaw) Kamelin & Makhm.	H	2500–4700	S.S. Dash 22767(BSHC)
	<i>Plectranthus mollis</i> (Aiton) Spreng.	H	1000–2900	P.K. Hajra 518 (BSHC)
	<i>Prunella vulgaris</i> L.	H	2600–4200	S. Lahiri 86697 (CAL)
	<i>Salvia campanulata</i> Wall. ex Benth.	H	2200–4000	S.S. Dash 24102,24048 (BSHC); S. Lahiri 86674 (CAL).
	<i>Salvia nubicola</i> Wall. ex Sweet	H	2600–3700	S. Lahiri & S.S. Dash 95727 (CAL)
	<i>Salvia roborowskii</i> Maxim.	H	2500–3700	S. Lahiri & S.S. Dash 85767 (CAL)
Orobanchaceae	<i>Pedicularis denudata</i> Hook.f.	H	3500–4500	S. Lahiri & S.S. Dash 86717 (CAL)
	<i>Pedicularis elwesii</i> Hook.f.	H	3200–4600	S.S. Dash 27037 (BSHC)
	<i>Pedicularis flexuosa</i> Hook.f.	H	2800–4000	S. Lahiri & S.S. Dash 86712 (CAL)
	<i>Pedicularis furfuracea</i> Wall. ex Benth.	H	3500–4000	S.S. Dash 22783 (BSHC); S. Lahiri 85731 (CAL)
	<i>Pedicularis gracilis</i> subsp. <i>macrocarpa</i> (Prain) Tsoong	H	2900–3600	S. Lahiri & S.S. Dash 85724 (CAL).



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Orobanchaceae	<i>Pedicularis longiflora</i> var. <i>tubiformis</i> (Klotzsch) Tsoong	H	3000–5000	S.S. Dash 24017 (BSHC); S. Lahiri 86656 (CAL).
	<i>Pedicularis megalantha</i> D. Don	H	2800–5000	S.S. Dash 27210 (BSHC); S. Lahiri 86752 (CAL)
	<i>Pedicularis microcalyx</i> Hook.f.	H	3200–4500	S. Lahiri & S.S. Dash 85786 (CAL)
	<i>Pedicularis mollis</i> Wall. ex Benth.	H	2700–4200	S. Lahiri & S.S. Dash 85798 (CAL)
	<i>Pedicularis porrecta</i> Wall.	H	3300–5000	S. Lahiri & S.S. Dash 86630 (CAL)
	<i>Pedicularis rhinanthoides</i> Schrenk	H	2500–5500	S.S. Dash 22774 (BSHC)
	<i>Pedicularis roylei</i> Maxim.	H	3400–5500	S. Lahiri & S.S. Dash 85789 (CAL)
	<i>Pedicularis siphonantha</i> D. Don	H	3200–4500	S. Lahiri & S.S. Dash 86629 (CAL)
	<i>Pedicularis tenuicaulis</i> Prain	H	3500–4000	S.S. Dash 27249 (BSHC)
	<i>Pedicularis wallichii</i> Bunge	H	3600–5000	S. Lahiri & S.S. Dash 95734 (CAL)
Campanulaceae	<i>Campanula pallida</i> Wall.	H	1200–3500	S.S. Dash 24200 (BSHC)
	<i>Codonopsis benthamii</i> Hook.f. & Thomson	H	2100–4300	S. Lahiri & S.S. Dash 86684 (CAL)
	<i>Codonopsis foetens</i> Hook.f. & Thomson	H	3600–4500	S. Lahiri & S.S. Dash 85747 (CAL)
	<i>Codonopsis subsimplex</i> Hook.f. & Thomson	H	3000–4200	S. Lahiri & S.S. Dash 86751, 85743, 86637 (CAL)
	<i>Codonopsis thalictrifolia</i> Wall.	H	3400–5000	S. Lahiri & S.S. Dash 95750 (CAL)
	<i>Cyananthus incanus</i> Hook.f. & Thomson	H	3500–4600	S. Lahiri & S.S. Dash 86736 (CAL)
	<i>Cyananthus inflatus</i> Hook.f. & Thomson	H	2700–4800	S. Lahiri & S.S. Dash 86774 (CAL)
	<i>Cyananthus lobatus</i> Wall. ex Benth.	H	3300–4200	S. Lahiri & S.S. Dash 86777, 85755, 85799 (CAL)
	<i>Cyananthus pedunculatus</i> C.B. Clarke	H	3000–4500	S. Lahiri & S.S. Dash 86785 (CAL)
	<i>Lobelia erectuscula</i> H. Hara	H	2200–4200	S. Lahiri & S.S. Dash 85709 (CAL)
Asteraceae (= Compositae)	<i>Ainsliaea aptera</i> DC.	H	3000–3600	S.S. Dash 24101 (BSHC)
	<i>Anaphalis contorta</i> (D. Don) Hook.f.	H	2000–5000	S. Lahiri & S.S. Dash 64921 (CAL)
	<i>Anaphalis margaritacea</i> (L.) Benth. & Hook.f.	H	2000–4000	S. Lahiri & S.S. Dash 95743 (CAL)
	<i>Anaphalis nepalensis</i> (Spreng.) Hand. –Mazz. Var. <i>nepalensis</i>	H	2800–5200	S. Lahiri & S.S. Dash 86789 (CAL)
	<i>Anaphalis nepalensis</i> var. <i>monocephala</i> (DC.) Hand.-Mazz.	H	2800–5200	S. Lahiri & S.S. Dash 86770 (CAL)
	<i>Anaphalis triplinervis</i> (Sims) Sims ex C.B. Clarke	H	1500–4200	S.S. Dash 24020 (BSHC); S. Lahiri 86650, 86741, 86778 (CAL)
	<i>Anaphalis triplinervis</i> var. <i>monocephala</i> (DC.) Airy Shaw	H	1500–4200	S.S. Dash 22724, 27273 (BSHC); S. Lahiri 85733, 86650 (CAL)
	<i>Artemisia nilagirica</i> (C.B. Clarke) Pamp.	H	1500–3300	S.S. Dash 24039 (BSHC)
	<i>Aster flaccidus</i> Bunge	H	3800–5000	S.S. Dash 20457 (BSHC); S. Lahiri (CAL)
	<i>Aster himalaicus</i> C.B. Clarke	H	2500–5000	S.S. Dash 27034, 24024 (BSHC); S. Lahiri 85748 (CAL)
	<i>Aster tricephalus</i> C.B. Clarke	H	3000–4000	S. Lahiri & S.S. Dash 86753 (CAL)
	<i>Cacalia mortonii</i> (C.B. Clarke) Kitam. ex H. Koyama	H	2500–3800	S. Lahiri & S.S. Dash 85759 (CAL)
	<i>Carpesium cernuum</i> L.	H	2900–3500	S.S. Dash & S.S. Lahiri 95757 (CAL).
	<i>Chaetoseris cyanea</i> (D. Don) C. Shih	H	2600–4000	S. Lahiri & S.S. Dash 85704 (CAL)
	<i>Chaetoseris macrantha</i> (C.B. Clarke) C. Shih	H	3000–5000	S.S. Dash 27267 (BSHC)
	<i>Cirsium falconeri</i> (Hook.f.) Petr.	H	3000–4200	S.S. Dash 20998, 24014 (BSHC); S. Lahiri 86767 (CAL)
	<i>Cremanthodium oblongatum</i> C.B. Clarke	H	3600–5300	S.S. Dash 27277 (BSHC); S. Lahiri 85783 (CAL)
	<i>Cremanthodium reniforme</i> (DC.) Benth.	H	3300–4500	S.S. Dash 27279 (BSHC); S. Lahiri 85765 (CAL)
	<i>Dubyaea hispida</i> (D. Don) DC.	H	3000–4500	S.S. Dash 24120 (BSHC); S. Lahiri 86648, 86734 (CAL)
	<i>Himalaiella deltoidea</i> (DC.) Raab–Straube	H	1000–3400	D.C.S. Raju, 5050 (BSHC)
<i>Jurinea cooperi</i> J. Anthony	H	3500–4300	S.S. Dash 24112 (BSHC)	

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Asteraceae (= Compositae)	<i>Jurinea dolomiaea</i> Boiss.	H	3500–4300	S.S. Dash 27285 (BSHC)
	<i>Lactuca brunoniana</i> (DC.) Wall. ex C.B.Clarke	H	3300–3800	S.S. Dash 24078 (BSHC)
	<i>Lactuca lessertiana</i> (Wall. ex DC.) Wall. ex C.B.Clarke	H	3400–4100	S.S. Dash 24125 (BSHC); S. Lahiri 86787 (CAL)
	<i>Laphangium luteoalbum</i> (L.) Tzvelev	H	2000–3800	S.S. Dash 27241(BSHC); S. Lahiri 74535 (CAL)
	<i>Leontopodium nivale</i> subsp. <i>alpinum</i> (Cass.) Greuter	H	3500–4500	S. Lahiri & S.S. Dash 85777 (CAL)
	<i>Ligularia amplexicaulis</i> DC.	H	3200–4400	S.S. Dash 24037 (BSHC); S. Lahiri 86671 (CAL)
	<i>Ligularia fischeri</i> (Ledeb.) Turcz.	H	2800–3600	S. Lahiri & S.S. Dash 85762 (CAL)
	<i>Ligularia kingiana</i> (W.W.Smith) R.Mathur	H	3500–4000	S.S. Dash 22062, 27030 (BSHC)
	<i>Ligularia virgaurea</i> (Maxim.) Mattf. ex Rehder & Kobuski	H	2400–4700	S. Lahiri & S.S. Dash 85768 (CAL)
	<i>Myriactis nepalensis</i> Less.	H	700–3700	S. Lahiri & S.S. Dash 64919 (CAL)
	<i>Saussurea gossypiphora</i> D.Don	H	3500–4500	S.S. Dash 27217 (BSHC)
	<i>Saussurea nepalensis</i> Spreng.	H	3200–5000	S.S. Dash 24110, 27262 (BSHC) S. Lahiri 86773, 86798, 85792 (CAL)
	<i>Saussurea obvallata</i> (DC.) Edgew.	H	3500–4500	S.S. Dash 27265(BSHC); S. Lahiri 85782(CAL)
	<i>Saussurea roylei</i> (DC.) Sch.-Bip	H	3500–4500	S.S. Dash 27261 (BSHC)
	<i>Saussurea piptathera</i> Edgew.	H	3200–4200	S. Lahiri & S.S. Dash 95745 (CAL)
	<i>Saussurea sughoo</i> C.B. Clarke	H	3500–4800	B. Krishna & S. Singh 3100 (BSHC)
	<i>Saussurea uniflora</i> (DC.) Wall. ex Sch.Bip.	H	3000–4700	S. Lahiri & S.S. Dash 86771 (CAL)
	<i>Senecio graciliflorus</i> (Wall.) DC.	H	3500-4600	S.S. Dash 24111, 27031(a) (BSHC); S. Lahiri 85776 (CAL)
	<i>Senecio raphanifolius</i> Wallich ex DC.	H	2800–4400	S.S. Dash 22714,24016,27042 (BSHC); S. Lahiri 86699, 85703 (CAL)
	<i>Synotis alata</i> C.Jeffrey & Y.L.Chen	H	2000–4000	S. Lahiri & S.S. Dash 86681, 64932 (CAL)
<i>Tanacetum atkinsonii</i> (C.B.Clarke) Kitam	H	2000–4200	S. Lahiri & S.S. Dash 85794 (CAL)	
<i>Taraxacum eriopodium</i> (D.Don) DC.	H	2000–4500	S. Lahiri & S.S. Dash 86647, 86750, 64918 (CAL)	
<i>Tibetoseris depressa</i> (Hook.f. & Thomson) Sennikov	H	3600–5000	S. Lahiri & S.S. Dash 86779 (CAL)	
Caprifoliaceae	<i>Dipsacus atratus</i> Hook.f. & Thomson ex C.B.Clarke	H	3000–4000	S. Lahiri & S.S. Dash 86757 (BSHC)
	<i>Lonicera lanceolata</i> Wall.	S	2440–3880	S.S. Dash 20986,24134 (BSHC)
	<i>Morina nepalensis</i> D.Don	H	3000–4800	S. Lahiri & S.S. Dash 86618 (CAL)
	<i>Nardostachys jatamansi</i> (D.Don) DC.	H	2800–5000	S. Lahiri & S.S. Dash 85880, 85750 (CAL)
	<i>Triplostegia glandulifera</i> Wall. ex DC.	H	2000–4000	S. Lahiri & S.S. Dash 86763 (CAL)
	<i>Valeriana hardwickii</i> Wall.	H	1200–3800	S. Lahiri & S.S. Dash 64926, 85790 (CAL)
	<i>Viburnum erubescens</i> Wall.	S	2500–3500	S. Lahiri & S.S. Dash 86800 (CAL)
Araliaceae	<i>Aralia apioides</i> Hand.-Mazz.	H	2700–3600	S. Lahiri & S.S. Dash 86679 (CAL)
	<i>Aralia tibetana</i> G.Hoo	H	3200–3500	S.S. Dash 20990,24052,24192 (BSHC)
	<i>Panax bipinnatifidus</i> Seem.	H	2500–3500	S.S. Dash 22727 (BSHC)
	<i>Panax pseudoginseng</i> Wall.	H	1500–3600	S. Lahiri & S.S. Dash 86644, 86764, 64925 (CAL)
Apiaceae	<i>Angelica cyclocarpa</i> (C.Norman) M.Hiroe	S	2800–4000	S. Lahiri & S.S. Dash 86613 (CAL)
	<i>Bupleurum candollei</i> Wall. ex DC.	H	2000–3500	S.S. Dash 27010 (BSHC)
	<i>Bupleurum dalhousianum</i> (C.B.Clarke) Koso-Pol.	H	2000–4800	S.S. Dash 22780 (BSHC); S. Lahiri 95728 (CAL)
	<i>Cortiella hookeri</i> (C.B.Clarke) C.Norman	H	4000–5000	S.S. Dash 27274 (BSHC)
	<i>Heracleum wallichii</i> DC.	H	3000–3700	S.S. Dash 27245 (BSHC)
	<i>Oenanthe thomsonii</i> C.B.Clarke	H	1500–3200	S.S. Dash 24051 (BSHC); S. Lahiri 95744 (CAL)
	<i>Pleurospermum apiolens</i> C.B.Clarke	H	3200–5000	S. Lahiri & S.S. Dash 86621 (CAL)



Family	Scientific name of taxa	*Growth form	Altitude (m)	Collection number & Herbarium acronym
Apiaceae	<i>Pleurospermum hookeri</i> C.B.Clarke	H	3500–4200	S.S. Dash & S.S. Lahiri 95756 (CAL)
	<i>Pleurospermopsis sikkimensis</i> (C.B.Clarke) C.Norman	H	3700–4500	S.S. Dash 27001 (BSHC); S. Lahiri 86782 (CAL)
	<i>Sanicula elata</i> Buch.-Ham. ex D.Don	H	1000–3200	S.S. Dash 24100 (BSHC)
	<i>Selinum wallichianum</i> (DC.) Raizada & H.O.Saxena	H	3400–4000	S.S. Dash 27269 (BSHC); S. Lahiri, 85729 (CAL)
	<i>Vicatia conifolia</i> Wall. ex DC.	H	3500–4200	S.S. Dash 27011 (BSHC); S. Lahiri 86672 (CAL)
Gymnosperm				
Cupressaceae	<i>Juniperus recurva</i> Buch.-Ham. ex D.Don	T	1800–3900	S.S. Dash 24004, 22769 (BSHC); S. Lahiri 86693 (CAL)
	<i>Juniperus squamata</i> f. <i>wilsonii</i> Rehder	S	1600–4500	S. Lahiri & S.S. Dash 74471 (CAL)
Pinaceae	<i>Abies densa</i> Griff.	T	2800–3700	S.S. Dash 24034, 16210 (A) (BSHC); S. Lahiri 86615 (CAL)
	<i>Larix griffithii</i> Hook.f.	T	3000–4100	S.S. Dash 24148 (BSHC)
	<i>Picea spinulosa</i> (Griff.) A.Henry	T	2900–3600	S.S. Dash 24152 (BSHC)

*—Growth form | C—Climber | E—Epiphyte | H—Herb | S—Shrub | T—Tree.

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Image 1. a—Post monsoon view of Ek gote area at 3,300 m | b—*Rhododendron-Abies* forest at 3,600 m | c—*Rhododendron* woodland at Panch gote area at 3,800 m | d—Riverine habitat near Ek gote area at 3,300 m | e—View of Kyangnosla village in the sanctuary | f—Jor Pokhari Lake at Nakchok at 4,100 m | g—Gregarious growth of *Iris clarkei* at 4,122 m | h—Snow covered slope at Namnang (3,800 m) during autumn. © Subhajit Lahiri.

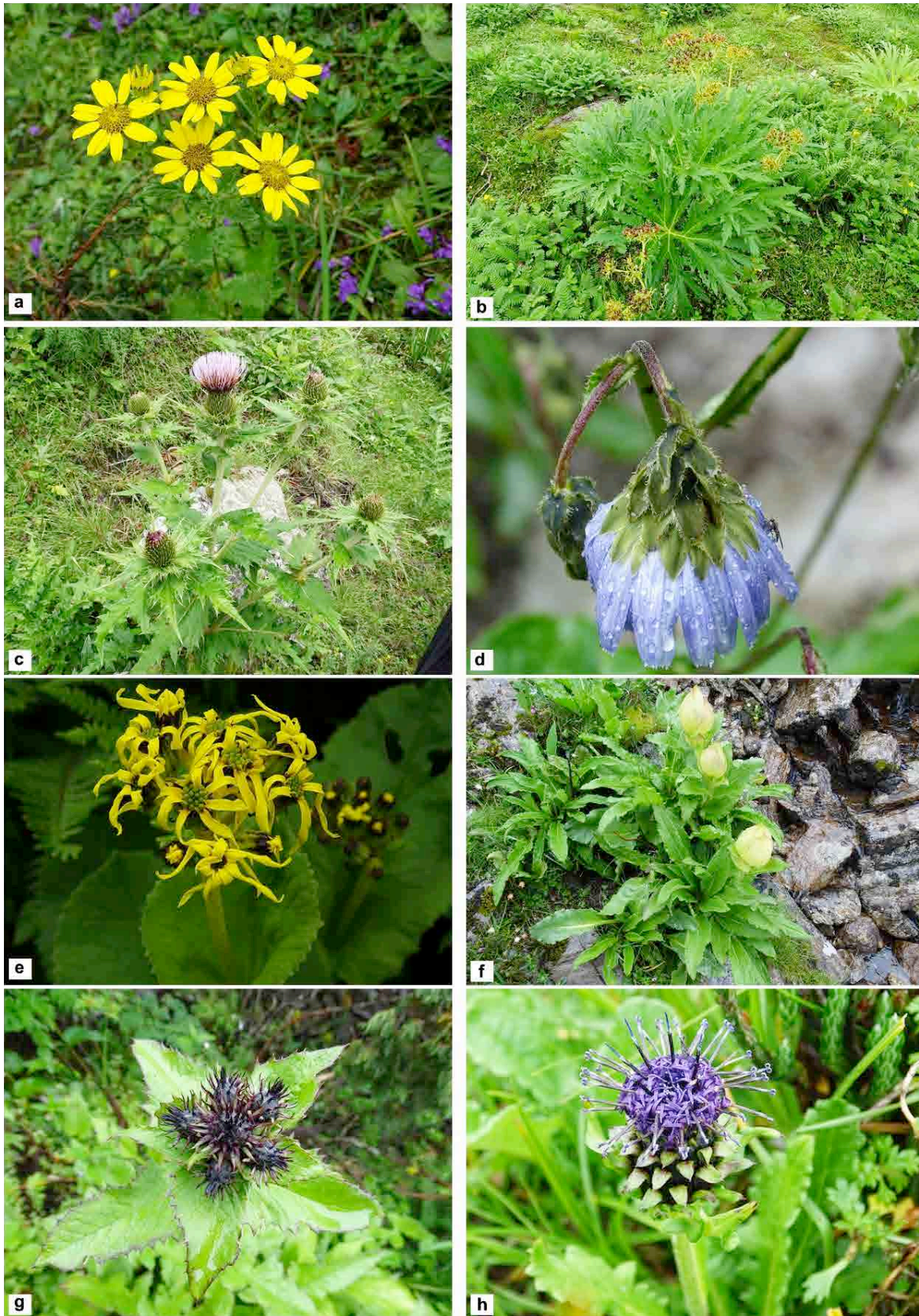


Image 2. a—*Senecio raphanifolius* Wall. ex DC. | b—*Cacia mertonii* (C.B. Clarke) Kitam. ex H. Koyama | c—*Cirsium falconeri* (Hook.f.) Petrd. | d—*Chaetoseris cyanea* (D. Don) C. Shih | e—*Senecio graciliflorus* (Wall.) DC. | f—*Saussurea obvallata* (DC.) Edgew. | g—*Saussurea piptathera* Edgew. | h—*Saussurea nepalensis* Spreng. © Subhajit Lahiri.

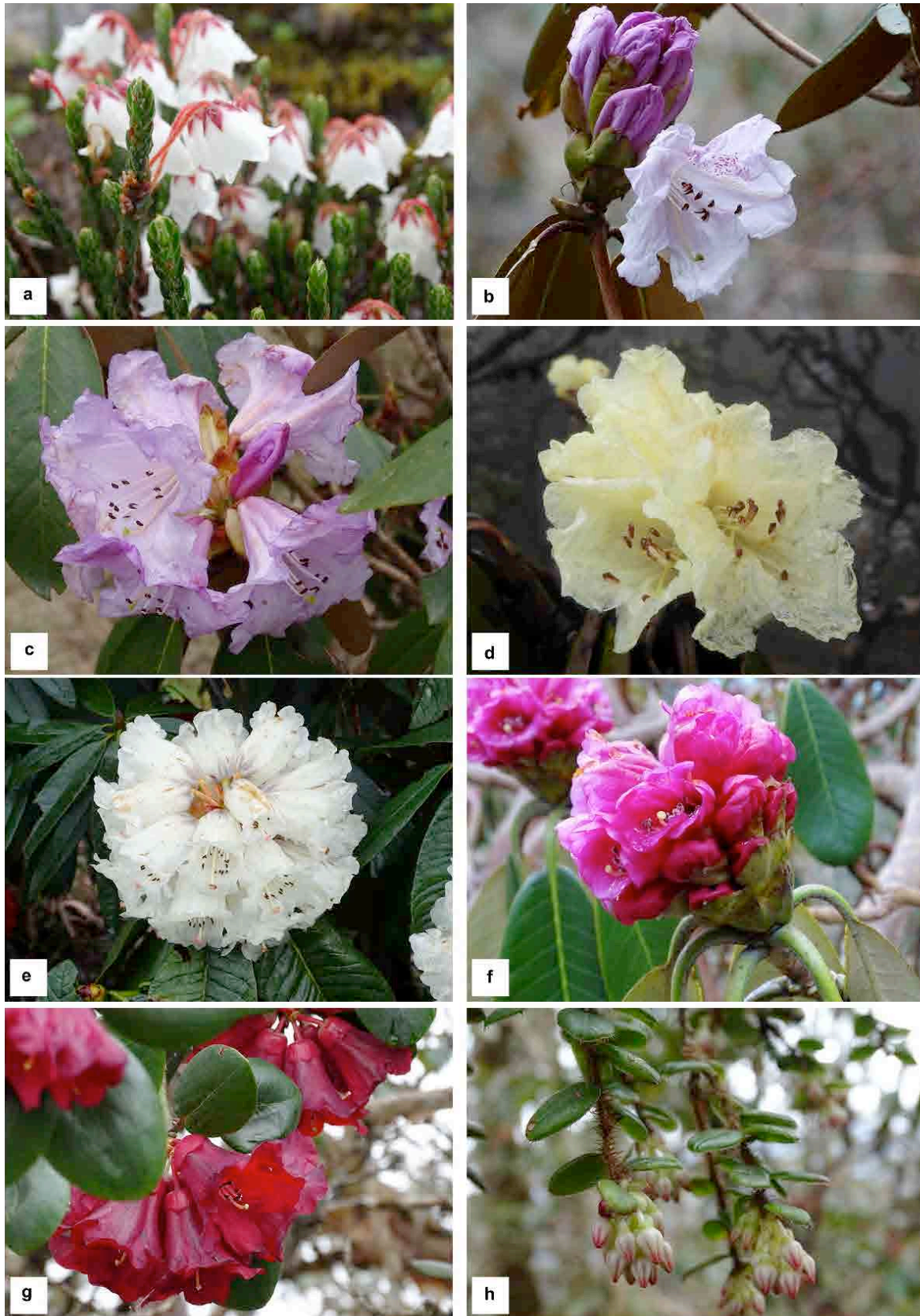


Image 3. a—*Cassiope fastigiata* (Wall.) D. Don | b—*Rhododendron campanulatum* D. Don | c—*Rhododendron campanulatum* subsp. *aeruginosum* (Hook.f.) D.F. Chamb. | d—*Rhododendron campylocarpum* Hook.f. | e—*Rhododendron grande* Wight | f—*Rhododendron hodgsonii* Hook.f. | g.—*Rhododendron thomsonii* Hook.f. | h—*Vaccinium nummularia* Hook.f. & Thomson ex C.B. Clarke. © Subhajit Lahiri.

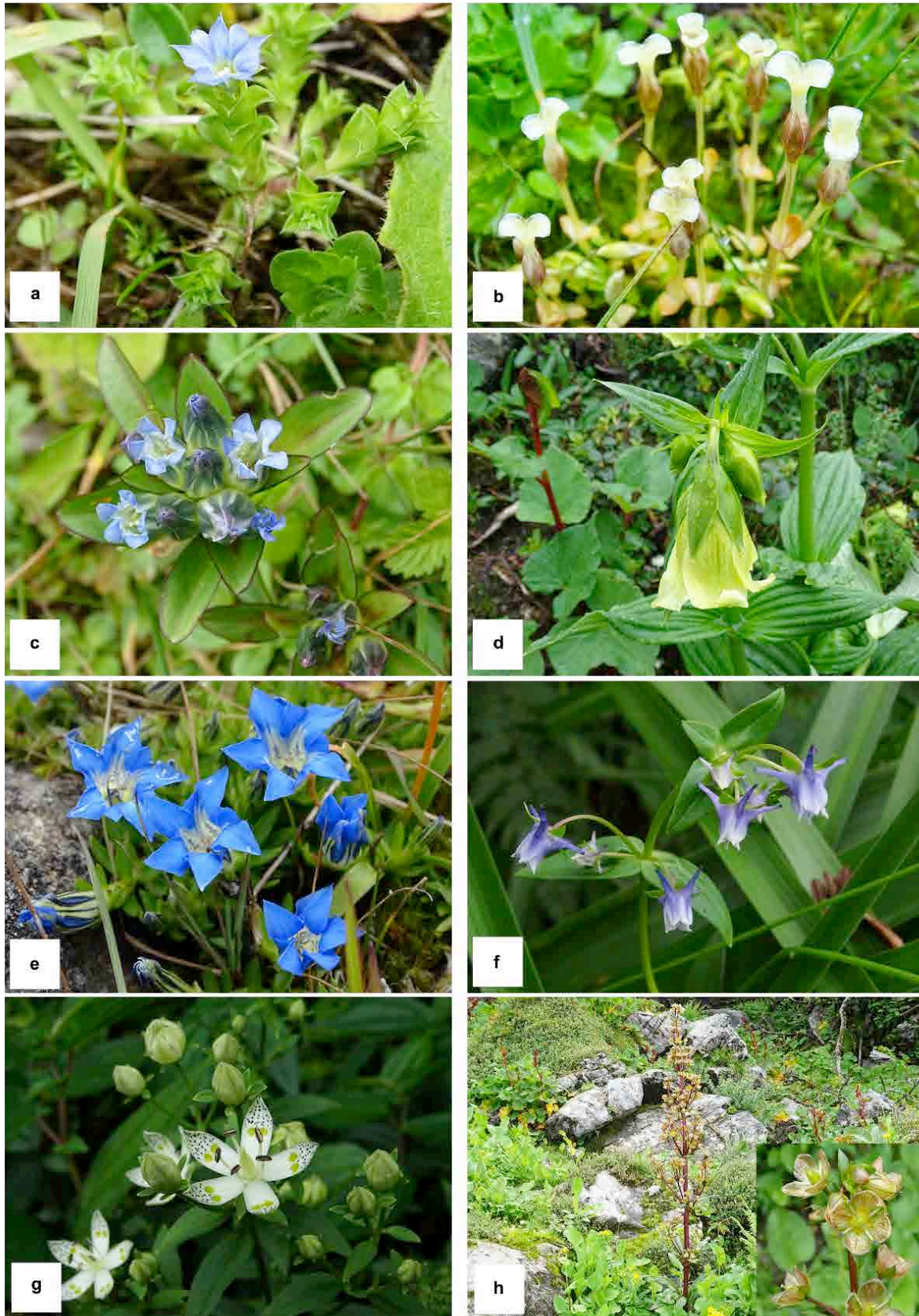


Image 4. a—*Gentiana recurvata* C.B.Clarke | b—*Gentiana recurvata* subsp. *prainii* (Burkill) Halda | c—*Gentiana sikkimensis* C.B.Clarke | d—*Gentiana stylophora* C.B.Clarke | e—*Gentiana tubiflora* (G.Don) Griseb | f—*Halenia elliptica* D.Don | g—*Swertia bimaculata* (Siebold & Zucc.) Hook.f. & Thomson ex C.B. Clarke | h—*Swertia hookeri* C.B. Clarke. © Subhajit Lahiri.

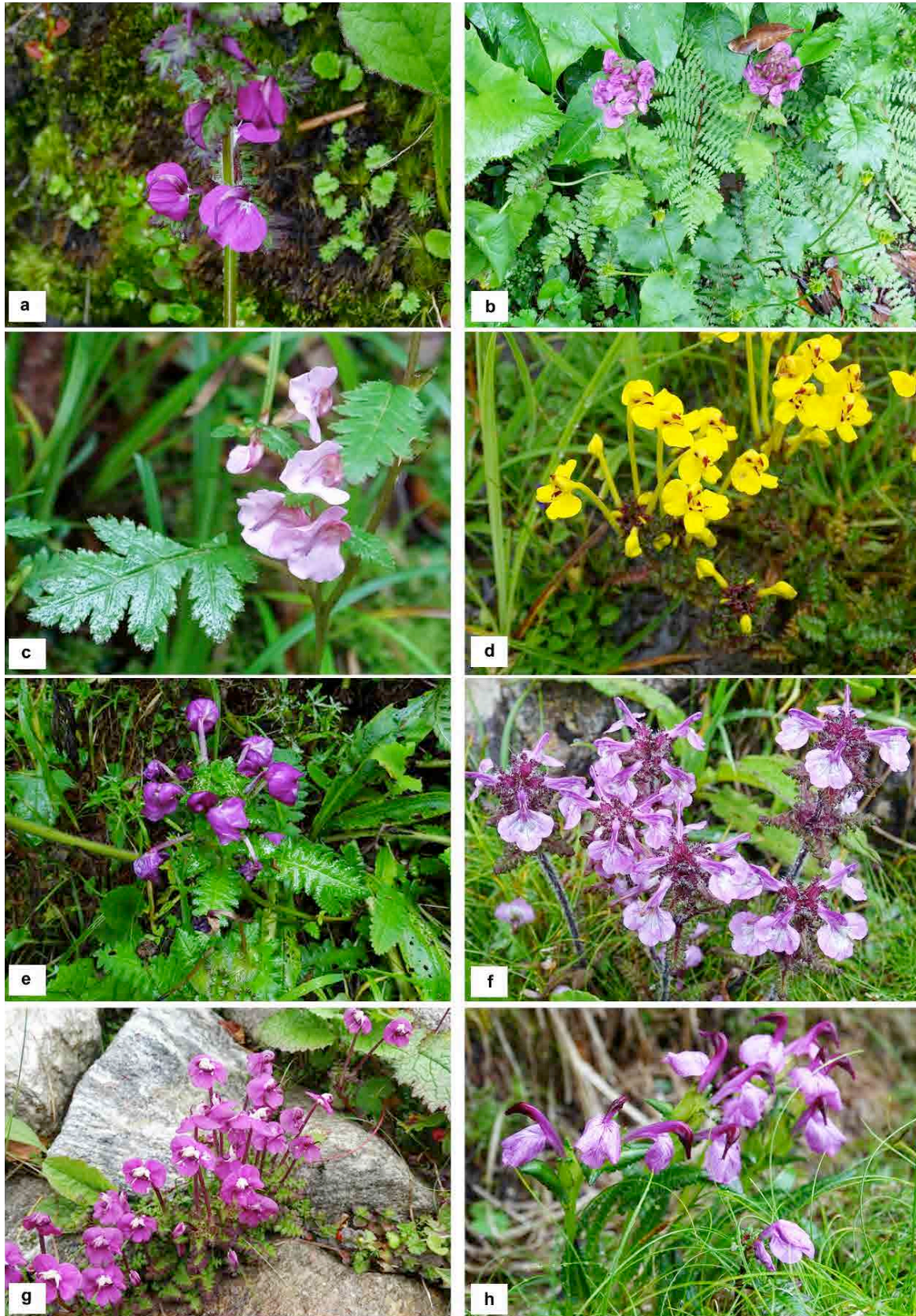


Image 5. a—*Pedicularis flexuosa* Hook.f | b—*Pedicularis furfuracea* Wall | c—*Pedicularis gracilis* subsp. *macrocarpa* (Prain) Tsoong | d—*Pedicularis longiflora* var. *tubiformis* (Klotzsch) Tsoong | e—*Pedicularis megalantha* D.Don | f—*Pedicularis roylei* Maxim | g—*Pedicularis siphonantha* D.Don | h—*Pedicularis wallichii* Bunge. © Subhajit Lahiri.

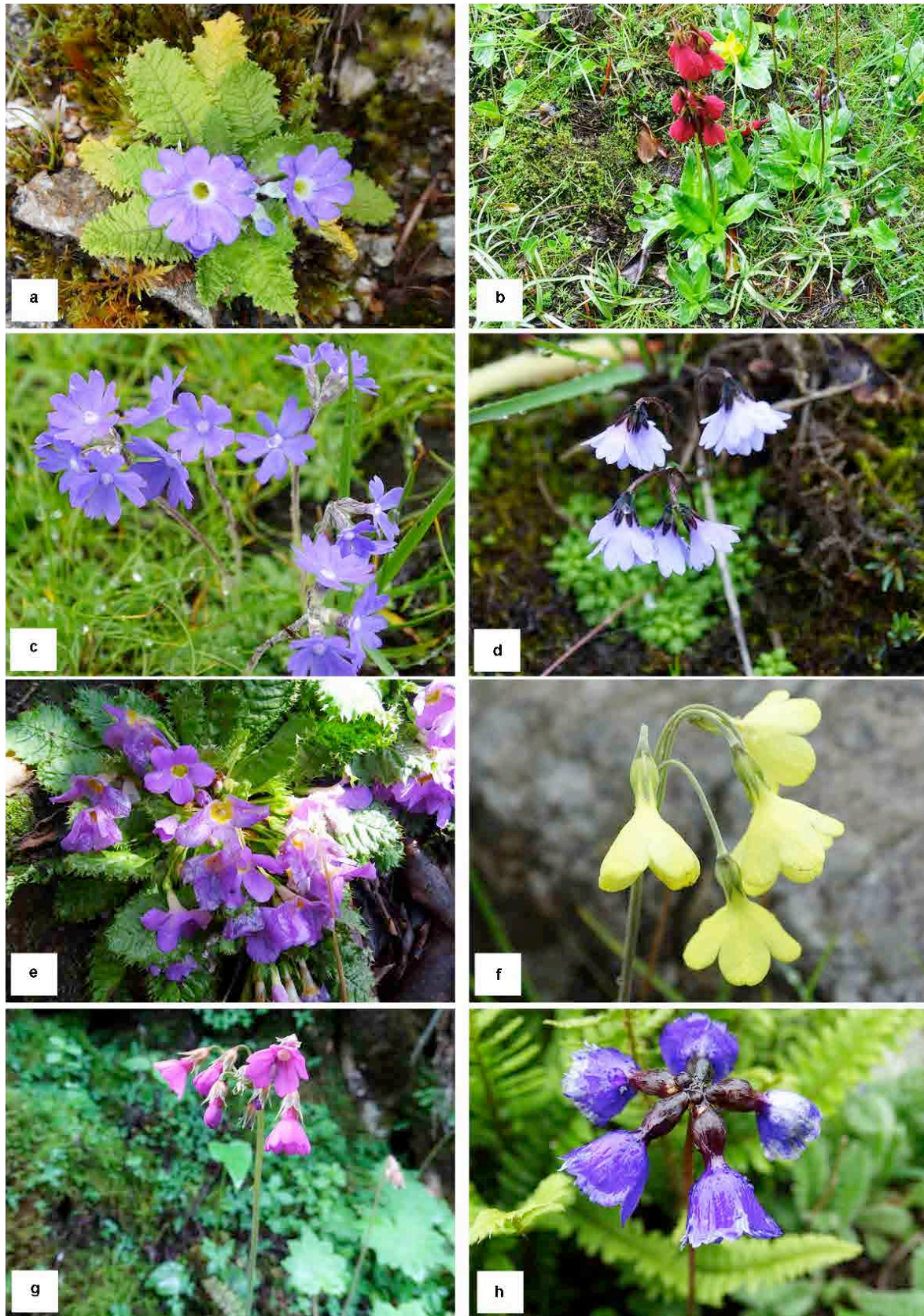


Image 6. a—*Primula drummondiana* Craib | b—*Primula kingii* Watt | c—*Primula primulina* (Spreng.) H.Hara | d—*Primula sapphirina* Hook.f. & Thomson | e—*Primula scapigera* (Hook.f.) Craib | f—*Primula sikkimensis* Hook.f | g—*Primula vaginata* Watt | h—*Primula wattii* King ex Watt. © Subhajit Lahiri.

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Article

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