

A Pictorial Handbook of Orchids of the Annapurna Conservation Area

अन्नपूर्ण संरक्षण क्षेत्रका सुनाखरीहरु



Babu Lal Tiruwa
Basu Dev Neupane
Sangram Karki
Suraj Sharma
Rajan Prasad Paudel
Rabin Kadariya



**National Trust for Nature Conservation
Annapurna Conservation Area Project
2024**





Cypripedium elegans © BL Tiruwa

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Dendrobium porphyrochilum © BD Neupane



National Trust for
Nature Conservation

2024



Annapurna Conservation
Area Project



Coelogyne ovalis © BL. Tiruwa

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Aerides odorata © BL Tiruwa

Map of Annapurna Conservation Area



List of Abbreviation

ACA	Annapurna Conservation Area
ACAP	Annapurna Conservation Area Project
masl	Meter Above Sea Level
BCC	Biodiversity Conservation Center
BCP	Bardiya Conservation Program
CA	Conservation Area
CO	Conservation Officer
F	Food
GCAP	Gaurishankar Conservation Area Project
GP	Gandaki Province
HQs	Headquarters
ICDP	Integrated Conservation and Development Program
KATH	National Herbarium and Plant Laboratories
KCC	Koshi Conservation Center
m	Meter
M	Medicinal
MCAP	Manaslu Conservation Area Project
NTNC	National Trust for Nature Conservation
O	Ornamental
OIC	Office In-Charge
PA	Protected Area
PhD	Doctor of Philosophy
RM	Rural Municipality
SCP	Suklaphanta Conservation Program
UCO	Unit Conservation Office
VDC	Village Development Committee



NATIONAL TRUST FOR NATURE CONSERVATION

Foreword

Annapurna Conservation Area (ACA) was initiated as a pilot project in 1986 and was officially notified in the Nepal Gazette in 1992. It is Nepal's first Conservation Area (CA) and largest Protected Area (PA), covering an area of 7,629 km² equivalent to 5.10% of the country's total land area. It covers 15 Rural Municipalities and 5 Districts of Gandaki province. It is the largest undertaking project of the National Trust for Nature Conservation (NTNC). ACA's participatory Integrated Conservation and Development Program (ICDP) is a prime example of community-based conservation in Nepal and around the world.

The altitudinal range of 790 masl-8091 masl offers a diverse climate and biodiversity. It encompasses the entire habitat gradients from sub-tropical Sal forests to perennial snow, harboring rare and endangered wild flora and fauna and boasting the highest biological endemism in Nepal. The ACA includes natural wonders like the world's deepest river gorge, the Kali Gandaki (~5571m), and the highest-altitude freshwater glacial lake, Tilicho (4919 masl). It also features stunning snow peaks such as Mt. Annapurna, Mt. Machhapuchhre, and Mt. Dhwalagiri, along with Ammonoid fossils dating back 60 million years. Besides, ACA is significantly rich in cultural diversity, with Tibeto-Burmese and Indo-Aryan ethnic groups such as Gurung, Brahmin, Biswokarma, Kshetri, Magar, Pariyar, Tamang, Pun, Mijar, Thakali, Ghale, Lhopa, and others.

Orchids not only enhance the forest's aesthetic value but also possess cultural, medicinal, and economical significance. They serve as key indicators of environmental health and biodiversity and maintain intricate relationships with pollinators. Many species are at high risk due to factors such as habitat loss, climate change, illegal poaching and its trade.

I trust that this valuable work will assist many researchers, students, trekkers, organizations, and nature enthusiasts as a reliable source of information. It will also emphasize the importance of ACA as a significant area for orchids. I am grateful to the research team, review members, and other contributors for their efforts in refining this book to its final form.

Best regards,

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Member Secretary

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Bulbophyllum cariniflorum © Bigyan GC



**NATIONAL TRUST FOR NATURE CONSERVATION
ANNAPURNA CONSERVATION AREA PROJECT**

Headquarters, Pokhara



Preface

The Annapurna Conservation Area is in Gandaki Province (GP) is the first CA and largest PA of Nepal which covers 26 % of total area of GP. It was, initiated in 1986 as pilot project from Ghadruk and officially declared and notified in the Nepal Gazette in 1992 as ACA, then NTNC has been officially managing it as Annapurna Conservation Area Project (ACAP). ACAP is dedicated to conserving the area, promoting sustainable development, and improving the livelihoods of the local people through the globally recognized community based participatory ICDP approach. It has more than 3,022 faunal (1,113) and floral (1,909) species. The area boasts higher endemism and localized species too.

Orchidaceae is the largest family, and orchids are the most beautiful plants among flowering plants. Nepal is extremely rich in orchid diversity. More than 501 species of native orchids are reported from tropics to alpine region of Nepal. This precious book has updated the previous record of 198 orchid species to 223 species including 3 sub-species in ACA which is about 44.5 % of national data. Apart from species diversity this book has also disseminated the knowledge about the importance of orchids in terms of their medicinal uses, ornamental uses and food values. It really bestows our extreme gratification and pride to present the first handbook of orchids recorded in ACA i.e. “**A Pictorial Handbook of Orchids of the Annapurna Conservation Area**”. Finally, the long, beautiful and admirable journey of the orchid book has come to be successful.

The field survey was the major tools applied to get primary data for orchid book. Besides this, further data was added from published articles, books and KATH. The photographs used in the book are mainly from field surveys and a few are contributed by various experts as well. The book disseminates the updated generic name, scientific name, sole distribution status in ACA, uses, and photos of individual species.

We believe that this book will be a milestone document for researchers, academicians, orchid lovers, travelers and every enthusiastic reader to understand the most exquisite orchid flowers of ACA. Let's hand together to preserve nature's masterpiece creation.

With gratitude,

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Brachycorythis obcordata © BB Raskoti



**NATIONAL TRUST FOR NATURE CONSERVATION
ANNAPURNA CONSERVATION AREA PROJECT**

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We convey our deep thanks to Professor Dr. Bijaya Pant and Dr. Bhakta Bahadur Raskoti for their expert review.

We extend our sincere thanks to the NTNC central office, particularly Dr. Naresh Subedi, Member Secretary, Dr. Chiranjivi Prasad Pokharel, Director, and Dr. Manish Raj Pandey, Director for their invaluable support. Our special thanks go to NTNC-ACAP, Headquarters, for providing all the necessary resources throughout this journey of book publication.

We are indebted to all the officers: Mr. Ram Gurung, Mr. Deepak Kumar Chhetri, and other staff: Mr. Kishan KC, Mr. Jagat KC, Mr. Bijay Gurung, Mr. Narendra Shrestha, Mr. Aitaman BK, Mr. Durga Nanda Yadav, and Mr. Bigyan GC staff of ACAP headquarters for their invaluable assistance during field work.

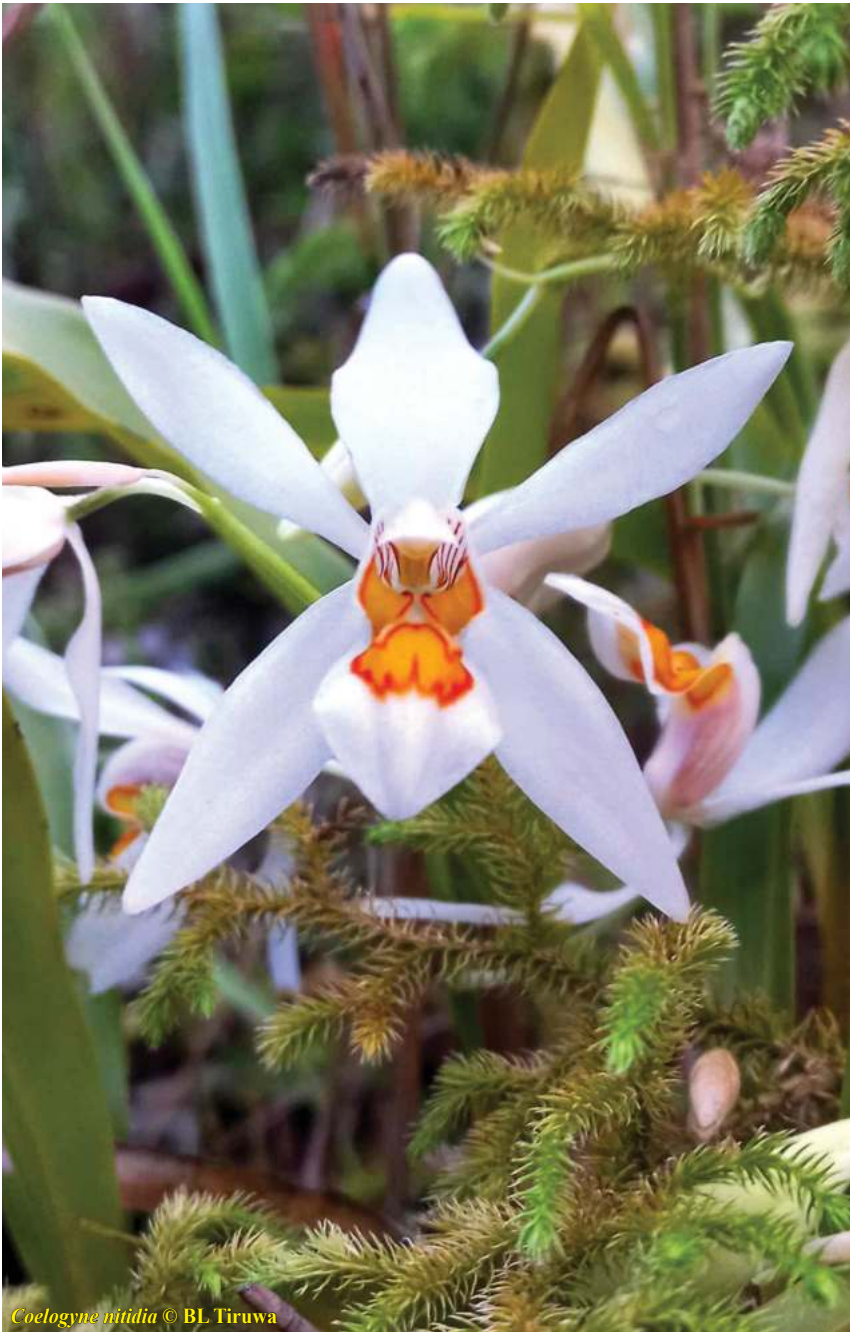
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Warm Regards,

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Coelogyne nitida © BL Tiruwa

National Trust for Nature Conservation

The National Trust for Nature Conservation (NTNC), established in 1982 by a Legislative Act, is an autonomous and not-for-profit organization mandated to work in the field of nature conservation in Nepal. Over the past decades, NTNC has successfully undertaken more than three hundred small and large projects on nature and biodiversity conservation, clean energy and climate change, as well as cultural heritage protection, ecotourism, and sustainable development through active engagement of local communities. NTNC works closely with the Government of Nepal in the management of protected areas by directly managing three mountain protected areas and assisting the government in all the low land parks. Our research outcomes have been especially instrumental in evidence-based decision making at the policy level. The Trust's experience over the years has shown that conservation efforts in low-income economies, such as Nepal, cannot be successful, much less sustainable, unless the needs and welfare of the local people are addressed. Holistic and integrated conservation and development programs with active people's participation aimed at promoting local guardianship have been the focus of our activities.

The Trust's activities extend from the sub-tropical plains of Chitwan, Bardia and Kanchanpur in the lowlands to the Annapurna, Manaslu and Gaurishankar regions of the high Himalayas, including the trans-Himalayan region of Upper Mustang and Manang. NTNC's projects are spread across all three geographical areas - the lowland, the mid-hills (Kathmandu Valley) and the high mountains. The Trust's activities in the lowlands are based in and around the Chitwan National Park, Parsa National Park, Banke National Park, Bardia National Park, Shuklaphanta National Park and Koshi Tappu Wildlife Reserve through the Biodiversity Conservation Center (BCC) in Chitwan, the Koshi Conservation Center (KCC) in Sunsari, the Bardia Conservation Program (BCP) in Bardia and the Suklaphanta Conservation Program (SCP) in Kanchanpur. The Central Zoo is the only project of the Trust in Kathmandu Valley. Protected areas managed by the Trust in the mountain region include the Annapurna Conservation Area (ACA), Manaslu Conservation Area (MCA) and Gaurishankar Conservation Area (GCA).

Emerging challenges caused by global environmental issues have called for increased focus in areas related to climate change mitigation and adaptation. NTNC is in the process of accreditation in the Global Climate Fund as a 'direct access entity'. The Trust also works in urban environment particularly, Bagmati River Conservation Project and urban greening in partnership with the local municipalities. In making a lasting difference in the conservation impact of

the country, besides government, community and other local bodies, we work closely with multilateral agencies and international donors through specialized projects.

VISION:

“A prosperous country where development flourishes by valuing, respecting and conserving nature.”

Mission Statement:

“To conserve, manage and promote nature in all its diversity that cultivates innovation, and enhance social equity and quality of life.”

NTNC Projects

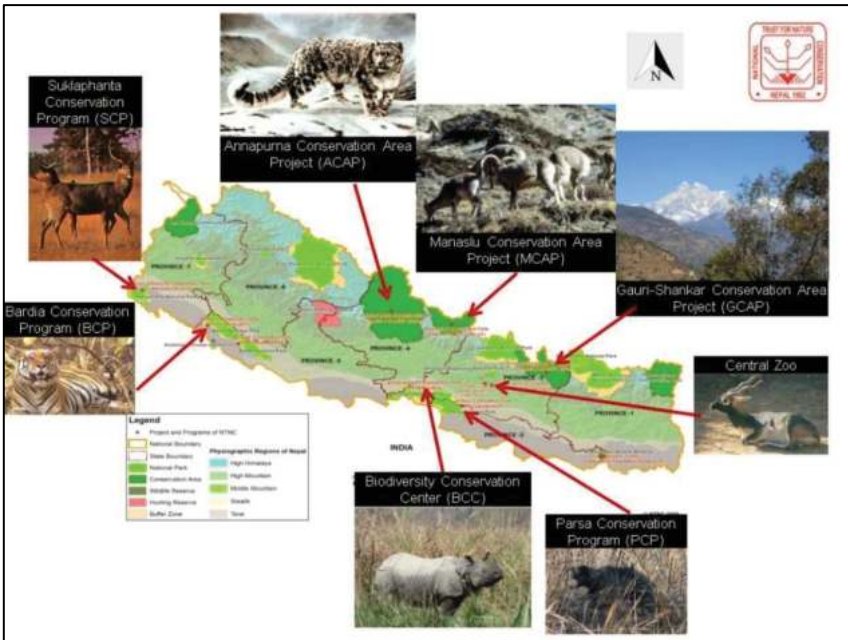


Figure 1: Projects of NTNC

Annapurna Conservation Area

Annapurna Conservation Area (ACA) is located in the western region of Nepal, covering 5.10% of the country area. It started in 1986 as a pilot project in Ghandruk. ACA officially declared in 1992 covering 7,629 km² includes 5 districts (Myagdi, Kaski, Lamjung, Manang, Mustang) and 15 Rural Municipalities within Gandaki Province. Managed by the NTNC under the National Park & Wildlife Conservation Act (NPWCA) 1972 and the Conservation Area Management Regulation 1996 as **Annapurna Conservation Area Project (ACAP)**. ACAP has been managing ACA through renowned community

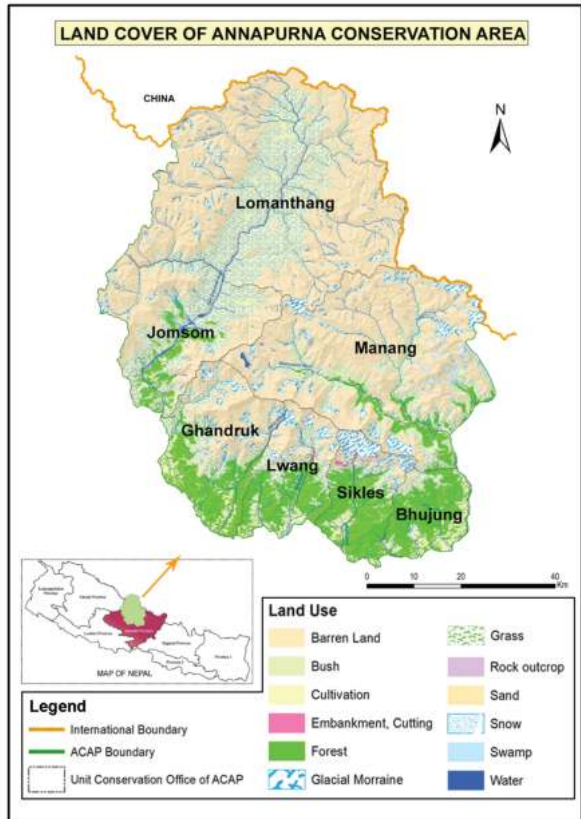


Figure 2: Administrative map of ACA

based participatory **Integrated Conservation and Development Programme (ICDP) approach**. It is divided into seven-unit conservation offices (UCOs) for smooth execution and administration (Figure 2). Conservation Area Management Committee (CAMC) is the key local institution of ACAP that directly coordinates and implements the conservation activities at grass root level.

ACA encompasses a unique Himalayan Sub tropical to Mountain ecosystem, which overlaps several bio-geographical regions due to huge altitudinal

range (from 790 to over 8091 masl). It holds a diverse range of habitats and correspondingly rich biodiversity elements including the world's largest rhododendron forest (Ghorepani), world's largest freshwater glacial lake located at highest elevation (The Tilicho Lake). A total of 1884 plant species, 128 mammals, 521 birds, 29 amphibians, 49 reptiles, 384 butterflies, and 28 species of fish are recorded in ACA. It is the only PA that possesses 6 different species of Himalayan pheasants in Nepal. ACA is rich in natural and cultural heritage, featuring the Annapurna range, Kaligandaki Gorge, sacred wetlands, unique biodiversity, cultural monuments, and ethnic settlements.

Goal:

"To achieve sustained balance between nature conservation and socio-economic improvement in the ACA thereby assist NTNC in achieving its goal."

Objectives:

- Conserve the natural resources of ACA for the benefit of present and future generations.
- Bring sustainable social and economic development to the local people.
- Develop tourism in such a way that it will have a minimum negative impact on the natural, socio-cultural and economic environments.

Introduction

Orchids are considered the most beautiful plants among the flowering plants. Orchidaceae is one of the largest families of angiosperms comprising over 703 genera and about 30,000 known species (Givnish et al., 2015; POWO, 2024). They are cosmopolitan in distribution (POWO, 2024) and recorded from all the continents except Antarctica (Givnish et al., 2015; POWO, 2024). The iconic shape and extreme colour combination indeed make orchids attractive and exquisite.

Nepal covers 1,47,516 km² area and comprises large numbers of species and ecosystem diversity. The distinguished physiography, climate, edaphic factor and altitude range from 60 to 8848 masl are supposed to play key role to possess such rich biodiversity. Nepal abodes over 502 taxa (499-species and 3-varieties) of orchids, among them 233 are terrestrial, 253 are epiphytes and 16 are holomycotrophic (Koju et al., 2023; Raskoti and Ale, 2019; Tiruwa et al., 2024).



This book is composed of 223 taxa (220-species & 3-varieties) belonging to 60 genera of orchids in the ACA. The species were recorded in the book through field survey. Besides this, some data were recorded from the secondary sources such as article (Chalise et al., 2019; Khakurel et al., 2020; Rokaya et al., 2013; Shrestha et al., 2022; Tiruwa et al., 2024), books (Chapagain & Chetri, 2006; Chetri, et al., 2006; Raskoti 2009; Maden et al., 2019; Shrestha et al., 2022) and online data base (Herbarium & Plant Laboratories (KATH, 2019).

Three major habits were considered for the recording of orchid species. Out of 223 species, 113 were epiphytes, 105 were terrestrial and 5 were holomycotrophic. This book also covered the importance of orchids in terms of their Medicinal, Ornamental and Food value. Total 99 species of 39 genera have Medicinal value (Acharya & Rokaya, 2010; Jambey et al., 2017; Pant & Raskoti, 2013; Rajbhandari, 2014; Shrestha, et al., 2022; Vaidya et al., 2000) likewise 74 species of 26 have Ornamental value (Raskoti 2009; Rajbhandari, 2014; Shrestha, et al., 2022) 9 species of 9 genera have Food value. (Shrestha, et al., 2022).

The orchid surveys were carried out according to the administrative division of ACA (Figure 1). The UCO Bhujung has recorded the largest number of species (174) and Lomanthang recorded the least number of species (7). In the Population status of each species is based on their encounter frequency according to the field survey.





Bulbophyllum careyanum © BL. Tiruwa

How to use this book?

- Each species is denoted by its generic name and followed by specific name, then by synonyms.
- Common name is followed by Nepali name and each Nepali name also represented in Roman script.
- Species distribution and their altitudinal range solely depicts their distribution and altitude within UCOs: Ghandruk (1,000-4,300 m), Lwang (1,000-4,500 m), Sikles (790-4,200 m), Bhujung (800-5,000 m), Manang (1,670-5,000 m), Jomsom (1,372-4,500 m) and Lomanthang (2,800-4,500 m) of ACA with different altitudinal range from 790-8,091 m asl.
- Habits: Epiphytes-orchids growing on others host plants, Terrestrial-orchids growing on land, Lithophytes-orchids growing on rock/boulders, and Holomycotrophic-orchids growing on dead and decaying materials like woods, and litter.
- For the epiphytic orchids their host species is mentioned.
- The importance of species is expressed in terms of Medicinal value (M), Ornamental value (O) and Food value (F).
- Population status of individual species is presented with its encounter frequency during field study as rare and common.



Pleione hookeriana © BL Tiruwa

1. *Acampe* Lindl.

1.1. *Acampe praemorsa* (Roxb.)

Blatt. & McCann

Acampe papillosa
(Lindl.)

**Brittle orchid, रसना
(Rasana)**

Distribution: Bhujung.

Altitude. 800-1000 m.

Habitat: Epiphytes
on *Garuga pinnata*,
Lagerstroemia
parviflora, *Schima*

wallichii, *Toona ciliata*. **Flowering:** Sep-Nov. **Uses:** Medicinal & Ornamental.

Ref.: SP: 1, & M: 1, 7, O: 1.

Population status: Commonly encountered during field survey.



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**1.2. *Acampe praemorsa*
var. *longepedunculata*
(Trimen) Govaerts**

Acampe rigida (Buch.-
Ham. ex Sm.) P.F.Hunt

Stiff Acampe

Distribution: Bhujung,

Sikles. **Altitude:** 800-1300
m.

Habitat: Epiphytes on
Castanopsis indica, *Ficus*
glaberrima, *Fraxinus*
floribunda, *Heynea trijuga*,
Machilus odoratissimus,
Mallotus philippensis,
Schima wallichii,
Semecarpus anacardium.

Flowering: Sep-Oct. **Uses:** Medicinal & Ornamental. **Ref.:** SP: 1, & M: 1,
2, 3, 4, 5, 7, & O: 1. **Population status:** Commonly encountered during field
survey.



2. *Aerides* Lour.

2.1. *Aerides multiflora* Roxb.

Aerides affinis Wall. ex Lindl.

The multi-flowered *Aerides*/The Cat's Tail Orchid, प्याजी सुनाखरी (Pyaajee Sunakhari)

Distribution: Bhujung, Ghandruk. **Altitude:** 800-1150 m. **Habit:** Epiphytes on *Ficus semicordata*, *Mangifera indica*, *Premna*

serratifolia, *Schima wallichii*. **Flowering:** May-Jun. **Uses:** Medicinal & Ornamental. **Ref.:** SP: 1, M: 1, 2, 3, 4, 7, & O: 1. **Population status:** Commonly encountered during field survey.



2.2. *Aerides odorata* Lour.

Epidendrum odoratum (Lour.) Poir.

Cat's- tail Orchid / Fox brush orchid

Distribution: Bhujung, Ghandruk. **Altitude:** 800-1200 m.

Habitat: Epiphytes on *Cordia dichotoma*, *Ficus glaberrima*, *Ficus lacor*, *Ficus religiosa*, *Mangifera indica*, *Premna serratifolia*, *Schima wallichii*.

Flowering: May-Jun. **Uses:** Medicinal & Ornamental.

Ref.: SP: 1, M: 1, 2, 3, 4, 5, 7, & O: 1.

Population status: Commonly encountered during field survey.

3. *Agrostophyllum* Blume

3.1. *Agrostophyllum* *callosum* Rchb.f.

Agrostophyllum
reichenbachii J.J.Sm.

Himalayan Grass-leaf orchid

Distribution: Bhujung,
Ghandruk, Lwang, Sikles.

Altitude: 1200-2300 m.

Habitat: Epiphytes
on *Alnus nepalensis*,
Castanopsis hystrix,
Daphniphyllum himalense,
Quercus lamellosa,

Rhododendron arboreum, *Semecarpus anacardium*, & lithophytes on rock
crevices. May-Aug. **Uses:** Medicinal. **Ref.:** SP: 1, & M: 1, 7. **Population**

status: Commonly encountered during field survey.



4. *Anthogonium* Wall. ex Lindl.

4.1. *Anthogonium gracile* Wall.ex Lindl.

Anthogonium griffithii Rchb.f.

The Selender Anthogonium

Distribution: Bhujung,
Lwang, Sikles. **Altitude:**
1200-2000 m.

Habitat: Grows on degraded
grazing land, Rock. Aug-
Nov.

Uses: Medicinal. **Ref.:** SP: 1,
& M: 1.

Population status: Commonly
encountered during field
survey.



© BD Neupane

5. *Arundina* Blume

5.1. *Arundina graminifolia* (D.Don) Hochr.

Bletia graminiflora
D.Don

Bamboo orchid, गग्भा (Gabha)

Distribution: Bhujung, Lwang. **Altitude:** 500-1700 m. **Habitat:** Terrestrial on warm and wet forest understories.

Flowering: Jun-Nov/

Jan-Apr. **Uses:** Medicinal & Ornamental. **Ref.:** SP: 1, M: 1, 2, 3, 4, 5, 6, 7, & O: 1. **Population status:** Commonly encountered during field survey.

6. *Brachycorythis* Lindl.

6.1. *Brachycorythis obcordata* (Lindl. ex Wall.) Summerh.

Platanthera obcordata
Lindl.

Heart-shaped

Brachycorythis, गग्ग्डोल/कललदलनल (Gamdol/ Kaladana)

Distribution: Ghandruk, Lwang. **Altitude:** 1900-2600 m. **Habitat:** Terrestrial on moist humus soil. **Flowering:** Jun-Aug. **Uses:** Medicinal & Food **Ref.:** SP: 1, 5, M: 1, 2, 3, 4, 5, 6, 7, & F: 1.

Population status:

Rarely encountered during field survey.



© LD Sherpa

7. *Bulbophyllum*

Thouars

7.1. *Bulbophyllum affine* Wall. ex Lindl.

Sarcopodium affine
(Wall. ex Lindl.)

Single Flowered- Bulb leaf Orchid

Distribution:

Bhujung, Ghandruk,
Lwang. **Altitude:**
1000-1700 m.

Habitat: Epiphytes
on *Lyonia ovalifolia*,

Machilus odoratissimus, *Falconeria insignis*, *Schima wallichii*. **Flowering:**

May-Aug. **Uses:** Ornamental. **Ref.:** SP: 1, & O: 1,2. **Population status:**

Commonly encountered during field survey.



7.2. *Bulbophyllum careyanum* (Hook.)

Spreng.

Pleurothallis purpurea
D. Don

Carey's Bulb leaf Orchid

Distribution: Bhujung,
Lwang, Sikles. **Altitude:**
900-1600 m.

Habitat: Epiphytes
on *Castanopsis indica*,
Falconeria insignis,
Schima wallichii.

Flowering: Sep-Dec.

Uses: Medicinal &
Ornamental. **Ref.:** SP: 1,
M: 1, 2, 3, 4, 5,7, & O: 2.

Population status:

Commonly encountered
during field survey.



7.3. *Bulbophyllum cariniflorum* Rehb.f.

Bulbophyllum densiflorum Rolfe

**The keeled Flower
Bulbophyllum**

Distribution: Bhujung, Ghandruk. **Altitude:** 1600-2100 m. **Habitat:** Epiphytes on *Machilus odoratissimus*, *Pouzolzia rugulosa*, *Schima wallichii*. **Flowering:** Jun-Aug. **Uses:** Ornamental. **Ref.:** SP: 1, & O: 2. **Population status:** Rarely encountered during field survey.

© BL Tiruwa

7.4. *Bulbophyllum caudatum* Lindl.

Cirrhopetalum caudatum (Lindl.) King & Pantl.

**Tailed Bulb-
Leaf Orchid**

Distribution: Bhujung.
Altitude: 1600-1700 m.

Habitat: Lithophytic on rock.

Flowering: Jun-Jul. **Ref.:** SP: 1. **Population status:** Rarely encountered during field survey.



© BD Neupane

7.5. *Bulbophyllum cylindraceum* Wall. ex Lindl.

Phyllorkis cylindracea (Wall. ex Lindl.) Kuntze

The Cylindrical Bulbophyllum

Distribution:

Bhujung. **Altitude:** 1600-1900 m.

Habitat: Epiphytes on *Castanopsis indica*, *Pouzolzia*

rugulosa, *Schima wallichii*. **Flowering:** Oct-Dec. **Ref.:** SP: 1. **Population status:** Rarely encountered during field survey.



7.6. *Bulbophyllum eublepharum* Rchb.f.

Phyllorchis eublephara (Rchb.f.) Kuntze

The Beautiful Lash Bulbophyllum

Distribution:

Bhujung. **Altitude:** 1900-2200 m.

Habitat: Epiphytes on *Daphniphyllum himalense*.

Flowering: Jul-Nov.

Uses: Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1.

Population status: Rarely encountered during field survey.



© BD Neupane

7.7. *Bulbophyllum leopardinum* (Wall.) Lindl. ex Wall.

Dendrobium leopardinum Wall.

Leopard Spotted Bulbophyllum

Distribution: Bhujung, Ghandruk, Lwang, Sikles.
Altitude: 1200-2200 m.

Habitat: Epiphytes on *Alnus nepalensis*, *Castanopsis hystrix*, *Castanopsis indica*, *Lyonia ovalifolia*, *Myrica esculenta*, *Prunus cerasoides*, *Rhododendron arboreum*, *Schima wallichii*, *Semecarpus anacardium*, and lithophytes on rock.

Flowering: Jun-Jul. **Uses:** Medicinal & Ornamental. **Ref.:** SP: 1, & M: 1, 2, 3, 4, 5, 7, O: 1, 2. **Population status:** Commonly encountered during field survey.

7.8. *Bulbophyllum moniliforme* C.S.P.Parish & Rchb.f.

Bulbophyllum jeosephii J.J.Verm., Schuit. & de Vogel

The Necklace-Like Bulbophyllum

Distribution: Bhujung.
Altitude: 1400-1500 m.

Habitat: Epiphytes on *Lyonia ovalifolia*.

Flowering: Oct. **Ref.:** SP: 1. **Population status:** Rarely encountered during field survey.



© BD Neupane

7.9. *Bulbophyllum muscicola* Rehb.f.

Bulbophyllum hookeri (Duthie)
J.J.Sm.

The Moss-growing Bulbophyllum

Distribution:

Bhujung. **Altitude:**
2000-3000 m.

Habitat: Epiphytes
on *Berberis asiatica*,
Rhododendron arboreum.

Flowering: Sep-Nov. **Uses:** Ornamental. **Ref.:** SP: 1, & O: 2. **Population status:** Rarely encountered during field survey.



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7.10. *Bulbophyllum odoratissimum* (Sm.) Lindl.

Stelis odoratissima
Sm.

Fragrant Bulbophyllum

Distribution:

Bhujung, Ghandruk,
Lwang. **Altitude:**
1200-2200 m.

Habitat: Epiphytes
on

Alnus nepalensis,
Daphniphyllum himalense, *Machilus odoratissimum*

Rhododendron arboreum, *Schima wallichii*, & lithophytes on rock.

Flowering: Apr-Aug. **Uses:** Medicinal & Ornamental. **Ref.:** SP: 1, M: 1, 2, 3, 4, 7, & O: 1,2.

Population status: Commonly encountered during field survey.



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7.11. *Bulbophyllum polyrrhizum* Lindl.

Phyllorchis polyrrhiza (Lindl.) Kuntze

The Many Root Bulbophyllum

Distribution:

Bhujung. **Altitude:** 1100-1700 m.

Habitat: Epiphytes on *Artocarpus lacucha*, *Engelhardtia spicata*, *Pouzolzia rugulosa*.

Flowering: Apr.

Ref.: SP: 1.

Population

status: Commonly encountered during field survey.

7.12. *Bulbophyllum purpureofuscum*

J.J.Verm., Schuit. & de Vogel

Sunipia cirrhata (Lindl.) P.F.Hunt

Pouzolzia rugulosa k purple Sunipia

Distribution: Bhujung, Lwang. **Altitude:** 1800-2200 m.

Habitat: Epiphytes on *Daphniphyllum himalense*.

Flowering: Nov-Dec.

Uses: Ornamental.

Ref.: SP: 1, & O: 1.

Population status: Rarely encountered during field survey.



7.13. *Bulbophyllum reptans*
(Lindl.) Lindl. ex Wall.

Tribrachia reptans Lindl.

Crawling Bulb-Leaf orchid

Distribution: Bhujung, Lwang, Sikles. **Altitude:** 1200-2300 m.

Habitat: Epiphytes on *Alnus nepalensis*, *Daphniphyllum himalense*, *Engelhardtia spicata*, *Lyonia ovalifolia* *Schima wallichii*. **Flowering:** Oct-Dec. **Uses:** Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1. **Population status:** Commonly encountered during field survey.



7.14. *Bulbophyllum retusiusculum* Rchb. f.

Cirrhopetalum retusiusculum (Rchb.f.) Hemsl.

Distribution: Lwang. **Altitude:** 2529 m.

Habitat: Epiphytes on *Viburnum erubescens*.

Flowering: Sep-Nov.

Uses: Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1.

Population status: Rarely encountered during field survey.



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7.15. *Bulbophyllum rolfei* (Kuntze) Seidenf.

Cirrhopetalum parvulum Hook.f.

Rolfe's Bulb-Leaf orchid

Distribution: Bhujung, Lwang. **Altitude:** 2500-3000 m.

Habitat: Epiphytes on *Berberis asiatica*, *Brassaiopsis hainla*, *Rhododendron arboreum*, *Taxus wallichiana*, *Viburnum erubescens*. **Flowering:**

Jun-Sep. **Ref.:** SP: 1.

Population status: Rarely encountered during field survey.

7.16. *Bulbophyllum roseopictum* J.J.Verm., Schuit. & de Vogel

Sunipia bicolor Lindl.

Rose-spotted Bulb-leaf Orchid / Two colored Sunipia

Distribution:

Bhujung, Lwang.

Altitude: 1800-2200 m.

Habitat: Epiphytes on *Daphniphyllum himalense*, *Ilex dipyrena*. **Flowering:**

Oct-Dec. **Ref.:** SP: 1.

Population status:

Rarely encountered during field survey.



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7.17. *Bulbophyllum striatum* (Griff.)

Rchb.f.

Dendrobium striatum
Griff.

**Striped Flowered
Bulbophyllum**

Distribution:

Bhujung. **Altitude:**
1700-1900 m.

Habitat: Epiphytes
on *Schima wallichii*.

Flowering: Nov-
Feb.

Ref.: SP: 1, 3.

Population status:

Rarely encountered during field survey.



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7.18. *Bulbophyllum triste* Rchb.f.

Bulbophyllum micranthum Hook.f.

**The Dark
Bulbophyllum**

Distribution:

Bhujung. **Altitude:**
2000-2200 m.

Habitat: Epiphytes
on *Schima wallichii*.

Flowering: Mar-
Jun.

Uses: Ornamental.

Ref.: SP: 1, &

O: 2. **Population**

status: Rarely
encountered during
field survey.



7.19. *Bulbophyllum umbellatum* Lindl.

Cirrhopetalum umbellatum (Lindl.) Linden

Umbrella Bulb-Leaf orchid

Distribution: Bhujung, Ghandruk. **Altitude:** 1200-2400 m. **Habitat:** Epiphytes on *Acer oblongum oblongum*, *Machilus odoratissimus*, *Pouzolzia rugulosa*. **Flowering:** Mar-Jun.

Uses: Medicinal & Ornamental. **Ref.:** **SP:** 1, **M:** 2, 3, 4, 5, 7, & **O:** 1. **Population status:** Commonly encountered during field survey.

7.20. *Bulbophyllum viridiflorum* (Hook.f.) Schltr.

Cirrhopetalum viridiflorum Hook.f.

The Green Flowered Bulbophyllum

Distribution: Bhujung, Lwang. **Altitude:** 2000-2300 m.

Habitat: Epiphytes on *Daphniphyllum himalense*, *Berberis asiatica*. **Flowering:** Oct-Dec. **Uses:** Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: **SP:** 1. **Population status:** Rarely encountered during field survey.



7.21. *Bulbophyllum wallichii* Rehb.f.

Cirrhopetalum wallichii Lindl.

The Moss-growing Bulbophyllum

Distribution: Sikles.

Altitude: 1409 m.

Habitat: Epiphytes on *Castanopsis indica*. **Flowering:**

Mar-May. **Uses:** Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1.

Population status:

Rarely encountered during field survey.



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7.22.

***Bulbophyllum yoksunense* J.J.Sm.**

Cirrhopetalum brevipes Hook.f.

Distribution:

Lwang.

Altitude: 2400-2600 m.

Habitat:

Epiphytes on *Acer oblongum oblongum*, *Rhododendron arboreum*. **Flowering:** Sep-Oct. **Ref.:** SP: 1. **Population status:** Rarely encountered during field survey.



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8. *Calanthe* R.Br.

8.1. *Calanthe alpina* Hook.f. ex Lindl.

Calanthe schlechteri
H.Hara

The Alpine Calanthe

Distribution: Bhujung,
Ghandruk. **Altitude:**

2700-3200 m. **Habitat:**
Terrestrial on wet and
cool forest understories.

Flowering: Nov.

Uses: Its ornamental and
medicinal uses are not
mentioned in existing
literatures.

**Ref.: SP: 1. Population
status:** Rarely
encountered during field
survey.

8.2. *Calanthe brevicornu* Lindl.

Alismorchis brevicornu
(Lindl.) Kuntze

Short Spurred Calanthe

Distribution: Bhujung,
Manang. **Altitude:**
1500-2200 m. **Habitat:**
Terrestrial on Wet and
cool forest understories.

Flowering: May-Jun.

Uses: Ornamental.

Ref.: SP: 1, & O: 1.

Population status:
Commonly encountered
during field survey.



8.3. *Calanthe mannii*

Hook.f.

Alismorchis mannii

(Hook.f.) Kuntze

Mann's Calanthe, बाँदरको धोति (Bandarko Dhoti)

Distribution: Bhujung.

Altitude: 1700-1900 m.

Habitat: Terrestrial on degraded and sunny forest land. **Flowering:** May.

Uses: Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1.

Population status: Rarely encountered during field survey.



8.4. *Calanthe plantaginea*

Lindl.

Alismorchis lindleyana Kuntze

Fragrant Calanthe / Plantain Calanthe, पंखा फूल (Pankha Phool)

Distribution: Bhujung,

Ghandruk, Sikles. **Altitude:** 1400-2200 m.

Habitat: Terrestrial on wet and cool forest understories.

Flowering: Mar-Apr.

Uses: Medicinal & Ornamental.

Ref.: SP: 1, M: 1, 2, 3, 4, 5, 7, & O: 1, 2.

Population status: Commonly encountered during field survey.



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8.5. *Calanthe puberula*
Lindl.

Alismorchis puberula
(Lindl.) Kuntze

Hairy Calanthe

Distribution: Bhujung,
Manang. **Altitude:** 1900-
2600 m.

Habitat: Terrestrial on wet
and cool forest understories.

Flowering: Jun-Aug.

Uses: Medicinal &
Ornamental.

Ref.: SP: 1, M: 1, 2, 3, 4,
5,7, & O: 1, 2.

Population status:
Commonly encountered
during field survey.

8.6. *Calanthe tricarinata*
Lindl.

Calanthe undulata Schl.

**Monkey Orchid / Hardy
Calanthe Orchid**

Distribution: Bhujung,
Ghandruk, Jomsom, Lwang,
Manang, Sikles. **Altitude:**
1900-3000 m.

Habitat: Terrestrial on wet
and cool forest understories.

Flowering: May-Jul.

Uses: Medicinal &
Ornamental.

Ref.: SP: 1, M: 1, 2, 3, 4,
7, & O: 1,2. **Population
status:** Commonly
encountered during field
survey.



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8.7. *Calanthe trulliformis* King & Pantl.

Distribution:

Jomsom, Sikles.

Altitude: 2400-2600 m.

Habitat:

Terrestrial on wet and cool forest understories.

Flowering: Jul.

Ref.: SP: 1.

Population

status: Rarely encountered during field survey.



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9. *Cephalanthera* Rich.

9.1. *Cephalanthera longifolia* (L.) Fritsch

Cephalanthera acuminata Wall ex. Lindl.

**Narrow-leaved
Helleborine**

Distribution: Manang.
Altitude: 2400-3200 m.

Habitat: Terrestrial on moist humus soil and rock. **Flowering:** May-Jun.

Uses: Medicinal.

Ref.: SP: 1, M: 1, 2, 3, 4, 7, & O: 1.

Population status: Rarely encountered during field survey.



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10. *Coelogyne* Lindl.

10.1. *Coelogyne alba* (Lindl.) Rchb.f.

Otochilus albus Lindl.

The white *Otochilus*

Distribution: Bhujung, Lwang, Sikles. **Altitude:** 1500-2200 m.

Habitat: Epiphytes on *Daphniphyllum himalense*, *Lyonia ovalifolia*, *Schima wallichii*.

Flowering: May-Jun.

Uses: Medicinal & Ornamental.

Ref.: SP: 1, M: 1, 7, & O: 2.

Population status:

Commonly encountered during field survey.

10.2. *Coelogyne articulata* (Lindl.) Rchb.f.

Pholidota articulata Lindl.

Rattlesnake Orchid

Distribution: Bhujung, Ghandruk, Lwang. **Altitude:** 1000-2100 m.

Habitat: Epiphytes on *Buddileja asiatica*, *Ficus semicordata*, *Magnolia kisopa*, *Mangifera indica*, *Pouzolzia rugulosa*, *Schima wallichii*, *Terminalia bellirica*.

Flowering: May-Jun.

Uses: Medicinal.

Ref.: SP: 1, & M: 1,7.

Population status: Commonly encountered during field survey.



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10.3. *Coelogyne corymbosa*
Lindl.

Pleione corymbosa (Lindl.)
Kuntze

**Clustered *Coelogyne*, चांदी गाभा
(Chandi Gabha)**

Distribution: Bhujung,
Ghandruk, Lwang, Manang,
Sikles. **Altitude:** 1500-2500 m.

Habitat: Epiphytes on *Lyonia
ovalifolia*, *Rhododendron
arboreum*, *Symplocos ramosissima*.

Flowering: May-Jul.

Uses: Medicinal & Ornamental.

Ref.: SP: 1, M: 1, 2, 3, 4, 5,
6,7, & O: 1. **Population status:**
Commonly encountered during
field survey.



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10.4. *Coelogyne cristata* Lindl.

Cymbidium speciosissimum
D. Don

**Crested Snow Orchid, चांदी गाभा/
भालु केरा (Chandi Gabha/Bhalu
Kera)**

Distribution: Bhujung. **Altitude:**
1500-2500 m.

Habitat: Epiphytes on
Castanopsis indica,
Daphniphyllum himalense,
Quercus lamellosa, *Viburnum
erubescens*. **Flowering:** Feb-May.

Uses: Medicinal & Ornamental.

Ref.: SP: 1, M: 1, 2, 3, 4, 5, 6, 7,
& O: 1.

Population status: Commonly
encountered during field survey.



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10.5. *Coelogyne demissa*
(D.Don) M.W.Chase & Schuit.

Panisea demissa (D.Don)
Pfitzer

Low-Lying *Coelogyne*, हात्ती टाउके (Hatti Tauke)

Distribution: Bhujung, Lwang, Sikles. **Altitude:** 1500-2400 m.

Habitat: Epiphytes on *Alnus nepalensis*, *Castanopsis indica*,

Ficus religiosa, *Fraxinus*

floribunda, *Lyonia ovalifolia*, *Machilus odoratissimus*, *Quercus lamellosa*, *Rhododendron arboreum*, *Schima wallichii*, *Semecarpus anacardium*, *Symplocos ramossima*.

Flowering: Apr-May. **Ref.:** SP: 1.

Population status: Commonly encountered during field survey.

10.6. *Coelogyne flaccida*
Lindl.

Pleione flaccida (Lindl.)
Kuntze

**The Bearded *Coelogyne* /
The loose *Coelogyne*, थुर गाभा
(Thur Gabha)**

Distribution: Bhujung.
Altitude: 1600-2000 m.

Habitat: Epiphytes on *Schima wallichii*. **Flowering:** Apr-Jun.

Uses: Medicinal &
Ornamental.

Ref.: SP: 1, M: 1, 2, 3, 4, 5, 7,
& O: 1.

Population status: ommonly
encountered during field
survey.



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**10.7. *Coelogyne fusca* (Lindl.)
Rchb.f.**

Otochilus fuscus Lindl.

**Pouzolzia rugulosa k-Brown
Otochilus / Dusky Otochilus**

Distribution: Bhujung,
Ghandruk, Lwang, Sikles.

Altitude: 1000-2000 m.

Habitat: Epiphytes on
Castanopsis indica,
Daphniphyllum himalense,
Machilus odoratissimus, *Schima
wallichii*.

Flowering: Oct-Jan.

Uses: Ornamental.

Ref.: SP: 1, & O: 2.

Population status: Commonly encountered during field survey.



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**10.8. *Coelogyne fuscescens*
Lindl.**

Coelogyne fuscescens var.
viridiflorum Pradhan

The Ocher yellow Coelogyne

Distribution: Bhujung,
Ghandruk, Sikles. **Altitude:**
1200-2000 m.

Habitat: Epiphytes on
Castanopsis indica, *Machilus
odoratissimus*, *Prunus
cerasoides*, *Schima wallichii*,
and lithophytes on rock.

Flowering: Oct-Dec.

Uses: Medicinal, &
Ornamental. **Ref.:** SP: 1,
M: 1,2,3,4,5,6,7, & **O:** 1.

Population status:
Commonly encountered
during field survey.



10.9. *Coelogyne imbricata* (Hook.) Rchb.f.

Pholidota imbricata Hook.

**Rattlesnake/Necklace Orchid,
पत्थर केरा (Patthar Kera)**

Distribution: Bhujung, Ghandruk, Jomsom, Lwang, Manang, Sikles.

Altitude: 1000-1800 m.

Habitat: Epiphytes on *Ficus religeosa*, *Ficus semicordata*, *Schima wallichii*, and lithophytes on rock.

Flowering: Jun-Jul.

Uses: Medicinal. **Ref.:** SP: 1, & M: 1, 7.

Population status: Commonly encountered during field survey.

10.10. *Coelogyne lancilabia* (Seidenf.) R.Rice

Otochilus lancilabius Seidenf.

**The Lanceolate Lip
Otochilus**

Distribution: Bhujung, Lwang, Sikles. **Altitude:** 1400-2200 m.

Habitat: Epiphytes on *Alnus nepalensis*, *aphniphyllum himalense*, *Lyonia ovalifolia*, *Schima wallichii*.

Flowering: Oct-Nov.

Uses: Medicinal & Ornamental.

Ref.: SP: 1, M: 7, & O: 2.

Population status: Commonly encountered during field survey.



10.11. *Coelogyne nitida* (Wall. ex D. Don) Lindl.

Cymbidium nitidum Wall. ex D. Don.

Shining Coelogyne, चांदी गाभा (Chandi Gabha)

Distribution: Bhujung, Ghandruk, Lwang, Manang, Sikles. **Altitude:** 1500-2200 m.

Habitat: Epiphytes on *Alnus nepalensis*, *Daphniphyllum himalense*, *Eurya cerasifolia*, *Lyonia ovalifolia*.

Flowering: Apr-Jun.

Uses: Medicinal & Ornamental.

Ref.: SP: 1, M: 1, 2, 3, 4, 5, 7, & O: 1.

Population status: Commonly encountered during field survey.



10.12. *Coelogyne ovalis* Lindl.

Coelogyne pilosissima Planch

The Oval Coelogyne / Falling-Scale Orchid

Distribution: Bhujung. **Altitude:** 1200-1700 m.

Habitat: Epiphytes on *Fraxinus floribunda*, *Machilus odoratissimus*, *Mangifera indica*, *Schima wallichii*.

Flowering: Aug-Nov.

Uses: Medicinal & Ornamental. **Ref.:** SP: 1, M: 1, 2, 3, 4, 5, 7, & O: 1.

Population status: Commonly encountered during field survey.



10.13. *Coelogyne pallida*
(Lindl.) Rchb.f.

Pholidota pallida Lindl.

Rattlesnake Orchid

Distribution: Bhujung, Ghandruk, Sikles. **Altitude:** 1000-1600 m.

Habitat: Epiphytes on *Engelhardia spicata*, *Schima wallichii*, and lithophytes on rock. **Flowering:** May-Jun.

Uses: Medicinal.

Ref.: SP: 1, & M: 1, 2, 3, 4, 5, 6,7.

Population status: Commonly encountered during field survey.

10.14. *Coelogyne porrecta*
(Lindl.) Rchb.f.

Otochilus porrectus Lindl.

जिवन्ती (Jivantee)

Distribution: Lwang, Sikles. **Altitude:** 1600-2300 m.

Habitat: Epiphytes on *Daphniphyllum himalense*.

Flowering: Oct-Dec.

Uses: Medicinal.

Ref.: SP: 1, & M: 1, 3, 4, 7.

Population status: Commonly encountered during field survey.



10.15. *Coelogyne prolifera* Lindl.

Coelogyne flavida Hook.f. ex Lindl.

The Prolific *Coelogyne*, थुग्गाउजो (Thurgaujo)

Distribution: Bhujung, Ghandruk. **Altitude:** 1000-1700 m.

Habitat: Epiphytes on *Alnus nepalensis*, *Lyonia ovalifolia*, *Myrica esculenta*, *Pouzolzia rugulosa*, *Schima wallichii*.

Flowering: Apr-Jun. **Uses:** Medicinal & Ornamental. **Ref.:** SP: 1, M: 1, 2, 3, 4, 5, 7, & O: 1. **Population status:** Commonly encountered during field survey.



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10.16. *Coelogyne protracta* (Hook.f.) R.Rice

Pholidota protracta Hook.f.

जिवन्ती (Jivantee)

Distribution: Bhujung, Ghandruk, Lwang, Sikles. **Altitude:** 1200-2200 m.

Habitat: Epiphytes on *Rhododendron arboreum*. **Flowering:** Oct-Dec.

Uses: Medicinal & Ornamental.

Ref.: SP: 1, & O: 2.

Population status: Commonly encountered during field survey.



10.17. *Coelogyne punctulata* Lindl.

Coelogyne brevifolia Lindl.

Spotted Coelogyne

Distribution: Bhujung, Ghandruk, Lwang.

Altitude: 1800-2200 m.

Habitat: Epiphytes on *Acer oblongum*, *Daphniphyllum himalense*.

Flowering: Nov.

Uses: Medicinal & Ornamental. **Ref.:** SP: 1, M: 1, 2, 3, 4, 5, & O: 1, 2.

Population status: Commonly encountered during field survey.

10.18. *Coelogyne stricta* (D. Don) Schltr.

Coelogyne elata Lindl.

Erect Coelogyne / The Rigid Coelogyne

Distribution: Bhujung, Sikles. **Altitude:** 1000-2000 m.

Habitat: Epiphytes on *Machilus odoratissimus*, *Pouzolzia rugulosa*, *Schima wallichii*, and lithophytes on rock.

Flowering: Apr-Jun.

Uses: Medicinal & Ornamental. **Ref.:** SP: 1, M: 1, 2, 3, 4, 5, 6, 7, & O: 1.

Population status: Commonly encountered during field survey.



11. *Cremastra* Lindl.

11.1. *Cremastra appendiculata* (D. Don) Makino

Cremastra wallichiana Lindl.

Warty Lip *Cremastra*

Distribution: Bhujung.

Altitude: 2000-2200 m.

Habitat: Terrestrial on wet and cool forest understories.

Flowering: May-Jun.

Uses: Medicinal.

Ref.: SP: 1, & M: 1,7.

Population status: Rarely encountered during field survey.



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12. *Crepidium* Blume

12.1. *Crepidium acuminatum* (D. Don) Szlach.

Malaxis acuminata
D. Don

Adder's Mouth Orchid

Distribution: Bhujung, Manang. **Altitude:** 800-2100 m.

Habitat: Terrestrial on litter covered moist surface.

Flowering: May-Jul.

Uses: Medicinal. **Ref.:** SP: 1, & M: 1,2, 3, 4, 7.

Population status: Commonly encountered during field survey.



12.2. *Crepidium biauratum*
(Lindl.) Szlach.

Microstylis biaurita Lindl.

Adder's Mouth Orchid

Distribution: Bhujung.

Altitude: 800-1000 m.

Habitat: Terrestrial on humus rich land.

Flowering: May-Aug.

Uses: Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1.

Population status: Commonly encountered during field survey.

12.3. *Crepidium calophyllum*
(Rchb.f.) Szlach.

Microstylis calophylla
Rchb.f.

Adder's Mouth Orchid

Distribution: Bhujung, Ghandruk. **Altitude:** 800-2100 m.

Habitat: Terrestrial on moist humus soil.

Flowering: Jul-Sep.

Uses: Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1.

Population status: Commonly encountered during field survey.



12.4. *Crepidium purpureum*
(Lindl.) Szlach.

Microstylis purpurea Lindl.

Purple Malaxis

Distribution: Bhujung.

Altitude: 800- 1700 m.

Habitat: Terrestrial on wet
and cool forest understories.

Flowering: Jul-Sep.

Uses: Its ornamental and
medicinal uses are not
mentioned in existing
literatures.

Ref.: SP: 1.

Population status:

Commonly encountered
during field survey.



13. *Cryptochilus* Wall.

13.1. *Cryptochilus acuminatus*
(Griff.) Schuit.,
Y.P.Ng & H.A.Pedersen

Xiphosium acuminatum
Griff.

Distribution: Bhujung.

Altitude: 1430-2000 m.

Habitat: Epiphytes on
Lyonia ovalifolia.

Flowering: Oct-Dec.

Uses: Its ornamental and
medicinal uses are not
mentioned in existing
literatures.

Ref.: SP: 3.

Population status: Rarely
encountered during field
survey.



13.2. *Cryptochilus luteus* Lindl.

Cryptochilus farreri Schltr.

**The yellow
Cryptochilus**

Distribution: Bhujung, Ghandruk, Sikles.

Altitude: 1200-2200 m.

Habitat: Epiphytes on *Lyonia ovalifolia*.

Flowering: May-Jul.

Uses: Ornamental.

Ref.: SP: 1, & O: 1, 2.

Population status: Rarely encountered during field survey.

14. *Cymbidium* Sw.

14.1. *Cymbidium aloifolium* (L.) Sw.

Cymbidium pendulum (Roxb.) Sw.

**The Aloe-Leafed Cymbidium,
हरजोर (Harjor)**

Distribution: Bhujung, Lwang, Sikles. **Altitude:** 900-2000 m.

Habitat: Epiphytes on *Alnus nepalensis*, *Castanopsis indica*, *Erythrina stricta*, *Ficus benghalensis*, *Lagerstroemia parviflora*, *Litsea monopetala*, *Mangifera indica*, *Falconeria insignis*. **Flowering:** Mar-Jun.

Uses: Medicinal & Ornamental.

Ref.: SP: 1, M: 1, 2, 3, 4, 5, 6,

7, & O: 1. **Population status:** Commonly encountered during field survey.



14.2. *Cymbidium bicolor*
Lindl.

Two-colored Cymbidium

Distribution: Bhujung.
Altitude: 800-1200 m.

Habitat: Epiphytes on *Alnus nepalensis*, *Artocarpus lacucha*, *Bombax ceiba*, *Castanopsis indica*, *Diospyros malabarica*, *Erythrina stricta*, *Premna serratifolia*, *Falconeria insignis*.

Flowering: Apr-May. **Uses:** Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1. **Population**

status: Commonly encountered during field survey.



14.3. *Cymbidium elegans*
Lindl.

Cymbidium longifolium
D. Don

Elegant Cymbidium

Distribution: Bhujung,
Lwang. **Altitude:** 2000-2500
m.

Habitat: Epiphytes on
Rhododendron arboreum.

Flowering: Oct-Jan.

Uses: Medicinal &
Ornamental.

Ref.: SP: 1, M: 1, 2, 3, 4, 5,
7, & O: 1.

Population status:
Commonly encountered
during field survey.



14.4. *Cymbidium erythraeum* Lindl.

Indian Cymbidium

Distribution: Bhujung, Ghandruk, Lwang.

Altitude: 1300-2400 m.

Habitat: Epiphytes on *Alnus nepalensis*, *Castanopsis indica*, *Daphniphyllum himalense*, *Machilus odoratissimus*.

Flowering: Oct-Nov.

Uses: Ornamental. **Ref.:** SP: 1, & O: 2.

Population status: Commonly encountered during field survey.

14.5. *Cymbidium iridioides*

D. Don

Cymbidium giganteum Wall. ex Lindl.

Iris-Like Cymbidium.

Distribution: Bhujung, Lwang, Sikles. **Altitude:** 1000-2000 m.

Habitat: Epiphytes on *Alnus nepalensis*, *Castanopsis indica*, *Daphniphyllum himalense*, *Eurya cerasifolia*, *Machilus odoratissimus*, *Schima wallichii*, and lithophytes on moss covered rock. **Flowering:** Oct-Nov. **Uses:** Medicinal & Ornamental. **Ref.:** SP: 1, M: 1, 2, 3, 4, 5, 7, & O: 1.

Population status: Commonly encountered during field survey.



15. *Cymbilabia* D.K.Liu & Ming H.Li

15.1. *Cymbilabia undulata* (Lindl.) D.K.Liu & Ming H.Li

Vanda undulata Lindl.

Wavy-Petal Vandopsis

Distribution: Bhujung, Sikles. **Altitude:** 1600-2500 m.

Habitat: Epiphytes on *Alnus nepalensis*, *Daphniphyllum himalense*, *Rhododendron arborum*, *Viburnum erubescens*.

Flowering: Apr-Jun.

Uses: Ornamental. **Ref.:** SP: 1, & O: 1, 2.

Population status: Commonly encountered during field survey.



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16. *Cyripedium* L.

16.1. *Cyripedium cordigerum* D.Don

Heart-shaped Slipper

Orchid, जिब्रे/ तुलो काकोली (Jibre/Thulo Kakoli)

Distribution: Ghandruk. **Altitude:** 2100-4000 m.

Habitat: Terrestrial on moist humus soil.

Flowering: Jun-Aug.

Uses: Medicinal, Ornamental & Food. **Ref.:** SP: 5, M: 2, 3, 4, 5, O: 1, & F: 1.

Population status: Rarely encountered during field survey.



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16.2. *Cypripedium elegans*
Rchb.f.

Coelogyne elegans Rchb.f.

Elegant Cypripedium

Distribution: Ghandruk.

Altitude: 3000-3600 m.

Habitat: Terrestrial on under humus rich soil of *Abies spectabilis* and *Taxus wallichiana* forest. **Flowering:** May-Jul.

Uses: Medicinal.

Ref.: SP: 1, M: 2, 3, 4, 5, 7, & O: 1.

Population status: Rarely encountered during field survey.

16.3. *Cypripedium himalaicum*
Rolfe

Cypripedium himalaicum
Rolfe ex Hemsl

Broad-leaved Helleborins,
खुजुक्पा (Khujukpa)

Distribution: Ghandruk,
Lwang, Manang. **Altitude:**
3000-3600 m.

Habitat: Terrestrial on wet
soil under the *Rhododendron*
forest. **Flowering:** Jun-Jul.

Uses: Medicinal &
Ornamental. **Ref.:** SP: 1, M:
2, 3, 4, 5, 7, & O: 1.

Population status: Rarely
encountered during field
survey.



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17. *Cyrtosia* Blume

17.1. *Cyrtosia lindleyana* Hook.f. & Thomson

Galeola lindleyana (Hook.f. & Thomson) Rchb.f.

Lindley's Galeola,

Distribution:

Bhujung. **Altitude:** 2000-2100 m.

Habitat:

Holomycotrophic on wet and cool litter under forest.

Flowering: Jul-Aug.

Ref.: SP: 1. **Population status:** Rarely encountered during field survey.



18. *Dactylorhiza* Neck. ex Nevski

18.1. *Dactylorhiza hatagirea* (D.Don) Soó

Orchis hatagirea D.Don

Himalayan Marsh Orchid, पाँच औले / हाथेजारा (Panche Aule / Hathejara)

Distribution: Bhujung, Ghandruk, Jomsom, Lomanthang, Lwang, Manang. **Altitude:** 2800-4000 m.

Habitat: Terrestrial on cool and wet pasture land. **Flowering:** Jun-Aug.

Uses: Medicinal & Food. **Ref.:** SP: 6, M: 1, 2, 3, 4, 5, 6, 7, & F: 1.

Population status: Not encountered during field survey but found in various literatures.



18.2. *Dactylorhiza viridis* (L.) R.M.Bateman, Pridgeon & M.W.Chase
Satyrium viride L.

Himalayan Marsh Orchid

Distribution: Bhujung.

Altitude: 4100-4300 m.

Habitat: Terrestrial on open alpine pasture.

Flowering: Jun-Aug.

Uses: Medicinal.

Ref.: SP: 1, & M: 7.

Population status: Rarely encountered during field survey.

19. *Dendrobium* Sw.

19.1. *Dendrobium amoenum* Wall. ex Lindl.

Callista amoena (Wall. ex Lindl.) Kuntze

Lovely Dendrobium, जिवन्ती (Jivantee)

Distribution:

Bhujung, Ghandruk, Lwang, Manang, Sikles. **Altitude:** 1000-2400 m.

Habitat: Epiphytes

on *Alnus nepalensis*, *Castanopsis indica*, *Ficus benghalensis*, *Ficus religiosa*, *Ficus semicordata*, *Fraxinus floribunda*, *Magnolia kisopa*, *Mangifera indica*, *Pouzolzia rugulosa*, *Premna serratifolia*, *Schima wallichii*, *Cordia dichotoma*, *Terminalia bellirica*, and lithophytes on rock. **Flowering:** May. **Uses:** Medicinal & Ornamental. **Ref.:** SP: 1, M: 1, 2, 3, 4, 5, 7, & O: 1, 2.

Population status: Commonly encountered during field survey.



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19.2. *Dendrobium amplum*
Lindl.

Epigeneium amplum (Lindl.)
Summerh.

**The Large Epigeneium/Black
tongued orchid**

Distribution: Bhujung,
Ghandruk, Lwang, Sikles.

Altitude: 1300-2000 m.

Habitat: Epiphytes on
Daphniphyllum himalense,
Lyonia ovalifolia, *Schima
wallichii*, and lithophytes on
rock crevices. **Flowering:**
Oct-Nov.



Uses: Ornamental. **Ref.:** SP: 1, & O: 1, 2. **Population status:** Commonly
encountered during field survey.



19.3. *Dendrobium aphyllum*
(Roxb.) C.E.C.Fisch.

Limodorum aphyllum Roxb.

The Hooded Orchid

Distribution: Bhujung. **Altitude:**
800-1500 m.

Habitat: Epiphytes on *Artocarpus
lacucha*, *Callicarpa arborea*,
Cordia dichotoma, *Ficus
religiosa*, *Ficus semicordata*,
Fraxinus floribunda, *Garuga
pinnata*, *Mangifera indica*,
Pouzolzia rugulosa, *Premna
serratifolia*, *Schima wallichii*,
Terminalia bellirica.

Flowering: Apr-Jun.

Uses: Medicinal & Ornamental.

Ref.: SP: 1, M: 7, & O: 1, 2.

Population status: Commonly
encountered during field survey.



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19.4. *Dendrobium chrysanthum* Wall. ex Lindl.

Callista chrysantha (Wall. ex Lindl.) Kuntze

Golden Yellow-Flowered Dendrobium

Distribution: Bhujung.

Altitude: 1200-1700 m.

Habitat: Epiphytes on *Daphniphyllum himalense*, *Schima wallichii*.

Flowering: Apr-Oct.

Uses: Medicinal & Ornamental.

Ref.: SP: 1, M: 1, 2, 7, &

O: 1, 2. **Population status:**

Rarely encountered during field survey.

19.5. *Dendrobium crepidatum* Lindl. & Paxton

Callista crepidata (Lindl. & Paxton) Kuntze

Shoe -Lipped Dendrobium

Distribution: Bhujung, Ghandruk, Lwang, Sikles. **Altitude:** 900-1500 m.

Habitat: Epiphytes on *Artocarpus lacucha*, *Bombax ceiba*, *Callicarpa arborea*,

Ficus religiosa, *Ficus semicordata*, *Fraxinus floribunda*, *Garuga pinnata*, *Mangifera indica*, *Pouzolzia rugulosa*, *Premna serratifolia*, *Sapium insigne*, *Schima wallichii*, *Terminalia bellirica*. **Flowering:** Apr-May. **Uses:** Medicinal & Ornamental. **Ref.:** SP: 1, M: 1, 2, 3, 4, 5, 7, & O: 1, 2.

Population status: Commonly encountered during field survey.



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19.6. *Dendrobium densiflorum* Lindl.

Callista densiflora (Lindl.) Kuntze

The Dencely Flowered *Dendrobium* / Pineapple Orchid, सुनगाभा (Sunagabha)

Distribution: Bhujung, Ghandruk, Manang.

Altitude: 800-1800 m.

Habitat: Epiphytes on *Ficus semicordata*, *Fraxinus floribunda*, *Pouzolzia rugulosa*, *Schima wallichii*, *Callicarpa arborea*, and lithophytes on rock crevices.

Flowering: Apr-Jun.

Uses: Medicinal & Ornamental. **Ref.:** **SP:** 1, **M:** 1, 2, 3, 4, 5, 7, & **O:** 1, 2. **Population status:**

Commonly encountered during field survey.



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19.7. *Dendrobium denudans* D. Don

Callista denudans (D. Don) Kuntze

Distribution: Sikles.

Altitude: 919 m.

Habitat: Epiphytes on *Schima wallichii*.

Flowering: Apr-Aug.

Uses: Medicinal & Ornamental. **Ref.:** **SP:** 1, **M:** 1, & **O:** 1.

Population status: Rarely

encountered during field survey.



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19.8. *Dendrobium eriiflorum*
Griff.

Callista eriiflora (Griff.)
Kuntze

**The Eria-Liked Flowered
Dendrobium**

Distribution: Bhujung,
Manang. **Altitude:** 1000-1800
m.

Habitat: Epiphytes on *Alnus nepalensis*, *Artocarpus lacucha*, *Bombax ceiba*, *Castanopsis indica*, *Engelhardtia spicata*, *Ficus semicordata*, *Fraxinus floribunda*, *Lyonia ovalifolia*, *Morella esculenta*, *Phyllanthus emblica*, *Pouzolzia rugulosa*, *Schima wallichii*, and

lithophytes on moss covered rock. **Flowering:** Sep-Oct. **Uses:** Medicinal & Ornamental. **Ref.:** SP: 1, M: 1, 2, 3, 4, 5, 7, & O: 1, 2. **Population status:** Commonly encountered during field survey.

19.9. *Dendrobium fimbriatum*
Hook.

Callista fimbriata
(Hook.) Kuntze

**Fringe-lipped
Dendrobium**

Distribution:
Ghandruk. **Altitude:**
1500-2100 m.

Habitat: Epiphytes
on *Schima wallichii*.

Flowering: Mar-May.

Uses: Medicinal &
Ornamental. **Ref.:**

SP: 1, 5, M: 1, 2, 3,
4, 5, 6, 7, & O: 1.

Population status: Rarely encountered during field survey.



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19.10. *Dendrobium fugax* Rchb.f.

Flickingeria fugax
(Rchb.f.) Seidenf.

**The Fading
Flickingeria**

Distribution:

Bhujung. **Altitude:**
1000-1600 m.

Habitat: Epiphytes
on *Alnus nepalensis*,
Machilus
odoratissimus,
Schima wallichii, and
lithophytes on rock
crevices. **Flowering:** May-Jul.

Uses: Medicinal & Ornamental. **Ref.:** SP: 1, M: 1, 7, & O: 2.

Population status: Commonly encountered during field survey.



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19.11. *Dendrobium heterocarpum* Wall. ex Lindl.

Callista aurea (Lindl.) Kuntze

Golden-Lip Dendrobium,

Distribution: Bhujung,
Ghandruk, Sikles. **Altitude:**
1100-1800 m.

Habitat: Epiphytes on
Alnus nepalensis, *Lyonia*
ovalifolia, *Morella esculenta*,
Rhododendron arboreum,
Falconeria insignis, *Schima*
wallichii. **Flowering:** Apr-
May. **Uses:** Medicinal &
Ornamental. **Ref.:** SP: 1, M:
2, 3, 4, 7, & O: 1, 2.

Population status:

Commonly encountered
during field survey.



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19.12. *Dendrobium longicornu*
Lindl.

Callista longicornis (Lindl.)
Kuntze

Long-Horned Dendrobium,
बावर (Bavar)

Distribution: Bhujung,
Ghandruk, Lwang, Sikles.

Altitude: 1800-2700 m.

Habitat: Epiphytes on
Daphniphyllum himalense,
Quercus lamellosa. **Flowering:**
Sep-Nov.

Uses: Medicinal & Ornamental.

Ref.: SP: 1, M: 1, 2, 3, 4, 5, 7,
& O: 1, 2.

Population status: Commonly
encountered during field
survey.

19.13. *Dendrobium*
***moniliforme* (L.) Sw.**

Dendrobium candidum
Wall. ex Lindl.

The white Dendrobium

Distribution: Bhujung,
Lwang. **Altitude:** 2000-
2400 m.

Habitat: Epiphytes
on *Daphniphyllum*
himalense, *Quercus*
lamellosa, and
lithophytes on
moss covered rock.

Flowering: Apr-May.

Uses: Medicinal. **Ref.:**
SP: 1, & M: 1, 4, 7.

Population status: Rarely encountered during field survey.



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19.14. *Dendrobium moschatum* (Banks) Sw.

Callista calceola
(Carey ex Hook.)
Kuntze

**Musky smelling
Dendrobium**

Distribution:

Bhujung. **Altitude:**
1200 m.

Habitat: Epiphytes
on *Schima wallichii*.

Flowering: May-Jul.

Uses: Medicinal

& Ornamental. **Ref.:** SP: 1, M: 1, 2, 3, 4, 5, 7, & O: 2. **Population status:**
Rarely encountered during field survey.



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19.15. *Dendrobium polyanthum* Wall. ex Lindl.

Dendrobium primulinum Lindl.

**Many Flowered
Dendrobium**

Distribution:

Bhujung. **Altitude:**
1000-1400 m.

Habitat: Epiphytes
on *Ficus semicordata*,
Pouzolzia rugulosa.

Flowering: Apr-May.

Uses: Ornamental.

Ref.: SP: 1, & O: 2.

Population status:

Rarely encountered
during field survey.



19.16. *Dendrobium porphyrochilum* Lindl.

Callista porphyrochila (Lindl.) Kuntze

Purple-Lipped Dendrobium

Distribution: Bhujung, Sikles. **Altitude:** 1900-2500 m.

Habitat: Epiphytes on *Berberis asiatica*, *Daphniphyllum himalense*, *Quercus lamellosa*, and lithophytes on moss covered rock. **Flowering:** May-Aug.

Ref.: SP: 1. **Population status:** Commonly encountered during field survey.

19.17. *Dendrobium transparens* Wall. ex Lindl.

Callista transparens (Wall. ex Lindl.) Kuntze

Translucent Dendrobium.

Distribution: Bhujung, Lwang, Sikles. **Altitude:** 900-1500 m.

Habitat: Epiphytes on *Artocarpus lacucha*, *Ficus benghalensis*, *Ficus glaberrima*, *Ficus lacor*, *Ficus religiosa*, *Fraxinus floribunda*, *Mallotus philippensis*. **Flowering:** May-Jun.

Uses: Medicinal & Ornamental.

Ref.: SP: 1, M: 1, 2, 3, 4, 5, 7, & O: 1, 2. **Population status:** Commonly encountered during field survey.



20. *Dienia* Lindl.

20.1. *Dienia cylindrostachya* Lindl.

Malaxis cylindrostachya (Lindl.) Kuntze

Adder's Mouth Orchid,

ढुकुना (Tukuna)

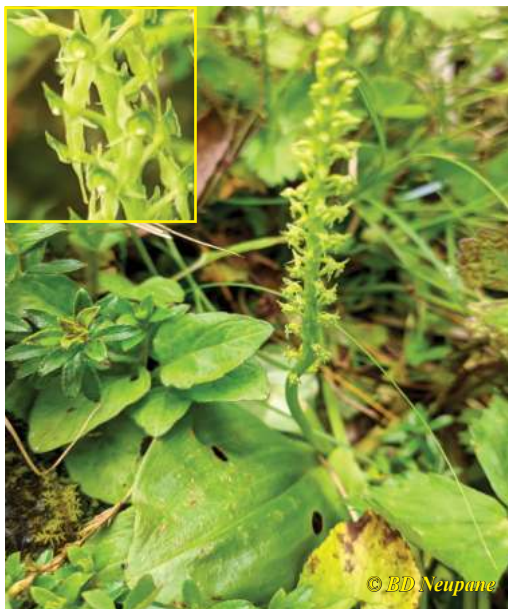
Distribution: Bhujung, Manang. **Altitude:** 2100-3300 m.

Habitat: Terrestrial on cool and wet forest understories, open slopes. **Flowering:** Jul-Aug.

Uses: Medicinal & Food.

Ref.: SP: 1, M: 1, 2, 3, 4, & F: 1.

Population status: Rarely encountered during field survey.



20.2. *Dienia ophrydis* (J.Koenig) Seidenf.

Malaxis latifolia Sm.

Distribution: Bhujung, Jomsom. **Altitude:** 1200-2100 m.

Habitat: Terrestrial on open waste landfill site.

Flowering: May-Aug.

Uses: Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1, 3.

Population status: Rarely encountered during field survey.



21. *Epipactis* Zinn

21.1. *Epipactis helleborine* (L.) Crantz

Serapias helleborine L.

Broad-Leaved Helleborine

Distribution: Jomsom, Manang. **Altitude:** 2400-3500 m.

Habitat: Terrestrial on moist humus grassland.

Flowering: Jun-Jul.

Uses: Medicinal. **Ref.:** **SP:** 1, & **M:** 1, 2, 3, 4, 5, 6, 7.

Population status: Commonly encountered during field survey.

21.2. *Epipactis royleana* Lindl.

Helleborine royleana (Lindl.) Soó

Orchid, सुनाखरी (Sunakhari)

Distribution: Jomsom, Manang. **Altitude:** 2000-3700 m.

Habitat: Terrestrial on moist humus grassland.

Flowering: Jul-Aug.

Uses: Medicinal & Food.

Ref.: **SP:** 1, **M:** 7, & **F:** 1.

Population status: Commonly encountered during field survey.



22. *Epipogium* Borkh.

22.1. *Epipogium aphyllum*

Sw.

Satyrium epipogium L.

Ghost Orchid

Distribution: Manang.

Altitude: 3200-3700 m.

Habitat: Holomycotrophic under litter covered forest.

Flowering: Aug-Sep. **Uses:**

Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1.

Population status: Rarely encountered during field survey.



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22.2. *Epipogium japonicum* Makino

Galera japonica (Makino)
Makino

Distribution: Lwang.

Altitude: 1700 m.

Habitat:

Holomycotrophic under litter covered forest. **Flowering:** Jul-Sep.

Uses: Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1.

Population status:

Rarely encountered during field survey



22.3. *Epipogium roseum*
(D. Don) Lindl.

Gastrodia schinziana
Kraenzl.

Ghost Orchid

Distribution: Bhujung.
Altitude: 1500-1700 m.

Habitat: Holomycotrophic on wet and cool litter under forest. **Flowering:** Apr-Sep. **Uses:** Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1.

Population status: Rarely encountered during field survey.

23. *Eria* Lindl.

23.1. *Eria clausa* King & Pantl.

Dendrobium subsessile
Gagnep.

The Closed Flower *Eria*

Distribution: Bhujung.
Altitude: 900-1200 m.

Habitat: Epiphytes on *Eurya cerasifolia*, *Schima wallichii*, and lithophytes on moss covered rock.

Flowering: Mar.

Ref.: SP: 1.

Population status: Rarely encountered during field survey.



23.2. *Eria coronaria*
(Lindl.) Rehb.f.

Coelogyne coronaria
Lindl.

**The Crowned-Lip
Eria**

Distribution:

Bhujung, Ghandruk,
Lwang, Sikles.

Altitude: 1700-2200
m.

Habitat: Epiphytes
on *Alnus nepalensis*,
Castanopsis hystrix,

Daphniphyllum himalense, *Lyonia ovalifolia*, *Magnolia kisopa*, *Schima wallichii*. **Flowering:** May-Jun. **Uses:** Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1. **Population status:** Commonly encountered during field survey.



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24. *Eulophia* R.Br.

24.1. *Eulophia cernua*
(Willd.) M.W.Chase,
Kumar & Schuit.

Geodorum densiflorum
(Lam.) Schltr.

Pink Nodding Orchid

Distribution: Bhujung.

Altitude: 1000-1200 m.

Habitat: Terrestrial
on degraded grassland
slopes. **Flowering:**
Jun-Jul.

Uses: Medicinal. **Ref.:**
SP: 1, & M: 1.

Population status:
Rarely encountered
during field survey.



25. Galearis Raf.

25.1. Galearis spathulata (Lindl.) P.F.Hunt

Gymnadenia spathulata Lindl.

Spathulate Galearis

Distribution: Bhujung, Jomsom, Lomanthang, Manang. **Altitude:** 3800-3900 m.

Habitat: Terrestrial on open and rocky grassland with *Rhododendron anthopogon* and *R. campanulatum*.

Flowering: Jul-Aug. **Uses:** Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1. **Population**

status: Commonly encountered during field survey.

26. Gastrochilus D.Don

26.1. Gastrochilus calceolaris (Buch.-Ham. ex Sm.) D.Don

Aerides calceolaris Buch.-Ham.

Shoe-shaped belly-Lip Orchid

Distribution: Bhujung, Ghandruk, Sikles. **Altitude:** 1000-2100 m.

Habitat: Epiphytes on *Bombax ceiba*, *Castanopsis indica*, *Daphniphyllum himalense*, *Ficus lacor*, *Eurya cerasifolia*, *Ficus semicordata*, *Schima wallichii*. **Flowering:** Mar-Apr.

Ref.: SP: 1. **Population status:** Commonly encountered during field survey.



26.2. *Gastrochilus distichus* (Lindl.)

Kuntze

Saccolabium distichum Lindl.

Distichus
Gastrochilus

Distribution:

Bhujung, Sikles.

Altitude: 2400-2900 m.

Habitat: Epiphytes on *Berberis asiatica*.

Flowering: Jan-May.

Ref.: SP: 1.

Population status: Rarely encountered during field survey.



26.3. *Gastrochilus pseudodistichus* (King & Pantl.) Schltr.

Saccolabium pseudodistichum King & Pantl.

Distribution:

Bhujung, Sikles.

Altitude: 2200-2400 m.

Habitat: Epiphytes on *Quercus lamellosa*.

Flowering: Aug-Sep.

Uses: Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1.

Population status:

Rarely encountered during field survey.



27. *Goodyera* R.Br.

27.1. *Goodyera biflora* (Lindl.) Hook. f.

Georchis biflora Lindl.

नक्कली जिवन्ती (Nakkali Jivanti)

Distribution: Lwang, Jomsom, Manang, Sikles. **Altitude:** 2000-2500 m.

Habitat: Terrestrial on humus soil in shaded forest. **Flowering:** June-Jul. **Ref.:** SP: 1.

Population status: Commonly encountered during field survey.

27.2. *Goodyera foliosa* (Lindl.) Benth. ex C.B. Clarke

Georchis foliosa Lindl.

Leafy Goodyera

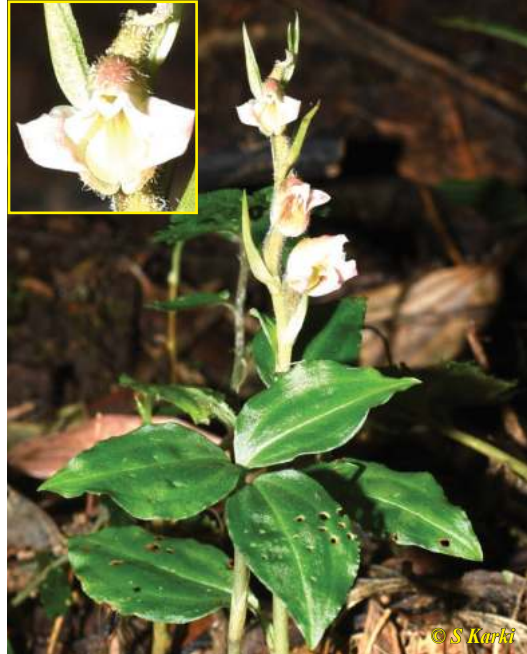
Distribution: Bhujung, Sikles. **Altitude:** 1900-2500 m.

Habitat: Terrestrial on wet and cool forest understories.

Flowering: Jul-Sep.

Uses: Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1. **Population status:** Commonly encountered during field survey.



**27.3. *Goodyera fusca* (Lindl.)
Hook.f.**

Hetaeria fusca Lindl.

Creeping lady's-Tresses

Distribution: Manang,
Sikles. **Altitude:** 3000-4000
m.

Habitat: Terrestrial on
moist humus grassland.

Flowering: Aug-Sep. **Uses:**
Its ornamental and medicinal
uses are not mentioned in
existing literatures.

Ref.: SP: 1.

Population status:
Commonly encountered
during field survey.



**27.4. *Goodyera henryi*
Rolfe**

*Goodyera
maximowicziana* Makino

Distribution: Ghandruk.
Altitude: 2400 m.

Habitat: Terrestrial
on wet and cool
forest understories.

Flowering: Aug-Sep.
Uses: Its ornamental and
medicinal uses are not
mentioned in existing
literatures.

Ref.: SP: 3.

Population status:
Rarely encountered
during field survey.



27.5. *Goodyera procera*
(Ker Gawl.) Hook.

Neottia procera Ker
Gawl.

The Tall Goodyera,

Distribution: Bhujung,
Lwang. **Altitude:** 900-
1500 m. Common.

Habitat: Terrestrial
on degraded grassland
slopes. **Flowering:**
Apr-May.

Uses: Medicinal.

Ref.: SP: 1, & M: 7.

Population status:
Commonly encountered
during field survey.

27.6. *Goodyera recurva*
Lindl.

Epipactis recurva (Lindl.)
A.A.Eaton

Distribution: Bhujung.
Altitude: 1900-2500 m.

Habitat: Epiphytes on
Berberis asiatica, *Lyonia*
ovalifolia, *Viburnum*
erubescens.

Flowering: Jun-Jul.

Uses: Its ornamental and
medicinal uses are not
mentioned in existing
literatures.

Ref.: SP: 1.

Population status: Rarely
encountered during field
survey.



**27.7. *Goodyera repens* (L.)
R.Br.**

Satyrium repens L.

**Creeping lady's-Tresses /
Dwarf, Lesser Rattlesnake
Plantain**

Distribution: Bhujung,
Ghandruk, Jomsom, Lwang,
Manang. **Altitude:** 2600-
3300 m.

Habitat: Terrestrial on wet
and cool forest understories.

Flowering: Aug-Oct.

Uses: Medicinal. **Ref.:** SP: 1,
& M: 1,7.

Population status:

Commonly encountered
during field survey.



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**27.8. *Goodyera
schlechtendaliana*
Rchb.f.**

Anoectochilus japonicus
(Blume) Linden

**Schlechtendal's
Goodyera**

Distribution: Bhujung,
Ghandruk. **Altitude:**
2300-3100 m.

Habitat: Terrestrial
on wet and cool forest
understories. **Flowering:**
Aug-Oct. **Uses:**

Medicinal. **Ref.:** SP: 1,
& M: 1,7.

Population status:

Commonly encountered
during field survey.



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27.9. *Goodyera viridiflora* (Blume)
Blume

Neottia viridiflora
Blume

Distribution:
Sikles. **Altitude:**
1900-2300 m.

Habitat: Terrestrial
on moist soil of
under covered
forest. **Flowering:**
Aug-Sep.

Uses: Medicinal.

Ref.: SP: 1, & M:
7.

**Population
status:** Rarely
encountered during
field survey.

27.10. *Goodyera vittata* (Lindl.)
Benth. ex Hook.f

Georchis vittata Lindl.

Striped Vein Rein Orchid /
Striped Vein Goodyera

Distribution: Bhujung.
Altitude: 2400-2800 m.

Habitat: Terrestrial on wet
and cool forest understories.

Flowering: Jul-Sep.

Uses: Its ornamental and
medicinal uses are not
mentioned in existing literatures.

Ref.: SP: 1.

Population status: Commonly
encountered during field survey.



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28. *Gymnadenia* R.Br.

28.1. *Gymnadenia orchidis* Lindl.

Habenaria orchidis (Lindl.)
Hook.f.

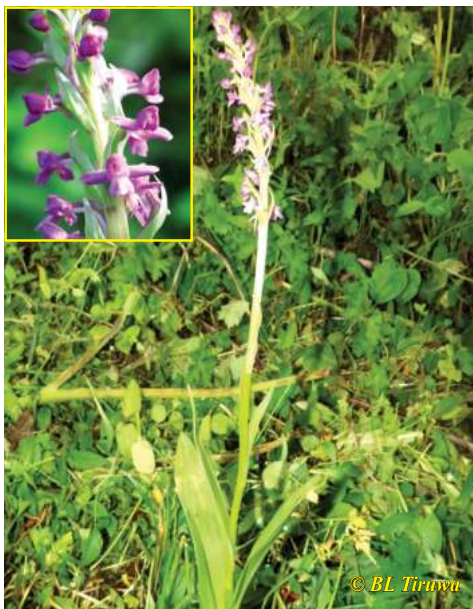
Himalayan Fragrant Orchid,
हाती जरा/ नकाल्ली पांच औले (Hatti
Jara /Nakkali Panch Aunle)

Distribution: Bhujung,
Lomanthang, Ghandruk,
Manang. **Altitude:** 3000-5000
m.

Habitat: Terrestrial on wet
and cool open slopes and forest
understories. **Flowering:** May-
Aug.

Uses: Medicinal. **Ref.:** SP: 1, &
M: 1, 7.

Population status: Commonly encountered during field survey.



29. *Habenaria* Willd.

29.1. *Habenaria* *aitchisonii* Rchb.f.

Habenaria diceras
Schltr.

Leafy Habenaria

Distribution: Jomsom,
Manang. **Altitude:**
2400-4000 m.

Habitat: Terrestrial on
wet and cool humus
soil under pinus forest.

Flowering: Jul-Sep.

Ref.: SP: 2.

Population status:
Rarely encountered
during field survey.



29.2. *Habenaria arietina* Hook.f.

Habenaria ensifolia
var. *gigantea* (Pradhan)
P.K.Sarkar

Intermediate

Habenaria, थुम्सा (Thumsaa)

Distribution:

Ghandruk, Jomsom.

Altitude: 1800-3000 m.

Habitat: Terrestrial on wet and cool humus soil under pinus forest.

Flowering: Aug.

Uses: Medicinal. **Ref.:** SP: 2, 3,4,5, & M: 2,3,4,5,7.

Population status: Rarely encountered during field survey.

29.3. *Habenaria dentata* (Sw.) Schltr.

Orchis dentata Sw.

The toothed Habenaria

Distribution:

Bhujung, Ghandruk.

Altitude: 1200-1900 m.

Habitat: Terrestrial on grazing land.

Flowering: Aug–Oct.

Uses: Medicinal & Ornamental.

Ref.: SP: 1, & M: 1, 2, 3, 4.

Population status: Rarely encountered during field survey.



29.4. *Habenaria digitata*
Lindl.

Habenaria lindleyana
Wight

Green Habenaria

Distribution: Bhujung.

Altitude: 800-1200 m.

Habitat: Terrestrial on degraded grazing land.

Flowering: Jul-Aug.

Uses: Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1.

Population status:

Commonly encountered during field survey.



29.5. *Habenaria gibsonii*
Hook.f.

Distribution:

Bhujung. **Altitude:**
800-1000 m.

Habitat: Terrestrial on degraded grazing land.

Flowering: Jul-Aug.

Uses: Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1.

Population status:

Commonly encountered during field survey.

Note: *H. gibsonii* is morphologically close to *H. digitata*, further study is needed for taxonomic identity of this species.



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29.6. *Habenaria intermedia* D.Don

Kryptostoma intermedium (D.Don)
Olszewski & Szlach.

थुनमा (Thunmaa)

Distribution: Bhujung, Ghandruk, Sikles.

Altitude: 1900-3000 m.

Habitat: Terrestrial on moist open grazing land.

Flowering: Jul.

Uses: Medicinal & Food.

Ref.: SP: 1, M: 7, & F: 1.

Population status: Commonly encountered during field survey.

29.7. *Habenaria pantlingiana* Kraenzl.

Habenaria polytrichia (Hook.f.) Pradhan

Distribution: Lwang.

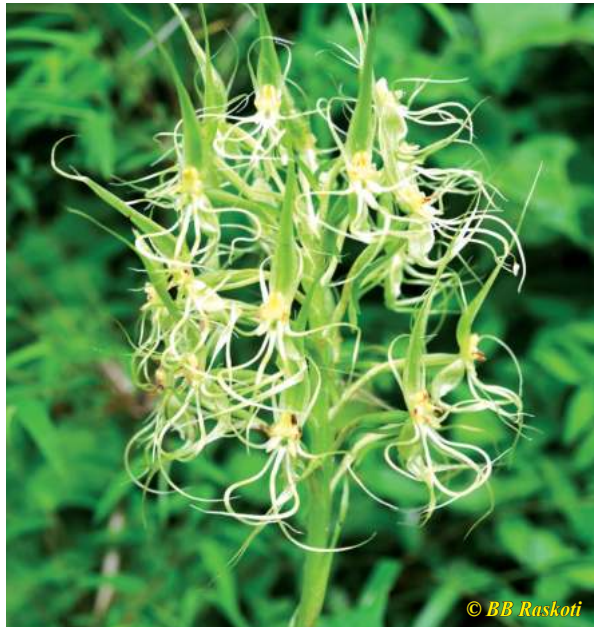
Altitude: 2579 m.

Habitat: Terrestrial on moist soil under the rhododendron forest. **Flowering:** Aug-Oct.

Uses: Medicinal.

Ref.: SP: 1, & M: 1.

Population status: Rarely encountered during field survey.



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29.8. *Habenaria pectinata* D.Don

Kryptostoma pectinatum (D.Don)
Olszewski & Szlach.

Comb Habenaria

Distribution: Bhujung, Jomsom,
Manang. **Altitude:** 1000-3500 m.

Habitat: Terrestrial on open
slopes. **Flowering:** Aug.

Uses: Medicinal & Ornamental.

Ref.: SP: 1, M: 1, 7, & O: 2.

Population status: Commonly
encountered during field survey.

Note: There are different plants
with different morphology on
the name of *H. pectinata*, future
research will solve taxonomic
identity of this *H. pectinata*
complex.



29.9. *Habenaria pubescens* Lindl.

Hairy Habenaria

Distribution: Bhujung.
Altitude: 700-1000 m.

Habitat: Terrestrial on
grassland slopes.

Flowering: Jul-Sep.

Ref.: SP: 1.

Population status:
Rarely encountered
during field survey.





30. *Hemipilia* Lindl.

30.1. *Hemipilia calcicola* (W.W.Sm.) Y.Tang & H.Peng

Neottianthe calcicola (W.W.Sm.) Schltr.

Distribution: Jomsom, Manang. **Altitude:** 3500-4500 m.

Habitat: Terrestrial on subalpine and alpine scree. **Flowering:** Jul-Oct.

Uses: Medicinal. **Ref.:** SP: 1, & M: 7.

Population status: Rarely encountered during field survey.

30.2. *Hemipilia chusua* (D.Don) Y.Tang & H.Peng

Ponerorchis chusua (D.Don) Soó

Chusua / Hemipilia, घोडे गाभा (Ghode Gabha)

Distribution: Bhujung, Jomsom, Lomanthang, Manang. **Altitude:** 3000-4000 m.

Habitat: Terrestrial on cool and wet grassland, understories in *Abies spectabilis* forest.

Flowering: Jul-Aug.

Uses: Medicinal, Ornamental, & Food.

Ref.: SP: 1, M: 1, 2, 3, 4, 5, 6, 7, O: 2, & F: 1.

Population status: Commonly encountered during field survey.



30.3. *Hemipilia cucullata*
(L.) Y.Tang, H.Peng &
T.Yukawa

Neottianthe cucullata (L.)
Schltr.

Distribution: Manang.
Altitude: 3000-4000 m.

Habitat: Terrestrial on
subalpine and alpine
meadows. **Flowering:**
Jul-Oct.

Uses: Medicinal &
Ornamental.

Ref.: SP: 1, M: 7, & O: 2.

Population status: Rarely
encountered during field
survey.



30.4. *Hemipilia*
secundiflora (Kraenzl.)
Y.Tang & H.Peng

Neottianthe
secundiflora (Kraenzl.)
Schltr.

Distribution: Jomsom.
Altitude: 2500-3200 m.

Habitat: Terrestrial
on moist humus soil.

Flowering: Aug-Oct.

Uses: Its ornamental
and medicinal uses
are not mentioned in
existing literatures.

Ref.: SP: 6.

Population status:
Rarely encountered
during field survey.



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31. *Herminium* L.

31.1. *Herminium alaschanicum* Maxim.

Peristylus alaschanicus (Maxim.) N.Pearce & P.J.Cribb

Distribution: Jomsom.

Altitude: 3700 m.

Habitat: Terrestrial on dry subalpine meadows.

Flowering: Jun-Sep.

Uses: Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 2.

Population status: Rarely encountered during field survey.

31.2. *Herminium albomarginatum* (King)
X.H.Jin, Schuit., Raskoti & Lu Q.Huang

Bhutanthera albomarginata (King) Renz

Distribution: Bhujung.

Altitude: 3400-4300 m.

Habitat: Terrestrial on humus soil in moist forest.

Flowering: Jul-Sep. **Uses:** Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1.

Population status: Rarely encountered during field survey.



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31.3. *Herminium chloranthum* Tang & F.T.Wang

Distribution: Jomsom.

Altitude: 3800 m.

Habitat: Terrestrial on open humus grass land slopes. **Flowering:** Jul-Sep.

Uses: Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 2.

Population status: Rarely encountered during field survey.



31.4. *Herminium clavigerum* (Lindl.)

X.H.Jin, Schuit., Raskoti & Lu Q.Huang

Platanthera clavigera Lindl.

Clun-Tail Habenaria,
कङ्गा (Kangga)

Distribution: Bhujung.

Altitude: 1900-3600 m.

Habitat: Terrestrial on wet and cool forest understories.

Flowering: Jul-Sep.

Uses: Food.

Ref.: SP: 1, & F: 1.

Population status: Rarely encountered during field survey.



31.5. *Herminium edgeworthii* (Hook.f. ex Collett) X.H.Jin, Schuit., Raskoti & Lu Q.Huang
Platanthera edgeworthii (Hook.f. ex Collett)
R.K.Gupta

कङ्गाछा (Kangachha)

Distribution: Bhujung, Jomsom, Manang. **Altitude:** 2600-3100 m.

Habitat: Terrestrial on moist humus grassland slopes.

Flowering: Jun-Sep.

Uses: Medicinal.

Ref.: SP: 1, & M: 7.

Population status: Commonly encountered during field survey.

31.6. *Herminium elisabethae* (Duthie) Tang & F.T.Wang

Peristylus elisabethae (Duthie) R.K.Gupta

Distribution: Manang. **Altitude:** 3000-3600 m.

Habitat: Terrestrial on moist grassland scree. **Flowering:** Jul-Sep.

Uses: Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 2.

Population status: Rarely encountered during field survey.



31.7. *Herminium fallax* (Lindl.) Hook.f.

Peristylus fallax
Lindl.

Distribution:

Ghandruk, Lwang.

Altitude: 2700-3700 m.

Habitat: Terrestrial on moist grassland slopes. **Flowering:** Jul-Sep.

Ref.: SP: 3.

Population status: Rarely encountered during field survey.



31.8. *Herminium josephi* Rehb.f.

Herminium duthiei
Hook.f.

Musk-Orchid

Distribution:

Bhujung, Ghandruk, Jomsom, Manang. **Altitude:** 3000-4300 m.

Habitat: Terrestrial on moist open land. **Flowering:** May-Jul.

Ref.: SP: 1.

Population status: Commonly encountered during field survey.



31.9. *Herminium kamengense* A.N.Rao

Distribution: Ghandruk. **Altitude:** 2400 m.

Habitat: Terrestrial on humus rich wet and cool forest understories.

Flowering: Jun-Aug.

Uses: Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1.

Population status: Rarely encountered during field survey.

31.10. *Herminium lanceum* (Thunb. ex Sw.) Vuijk

Ophrys lancea Thunb. ex Sw.

Lance-Leaf Herminium

Distribution: Bhujung, Lwang, Manang, Sikles.

Altitude: 1900-3500 m.

Habitat: Terrestrial on humus rich wet and cool forest understories.

Flowering: Jun-Aug.

Uses: Medicinal.

Ref.: SP: 1, & M: 1, 2, 7.

Population status: Commonly encountered during field survey.



31.11. *Herminium latilabre* (Lindl.)
X.H.Jin, Schuit.,
Raskoti & Lu Q.Huang
Platanthera latilabris
Lindl.

Distribution: Jomsom.
Altitude: 2000-3000
m.

Habitat: Terrestrial
on grassland slopes.

Flowering: Jul-Aug.

Uses: Medicinal.

Ref.: SP: 2, & M: 1,
2, 7.

Population status:
Rarely encountered
during field survey.



31.12.
Herminium
mackinonii
Duthie

Monorchis
mackinonii
(Duthie)
O.Schwarz

Mackinon's
Herminium

Distribution:

Bhujung.

Altitude: 2500-
2700 m.

Habitat:

Terrestrial on wet
and cool forest

understories. **Flowering:** Aug. **Ref.:** SP: 1.

Population status: Commonly encountered during field survey.



31.13. *Herminium macrophyllum* (D.Don)
Dandy

Neottia macrophylla D.Don

Distribution: Ghandruk, Jomsom, Lomanthang, Manang. **Altitude:** 1500-1700 m.

Habitat: Terrestrial on moist humus rich land.

Flowering: Jun-Aug.

Uses: Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1.

Population status: Commonly encountered during field survey.

31.14. *Herminium monorchis* (L.) R.Br.

Ophrys monorchis L.

The Musk Orchid

Distribution: Bhujung, Jomsom, Manang. **Altitude:** 3000-4000 m.

Habitat: Terrestrial on subalpine and alpine meadows. **Flowering:** Jul- Aug.

Uses: Medicinal.

Ref.: SP: 2, & M: 2, 7.

Population status: Rarely encountered during field survey.



32. *Liparis* Rich.

32.1. *Liparis bootanensis* Griff.

Liparis lancifolia
Hook.f.

The Bhutan *Liparis*

Distribution:

Bhujung, Sikles.

Altitude: 1900-2500
m.

Habitat: Epiphytes
on shady forest and
lithophytes on moist
rock. **Flowering:**

Jul-Oct. **Uses:** Its
ornamental and
medicinal uses are not
mentioned in existing
literatures. **Ref.:** SP: 1.

Population status: Rarely encountered during field survey.



32.2. *Liparis cathcartii* Hook.f.

Leptorchis cathcartii
(Hook.f.) Kuntze

Cathcart's *Liparis*.

Distribution: Bhujung.

Altitude: 2300-2900 m.

Habitat: Terrestrial
on wet and cool forest
understories. **Flowering:**

Jun-Jul. **Uses:** Its
ornamental and medicinal
uses are not mentioned in
existing literatures. **Ref.:**
SP: 1.

Population status:

Commonly encountered
during field survey.



32.3. *Liparis cordifolia* Hook.f.
Leptorchis cordifolia (Hook.f.) Kuntze

Distribution: Sikles. **Altitude:** 1950 m.

Habitat: Terrestrial on wet and cool forest thicket.

Flowering: Jun-Jul.

Uses: Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1.

Population status: Rarely encountered during field survey.

32.4. *Liparis deflexa* Hook.f.

Leptorchis deflexa (Hook.f.) Kuntze

Bent Liparis

Distribution: Bhujung. **Altitude:** 1300-1700 m.

Habitat: Terrestrial on degraded pasture land.

Flowering: Jun-Jul. **Uses:** Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1.

Population status: Rarely encountered during field survey.



32.5. *Liparis elliptica* Wight

Liparis hookerae Ridl.

Elliptic Liparis

Distribution: Bhujung.

Altitude: 1300-2000 m.

Habitat: Epiphytes on *Alnus nepalensis*, *Engelhardtia spicata*, *Schima wallichii* and lithophytes on rock crevices.

Flowering: Nov-Dec.

Uses: Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1.

Population status:

Commonly encountered during field survey.



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32.6. *Liparis nervosa* (Thunb.) Lindl.

Ophrys nervosa Thunb.

Veined Liparis / Tall Liparis

Distribution: Bhujung.

Altitude: 900-1200 m.

Habitat: Terrestrial on moist pasture land.

Flowering: Feb-Jul.

Uses: Medicinal.

Ref.: SP: 1, & M: 1, 2, 4.

Population status:

Rarely encountered during field survey.



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32.7. *Liparis petiolata*
(D.Don) P.F.Hunt & Summerh.

Liparis nepalensis Lindl.

Petiolate Leaf Liparis

Distribution: Bhujung, Ghandruk, Sikles. **Altitude:** 2100-2600 m.

Habitat: Terrestrial on-stream sides or wet and cool forest understories.

Flowering: May-Jun.

Uses: Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1.

Population status:

Commonly encountered during field survey.

32.8. *Liparis resupinata* Ridl.

Leptorchis resupinata (Ridl.) Kuntze

Distribution: Bhujung, Ghandruk, Lwang, Sikles. **Altitude:** 1400-2500 m.

Habitat: Epiphytes on *Alnus nepalensis*, *Symplocos ramossima*, *Viburnum erubescens* and lithophytes on moist rock.

Flowering: Feb-Mar.

Uses: Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1.

Population status: Commonly encountered during field survey.



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32.9. *Liparis rostrata*
Rchb.f.

Leptorchis rostrata
(Rchb.f.) Kuntze

Liparis

Distribution:

Bhujung, Ghandruk.
Altitude: 2300-2900
m.

Habitat: Terrestrial
on wet and cool
forest understories.

Flowering: May-Jun.

Uses: Medicinal.

Ref.: SP: 1, & M: 2,
3, 4, 5, 7. **Population
status:** Commonly
encountered during
field survey.



32.10. *Liparis viridiflora*
(Blume) Lindl.

Malaxis viridiflora Blume

Liparis

Distribution: Bhujung.

Altitude: 1000-1700 m.

Habitat: Epiphytes on *Schima
wallichii* and lithophytes
on moist rock.

Flowering:
Jan-Feb. **Uses:** Its ornamental
and medicinal uses are
not mentioned in existing
literatures.

Ref.: SP: 1.

Population status: Rarely
encountered during field
survey.



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33. Luisia Gaudich.

33.1. Luisia trichorrhiza (Hook.) Blume

Vanda trichorrhiza Hook.

The Hair-Like Root Luisia, अर्जोना (Arjona)

Distribution: Bhujung.

Altitude: 900-1700 m.

Habitat: Epiphytes on *Garuga pinnata*, *Mallotus philippensis*, *Pouzolzia rugulosa*, *Premna serratifolia*, *Syzygium cumini*. **Flowering:** Mar-Jul.

Uses: Medicinal. **Ref.:** SP: 1, & M: 1, 2, 7.

Population status:

Commonly encountered during field survey.

33.2. Luisia zeylanica Lindl.

Luisia platyglossa Rehb.f.

Luisia, कौवाको केरा/ बोरि झार (Kouwako Kera/Bori Jhar)

Distribution: Bhujung.

Altitude: 900-1400 m.

Habitat: Epiphytes on *Artocarpus lacucha*, *Bombax ceiba*.

Flowering: Apr-Jun.

Uses: Medicinal.

Ref.: SP: 1, & M: 2, 7.

Population status:

Commonly encountered during field survey.



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34. *Malaxis* Sol. ex Sw.

34.1. *Malaxis monophyllos* (L.) Sw.

Ophrys monophyllos L.

White Adder'S Mouth

Distribution: Jomsom, Manang. **Altitude:** 3000-4000 m.

Habitat: Terrestrial on moist open grassland slopes. **Flowering:** Jun-Aug. **Uses:** Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 2.

Population status: Rarely encountered during field survey.



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34.2. *Malaxis muscifera* (Lindl.)

Kuntze

Dienia muscifera
Lindl.

Fly Bearing

**Malaxis, रसाभक
(Rasabhak)**

Distribution:

Bhujung,
Ghandruk, Jomsom,
Lomanthang, Lwang,
Manang, Sikles.
Altitude: 2400-4100
m.

Habitat: Terrestrial on wet and cool forest understories. **Flowering:** Jun-Aug. **Uses:** Medicinal. **Ref.:** SP: 1, & M: 1,7.

Population status: Commonly encountered during field survey.



35. *Mycaranthes* Blume

35.1. *Mycaranthes floribunda* (D. Don)
S.C. Chen & J.J. Wood

Eria paniculata Lindl.

Tiny Eria

Distribution: Bhujung.

Altitude: 800-1600 m.

Habitat: Epiphytes on *Myrica esculenta*, *Schima wallichii*. **Flowering:** Mar-

Apr. **Uses:** Its ornamental and medicinal uses are not mentioned in existing literatures. **Ref.: SP: 1.**

Population status: Rarely encountered during field survey.

36. *Neottia* Guett.

36.1. *Neottia chandrae*
Raskoti, J.J. Wood & Ale

Distribution:

Ghandruk. **Altitude:**
3143 m.

Habitat: Terrestrial on moist humus under cover of *Abies* forest.

Flowering: Jun-Jul.

Uses: Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1.

Population status:

Rarely encountered during field survey.



36.2. *Neottia listeroides* Lindl.

Listera lindleyana (Decne.) King & Pantl.

Distribution: Jomsom, Manang.

Altitude: 1900-3200 m.

Habitat: Holomycotrophic under litter covered forest.

Flowering: Jul-Sep. **Ref.:** SP: 2.

Population status: Rarely encountered during field survey.



36.3. *Neottia nepalensis* (N.P.Balacr.) Szlach.

Listera nepalensis N. P. Balacr.

Distribution: Manang.

Altitude: 2689 m.

Habitat: Terrestrial on moist slopes.

Flowering: Jul-Aug.

Uses: Its ornamental and medicinal uses are not mentioned in existing literatures.

Endemic: Nepal.

Ref.: SP: 3. **Population status:** Rarely encountered during field survey.



36.4. *Neottia pinetorum*
(Lindl.) Szlach.

Listera pinetorum Lindl.

**The Pine-Wood Growing
Neottia**

Distribution: Bhujung,
Ghandruk, Sikles. **Altitude:**
2300-3600 m.

Habitat: Terrestrial on
moist under cover litter of
forest. **Flowering:** Jun-
Jul. **Uses:** Its ornamental
and medicinal uses are
not mentioned in existing
literatures.

Ref.: SP: 1. **Population
status:** Commonly
encountered during field
survey.

36.5. *Neottia tenii* Schltr.

Distribution: Jomsom.
Altitude: 2200-2600 m.

Habitat:
Holomycotrophic on
under litter covered
forest.

Flowering: Jul-Aug.

Uses: Its ornamental and
medicinal uses are not
mentioned in existing
literatures.

Ref.: SP: 2.

Population status: Rarely
encountered during field
survey.



37. *Nervilia* Comm. ex Gaudich.

37.1. *Nervilia concolor* (Blume) Schltr.

Cordyla concolor Blume

Tall Shield Orchid, स्थल कमल (Sthal Kamal)

Distribution: Bhujung.

Altitude: 800-1500 m.

Habitat: Terrestrial on open forest or forest thicket. **Flowering:** May-Jun.

Uses: Medicinal.

Ref.: SP: 1, & M: 7.

Population status: Rarely encountered during field survey.



37.2. *Nervilia mackinnonii* (Duthie) Schltr.

Pogonia mackinnonii

Duthien

Distribution: Bhujung, Sikles. **Altitude:** 1200-2600 m.

Habitat: Terrestrial on litter covered land. **Flowering:** May-June. **Uses:** Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1.

Population status: Rarely encountered during field survey.



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37.3. *Nervilia plicata*
(Andrews) Schltr.

Arethusa plicata
Andrews

Distribution:
Bhujung. **Altitude:**
1000-2000 m.

Habitat: Terrestrial on
litter deposited areas.

Flowering: Apr-May.

Uses: Its ornamental
and medicinal uses
are not mentioned in
existing literatures.

Ref.: SP: 1.

Population status:
Rarely encountered
during field survey.

37.4. *Nervilia simplex*
(Thouars) Schltr.

Arethusa simplex
Thouars

Distribution: Bhujung.
Altitude: 1200-1700
m.

Habitat: Terrestrial
on forest thickets.

Flowering: May-June.

Uses: Its ornamental
and medicinal uses
are not mentioned in
existing literatures.

Ref.: SP: 1.

Population status:
Rarely encountered
during field survey.



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38. *Oberonia* Lindl.

38.1. *Oberonia acaulis* Griff.

Iridorchis myriantha (Lindl.)
Kuntze

Stem Less *Oberonia*

Distribution:

Bhujung, Ghandruk. **Altitude:**
900-2000 m.

Habitat: Epiphytes on *Alnus nepalensis*, *Engelhardtia spicata*, *Fraxinus floribunda*.

Flowering: Oct-Nov. **Uses:** Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1.

Population status: Commonly encountered during field survey.



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38.2. *Oberonia caulescens* Lindl.

Malaxis caulescens
(Lindl.) Rehb.f.

Distribution: Bhujung.
Altitude: 1600-2400 m.

Habitat: Epiphytes on *Alnus nepalensis*, *Castanopsis indica*, *Schima wallichii*, *Rhododendron arboreum*

Flowering: Jul-Sep.

Uses: Medicinal.

Ref.: SP: 1, & M: 1, 2, 3, 4, 5, 6, 7.

Population status: Rarely encountered during field survey.



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38.3. *Oberonia ensiformis* (Sm.) Lindl.

Malaxis ensiformis Sm.

Sword-Leaf Oberonia

Distribution: Bhujung, Sikles. **Altitude:** 800-1700 m.

Habitat: Epiphytes on *Artocarpus lacucha*, *Castanopsis indica*, *Mangifera indica*, *Schima wallichii*, *Terminalia bellirica*.

Flowering: Sep-Nov. **Uses:** Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1.

Population status: Commonly encountered during field survey.

38.4. *Oberonia falcata* King & Pantl.

Oberonia caudata King & Pantl.

Sickle-Leaf Oberonia,

Distribution: Bhujung, Ghandruk, Lwang, Sikles. **Altitude:** 1000-2300 m.

Habitat: Epiphytes on *Alnus nepalensis*, *Berberis asiatica*, *Ficus nemoralis*, *Prunus cerasoides*.

Flowering: Jun-Jul. **Uses:** Its ornamental and medicinal uses are not mentioned in existing literatures. **Ref.: SP:** 1. **Population status:** Commonly encountered during field survey.



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38.5. *Oberonia longilabris*
King & Pantl.

Longilabris Oberonia

Distribution: Bhujung,
Ghandruk. **Altitude:** 1600-
2200 m.

Habitat: Epiphytes on *Alnus*
nepalensis, *Berberis asiatica*

Flowering: Jul-Sep.

Uses: Its ornamental and
medicinal uses are not
mentioned in existing
literatures.

Ref.: SP: 1.

Population status: Commonly
encountered during field
survey.



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38.6. *Oberonia obcordata*
Lindl.

Malaxis obcordata (Lindl.)
Rchb.f.

**The Reverse Heart Shaped
Oberonia**

Distribution: Bhujung.
Altitude: 1200-1500 m.

Habitat: Epiphytes on *Schima*
wallichii. **Flowering:** Sep-Oct.

Uses: Its ornamental and
medicinal uses are not
mentioned in existing
literatures.

Ref.: SP: 1.

Population status: Rarely
encountered during field
survey.



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38.7. *Oberonia pachyrachis*
Rchb.f. ex Hook.f.

Iridorchis pachyrachis
(Rchb.f. ex Hook.f.) Kuntze

The Thick Spine Oberonia

Distribution: Bhujung, Lwang, Sikles. **Altitude:** 1600-2500 m.

Habitat: Epiphytes on *Alnus nepalensis*, *Bombax ceiba*, *Ficus roxburghii*, *Fraxinus floribunda*, *Machilus odoratissimus*.

Flowering: Aug.-Nov.

Uses: Its ornamental and medicinal uses are not mentioned in existing literatures. **Ref.:** SP: 1.

Population status: Commonly encountered during field survey.

38.8. *Oberonia rufilabris*
Lindl.

Oberonia nepalensis
L.R.Shakya & R.P.Chaudhary

The Fox-Red Lip Oberonia

Distribution: Bhujung, Ghandruk, Lwang. **Altitude:** 1200-1900 m.

Habitat: Epiphytes on *Alnus nepalensis*, *Engelhardtia spicata*, *Schima wallichii*.

Flowering: Nov-Jan. **Uses:** Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1. **Population status:** Rarely encountered during field survey.



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39. *Odontochilus* Blume

39.1. *Odontochilus lanceolatus* (Lindl.) Blume

Anoectochilus lanceolatus
Lindl.

The Lanceolate *Odontochilus*

Distribution: Bhujung.

Altitude: 1300-2000 m.

Habitat: Terrestrial on wet and cool forest understories, near to stream sites.

Flowering: Jun-Sep. **Uses:** Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1.

Population status: Rarely encountered during field survey.



39.2. *Odontochilus pumilus* Hook.f.

Myrmechis pumila (Hook.f.)
Tang & F.T.Wang

The Small Flowered *Myrmechis*

Distribution: Bhujung,
Ghandruk. **Altitude:** 2500-
2800 m.

Habitat: Terrestrial on wet and cool forest understories.

Flowering: Jul-Aug. **Uses:** Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1.

Population status: Rarely encountered during field survey.



40. *Oreorchis* Lindl.

40.1. *Oreorchis foliosa* (Lindl.) Lindl.

Corallorhiza foliosa Lindl.

Leafy *Oreorchis*

Distribution: Bhujung, Ghandruk, Manang.

Altitude: 2100-3500 m.

Habitat: Terrestrial on wet and cool understories of Berberis and Rhododendron forest. **Flowering:** Jun-Aug.

Ref.: SP: 1.

Population status: Commonly encountered during field survey.

40.2. *Oreorchis micrantha* Lindl.

Oreorchis rolfei Duthie

Small Flowered *Oreorchis*

Distribution: Bhujung, Ghandruk, Manang, Sikles. **Altitude:** 1900-3300 m.

Habitat: Terrestrial on forest understories.

Flowering: Jun.

Ref.: SP: 1.

Population status: Rarely encountered during field survey.



40.3. *Oreorchis nepalensis* N. Pearce & P. J. Cribb

Distribution:

Ghandruk, Jomsom.
Altitude: 2700-3100 m.

Habitat: Terrestrial on moist shaded grassland.

Flowering: May-Jun.

Uses: Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1.

Population status:

Rarely encountered during field survey.



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41. *Papilionanthe* Schltr.

41.1. *Papilionanthe uniflora* (Lindl.) Garay

Aerides uniflora (Lindl.)
Summerh.

Single Flowered-Butterfly Orchid

Distribution: Bhujung, Lwang.

Altitude: 1600-2000 m.

Habitat: Epiphytes on *Schima wallichii*. **Flowering:** Jul-Aug.

Uses: Ornamental.

Ref.: SP: 1, & O: 2.

Population status: Rarely encountered during field survey.



42. *Pecteilis* Raf.

42.1. *Pecteilis susannae* (L.) Raf.

Orchis susannae L.

Distribution:

Ghandruk.

Altitude: 1500-2000 m.

Habitat:

Terrestrial on grassland slopes.

Flowering: Jul-Sep.

Uses: Medicinal & Ornamental. **Ref.:**

SP: 5, **M:** 7, &

O: 2. **Population**

status: Rarely encountered during field survey.

43. *Peristylus* Blume

43.1. *Peristylus biermannianus* (King & Pantl.) X.H.Jin, Schuit. & W.T.Jin

Habenaria biermanniana King & Pantl.

Distribution: Bhujung.

Altitude: 2000-3000 m.

Habitat: Terrestrial on wet and cool grassland and forest understories. **Flowering:**

Jul-Oct. **Uses:** Its ornamental and medicinal uses are not mentioned in existing literatures. **Ref.:** **SP:** 1.

Population status: Rarely encountered during field survey.



43.2. *Peristylus goodyeroides* (D.Don)
Lindl.

Habenaria goodyeroides
D.Don

**The Goodyera-Like
Peristylus**

Distribution: Bhujung.

Altitude: 1000-2000 m.

Habitat: Terrestrial on
open grassland slopes.

Flowering: Jun-Aug.

Uses: Medicinal &
Ornamental. **Ref.:** SP: 1,
M: 1, 2, 3, 4, 5, 6, 7, &
O: 1.

Population status: Rarely
encountered during field
survey.



44. *Phalaenopsis* Blume

44.1. *Phalaenopsis difformis*
(Wall. ex Lindl.) Kocyan &
Schuit.

Ornithochilus difformis (Wall. ex
Lindl.) Schltr.

Himalayan Bird-Lip Orchid

Distribution: Bhujung.

Altitude: 900-2000 m.

Habitat: Epiphytes on
Castanopsis indica, *Ficus*
glaberrima, *Ficus nemoralis*,
Ficus semicordata, *Schima*
wallichii.

Flowering: Jun-Jul.

Uses: Ornamental. **Ref.:** SP: 1,
& O: 1.

Population status: Rarely
encountered during field survey.



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44.2. *Phalaenopsis taenialis* (Lindl.)

Christenson & Pradhan

Aerides taenialis Lindl.

The Bandage-Like *Phalaenopsis*

Distribution: Bhujung.

Altitude: 1400-2300 m.

Habitat: Epiphytes on *Alnus nepalensis*, *Daphniphyllum himalense*, *Viburnum erubescens*. **Flowering:** Apr-Jun.

Uses: Ornamental. **CS:**

Ref.: SP: 1, & O: 2.

Population status: Rarely encountered during field survey.

45. *Pinalia* Lindl.

45.1. *Pinalia annapurnensis* (L.R.Shakya & M.R.Shrestha) Schuit., Y.P.Ng & H.A.Pedersen

Eria annapurnensis L.R.Shakya & M.R.Shrestha

Distribution: Ghandruk, endemic to Nepal. **Altitude:** 2000 m.

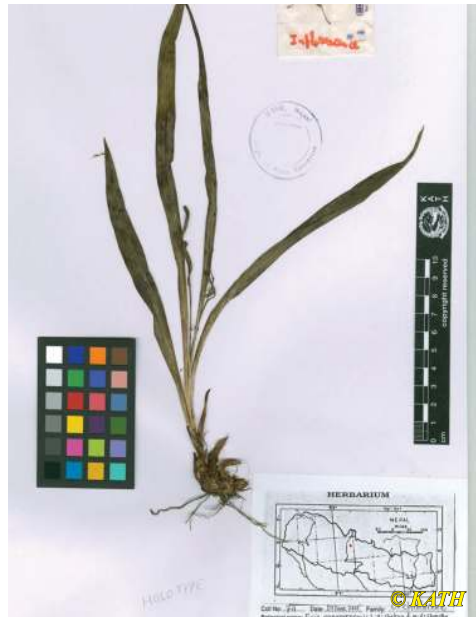
Habitat: Epiphytes on *Schima wallichii*.

Flowering: Jun-Aug.

Uses: Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 3.

Population status: Rarely encountered during field survey.



45.2. *Pinalia apertiflora*
(Summerh.) A.N.Rao

Eria apertiflora
Summerh.

Distribution:

Bhujung, Ghandruk.
Altitude: 1400-1600
m.

Habitat: Epiphytes
on *Quercus*
semicarpifolia.

Flowering: Aug-Sep.

Uses: Ornamental.

Ref.: SP: 1, & O: 2.

Population status:
Rarely encountered
during field survey.



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45.3. *Pinalia bipunctata*
(Lindl.) Kuntze

Eria bipunctata
Lindl.

**The Two
Spotted Eria**

Distribution:

Bhujung,
Ghandruk.
Altitude: 1400-
1700 m.

Habitat:

Epiphytes on
Castanopsis
indica, *Machilus*
odoratissimus,
Pouzolzia

rugulosa, *Schima wallichii*. **Flowering:** Jun-Jul. **Ref.:** SP: 1.

Population status: Rarely encountered during field survey.



45.4. *Pinalia excavata*
(Lindl.) Kuntze

Eria excavata Lindl.

Lovely Pinalia

Distribution: Bhujung, Ghandruk, Lwang, Manang.

Altitude: 1700-2500 m.

Habitat: Epiphytes on *Daphniphyllum himalense*, *Quercus lamellosa*, *Rhododendron arboreum*, *Semecarpus anacardium*.

Flowering: May-Jun.

Uses: Its ornamental and medicinal uses are not mentioned in existing literatures. **Ref.:** SP: 1.

Population status:

Commonly encountered during field survey.

45.5. *Pinalia graminifolia*
(Lindl.) Kuntze

Eria graminifolia Lindl.

Distribution:

Bhujung, Manang.

Altitude: 2200-2600 m.

Habitat: Epiphytes on *Quercus lamellosa*, *Rhododendron arboreum*.

Flowering: Aug-

Sep. **Uses:** Its ornamental and medicinal uses are not mentioned in existing literatures. **Ref.:** SP: 1.

Population status: Rarely encountered during field survey.



45.6. *Pinalia leucantha* Kuntze

Eria alba Lindl.

Distribution: Lwang.

Altitude: 1840 m.

Habitat: Epiphytes on *Quercus Griffithii*, *Schima wallichii*.

Flowering: Apr-Jun.

Uses: Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1.

Population status: Rarely encountered during field survey.



© R Acharya



© KATH

45.7. *Pinalia pokharensis* (Bajrach., Subedi & K.K.Shrestha) Schuit., Y.P.Ng & H.A.Pedersen

Eria pokharensis Bajrach., Subedi & K. K. Shrestha

Distribution:

Ghandruk. **Endemic to ACA. Altitude:** 900-2100 m.

Habitat: Lithophytes on open area on the rock.

Flowering: Aug-Sep.

Uses: Its ornamental and medicinal uses are not mentioned in existing

literatures. **Ref.:** SP: 3.

Population status: Rarely encountered during field survey



45.8. *Pinalia spicata*
(D.Don) S.C.Chen &
J.J.Wood

Eria spicata (D.Don)
Hand.-Mazz.

**Lily of the Valley
Orchid / Spicate Eria**

Distribution: Bhujung,
Sikles. **Altitude:** 1000-
2100 m.

Habitat: Epiphytes
on *Eurya cerasifolia*,
Machilus odoratissimus,
Pouzolzia rugulosa,
Schima wallichii, and
lithophytes on rock
services. **Flowering:**
Jul-Aug.

Uses: Medicinal & Ornamental. **Ref.:** SP: 1, & M: 1, 2, 3, 4, 5, 6,7.
Population status: Commonly encountered during field survey.

46. *Platanthera* Rich.

46.1. *Platanthera bakeriana* (King &
Pantl.) Kraenzl.

Habenaria bakeriana King & Pantl.

Distribution: Bhujung. **Altitude:** 2500-
3000 m.

Habitat: Terrestrial on open alpine
pastureland. **Flowering:** Jul-Aug.

Uses: Its ornamental and medicinal uses
are not mentioned in existing literatures.

Ref.: SP: 1.

**Population
status:**

Commonly
encountered
during field
survey.



46.2. *Platanthera japonica* (Thunb.) Lindl.

Orchis japonica Thunb.

Distribution: Ghandruk. **Altitude:** 2600-3100 m.

Habitat: Terrestrial on moist humus soil under Rhododendron forest.

Flowering: Jun-Aug.

Uses: Medicinal.

Ref.: SP: 1, &

M: 7.

Population status:

Commonly encountered during field survey.



46.3. *Platanthera leptocaulon* (Hook.f.) Soó

Habenaria leptocaulon Hook.f.

Distribution: Bhujung. **Altitude:** 2800-3200 m.

Habitat: Terrestrial on cool and wet grassland and forest understories.

Flowering: Aug-Oct.

Uses: Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1.

Population status: Rarely encountered during field survey.



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46.4. *Platanthera sikkimensis*
(Hook.f.) Kraenzl.

Habenaria sikkimensis Hook.f.

Distribution: Bhujung. **Altitude:** 2600-3200 m.

Habitat: Epiphytes on *Daphniphyllum himalense*.

Flowering: Jul-Aug.

Uses: Medicinal.

Ref.: SP: 1, & M: 7.

Population status: Rarely encountered during field survey.

46.5. *Platanthera stenantha* (Hook.f.) Soó

Habenaria stenantha Hook.f.

The Slim Flowered Platanthera

Distribution: Bhujung, Ghandruk, Lwang. **Altitude:** 2600-3200 m.

Habitat: Terrestrial on cool and wet forest understories, rarely in most covered big tree.

Flowering: Aug-Sep.

Ref.: SP: 1.

Population status: Commonly encountered during field survey.



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46.6. *Platanthera stenoglossa* Hayata

Platanthera stenosepala Schltr.

Orchid

Distribution:

Ghandruk.

Altitude: 3200 m.

Terrestrial:

Terrestrial on moist humus soil under cover of forest.

Flowering: Aug-Sep.

Ref.: SP: 2.

Population status:

Rarely encountered during field survey.



46.7. *Platanthera urceolata* (C.B.Clarke) R.M.Bateman

Habenaria urceolata
C.B.Clarke

The Jug-Like Diphyllax

Distribution: Bhujung.

Altitude: 2800-3200 m.

Habitat: Terrestrial on cool and wet grassland and forest understories or moss covered tree trunk and rock.

Flowering: Aug-Nov. **Uses:** Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1.

Population status:

Commonly encountered during field survey.



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47. *Pleione* D.Don

47.1. *Pleione hookeriana* (Lindl.) Rollisson

Coelogyne hookeriana Lindl.

Hooker's Pleione

Distribution: Bhujung, Ghandruk, Lwang.

Altitude: 2500-3400 m.

Habitat: Epiphytes on *Acer oblongum*, *Quercus lamellosa*, *Rhododendron arboreum*, *Taxus wallichiana*,

and lithophytes on moss covered rock.

Flowering: Apr-Jun.

Uses: Its ornamental and

medicinal uses are not mentioned in existing literatures. **Ref.:** SP: 1.

Population status: Commonly encountered during field survey.

47.2. *Pleione humilis* (Sm.) D.Don

Epidendrum humile Sm.

The low -Growing Pleione / Peacock

Orchid, हात्ती/ बत्ति टाउके (Hatti /Batti Taauke)

Distribution: Bhujung, Manang. **Altitude:** 2000-2700 m.

Habitat: Epiphytes on *Castanopsis indica*, *Daphniphyllum*

himalense, *Eurya cerasifolia*, *Quercus lamellosa*, *Rhododendron arboreum*, *Tsuga dumosa*, and lithophytes on rock cervices. **Flowering:** Feb-Mar. **Uses:** Medicinal. **Ref.:** SP: 1, & M: 1, 2, 5, 7.

Population status: Commonly encountered during field survey.



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47.3. *Pleione praecox* (Sm.) D. Don

Epidendrum praecox Sm.

The early blooming Oleione, लसुन पाते/शक्ति गुम्बा (Lasun Pate/Shakti Gumba)

Distribution: Bhujung, Ghandruk, Lwang, Sikles. **Altitude:** 1800-2600 m.

Habitat: Epiphytes on *Castanopsis indica*, *Lyonia ovalifolia*, *Quercus lamellosa*, *Rhododendron arboreum*, and lithophytes on rock cervices. **Flowering:** Sep-Nov.

Uses: Medicinal.

Ref.: SP: 1, & M: 1, 2, 3, 4, 5, 6, 7.

Population status: Commonly encountered during field survey.



48. *Podochilus* Blume

48.1. *Podochilus cultratus* Lindl.

Knife-Like Podochilus

Distribution: Bhujung. **Altitude:** 800-1300 m.

Habitat: Epiphytes on *Schima wallichii*.

Flowering: Sep-Oct.

Uses: Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1.

Population status: Rarely encountered during field survey.



49. *Porpax* Lindl.
49.1. *Porpax elwesii*
 (Rchb.f.) Rolfe

Eria elwesii Rchb.f.
Elwes's Bulbophyllum

Distribution: Bhujung.
Altitude: 800-1500 m.

Habitat: Epiphytes on *Schima wallichii*, and lithophytes on rock crevices.

Flowering: Aug-May.

Uses: Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1.

Population status: Rarely encountered during field survey.

49.2. *Porpax parviflora*
 (D.Don) Ormerod & Kurzweil

Dendrobium parviflorum
 D.Don

The moss-growing Eria

Distribution: Bhujung.
Altitude: 800-1700 m.

Habitat: Epiphytes on *Lyonia ovalifolia*, *Schima wallichii*, and lithophytes on rock crevices.

Flowering: Jul-Aug.

Uses: Medicinal.

Ref.: SP: 1, & M: 7.

Population status: Rarely encountered during field survey.



50. *Rhynchostylis* Blume

50.1. *Rhynchostylis retusa* (L.) Blume

Epidendrum retusum L.

Foxtail Orchid, घोडे गाभा (Ghode Gabha)

Distribution: Bhujung, Ghandruk, Lwang. **Altitude:** 800-1200 m.

Habitat: Epiphytes on *Artocarpus integer*, *Bombax ceiba*, *Callicarpa arborea*, *Fraxinus floribunda*, *Garuga pinnata*, *Lagerstroemia parviflora*, *Phyllanthus emblica*, *Plumeria rubra*, *Pouzolzia rugulosa*, *Premna serratifolia*, *Schima wallichii*.

Flowering: May-Jun.

Uses: Medicinal. **Ref.:** SP: 1, M: 1, 2, 3, 4, 7, & O: 1.

Population status: Commonly encountered during field survey.



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51. *Satyrium* Sw.

51.1. *Satyrium nepalense* var. *ciliatum* (Lindl.) Hook.f.

Satyrium ciliatum Lindl.

Nepal Satyrium, थाम्नी (Thamni)

Distribution: Bhujung, Ghandruk, Manang. **Altitude:** 2400-3300 m.

Habitat: Terrestrial on forest understories.

Flowering: Aug-Oct.

Uses: Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1.

Population status: Commonly encountered during field survey.



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51.2. *Satyrium nepalense*
D. Don

Nepal Satyrium,
गामडोल / थाम्नी (**Gamdol/**
Thamni)

Distribution: Bhujung,
Ghandruk, Jomsom,
Lomanthang, Lwang,
Manang, Sikles.

Altitude: 2400-4200 m.

Habitat: Terrestrial on
Forest understories.

Flowering: Jul-Nov.

Uses: Medicinal & Food.

Ref.: SP: 1, M: 1, 2, 3, 4,
5, 6, 7, & F: 1.

Population status:
Commonly encountered
during field survey.

52. *Smitinandia* Holttum

**52.1. *Smitinandia micrantha* (Lindl.)
Holttum**

Saccolabium micranthum Lindl.

Small Flowered Smitinandia, थिर्जो
(Thirjo)

Distribution: Bhujung, Ghandruk.

Altitude: 800-1000 m.

Habitat: Epiphytes on *Artocarpus*
integer, *Artocarpus lacucha*, *Ficus*
benghalensis, *Ficus benghalensis*, *Ficus*
glaberrima, *Ficus lacor*, *Ficus religiosa*,
Garuga pinnata, *Mangifera indica*,
Schima wallichii. **Flowering:** Apr.

Uses: Medicinal and Ornamental. **Ref.:**
SP: 1, M: 1, & O: 1.

Population status: Commonly
encountered during field survey.



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53. *Spathoglottis* Blume

53.1. *Spathoglottis ixioides* (D.Don) Lindl.

Cymbidium ixioides
D.Don

Distribution: Ghandruk.

Altitude: 1500-2300 m.

Habitat: Terrestrial on moist soil and lithophytes on rock crevices.

Flowering: Aug-Sep.

Uses: Ornamental.

Ref.: SP: 5, O :1, 2.

Population status:

Rarely encountered during field survey.



54. *Spiranthes* Rich.

54.1. *Spiranthes sinensis* (Pers.) Ames

Neottia sinensis Pers.

Chinese Lady's Tresses

Distribution: Bhujung, Ghandruk, Jomsom, Manang, Sikles. **Altitude:** 800-2000 m.

Habitat: Terrestrial on open or degraded grazing land. **Flowering:** Jul-Aug.

Uses: Medicinal & Ornamental.

Ref.: SP: 1, & M: 1, 2, 3, 4.

Population status: Rarely encountered during field survey.



55. *Taeniophyllum*
Blume

55.1. *Taeniophyllum*
scaberulum Hook.f.

Distribution:

Bhujung. **Altitude:**
800-2200 m.

Habitat: Epiphytes
on *Daphniphyllum*
himalense.

Flowering: Jun.

Uses: Its ornamental
and medicinal uses
are not mentioned in
existing literatures.

Ref.: SP: 1.

Population status:
Rarely encountered
during field survey.

56. *Tainia* Blume

56.1. *Tainia minor* Hook.f.

Tiny *Tainia*

Distribution: Bhujung.
Altitude: 1700-2200 m.

Habitat: Terrestrial on forest
understories, cool and wet
area.

Flowering: May-Aug.

Uses: Its ornamental and
medicinal uses are not
mentioned in existing
literatures.

Ref.: SP: 1.

Population status: Rarely
encountered during field
survey.



57. *Thunia* Rchb.f.

57.1. *Thunia alba* (Lindl.) Rchb.f.

Phaius albus Lindl.

White Thunia, चांदे फूल (Chaande Phool)

Distribution: Bhujung.

Altitude: 1000-1800 m.

Habitat: Epiphytes on

Pouzolzia rugulosa,

Schima wallichii,

Alnus nepalensis,

and lithophytes on rock

crevices. **Flowering:** May-Jul.

Uses: Medicinal and Ornamental. **Ref.:** SP: 1, M: 1, 2, 3, 5, 7, & O: 1.

Population status: Commonly encountered during field survey.



57.2. *Thunia alba* var. *bracteata* (Roxb.) N.Pearce & P.J.Cribb

Limodorum bracteatum Roxb.

Veined Thunia,

Distribution: Bhujung, Ghandruk, Lwang, Sikles.

Habitat: Epiphytes on

Schima wallichii,

Mangifera indica,

Heynea trijuga, and

lithophytes on rock crevices.

Flowering: Jul-Aug.

Uses: Ornamental & Forage.

Ref.: SP: 1, O, & F: Field Study.

Population status:

Commonly encountered during field survey.

58. *Tipularia* Nutt.

58.1. *Tipularia josephi* Rehb.f. ex Lindl.

Distribution: Bhujung. **Altitude:** 2700-3100 m.

Habitat: Terrestrial on moist slopes as understores of *Rhododendron arboreum* forest. **Flowering:** Jul-Aug. **Uses:** Its ornamental and medicinal uses are not mentioned in existing literatures. **Ref.:** SP: 1.

Population status: Rarely encountered during field survey.



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59. *Vanda* R.Br.

59.1. *Vanda cristata* Wall. ex Lindl.

Aerides cristata (Wall. ex Lindl.) Wall. ex Hook.f.

Comb Vanda / Comb Trudelia, भ्यागुते फूल/हरचुर (Bhyaagute phoo/harchur)

Distribution: Bhujung, Ghandruk, Lwang, Sikles. **Altitude:** 800-2200 m.

Habitat: Epiphytes on *Alnus nepalensis*, *Castanopsis hystrix*, *Castanopsis indica*, *Ficus nemoralis*, *Ficus roxburghii*, *Ficus semicordata*, *Litsea monopetala*, *Magnolia kisopa*, *Pouzolzia rugulosa*, *Premna serratifolia*, *Schima wallichii*. **Flowering:** May-Jun. **Uses:** Medicinal and Ornamental.

Ref.: SP: 1, M: 1, 2, 3, 7, O: 1.

Population status: Commonly encountered during field survey.



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60. Zeuxine Lindl.

60.1. Zeuxine affinis
(Lindl.) Benth. ex Hook.f.

Monochilus affinis Lindl.

SlenPouzolzia rugulosa
Zeuxine / Cleric's Collar
Orchid

Distribution: Bhujung.

Altitude: 800-1000 m.

Habitat: Terrestrial on open or degraded grazing land. **Flowering:** Feb-May. **Uses:** Its ornamental and medicinal uses are not mentioned in existing literatures. **Ref.: SP: 1.**

Population status:

Rarely encountered during field survey.

60.2. Zeuxine flava (Wall. ex Lindl.) Trimen

Monochilus flavus Wall. ex Lindl.

The Yellow Zeuxine

Distribution: Bhujung.

Altitude: 1400-1600 m.

Habitat: Terrestrial on forest understories and rocky boulders.

Flowering: May-Jun.

Uses: Its ornamental and medicinal uses are not mentioned in existing literatures.

Ref.: SP: 1.

Population status: Rarely encountered during field survey.



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60.3. *Zeuxine strateumatica* (L.) Schltr.

Orchis strateumatica L.

Soldier's Orchid / Lawn Orchid

Distribution: Bhujung. **Altitude:** 800-1000 m.

Habitat: Terrestrial on open levee banks. **Flowering:** Mar-Jul.

Uses: Its ornamental and medicinal uses are not mentioned in existing literatures. **Ref. SP:** 1, & **M:** 1, 2, 3, 4, 5, 7.

Population status: Rarely encountered during field survey.



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Reference code for Species: (1) Field Survey, (2) KATH, (3) Rokarya et al., 2012, (4) Shrestha et al., 2022, (5) Maden et al., 2029, (6) Chapagain et al., 2006. For Medicinal value: (1) Jambey et al., 2017, (2) Rajbhandari, 2014, (3) Pant, 2013, (4) Pant et al., 2013, (5) Acharya et al., 2010, (6) Vaidya et al., 2000, (7) Shrestha et al., 2022. For Ornamental value: (1) Rajbhanadri, 2014, (2) Shrestha et al., 2022. For Food value: (1) Shrestha et al., 2022.

Bibliography:

- Acharya, K. P., & Rokaya, M. B. (2010). Medicinal Orchids of Nepal: Are They Well Protected? *Our Nature*, 8 (1): 82-91. <https://doi.org/10.3126/on.v8i1.4315>
- Baral, R. (2018). Birds of Annapurna Conservation Area. National Trust for Nature Conservation, Annapurna Conservation Area Project, Pokhara, Nepal. <https://ntnc.org.np/publication/birds-annapurna-conservation-area>
- Chalise, P., Paneru, Y. R., & Ghimire, S. K. (2019). Floristic diversity of vascular plants in Gyasumbdo Valley, Lower Manang, central Nepal. *Journal of Plant Resources*, 17 (1): 42-57.
- Chapagain, N., & Chetri, M. (2006). Biodiversity Profile of Upper Mustang. National Trust for Nature Conservation, Annapurna Conservation Area Project, Upper Mustang Biodiversity Conservation Project, Kathmandu, Nepal. IV + 32 pp.
- Chetri, M., Chapagain, N. R., & Neupane, B. D. (2006). Flowers of Mustang: A pictorial Guidebook. National Trust for Nature Conservation, Annapurna Conservation Area Project, Upper Mustang Biodiversity Conservation Project. Kathmandu, Nepal. VI + 196pp.
- Givnish, T. J., Spalink, D., Ames, M., Lyon, S. P., Hunter, S. J., Zuluaga, A., Iles, W. J. D., Clements, M. A., Arroyo, M. T. K., Leebens-Mack, J., Endara, L., Kriebel, R., Neubig, K. M., Whitten, W. M. Williams, N. H., & Cameron, K. M. (2015). Orchid phylogenomics and multiple drivers of their extraordinary diversification. *Proceedings of the Royal Society B: Biological Sciences*, 282(1814). <https://doi.org/10.1098/rspb.2015.1553>
- Jambey, T., Ngilyang, T., Hui, T., Baikuntha, Jyoti Gogoi, & Apang, O. (2017). Medicinal Orchids of Arunachal Pradesh: a Review. *Bulletin of Arunachal Forest Research*, 32 (1 & 2): 1-16. <http://sfrbulletin.org.in/wp-content/uploads/2017/07/Vol.-3212-1-16.pdf>
- Khakurel, D., Uprety, Y., & Rajbhandary, S. (2020). Floristic diversity of vascular plants in Sikles region of Annapurna Conservation Area, Nepal. *Journal of Plant Resources*, 18(1).
- KATH, (2019). Herbarium Plant Database. National Herbarium and Plant Laboratories. Godawari, Lalitpur, Nepal.
- Koju, L., Shrestha, N., Raskoti, B. B., Ale, R., Ghimire, N. P., & Shrestha, S. (2023). Spatial patterns, underlying drivers and conservation priorities of orchids in the central Himalaya. *Biological Conservation*, 283,

110121. <https://doi.org/10.1016/J.BIOCON.2023.110121>

- Maden, K., Dahal, M., Baral, R., Basaula, R., Limbum, K. P., Bashyal, S., & Pun, J. (2019). Biodiversity study of Narchyang and its vicinities of Annapurna Conservation Area, Myagdi district, Nepal. Robust Energy Ltd. Pani Pokhari, Kathmandu, Nepal.
- Pant, B. (2013). Medicinal orchids and their Uses: Tissue culture a potential alternative for conservation. *African Journal of Plant Science*, 7 (10): 448-467. <https://doi.org/10.5897/ajps2013.1031>
- Pant, B., & Raskoti, B. B. (2013). Medicinal Orchids of Nepal. Himalayan Map House (P.) Ltd. Basantapur, Kathmandu, Nepal.
- POWO (2024). "Plants of the World Online. Facilitated by the Royal Botanic Gardens, Kew. Published on the Internet; <https://powo.science.kew.org/> Retrieved 05 December 2024."
- Rajbhandari, K. R. (2014). Orchids of Nepal: Status, Threat and Conservation. Proceedings of National Workshop on NTFPs/MAPs Sector Action Plan Development: Orchid, Table 3, 1–40.
- Raskoti B. B.(2009). The Orchids of Nepal. Bhakta Bahadur Raskoti and Rita Ale, Kathmandu.
- Raskoti, B. B., & Ale, R. (2019). New species of orchids and notes on Orchidaceae of Nepal. *Phytotaxa* 394 (4): 257–266.
- Rokaya, M. B., Raskoti, B. B., Timsina, B., & Münzbergová, Z. (2013). An annotated checklist of the orchids of Nepal. *Nordic Journal of Botany*, 31 (5): 511-550. <https://doi.org/10.1111/j.1756-1051.2013.01230.x>
- Shrestha, K. K., Bhandari, P. & Bhattacharai, S. (2022). Plants of Nepal (Gymnosperms and Angiosperms). 1088. <https://heritagebooks.com.np/product/plants-of-nepal-gymnosperms-and-angiosperms/>
- Tiruwa, B. L., Neupane, B. D., Kadariya, R., Pokheral, C. P., & Pant, B. (2024). Diversity of Orchids in Terms of Their Distribution, Uses and Conservation in Annapurna Conservation Area of Nepal. *American Journal of Plant Sciences*, 15 (6): 422-440. <https://doi.org/10.4236/ajps.2024.156030>
- Vaidya, B., Shrestha, M., & Joshee, N. (2000). Report on Nepalese Orchid Species with Medicinal Properties. Proceeding of Nepal-Japan Joint Symposium-2000, January, 146–152.

Photos taken during field work: Lwang

BL Tiruwa is taking photo of orchid during field survey in Lwang



Ramji Acharya is looking for orchid during field survey in Lwang Ghalel

Photos taken during field work: Lwang

Yam Bahadur Gurung is taking photo of orchid during field survey in Ghandruk



BL Tiruwa is taking data of orchid during field survey in Lwang

Photos taken during field work: Manang



Prakash Adhikari is taking photo of orchid during field survey in Manang



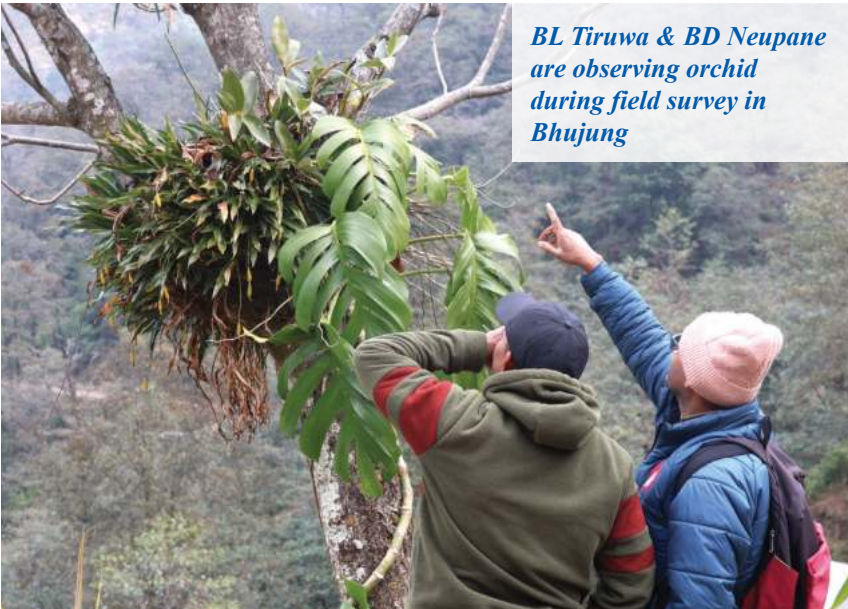
BL Tiruwa is taking photo during field survey in Manang

Photos taken during field work: Bhujung

BL Tiruwa & BD Neupane are taking orchid photo during field survey in Bhujung



BL Tiruwa & BD Neupane are observing orchid during field survey in Bhujung





Rhynchosstylis retusa © BL Tiruwa



Epipogium aphyllum © BL. Tiruwa



Calanthe brevicornu © BD Neupane



Pleione praecox © BB Raskoti



Coelogyne pallida © RP Paudel



Oreorchis micrantha © BL Tiruwa



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