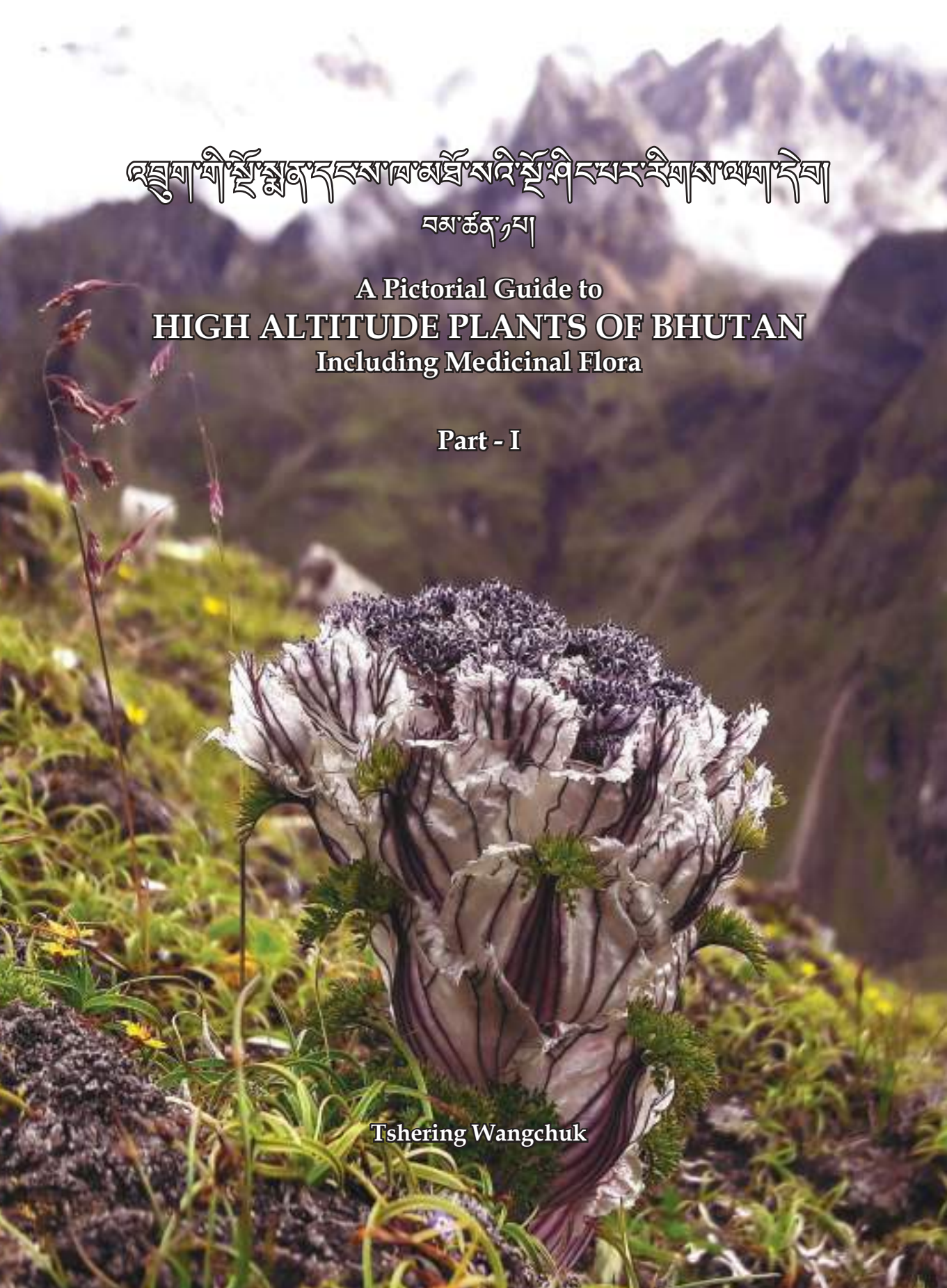
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བམ་ཚན་༡།

A Pictorial Guide to
HIGH ALTITUDE PLANTS OF BHUTAN
Including Medicinal Flora

Part - I



Tshering Wangchuk

འབྲུག་གི་སྤོ་སྨན་དང་ས་ཁ་མཐོ་སའི་སྤོ་ཤིང་པར་རིགས་ལག་དེབ།

བམ་ཚན་༡པ།

A Pictorial Guide to

HIGH ALTITUDE PLANTS OF BHUTAN

Including Medicinal Floras

Part-I

Tshering Wangchuk





དུས་ནམ་ཅིག་གི་ཚེ་ང་བཅས་རའི་རྒྱལ་ཁབ་ལུ་སྐྱབས་མ་བདེ་ཤ་རེ་འཐོན་ཏེ་ རོགས་ཕྱི་ཁའི་སྨན་ཚུ་ངེ་བཅས་རའི་རྒྱལ་ཁབ་ནང་ལུ་བཏང་མ་བཏུབ་འདུ་ཤ་ཅིག་འབད་བ་ཅིན་ ངེ་བཅས་རའི་ནང་ཁའི་གསོ་བ་རིག་ཁའི་སྨན་གྱིས་འབྲུག་ཁའི་མི་སེང་གི་ང་ལུ་ཞུབ་ཚུགས་འབད་དགོ། དེ་འབད་ནི་འདི་གིས་རྒྱལ་ཁབ་ནང་འཛོད་ལུ་ཡོད་ཁའི་སྨན་འདི་ཚུ་གི་དེ་ཅན་བདག་འཛིན་འབད་དེ་གོང་འཕེལ་བཏང་དགོས་ཁག་ཆེ།

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DEDICATION



This book is humbly dedicated to all those remarkable individuals who have walked the forests, mountains, valleys, and sacred landscapes of Bhutan with unwavering dedication to research, document, and conserve the extraordinary wealth of our flora and fauna.



འབྲུག་གི་སྨོ་སྨན་དང་ས་ཁ་མཐོ་སའི་སྨོ་ཤིང་པར་རིགས་ལག་དེབ། བམ་ཚན་༡ པ། དཔྱིད་ཟླ་༡༢པ། ༢༠༢༢

A Pictorial Guide to High Altitude Plants of Bhutan-Including Medicinal Floras
Part-I-December 2022

Peer Reviewed by:

1. Rinchen Yangzom, NBC, MoAF
2. Ngawang Gyeltshen, NCD, DoFPS, MoAF

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The medicinal plants described in this guideline are intended solely for educational, research, and professional reference purposes. Readers should not independently collect, prepare, process, or use any medicinal plants for therapeutic purposes without the guidance of a qualified TM practitioner. The safe and effective use of medicinal plants requires accurate species identification, appropriate collection and processing, correct dosage, and careful consideration of the patient's condition. Many traditional formulations consist of multiple ingredients that work synergistically to enhance therapeutic efficacy and minimise potential adverse effects. The use of individual plants outside their traditional formulations may reduce effectiveness or pose health risks. Readers are therefore strongly advised against self-medication based on the information contained in this publication.

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དཔལ་ལྡན་འབྲུག་གཞུང་།
གསོལ་བཅུམ་ཁང་།
ཐིམ་ཕུ།

ROYAL GOVERNMENT OF BHUTAN
MINISTRY OF HEALTH
THIMPHU: BHUTAN
P.O. BOX: 726

ཨོ་ཏོ།
MINISTER

FOREWORD

Since the formal integration of Traditional Medicine Services into Bhutan's National Healthcare System in 1968, Bhutan has demonstrated a steadfast commitment to preserving, promoting, and advancing its rich medical heritage as an integral component of the country's healthcare delivery system. Rooted in the profound principles of gSo-ba Rig-pa and guided by the national development philosophy of Gross National Happiness, TM has evolved into a scientifically informed, patient-centered, and culturally relevant healthcare system that complements modern medical services while safeguarding centuries-old knowledge and practices.

Over the past five decades, Traditional Medicine Services have achieved remarkable progress in expanding healthcare access, improving the quality of clinical services, strengthening pharmaceutical production, developing specialised human resources, enhancing infrastructure, promoting research and innovation, undertaking scientific validation of traditional therapies, and establishing robust institutional and regulatory frameworks.

Today, TM Services are delivered through a network of 84 TM Hospitals and Units strategically established across all twenty Dzongkhags, ensuring that safe, effective, accessible, and quality traditional healthcare services are available to communities throughout the country.

The continued expansion of TM services has, however, been accompanied by an increasing demand for medicinal resources. Bhutan's rich medicinal flora forms the cornerstone of the TM system. These invaluable natural resources are now facing mounting pressures from exploitation, habitat destruction, climate change, illegal collection and trading, and other anthropogenic influences. Such challenges threaten not only the survival of many medicinal plant species but also the long-term sustainability of the Traditional Medicine system that depends upon them.

Recognising the strategic importance of conserving these invaluable biological resources, the Department of Traditional Medicine Services has initiated a resource mapping programme to systematically document the diversity, distribution, density, and ecological characteristics of medicinal plant species. The programme seeks to establish a comprehensive national inventory of medicinal resources of Bhutan, which will provide an essential foundation for evidence-based conservation planning, sustainable

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ROYAL GOVERNMENT OF BHUTAN
MINISTRY OF HEALTH
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collection, monitoring, and informed policy decisions that will safeguard these precious resources for future generations.

In this context, the publication of A Pictorial Guide to High-Altitude Plants of Bhutan is both timely and significant. This guide represents an important contribution towards the documentation of Bhutan's high-altitude plants, including medicinal flora. It will serve as a reference during resource mapping, biodiversity assessment, botanical surveys, conservation programmes, and research on high-altitude plants. By bringing together scientific classification and Sorig nomenclature, it will greatly facilitate the accurate identification of medicinal plant species.

Therefore, I would like to express my appreciation and commendation to Mr Tshering Wangchuk, Senior Programme Officer of the Sorig Research and Development Division, Department of Traditional Medicine Services, Ministry of Health, for his vision, dedication, and painstaking efforts in conceptualising and developing this invaluable publication. His commitment to documenting Bhutan's medicinal plant wealth reflects a deep sense of responsibility towards preserving our nation's natural heritage and strengthening the scientific foundation of the TM of Bhutan.

I am confident that this guideline will serve as an invaluable reference for researchers, forestry professionals, medicinal plant collectors, farmers, pharmaceutical personnel, Traditional Medicine practitioners, and all stakeholders engaged in the conservation and sustainable utilisation of Bhutan's medicinal plant resources. Through collective commitment and coordinated action, we can ensure the sustainable availability of high-quality medicinal raw materials while conserving Bhutan's exceptional biodiversity for future generations.

I hope that this publication will further strengthen the conservation, scientific management, and sustainable utilisation of Bhutan's medicinal plant resources, thereby supporting the continued growth and excellence of Traditional Medicine Services in Bhutan.

Dasho Dechen Wangmo
HEALTH MINISTER

PREFACE

Bhutan, the cradle of medicinal plants, is nestled within the southern slopes of the Eastern Himalayas and represents one of the most biologically significant region in the world owing to its exceptional ecological integrity, extensive forest cover, diverse ecosystems, remarkable altitudinal gradients, and a comprehensive network of protected areas interconnected through biological corridors. Situated within the Himalayan Biodiversity Hotspot, Bhutan's unique geographical position, complex topography, and climatic variability have created a remarkable diversity of habitats and ecological niches that support an extraordinary assemblage of flora and fauna. These ecosystems harbour numerous endemic, rare, endangered, and globally threatened species, making Bhutan a priority region for biodiversity conservation, ecological research, and sustainable natural resource management.

Bhutan's ecological diversity is reflected in its wide range of vegetation zones, extending from subtropical broadleaf forests in the southern foothills to temperate mixed forests, conifer forests, alpine meadows, and high Himalayan scree ecosystems. This pronounced ecological gradient provides suitable habitats for thousands of plant species, many of which possess significant medicinal, ecological, cultural, and economic value. Among these biological resources, medicinal plants occupy a particularly important position as they form the foundation of Bhutan's Traditional Medicine system and support the livelihoods of many rural communities.

Today, Bhutan's rich medicinal plant diversity remains indispensable for the production of essential traditional medicines and the delivery of quality Traditional Medicine services through 84 TM healthcare facilities established across the country. At the same time, these valuable biological resources contribute significantly to biodiversity conservation, scientific research, rural livelihoods, and the country's socio-economic development. Increasing anthropogenic pressures, unsustainable collection practices, illegal extraction, and uncontrolled trade of high-value medicinal species have emerged as significant conservation concerns, and safeguarding this invaluable natural heritage has become both a national responsibility and a global conservation priority.

Although Bhutan's natural ecosystems remain relatively intact and well preserved compared with many regions of the world, comprehensive scientific information regarding the species diversity, population density, spatial distribution, ecology, phenology, regeneration status, and conservation status of medicinal resources remains incomplete. Over the years, numerous botanical surveys, floristic inventories, herbarium

collections, ethnobotanical studies, and research initiatives have been undertaken by the Department of Traditional Medicine Services, Department of Forest and Park Services; Menjong Sorig Pharmaceuticals, National Biodiversity Centre, Ugyen Wangchuck Institute for Forestry Research and Training, and other governmental and research institutions.

Nevertheless, much of the available information remains fragmented, locality-specific, and dispersed across different institutions, limiting its application for national-level resource assessment, conservation prioritisation, policy formulation, and sustainable management planning. Furthermore, a considerable proportion of Bhutan's medicinal flora remains inadequately documented, particularly within remote alpine and sub-alpine ecosystems where field investigations are constrained by rugged terrain, extreme climatic conditions, short growing seasons, and limited accessibility.

The challenges associated with medicinal resource documentation are further intensified by rapidly changing environmental conditions. Climate change, habitat transformation, invasive species, and increasing human pressures are expected to influence species distribution patterns, phenological cycles, population dynamics, and ecosystem interactions. Therefore, systematic documentation, continuous monitoring, and periodic reassessment of medicinal plant resources have become crucial to understand emerging threats and develop adaptive conservation strategies.

Recognising these challenges and the urgent need for scientific documentation, the Department of Traditional Medicine Services, Ministry of Health, initiated the nationwide Resource Mapping Programme to systematically document the diversity, distribution patterns, density, ecological characteristics, phenology, and conservation status of medicinal flora and fauna to establish a comprehensive inventory of Bhutan's medicinal resources.

The information generated through this initiative is expected to provide a critical scientific baseline for biodiversity conservation, sustainable harvesting, ecological monitoring, resource assessment, in-situ and ex-situ conservation, climate change adaptation, and evidence-based decision-making. Furthermore, it is also expected to support the development of strategies and guidelines for the sustainable management of medicinal plants.

As an integral initiative, A Pictorial Guide to High-Altitude Plants of Bhutan has been developed to support field-based Sorig and botanical identification during resource mapping and the documentation of high-altitude plant. The guide presents 1,857 species of high-altitude plants,

including 501 medicinal flora, representing 124 plant families occurring between 2,000 and 5,900 metres above sea level.

The species included in this guide have been arranged according to the internationally accepted Angiosperm Phylogeny Group classification system, thereby harmonising contemporary botanical taxonomy with the Sorig nomenclature. This guide will provide a standardised reference for accurate species identification, minimise taxonomic ambiguity, and promote consistency in documenting medicinal plants among the TM fraternity, botanists, researchers, conservationists, and resource managers. The guide is organised into three volumes:

- Part I comprises 640 species belonging to 45 families (Acanthaceae–Ephedraceae), including 172 medicinal plant species.
- Part II comprises 667 species belonging to 45 families (Equisetaceae–Plantaginaceae), including 176 medicinal plant species.
- Part III comprises 550 species belonging to 34 families (Plumbaginaceae–Zingiberaceae), including 153 medicinal plant species.

This guide incorporates selected non-angiosperm taxa of medicinal importance that are routinely used in Traditional Medicine. These include lichens such as *Lobaria oregano* and *Thamnolia vermicularis*; bryophytes including *Macromitrium sulcatum*; lycophytes such as *Selaginella pulvinata* and *Selaginella tamariscina*; mosses including *Dicranum fulvum*, *Dicranum fuscescens*, *Dicranum majus*, and *Dicranum viride*; as well as medicinal lichens belonging to the genera *Peltigera* and *Pilophorus*.

Special emphasis has been placed on documenting endemic medicinal plant species of Bhutan, including *Allium rhabdotum*, *Bistorta griersonii*, *Buddleja bhutanica*, *Ceropegia dorjei*, *Cotoneaster bumthangensis*, *Delphinium muscosum*, *Lobelia nubigena*, *Meconopsis bhutanica*, *Meconopsis superba*, *Primula chasmophila*, *Rhododendron bhutanense*, *Rhododendron kesangiae*, *Saxifraga thiantha*, *Silene birgittae*, and *Sorbus longii*. These taxa, many of which possess restricted geographic distributions and narrow ecological amplitudes, constitute an important component of Bhutan's botanical endemism and medicinal plant diversity. Their inclusion underscores the need for systematic documentation, ecological assessment, and long-term conservation, as endemic species are inherently more susceptible to habitat degradation, climate change, stochastic environmental events, and anthropogenic disturbances due to their limited distribution and often small population sizes.

This guide also highlights several high-value medicinal species that are subject to increasing harvesting pressure owing to their established

therapeutic importance, high commercial demand, and limited natural regeneration. These include *Aconitum laciniatum*, *Daphne bholua*, *Delphinium drepanocentrum*, *Gentiana urnula*, *Gymnadenia orchidis*, *Nardostachys jatamansi*, *Onosma hookeri*, *Ophiocordyceps sinensis*, *Panax pseudoginseng*, and *Picrorhiza scrophulariiflora*. Many of these taxa are ecologically vulnerable because of their restricted distribution, slow growth rates, specialised habitat requirements, and susceptibility to overexploitation. Their inclusion in this guide aims to enhance awareness of their conservation significance and provide baseline information to support resource monitoring, conservation assessment, sustainable harvesting protocols, and evidence-based management strategies.

Every effort has been made to incorporate the maximum possible number of high-altitude plant species based on available botanical literature, herbarium records, field surveys, taxonomic databases, ecological observations, and TM documentation. However, considering Bhutan's exceptional floristic richness and the continuous discovery of previously undocumented taxa, this guide should be regarded as an evolving scientific reference rather than an exhaustive inventory.

It is sincerely hoped that this pictorial guide will serve as an important scientific resource for strengthening medicinal resource mapping, taxonomic documentation, and biodiversity assessment in Bhutan and reducing taxonomic ambiguity. Furthermore, this publication is anticipated to contribute significantly to the expanding body of scientific knowledge on Bhutan's rich floral diversity by providing a consolidated reference for researchers, botanists, taxonomists, ecologists, conservation practitioners, Traditional Medicine professionals, and students.

The conservation of medicinal plants is fundamental not only to the continued sustainability of raditional Medicine system, but also to the preservation of the country's biodiversity, ecological integrity, cultural heritage, and ecosystem resilience. Through collective efforts, Bhutan's medicinal plant heritage can be conserved and sustainably managed to support the health, well-being, and ecological security of present and future generations.

ABBREVIATIONS

CPO	Chief Program Officer
DEO	District Education Officer
DISVI	Disarmo e Sviluppo (Non-profit Italian NGO)
DoTMS	Department of Traditional Medicine Services
FoTM	Faculty of Traditional Medicine
FYP	Five Year Plan
HAMP	High Altitude Medicinal Plants
JKSNR	Jigme Khesar Strict Nature Reserve
JSWNP	Jigme Singye Wangchuck National Park
KGUMSB	Khesar Gyalpo University of Medical Sciences of Bhutan
Masl	Meter above sea level
MoAF	Ministry of Agriculture and Forest
MoH	Ministry of Health
MP	Medicinal Plants
MR	Medicinal Resources
MSPCL	Menjongsorig Pharmaceutical Corporation Limited
MSPD	Medical Supply and Procurement Division
NBC	National Biodiversity Centre
NCD	Nature Conservation Division
NHCS	National Health Care System
NTMH	National Traditional Medicine Hospital
R&D	Research and Development
SR&DD	Sorig Research and Development Division
TK	Traditional Knowledge
TM	Traditional Medicine
TMR	Traditional Medicine Resources
TMS	Traditional Medicine Service
WCNP	Wangchuk Centennial National Park
WHO	World Health Organisation

ACKNOWLEDGEMENTS

The completion of this guideline is a humble reflection of the collective wisdom, dedication, and unwavering commitment of many individuals who have contributed to the conservation, documentation, and advancement of Traditional Medicine. This work stands on the shoulders of the remarkable efforts of earlier researchers, botanists, and countless plant enthusiasts who devoted their lives to exploring and documenting the diverse flora and fauna of Bhutan.

With extraordinary courage and perseverance, these pioneers traversed some of the most challenging landscapes of our country, from the harsh and rugged alpine mountains to the dense and impenetrable subtropical forests, often enduring difficult weather conditions, geographical barriers, and countless hardships. Their passion and sacrifices have gifted us with invaluable knowledge and laid the foundation for comprehensive works such as the Flora of Bhutan, which continues to serve as an important reference for generations. I offer my deepest respect and heartfelt appreciation to these unsung heroes whose dedication has preserved the natural treasures of our nation for the benefit of present and future generations.

I extend my humble gratitude to Her Excellency Dasho Dechen Wangmo, the Hon'ble Health Minister, for her invaluable support, encouragement, and approval that made this initiative possible. Her visionary leadership and words of wisdom have been a source of inspiration and motivation throughout this journey.

I also express my sincere appreciation to Dasho Pemba Wangchuk, Acting Secretary, Ministry of Health, for his continued guidance, leadership, and encouragement to pursue excellence and deliver work that reflects our shared commitment towards strengthening Bhutan's Traditional Medicine system.

I would like to express my profound gratitude to the following esteemed peer reviewers for their invaluable contributions, critical assessment, and insightful recommendations. Their expertise, thoughtful observations, and constructive feedback have significantly enhanced the scientific accuracy, technical quality, and overall value of this guideline. Beyond improving this publication, their contributions have enriched our collective learning and professional growth. I remain deeply grateful for their time, patience, and commitment.

1. Rinchen Yangzom, Principal Biodiversity Officer, NBC, MoAF
2. Ngawang Gyeltshen, Taxonomist, NCD, DoFPS, MoAF

I am also profoundly indebted to the following plant enthusiasts, TM professionals, researchers, and intellectuals who generously shared their knowledge, experience, and valuable insights at various stages of developing this guideline. Their dedication and willingness to contribute have been instrumental in shaping this work. Their passion for research and documenting medicinal plants serves as an inspiration to all of us.

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5. Jambay Dorji, Research Officer, SR&DD, DoTMS, MoH
6. Yeshi Tshomo, Research Assistant, SR&DD, DoTMS, MoH

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I extend my deepest gratitude to the World Health Organisation Country Office, Thimphu, Bhutan, for its generous financial support and continued encouragement. Without this valuable assistance and partnership, the successful completion and publication of this guideline would not have been possible.

Finally, I would like to express my sincere appreciation to all future readers, practitioners, researchers, and well-wishers who engage with this guideline. Your continued interest, observations, and constructive suggestions will help us identify areas for improvement and ensure that this document remains relevant, accurate, and useful for generations to come. Every comment and contribution will be regarded as a valuable opportunity to further strengthen and enrich Bhutan's Traditional Medicine knowledge system.

With profound gratitude and respect, I acknowledge every individual who has contributed, directly or indirectly, to the realisation of this important work.

INTRODUCTION



The conservation and sustainable utilisation of medicinal resources represent an ongoing journey that requires continuous scientific inquiry, responsible management, and collective commitment. Bhutan, recognised as one of the world's biodiversity hotspots, possesses an extraordinary wealth of medicinal plant diversity that has supported the country's traditional healthcare system for centuries. These natural resources are not merely biological entities; they represent a living heritage deeply intertwined with Bhutanese culture, indigenous knowledge systems, rural livelihoods, and the holistic health philosophy of the country.

The systematic documentation and scientific exploration of Bhutan's medicinal plant resources began with the first botanical expedition conducted under the DISVI Project from 1988 to 1993. The expedition covered the rich alpine ecosystems of Lingzhi, Phajoding, Dochula, and the surrounding regions of Trongsa Dzongkhag, marking a historic milestone in the advancement of medicinal plant research in Bhutan. This pioneering initiative represented the first significant step towards understanding, identifying, documenting, and conserving the country's valuable medicinal flora.

Beyond documenting the plant species, the expedition highlighted the ecological, cultural and socio-economic importance of medicinal resources and recognised their essential contribution to the livelihoods of rural communities. The availability of these resources has enabled the provision of quality TM services through the nationwide network of 84 TM facilities, currently serving communities across the country and contributing significantly to the promotion of holistic health and well-being.

Following the integration of Traditional Medicine services into Bhutan's National Health Care System on 28th June 1968, the demand for medicinal resources has continued to increase substantially. Approximately 150–950 medicinal species and resources are utilised in the preparation of essential traditional medicines, herbal formulations, health supplements, and other therapeutic products. These resources are persistently collected from ecologically sensitive and exploited regions such as Lingshi Drungkhag and Langthel Gewog.

However, decades of continuous collection, coupled with increasing demands for raw materials, climate variability, habitat disturbance, and expanding commercial interest, have placed significant pressure on Bhutan's medicinal plant ecosystems. Several high-altitude and low-altitude medicinal species are now facing increasing threats due to unsustainable harvesting practices, habitat degradation, and reduced

natural regeneration capacity. The slow growth cycle, restricted geographic distribution, and specific ecological requirements of many medicinal plants further increase their vulnerability to depletion.

The conservation challenge is further intensified by the extensive use of medicinal resources among local healers and commercial stakeholders. Records maintained by the Department of Traditional Medicine Services, Ministry of Health, indicate the presence of more than 2,060 local healers involved in traditional healing practices, while the National Biodiversity Centre, Ministry of Agriculture and Forests, has documented 789 traditional knowledge holders associated with the use of biological resources. Appropriate scientific management frameworks are required to ensure sustainable resource utilisation by these local healers.

Furthermore, increasing demand from private pharmaceutical companies, herbal product manufacturers, and other commercial users has contributed to intensified harvesting pressure, including over-collection, unsustainable extraction, and risks associated with illicit trade. These challenges are compounded by limited enforcement mechanisms, inadequate monitoring systems, and gaps in the implementation of conservation strategies, policies, and regulatory frameworks.

Although Bhutan has not yet experienced large-scale extinction of medicinal plant species, evidence of localised and population-level declines is increasingly apparent. Several species have demonstrated reduced regeneration, declining population density, and restricted distribution within their natural habitats. Such ecological changes serve as early warning indicators of potential future biodiversity loss if appropriate interventions are not implemented.

In view of these emerging challenges, the conservation, sustainable collection, cultivation, and scientific documentation of medicinal plants have become more critical than ever. Protecting Bhutan's medicinal plant heritage requires an integrated approach combining traditional ecological knowledge, modern scientific research, biodiversity conservation principles, sustainable resource management practices, and effective policy implementation.

This guideline therefore serves as an important step towards strengthening the scientific foundation for the documentation of medicinal plants. By promoting responsible collection practices, enhancing documentation, encouraging cultivation and regeneration initiatives, and fostering collaboration among researchers, policymakers, and local communities, Bhutan can safeguard its invaluable medicinal resources for present and future generations while continuing to support the health and well-being of humanity.

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ཟང་ཟིང་དོན་གཉེར་སྨན་པའི་ཚིང་འཛིན་ལ། འདི་འདྲས་དོན་དུ་འགྱུར་སྐམ་འབད་པས་འགོད།



ACANTHACEAE Acanthus Family



Strobilanthes helicta T.Anderson



Strobilanthes lachenensis C.B.Cl.

ACANTHACEAE



Strobilanthes lamiifolia (Nees) T.Anderson.



Strobilanthes oligocephala C. B. Cl.

ACANTHACEAE



Strobilanthes penstemonoides (Nees) T.Anderson



Strobilanthes wallichii Nees

ACTINIDIACEAE Chinese Gooseberry/Kiwi Family



Actinidia strigosa Hook.f. & Thomson

ADOXACEAE Moschatel Family



Sambucus adnata (Wall.)

ADOXACEAE



Sambucus cerulean Raf.



Sambucus javanica Blume

ADOXACEAE



Viburnum cotinifolium D. Don.



Viburnum cylindricum D. Don.

ADOXACEAE



Viburnum erubescens Wall.



Viburnum grandiflorum Candolle

ADOXACEAE



Viburnum mullaha Buchanan-Hamilton D. Don.



Viburnum nervosum D. Don

AMARANTHACEAE Goosefoot Family



Amaranthus caudatus L.



Amaranthus hybridus L.

AMARANTHACEAE



Celosia argentea var. *cristata* (L.) Kuntze.



Chenopodium album L.



གསོ་དིག་མིང་ » སྨྲེའུ་ནག། (སྨྲེའུ་རལ་ནག་པོ།)

Chenopodium quinoa Willd.



Cyathula capitata Moquin. T.

AMARANTHACEAE



Cyathula tomentosa (Roth) Moquin.T.

AMARYLLIDACEAE Amaryllis family



Allium fasciculatum Rendle

AMARYLLIDACEAE



Allium hookeri Thwaites



Allium macranthum Baker

AMARYLLIDACEAE



Allium prattii C.H. Wright



Allium przewalskianum Regel

AMARYLLIDACEAE



Allium rhabdotum Stearn



Allium schoenoprasum Linn.

AMARYLLIDACEAE



Allium sikkimense Baker



Allium wallichii Kunth

AMARYLLIDACEAE



Zephyranthes carinata Herbert

ANACARDIACEAE Cashew Family



Rhus chinensis Miller

APIACEAE Parsley or Carrot Family



Angelica cyclocarpa (C.Norman) M.Hiroe



Anthriscus nemorosa (M. Bieb) Spreng

APIACEAE



Bupleurum candollei DC.



Bupleurum falcatum L.

APIACEAE



Bupleurum gracillimum Klotzsch



Bupleurum hamiltonii N.P.Balakr.

APIACEAE



Carum carvi L.



Cnidium bhutanicum M.F.Watson

APIACEAE



Coriandrum sativum L.



Cortia depressa (D. Don) C. Norman

APIACEAE



Cortiella hookeri (C.B.Clarke) C. Norman



Heracleum obtusifolium DC.

APIACEAE



Heracleum wallichii DC.



Hymenidium amabile (Craib & W.W.Sm.) Pimenov & Kl.

APIACEAE



Hymenolaena candollei DC.



Lalldhwojia acronemifolia (H.Wolff) M.F.Watson

APIACEAE



Ligusticopsis wallichiana (DC.) Pimenov & Kljuykov



Pleurospermopsis hookeri C. B. Cl.

APIACEAE



Pleurospermopsis sikkimensis (C. B. Cl.) C. Norman



Pleurospermum album H.Wolff

APIACEAE



Pleurospermum benthamii (Candolle) C.B.Cl.



Pleurospermum hedinii Diels

APIACEAE



Pternopetalum subalpinum Hanel-Mazz.



Sanicula elata Buch.-Ham.

APIACEAE



Selinum candollei DC.



Selinum carvifolia (L.) L.

APIACEAE



Selinum vaginatum (C.B.Clarke)



Semenovia candicans DC.

APIACEAE



Semenovia candicans var. *obtusifolium* (Candolle) Comb.



Sinolimprichtia alpine Wolff

APIACEAE



Tetrataenium nepalense (Don) I.P. Mandenova



Tordyliopsis brunonis DC.

APIACEAE



Torilis japonica (Houtt.) DC.



Vicatia coniifolia Candolle

APIACEAE



Heracleum nepalense D. Don



Heracleum sphondylium L.

APIACEAE



Pimpinella diversifolia DC.

APOCYNACEAE Dogbane Family



Asclepias curassavica L.

APOCYNACEAE



Ceropegia bhutanica H.Hara



Ceropegia dorjei C.E.C.Fisch

APOCYNACEAE



Hoya fusca Wall.



Ilex dipyrena Wall.

APOCYNACEAE



Ilex hookeri King



Vincetoxicum hirundinaria Medicus

ARACEAE Arum Family



Acorus calamus Linn.



Arisaema consanguineum Schott

ARACEAE



Arisaema echinatum (Wall.) Schott



Arisaema elephas Buchet

ARACEAE



Arisaema flavum (Forssk.) Schott



Arisaema galeatum N.E.Br.

ARACEAE



Arisaema griffithii Schott.



Arisaema jacquemontii Blume

ARACEAE



Arisaema nepenthoides (Wall.) Mart.



Arisaema propinquum Schott in Oesterr

ARACEAE



Arisaema serratum (Thunb.) Schott



Arisaema speciosum (Wall.) Mart Schott & Endlicher

ARACEAE



Arisaema tortuosum (Wallich) Schott



Arisaema utile Hook. f.

ARACEAE



Colocasia esculenta (L.) Schott.



Lemna minor L.

ARACEAE



Remusatia hookeriana Schott



Typhonium diversifolium Schott

ARALIACEAE Ginseng Family



Aralia cachemirica Dcne.



Eleutherococcus cissifolius Nakai

ARALIACEAE



Eleutherococcus leucorrhizus Oliver



Panax quinquefolius L.



གསོ་རིག་མིང་ » སྤྱིང་གི་ར་ཙ། (དམར་རྩ་མགོ་ནག། མདའ་རྒྱུས།)

Panax pseudoginseng Wall, P.



Pentapanax fragrans (D. Don) T. D. Ha.

ARALIACEAE



Schefflera impressa (C.B.Clarke) Harms

ARAUCARIACEAE Araucaria Family



Araucaria araucana (Molina) K. Koch.

ASPARAGACEAE Asparagus Family



Asparagus racemosus Wil.



Rohdea wattii (C.B.Clarke) Yamashita & M.N.Tamura

ASPARAGACEAE



Ophiopogon clarkei Hook.f.

ASTERACEAE Sunflower Family



Acilepis squarrosa D.Don

ASTERACEAE



Acmella uliginosa (Swartz) Cassini



Adenostemma lavenia (Linnaeus) Kuntz

ASTERACEAE



Ainsliaea acerifolia Sch.Bip.



Ainsliaea aptera DC.

ASTERACEAE



Ainsliaea latifolia (D.Don) Sch.Bip



Anaphalis busua (Buch.-Ham.) Hand.-Mazz.

ASTERACEAE



Anaphalis contorta (D. Don) Hook. fil.



Anaphalis cooperi A. I. C Grierson & L. S. Springate

ASTERACEAE



Anaphalis margaritacea (L.) Benth.



Anaphalis nepalensis (Spreng.) Hand.-Mazz.

ASTERACEAE



Anaphalis royleana DC.



Anaphalis triplinervis (Sims) C.B.Clarke.

ASTERACEAE



Anaphalis xylorhiza Sch.Bip.



Artemisia bhutanica Grierson & Springate

ASTERACEAE



Artemisia desertorum Spreng



Artemisia dubia Wall.

ASTERACEAE



Artemisia hedinii Ostenf



Artemisia indica Willd.

ASTERACEAE



Artemisia moorcroftiana Wall.



Artemisia myriantha Wall.

ASTERACEAE



Artemisia parviflora Roxb. ex D.Don



Artemisia sieversiana Wild

ASTERACEAE



Artemisia stricta Edg.



Artemisia thellungiana Pamp.

ASTERACEAE



Artemisia tukuchaensis Kitam.



Arctium lappa L.

ASTERACEAE



Aster ageratoides Turcz.



Aster albescens Hand.-Mazz.

ASTERACEAE



Aster asteroides (Candolle) Kuntze



Aster barbellatus Grierson

ASTERACEAE



Aster batangensis Bureau & Franchet



Aster diplostephioides (DC.) C. B. Cl.

ASTERACEAE



Aster flaccidus Bunge



Aster heliopsis Grierson

ASTERACEAE



Aster himalaicus C. B. Cl.



Aster neoelegans Grierson

ASTERACEAE



Aster souliei Franchet, J. Bot. (Morot)



Aster stracheyi Hook.f.

ASTERACEAE



Aster vestitus Franchet, J. Bot. (Morot)



Bellis perennis L.

ASTERACEAE



Bidens bipinnata Linn.



Bidens pilosa L.

ASTERACEAE



Bidens tripartita Linn.



Brachyactis anomala (DC.) Bru.

ASTERACEAE



Cavea tanguensis W.W Smith & Small



Cirsium eriohorodes (Hook. Fil.) Petr.

ASTERACEAE



Cirsium falconeri (Hook.f.) Petr.



Cirsium shansiense Petr.

ASTERACEAE



Cirsium wallichii DC.



Coreopsis lanceolata L.

ASTERACEAE



Cosmos bipinnatus Cav.



Crassocephalum crepidioides (Benth.) S. Moore.



Cremanthodium bhutanicum Ludl.



Cremanthodium decaisnei C. B. Cl.

ASTERACEAE



Cremanthodium ellisii (Hook.f.) Kitam



Cremanthodium humile Maxim.

ASTERACEAE



Cremanthodium oblongatum C.B.Cl.

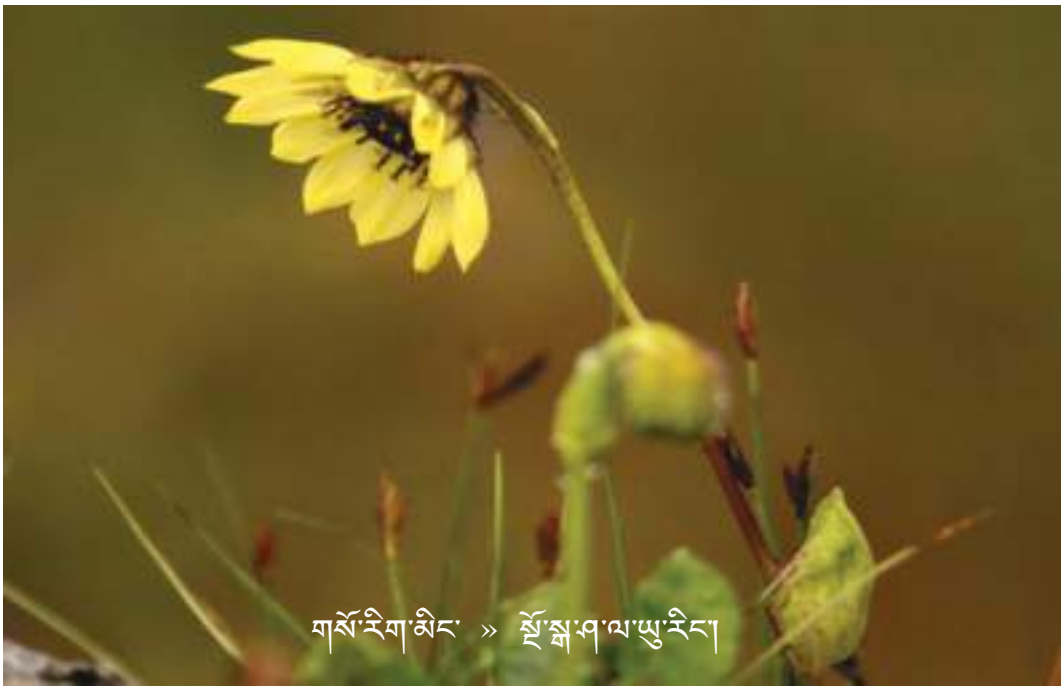


Cremanthodium palmatum Benth.

ASTERACEAE



Cremanthodium pinnatifidum Benth



Cremanthodium reniforme (DC.) Benth

ASTERACEAE



Cremanthodium rhodocephalum Diels



Dichrocephala chrysanthemifolia (Blume) Candolle

ASTERACEAE



Dolomiaea costus (Falc.) Kasana & A.K.Pandey



གསོ་རིག་མིང་ » ཐྲ་རོག་ཨུང་མ།

Dolomiaea taraxacifolia (J.Anthony) Y.S.Chen & Raab-Straube

ASTERACEAE



Doronicum roylei DC.



Dubyaea hispida (D.Don) DC.

ASTERACEAE



Duhaldea cappa (Buch.-Ham. ex D.Don) Pruski & Anderb



Eclipta prostrata (Linn.) Linn.

ASTERACEAE



Erigeron acer L.



Erigeron annuus (L.) Pers.

ASTERACEAE



Erigeron multiradiatus C.B. Cl.



Eupatorium heterophyllum DC

ASTERACEAE



Galinsoga ciliate (Raf.) S.F. Blake



Galinsoga parviflora Cav.

ASTERACEAE



Hieracium umbellatum Lin.



Hippolytia gossypina (Hook.fil. C.B.Cl.) C.Shih.

ASTERACEAE



Inula hookeri C.B. Cl.



གསོ་རིག་མིང་ » མ་ནུ། (མ་ནུ་པ་ཏྲ། ཡིད་འོང་འདབ་ཅན།)

Inula racemosa Hook. f.

ASTERACEAE



Ixeris gracilis (DC.) Stebbins



Ixeris stolonifera A. Gray

ASTERACEAE



Jurinea auriculata (DC.) N.Garcia, Herrando & Susanna



Leibnitzia nepalensis (Kunze) Kitam.

ASTERACEAE



Leontopodium franchetii Beauv.



Leontopodium himalayanum Candolle

ASTERACEAE



Leontopodium jacotianum Beauv.



Leontopodium monocephalum Edgeworth, Trans. Linn.

ASTERACEAE



Leontopodium stracheyi (Hook. f.) C.B. Clarke



Leucanthemum vulgare Lam.

ASTERACEAE



Ligularia amplexicaulis (Wall.) DC.



Ligularia atkinsonii (C.B.Clarke) S.W.Liu

ASTERACEAE



Ligularia fischeri (Ledeb.) Turcz.



Ligularia hookeri (C.B.Clarke) Hand.-Mazz.

ASTERACEAE



Ligularia lancifera J. R. Drum.



Ligularia mortonii (C. B. Clarke) Hand.-Mazz.

ASTERACEAE



Ligularia virgaurea (Maxim.) Rehder & Kobuski



Melanoseris cyanea (D. Don) Edgeworth



Melanoseris macrantha (Decne.) Beauverd



Melanoseris macrorhiza (Royle) N.Kilian

ASTERACEAE



Mulgedium lessertianum DC.



Myriactis nepalensis Less.

ASTERACEAE



Nannoglottis hookeri (J. D. Hooker) Kitam.



Parasenecio palmatisectus (Jeffrey) Y.L.Chen.

ASTERACEAE



Petasites tricholobus Franchet



Picris hieracioides Linn.

ASTERACEAE



Pseudognaphalium affine (DC.) Hilliard & B.L.Burtt



Saussurea candolleana Linn.

ASTERACEAE



Saussurea columnaris Hand.-Mazz.



Saussurea deltoidea (DC.) Sch.

ASTERACEAE



Saussurea eriostemon C.B. Cl.



Saussurea fastuosa (DC.) Sch.Bip.

ASTERACEAE



Saussurea graminifoila DC.



Saussurea gossypiphora D.Don

ASTERACEAE



Saussurea hieracioides Hook. fil.



Saussurea katochaetoides Maxim.

ASTERACEAE



Saussurea leucoma Diels



གསོ་རིག་མིང་ » གཟའ་བདུག་ནག་སོ། (གཟའ་བདུད་ནག་སོ།)

Saussurea obvallata (DC.) Edgew

ASTERACEAE



Saussurea pachyneura Franch.



Saussurea przewalskii Maxim.

ASTERACEAE



Saussurea roylei C.B.Clarke.



Saussurea sericea Y.L.Chen & S.Yun Liang

ASTERACEAE



Saussurea simpsoniana (Fie. & Gard.) Lipsch.



གསོ་རིག་མིང་ » ཁྲུང་སྐྱེར་སྨུག་པོ།

Saussurea stella Maxim.

ASTERACEAE



Saussurea sughoo C.B.Clarke



Saussurea taraxacifolia DC

ASTERACEAE



Saussurea tridactyla Hook. fil.



Saussurea uniflora Sch. Bip.

ASTERACEAE



Saussurea wernerioides J. D. Hook.fil.



Senecio albopurpureus Kita.

ASTERACEAE



Senecio graciliflorus Candolle



Senecio lautus Willd.

ASTERACEAE



Senecio raphanifolius W. Cand.



Senecio scandens D.Don

ASTERACEAE



Sigesbeckia orientalis L.



Sonchus asper (L.) Hill

ASTERACEAE



Sonchus oleraceus L.



Soroseris depressa (Hook.f. & Thom.) J.W.Z, N.Kilian & H.Sun

ASTERACEAE



Soroseris erysimoides (Hand.-Mazz.) C.Shih



Soroseris glomerata (Decaisne) Stebbins

ASTERACEAE



Soroseris glomerata var. *hirsuta* (Decaisne) Stebbins



Soroseris hirsuta (J.Anthony) C.Shih

ASTERACEAE



Soroseris hookeriana (C.B. Clarke) Stebbins



Soroseris cf. pumila Stebbins

ASTERACEAE



Soroseris cf. pumila Stebbins



Syncalathium chrysocephalum (C. Shih) S. W. Liu

ASTERACEAE



Syncalathium kawaguchii (Kitam.) Ling



Synotis acuminata C.Jeffrey & Y.L.Chen

ASTERACEAE



Synotis tetrantha (Candolle) C. Jeffrey & Y. L. Chen



Synotis wallichii (DC.) C.Jeffrey & Y.L.Chen

ASTERACEAE



Tanacetum atkinsonii (C. B. Cl.) S. Kitam



Tanacetum gossypinum Hook. f. & Thoms. Ex C. B. Clarke

ASTERACEAE



Tanacetum nubigenum DC.



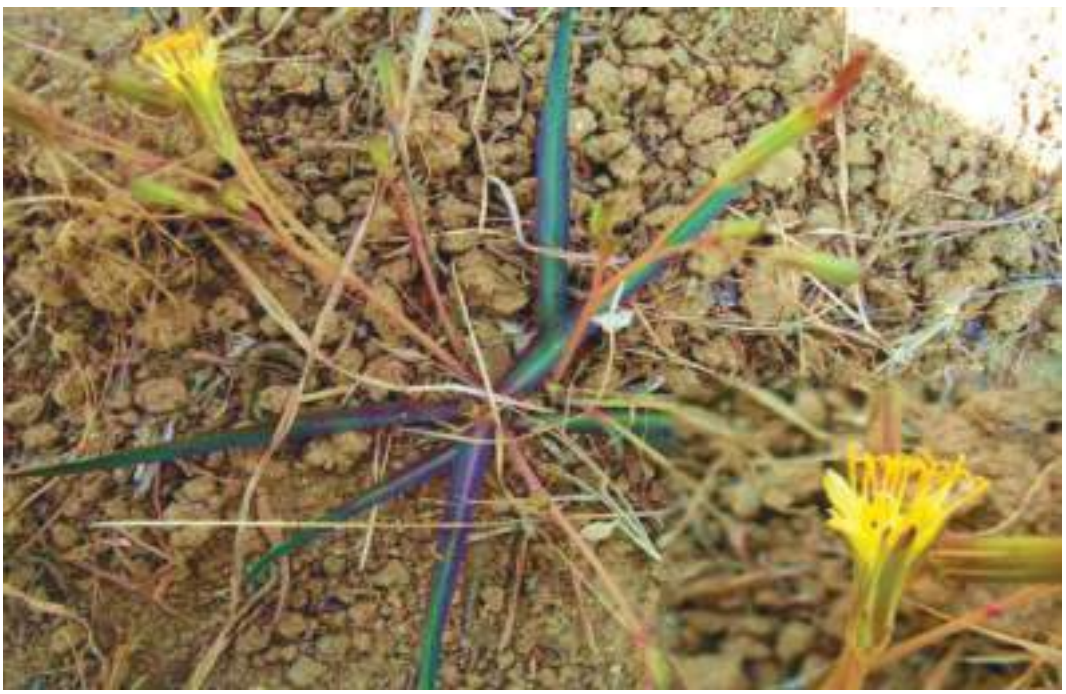
Tanacetum tatsienense (Bureau & Franch.) K.Bre. & Hum.

ASTERACEAE



གསོ་རིག་མིང་ » ཁྲུང་མོང། (ཁྲུང་མོང་སེང་པོ། ཤེས་རབ་ལོ་མ། ཕྱུང་ཁུ་ཀོག།)

Taraxacum eriopodum (D. Don) DC.



Taraxacum mitalii Soest

ASTERACEAE



Taraxacum officinale (L.) F.H.Wigg.



Taraxacum sikkimense Hand.-Mazz



Tagetes minuta Linn.



Tragopogon dubius Scopoli

ASTERACEAE



Tricholepis furcata DC.



Xanthium sibiricum Widd.



Youngia depressa (Hook.f. & Thomson) Babc. & Stebbins



Youngia gracilipes Hook.fil.

ASTERACEAE



Youngia nilgiriensis Babc



Youngia racemifera (Hook. f.) Babc. & Stebb.

ASTERACEAE



Youngia simulatrix (Babc.) Babc. & Stebbins



Waldheimia glabra (Decne.) Regel

ASTERACEAE



Waldheimia nivea (Hook. f. et Thomson ex C. B. Clarke) Regel



Waldheimia tomentosa (Decne.) Regel

ASTERACEAE



Waldheimia vestita (J. D. Hooker & Thomson. C. B. Cl) Pamp.

BALANOPHORACEAE Obligate parasitic flowering plants Family



Balanophora dioica Royle

BALANOPHORACEAE



Balanophora fargesii (Tieghem) Harms



Balanophora involucrata J. D. Hooker

BALSAMINACEAE Balsam Family



Impatiens arguta J. D. Hooker & Thomson



Impatiens balsamina L.

BALSAMINACEAE



Impatiens drepanophora J. D. Hooker



Impatiens cristata Wall.

BALSAMINACEAE



Impatiens edgeworthii Hook. f.



Impatiens glandulifera Royle

BALSAMINACEAE



Impatiens laxiflora Edgew.



Impatiens prainii Hook. f.

BALSAMINACEAE



Impatiens puberula DC.



Impatiens racemosa DC.

BALSAMINACEAE



Impatiens radiata J. D. Hooker



Impatiens stenantha J. D. Hooker

BALSAMINACEAE



Impatiens sulcata Wall.

BEGONIACEAE Begonia Family



Begonia cathcartii Hook.fil. & Thomson

BEGONIACEAE



Begonia dioica Buch.-Ham.



Begonia josephii A. Cand.

BEGONIACEAE



Begonia megaptera A.DC.



Begonia sikkimensis A. Candolle

BERBERIDACEAE Barberry Family



Berberis asiatica (Roxb. Ex DC.)



གསོ་རིག་མིང་ » སྐྱེར་པ་དཀར་པོ། (གསེར་ཤིང་། ཆོར་རྩོག། འབྲས་སྐྱུར། པགས་སེར།)

Berberis concinna Hook. f.

BERBERIDACEAE



Berberis cooperi Ahrendt



Berberis hookeri Lem.

BERBERIDACEAE



Berberis insignis Hook. f. & Thomson



Berberis thomsoniana C.K.Schneid.

BERBERIDACEAE



Berberis tsarica Ahrendt



Berberis wallichiana DC.

BERBERIDACEAE



Berberis virescens Hook. f.



གསོ་རིག་མིང་ » ཡལ་འདབ་ཕྱོགས་ཆུབ། (ཡལ་འདབ་ཁྲ་བའི་རལ་བ།)

Berberis napaulensis (DC.) Spreng

BERBERIDACEAE



Podophyllum hexandrum Royle

BETULACEAE Birch Family



Alnus nepalensis D.Don.

BETULACEAE



Betula alnoides Buch.-Ham.



Betula calcicola (W. W. Smith) P. C. Li

BETULACEAE



Betula nigra L.



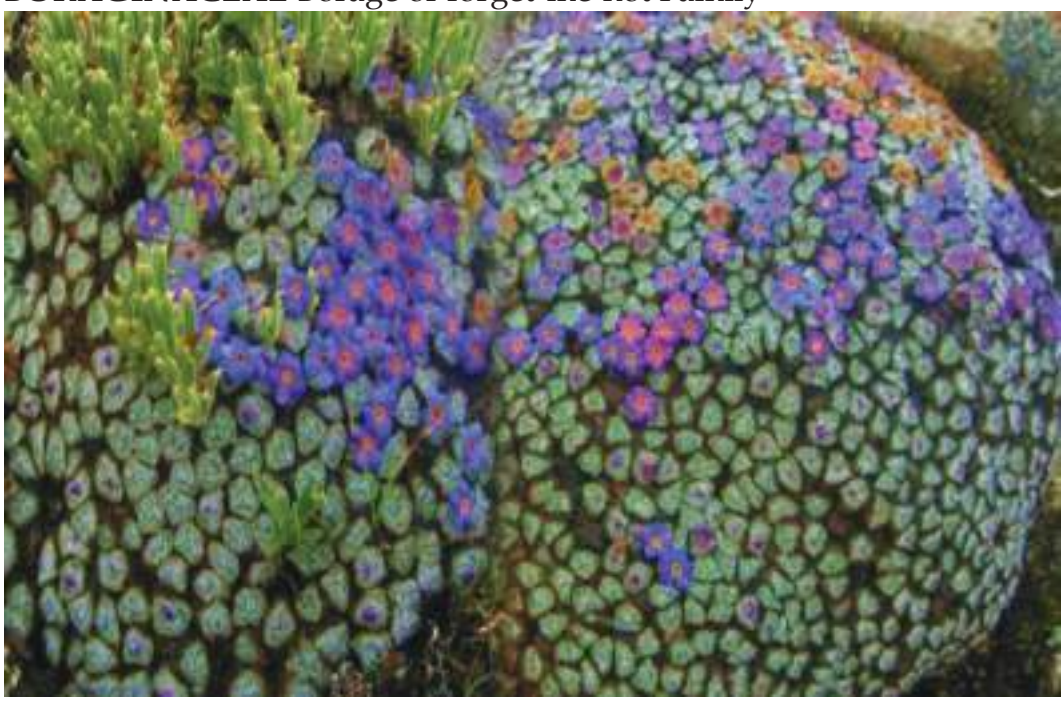
Corylus ferox Wall.

BIGNONIACEAE Bignonia Family



Incarvillea himalayensis Grey-Wilson

BORAGINACEAE Borage or forget-me-not Family



Chionocharis hookeri (C. B. Clarke) I. M. Johnston

BORAGINACEAE



Cynoglossum amabile Stapf & J.R.Drumm.



Cynoglossum furcatum Wall.

BORAGINACEAE



Cynoglossum glochidiatum Wall.



Cynoglossum wallichii G.Don

BORAGINACEAE



Eritrichium canum (Bentham) Kitamura



Eritrichium nanum L.

BORAGINACEAE



Eritrichium rupestre (Pall.) Bge.



གསོ་རིག་མིང་ » གོང་ཐོག་པ། (འཇེ་མོ་ཡུངས་ཀར། ཙ་སྣ་ཐང་ཤིང། བྲ་བ་ཐང་ཤིང།)

Erysimum hieraciifolium L.

BORAGINACEAE



Erysimum pachycarpum Hook.f. & Thomson



Hackelia uncinata Fischer

BORAGINACEAE



Hackelia virginiana (L.) I. M. Johnst



Lasiocaryum densiflorum (Duthie) I.M.Johnst.

BORAGINACEAE



Lithospermum officinale L.



Maharanga bicolor DC.

BORAGINACEAE



Maharanga emodii (Wall.) A. DC.



Microula bhutanica (T. Yamazaki) H. Hara



Microula pustulosa (C.B.Cl.) Duthie



Microula sikkimensis (C. B. Cl.) Hem.

BORAGINACEAE



Microula tangutica Maxim.



Microula tibetica Bentham

BORAGINACEAE



Myosotis alpestris F.W. Schmidt.



གསོ་རིག་མིང་ » འབྲི་མོག། (ཐྲུང་ཡའི་ཁག། རྩེའི་ཁག། རི་ཚོས།)

Onosma hookeri C. B. Cl.

BORAGINACEAE



Trigonotis gracilipes I. M. Johnst



Trigonotis microcarpa (DC.) C.B.Cl.



Trigonotis multicaulis C.B.Cl.



Trigonotis peduncularis Baker & S.Moore.

BORAGINACEAE



Trigonotis rotundifolia C.B.Cl.



Trigonotis tibetica (C.B.Clarke) I.M.Johnst.

BRASSICACEAE Mustard Family



Alyssum klimesii Al-Shehbaz



Aphragmus oxycarpus (Hook. f. & Thoms.) Jafri

BRASSICACEAE



Arabidopsis himalaica (Edge.) O.E. Sch.



Arabis amplexicaulis Edgeworth

BRASSICACEAE



Arabis axilliflora (Jafri) H. Hara



Arabis pterosperma Edgew

BRASSICACEAE



Arcyosperma primulifolium (Thoms.) O. E. Schulz



Barbarea intermedia Boreau

BRASSICACEAE



Brassica campestris var. *oleifere* Linn. DC



Brassica rapa subsp. *rapa* Lin.

BRASSICACEAE



Braya linearis Rouy



Braya oxycarpa (Hook.f. & Thomson) Jafri.

BRASSICACEAE



Braya rosea (Turczaninow) Bunge, Delect



Capsella bursa-pastoris (L.)Medic.

BRASSICACEAE



Cardamine californica (Nutt.) Greene



Cardamine elegantula Hook.f. & Thomson.

BRASSICACEAE



Cardamine flexuosa Withering



Cardamine griffithii Hook. f. & Thomson

BRASSICACEAE



Cardamine hirsute L.



Cardamine impatiens L.



Cardamine macrophylla Willd.



Cardamine scoriarum W.W.Sm.

BRASSICACEAE



Cardamine trifoliolata Hook.f. & Thomson.



Draba aizoides L.



Draba bruniifolia Steven



Draba dedeana Boiss. & Reut.

BRASSICACEAE



Draba involucrata (W. W. Smith) W. W. Smith



Draba mongolica Turcza.

BRASSICACEAE



Draba nemorosa Linn.



Draba oreades Schrenk

BRASSICACEAE



Draba sherriffii Gri.



Eutrema edwardsii R. Brown



Lepidium apetalum Willd.



Lepidium capitatum Hook.f. & Thoms

BRASSICACEAE



Lepidium densiflorum Schrad



Lepidium didymium L.

BRASSICACEAE



Lepidium virginicum L.



Megacarpaea delavayi Franchet

BRASSICACEAE



Nasturtium officinale W.T.Aiton



Noccaea andersonii (Hook.f. & Thomson) Al-Shehbaz

BRASSICACEAE



Noccaea caerulescens (J.Presl & C.Presl) F.K.Mey



Noccaea montana (L.) F. K. Mey.

BRASSICACEAE



Noccaea rotundifolia (L.) Moench



Parrya nudicaulis (L.) Regel



Pegaeophyton minutum H.Hara.



Pegaeophyton purii (D.S.Rawat, L.R.Dangwal & R.D.Gaur) Al-Sh.

BRASSICACEAE



Pegaeophyton scapiflorum (Hook.f. & Thom.) C. Mar.



Pycnoplinthopsis bhutanica Jafri

BRASSICACEAE



Raphanus sativus Linn.



Rorippa indica (L) Hiern

BRASSICACEAE



Rorippa palustris (Linn.) Besser



Solmslaubachia prolifera Maxim.

BRASSICACEAE



Solmslaubachia pulcherrima Muschl



Thlaspi arvense L.

BRASSICACEAE



Torularia humilis (C. A. Mey.) O. E. Schulz

BUXACEAE Box wood Familt



Buxus wallichiana Baill.

BUXACEAE



Sarcococca hookeriana Baill.

CAMPANULACEAE Bellflower Family

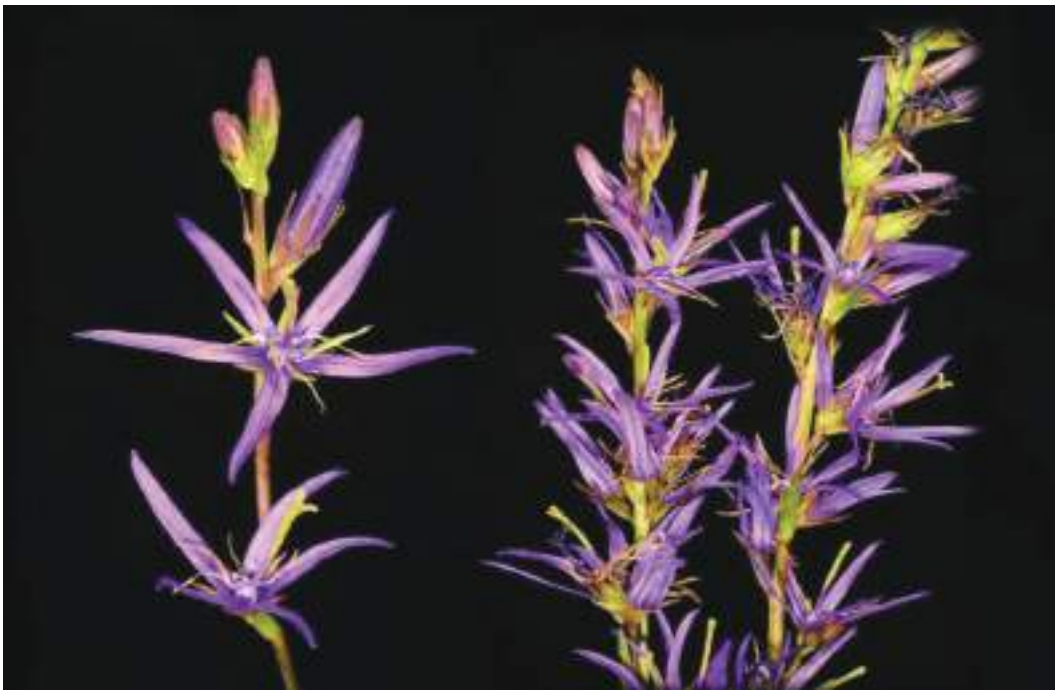


Adenophora khasiana (J. D. Hooker & Thomson)

CAMPANULACEAE



Asyneuma fulgens (Wallich) Briquet



Asyneuma rigidum (Willd.) Grossh

CAMPANULACEAE



Campanula argyrotricha A.DC.



Campanula aristata Wall.

CAMPANULACEAE



Campanula cashmeriana Royle



Campanula cana Wall.

CAMPANULACEAE



Campanula cenisia L.



Campanula cymbalaria Sm.

CAMPANULACEAE



Campanula forsythii (Arcang.) Podlech.



Campanula pallida Wall.

CAMPANULACEAE



Codonopsis benthamii Hook.f. & Thomson



Codonopsis bhutanica Ludlow

CAMPANULACEAE



Codonopsis clematidea (Schrenk) C.B. Clarke



Codonopsis convolvulacea var. *forrestii* (Diels) Ballard

CAMPANULACEAE



Codonopsis foetens Hook.f. & Thomson



Codonopsis gracilis J. D. Hooker & Thomson

CAMPANULACEAE



Codonopsis javanica (Blume) Hook.f. & Thomson



Codonopsis lanceolate (Sieb. & Zucc.) Trau.



Codonopsis nervosa (Cnipp) Nannf



Codonopsis ovata Benth.

CAMPANULACEAE



*Codonopsis pilosula (*Franchet) Nannfeldt



Codonopsis purpurea Wall.

CAMPANULACEAE



Codonopsis thalictrifolia Wall.



Codonopsis tubulosa Komar.

CAMPANULACEAE



Codonopsis vinciflora Kom.



Codonopsis viridiflora Maxim.

CAMPANULACEAE



Codonopsis viridis var. *hirsuta* Chipp



Cyananthus flavus C. Marq.

CAMPANULACEAE



Cyananthus formosus Diels



Cyananthus hookeri C.B.Cl.

CAMPANULACEAE



Cyananthus incanus Hook.f. & Thomson



Cyananthus incanus subsp. *orientalis* K.K.Shres.

CAMPANULACEAE



གསོ་རིག་མིང་ » ཆུང་ལེ་འཁྲུར་གཤམ།

Cyananthus inflatus Hook.f. & Thomson



གསོ་རིག་མིང་ » ཆུང་ལེ་མེ་ཏོག (ལིང་ཡ། ཤོག་ཤིང་ཡ)

Cyananthus lobatus Benth.

CAMPANULACEAE



Cyananthus macrocalyx subsp. *spathulifolius* (Nannf.) K.K Shrestha



Cyananthus microphyllus Edge. Linn.

CAMPANULACEAE



Cyananthus pedunculatus C. B. Cl.



Cyananthus spathulifolius Nannf.

CAMPANULACEAE



Lobelia erectiuscula H.Hara.



Lobelia montana Rein.

CAMPANULACEAE



Lobelia nubigena J.Anthony



Lobelia nummularia Lamarck

CAMPANULACEAE



Lobelia pyramidalis Wall.



Lobelia seguinii H.Lév. & Vaniot

CAMPANULACEAE



Peracarpa carnosa (Wall.) J. D. Hooker & Thomson



Wahlenbergia grandiflora (Jacq.) Schrad

CANNABACEAE Hemp Family



Cannabis sativa L.

CAPRIFOLIACEAE Honeysuckle Family



Acanthocalyx nepalensis (D. Don) M.J. Cannon

CAPRIFOLIACEAE



Bassecoia hookeri (C.B.Cl.) V.May. & Ehren.



Dipsacus inermis Wall.

CAPRIFOLIACEAE



Leycesteria formosa Wall.



Leycesteria stipulata (Hook.f. & Thom.) Fritsch

CAPRIFOLIACEAE



Lonicera acuminata Wall.



Lonicera angustifolia Candolle

CAPRIFOLIACEAE



Lonicera asperifolia (Decne.) Hook.f. & Thomson



Lonicera cyanocarpa Franchet

CAPRIFOLIACEAE



Lonicera hispida Pall.



Lonicera japonica Thunb.

CAPRIFOLIACEAE



Lonicera lanceolata Wall.



Lonicera maackii (Ruprecht) Maxim.

CAPRIFOLIACEAE



Lonicera obovata Royle



Lonicera periclymenum L.

CAPRIFOLIACEAE



Lonicera quinquelocularis Hardwicke.



Lonicera rupicola Hook.f. & Thoms.

CAPRIFOLIACEAE



Lonicera syringantha L.



Lonicera webbiana Candolle



Morina coulteriana Royle



Morina nepalensis subsp. *delavayi* (Franch.) D.Y.Hong

CAPRIFOLIACEAE



Morina polyphylla DC.



Morina longifolia Wall.

CAPRIFOLIACEAE



གསོ་རིག་མིང་ » སྤྱང་སྤོས། (རྡོ་དེ་མི་རོ། དེ་ཚན་ཐོད་དམར།)

Nardostachys jatamansi (D.Don) DC



གསོ་རིག་མིང་ » སྤྱང་རྩི་དོ་གོ། (ཞི་གྱ་རྒྱང། ཀུན་ཟེད་རྒྱལ་པོ། མི་རྟན་མགོ་བོ། ཀ་ཏྲ།)

Pterocephalus hookeri (C.B.Clarke) Diels

CAPRIFOLIACEAE



Triosteum himalayanum Wall.



Valeriana jatamansi Jones

CAPRIFOLIACEAE



Weigela thumb F. Boulineau

CARYOPHYLLACEAE Pink or Carnation Family



Arenaria ciliolata Edgew.

CARYOPHYLLACEAE



Arenaria densissima Wall.



Arenaria edgeworthiana Maj.



Arenaria festucoides Bentham Royle



Arenaria glanduligera Edgeworth

CARYOPHYLLACEAE



Arenaria ischnophylla F. N. Will.



Arenaria kansuensis Maxim.

CARYOPHYLLACEAE



Arenaria ludlowii H. Hara

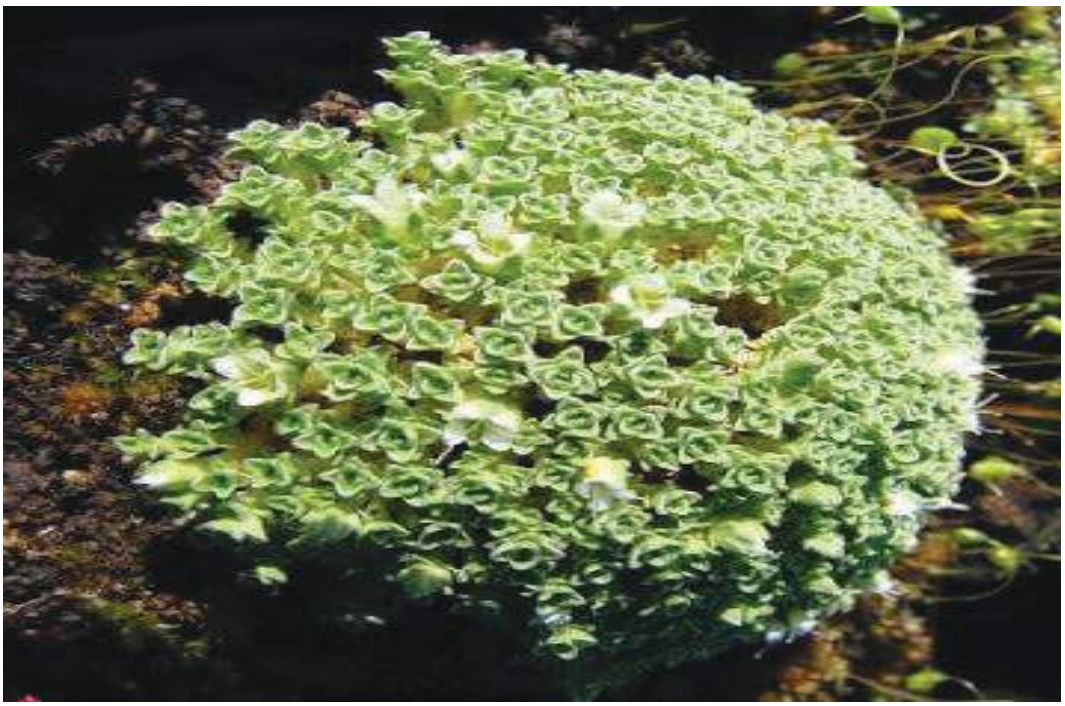


Arenaria melandryoides Edgeworth

CARYOPHYLLACEAE



Arenaria polytrichoides Edgeworth



Arenaria pulvinata Edgewort.



Arenaria rotundifolia M.Bieb.



Arenaria tetraquetra L.

CARYOPHYLLACEAE



Cerastium glomeratum Thuill.



Cucubalus baccifer (L.) Durande

CARYOPHYLLACEAE



གསོ་རིག་མིང་ » ཨ་ཀོང། (རྩ་ཨ་ཀོང་དཀར་པོ།)

Eremogone edgeworthiana Sadeghian & Zarree



གསོ་རིག་མིང་ » བྱི་ཤང་དཀར་མོ། (སྟ་གི་སྣ་ར་འབྲ། བྱི་ཀོང་དཀར་པོ།)

Eremogone saxatilis (L.)Ikonn.

CARYOPHYLLACEAE



Gypsophila cerastioides D.Don.



Minuartia laricifolia (L.) Schinz & Thell

CARYOPHYLLACEAE



Minuartia obtusiloba (Rydberg) House



Minuartia rubella (Wahlenberg) Hiern

CARYOPHYLLACEAE



Minuartia stricta (Swartz) Hiern



Odontostemma glandulosa Benth



Odontostemma melandryiforme (F.N.Williams) Rabeler & W.L.Wagner



*Odontostemma melandryoides (*Edgew.) Rabeler & W.L.Wagner

CARYOPHYLLACEAE



Pseudostellaria heterantha (Maxim.) Pax.



Pseudostellaria heterophylla (Miq.) Pax.



Pseudostellaria sylvatica (Maxim.) Pax.



Sagina japonica (Swartz) Ohwi

CARYOPHYLLACEAE



Silene acaulis (L.) Jacq.



Silene armeria L.



Silene acaulis (L.)Jacq.



Silene bhutanica W. W. Sm.

CARYOPHYLLACEAE



Silene birgittae Bocquet.



Silene caespitella F. N. Will.



Silene conoidea Linn.



Silene davidii (Franchet) Oxelman & Lideeen

CARYOPHYLLACEAE



Silene edgeworthii Bocquet



Silene gonosperma (Ruprecht) Bocquet.



Silene indica Otth.



Silene indica var. *bhutanica* (W. W. Smith) Bocquet

CARYOPHYLLACEAE



Silene indica var. *edgeworthii* Otth.



Silene julaensis Grierson

CARYOPHYLLACEAE



Silene latifolia Poir.



Silene linae Bocquet

CARYOPHYLLACEAE



Silene nepalensis Majumdar



Silene nigrescens (Edgeworth) Majumdar

CARYOPHYLLACEAE



Silene nutans Lin.



Silene purii Bocquet & N.P. Saxena

CARYOPHYLLACEAE



Silene thomsonii Majumdar



Silene vulgaris (Moench) Garcke



Solitaria glanduligera (Edgew.) Sadeghian & Zarre



Solitaria ludlowii (H. Hara) comb. Ined

CARYOPHYLLACEAE



Spergula arvensis L.



Stellaria alsine Grimm



Stellaria congestiflra H. Hara



Stellaria decumbens Edgew

CARYOPHYLLACEAE



Stellaria monosperma D. Don



Stellaria vestita Kurz.

CELASTRACEAE Spindle-Traa Family



Euonymus frigidus Wall.



Euonymus grandiflorus Wall.

CELASTRACEAE



Euonymus tingens Wall.



Parnassia asarifolia Vent.

CELASTRACEAE



Parnassia chinensis Franch.



Parnassia delavayi Franchet

CELASTRACEAE



Parnassia fimbriata K.D.Koenig



Parnassia nubicola Royle

CELASTRACEAE



Parnassia palustris L.



Parnassia wightiana Wall.

CLADONIACEAE Lichenized fungi Family



Pilophorus acicularis (Ach.) Th. Fr.



Pilophorus robustus Th. Fr.

CLETHRACEAE Clethra Family



Clethra delavayi Franch.

COMMELINACEAE Day flower Family



Cyanotis fasciculata (Roth) Schult.f.

COMMELINACEAE



Cyanotis vaga (Lour.) Schult. & Schult.f.

CONVOLVULACEAE Bindweed or Morning glory Family



Cuscuta europaea Linn.



Cuscuta reflexa Roxb.



Cuscuta indica L.

CONVOLVULACEAE



Ipomoea purpurea (L.) Roth

CORNACEAE Dogwood family



Alangium alpinum (C. B. Cl.) W. W. Smith & Cave

CORNACEAE



Benthamia capitata (Wallich) Nakai



Swida macrophylla (Wall.) Sojak

CORNACEAE



Swida oblonga (Wall.) Soják.

CRASSULACEAE Stonecrop or orpine Family



Rhodiola amabilis (H. Ohba) H. Ohba.

CRASSULACEAE



Rhodiola bupleuroides (Hook.fil. & Thomson) S.H.Fu



Rhodiola chrysanthemifolia (H.Lév.) S.H.Fu.

CRASSULACEAE



Rhodiola coccinea (Royle) Boriss



Rhodiola crenulata (Hook. fil & Thomson) H. Ohba



Rhodiola cretinii (Raymond-Hamet) H. Ohba.



Rhodiola dumulosa (Franch.) S.H. Fu

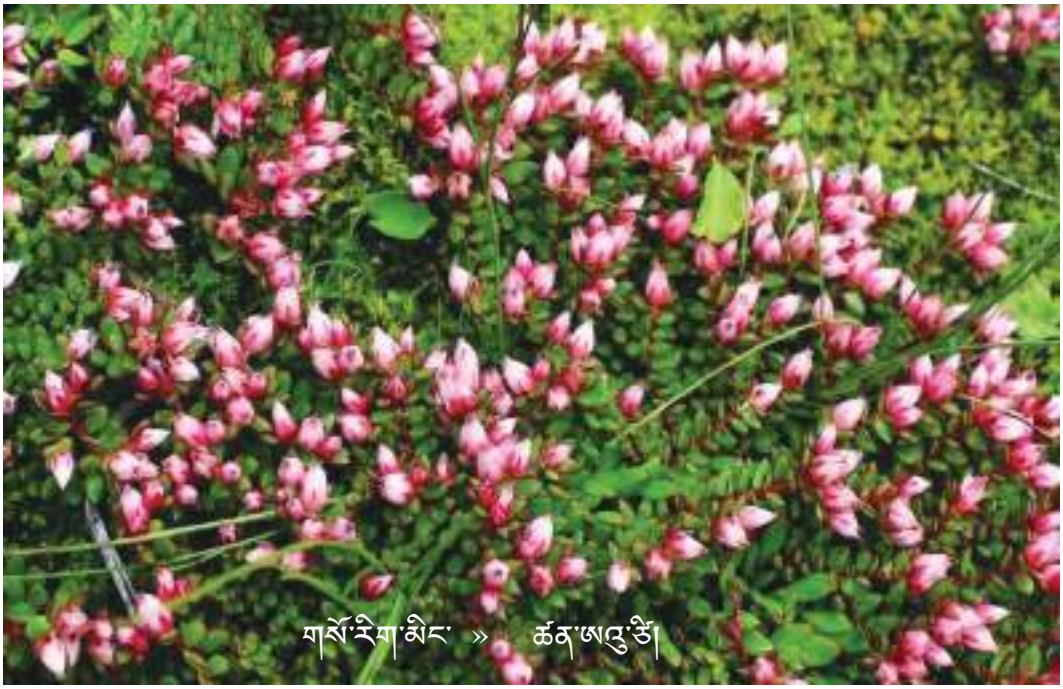
CRASSULACEAE



Rhodiola fastigiata (Hook.f. & Thomson) S. H. Fu



Rhodiola himalensis (D. Don) S. H. Fu



Rhodiola hubsonii (R.-Hamet) Fu.



Rhodiola humilis (J. D. Hooker & Thomson) S. H. Fu

CRASSULACEAE



Rhodiola imbricata Edgew



Rhodiola rosea L.

CRASSULACEAE



Rhodiola sherriffii H.Ohba.



Rhodiola sinuata (Edgew.) S.H.Fu.

CRASSULACEAE



Rhodiola stapfii (Raymond-Hamet) Fu



Rhodiola tibetica (Hook.f. & Thomson) S. H. Fu



CRASSULACEAE



Rhodiola wallichiana (Hooker) S. H. Fu



Sedum acre L.

CRASSULACEAE



Sedum multicaule Wall.



Sedum oreades (Decne.)R.-Hamet

CRASSULACEAE



Sedum ludlowii (H.Ohba) Kozhevn



Sedum sarmentosum Bunge

CRASSULACEAE



Sedum spurium M.Bieb



Sedum triactina A. Berger

CRASSULACEAE



Sedum trullipetalum Hook.f. & Thomson.



Sinocrassula indica (Decaisne) A. Berger

CUCURBITACEAE Gourd Family



Herpetospermum pedunculosum (Ser.) C.B.Clarke



Thladiantha cordifolia (Blume) Cogniaux

CUCURBITACEAE



Trichosanthes lepiniana (Naudin) Cogn.



Zanonia indica L.

CUPRESSACEAE Cypress Family



Cryptomeria japonica (L.f.) D. Don.



Cupressus corneyana Carriere.

CUPRESSACEAE



Cupressus torulosa D. Don



Juniperus communis L.

CUPRESSACEAE



Juniperus indica Bertol.



Juniperus pseudosabina Fisch. & C.A.Mey

CUPRESSACEAE



Juniperus recurva D. Don



Juniperus squamata D.Don

CUPRESSACEAE



Juniperus wallichiana Hook. f. & Brandis



Thuja orientalis L.

CYPERACEAE Sedge family



Carex alopecuroides D.Don.



Carex atrata L.

CYPERACEAE



Carex atrofusca Schkuhr



Carex baccans Nee.



Carex breviculmis R.Br.



Carex diandra Sch.

CYPERACEAE



Carex echinata Murr.



Carex filicina Nees.

CYPERACEAE



Carex haematostoma Nees.



Carex hebecarpa C. A. Meyer

CYPERACEAE



Carex microglochin Wahlenb.



Carex viridula Micha.



Cyperus squarrosus L.



Eleocharis palustris (L.) Roem

CYPERACEAE



Kyllinga squamulata Vahl.



Scirpus wichurai Boeckeler

DAPHNIPHYLLACEAE Daphniphyllum Family



Daphniphyllum himalense (Bentham) Müller

DIAPENSIACEAE Diapensia Family



Diapensia himalaica J. D. Hooker & Thomson

DIAPENSIACEAE



Diapensia purpurea Diels

DICRANACEAE Haplolepideous mosses Family



Dicranum fulvum Hooker

DICRANACEAE

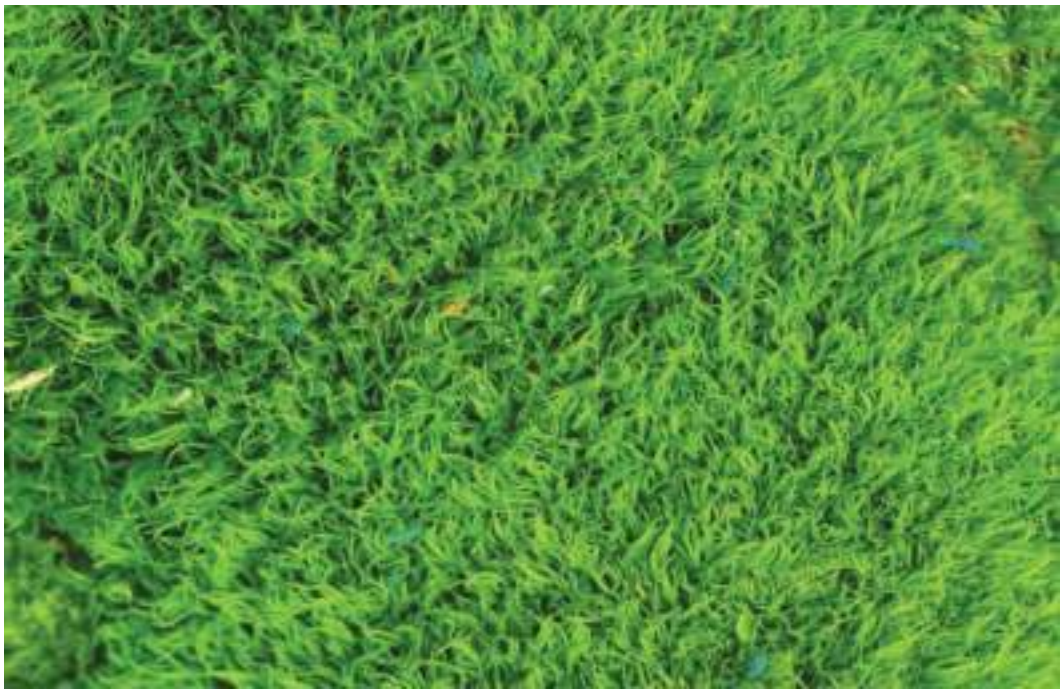


Dicranum fuscescens Turner



Dicranum majus Turner

DICRANACEAE



Dicranum montanum Hedwig



Dicranum polysetum Swartz.

DICRANACEAE

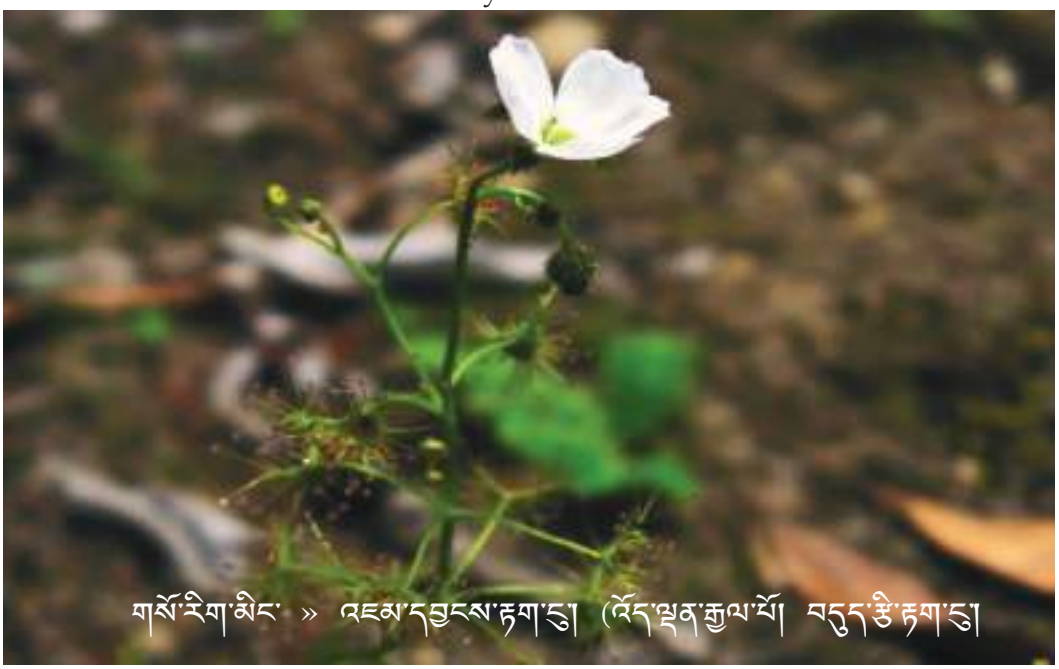


Dicranum scoparium Hedw



Dicranum viride (Sulli. & Lesq.) Lind.

DROSERACEAE Sundew Family



Drosera peltata Thunb.

DRYOPTERIDACEAE Leptosporangiate ferns Family



Polystichum squarrosum (D.Don) Fée

ELAEAGNACEAE Oleaster Family



Elaeagnus caudata Momiyama.



Elaeagnus infundibularis Momiy

ELAEAGNACEAE



Elaeagnus parvifolia Thunb.



Hippophae neurocarpa S. WuLieut T. N. He



Hippophae rhamnoides L.



Hippophae salicifolia D.Don.

ELAEAGNACEAE



Hippophae thibetiane Schleche



Hippophae tibetana Schltdl.

ELATINACEAE Waterwort Family



Elatine ambigua Wight

EPHEDRACEAE Sinica Family



Ephedra equisetina Bge.

EPHEDRACEAE



Ephedra gerardiana Stapf.



Ephedra monosperma C.A.Mey

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