



A Pictorial Guide to
Rhododendrons
of Phrumsengla National Park

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of Phrumsengla National Park

Phrumsengla National Park
Department of Forests and Park Services
Ministry of Agriculture and Forests

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Royal Government of Bhutan
Ministry of Agriculture & Forests
Department of Forests & Park Services
Phrumsengla National Park
Ura: Bumthang
"Managing Bhutan's Natural Heritage"



FOREWORD

The Phrumsengla National Park lies at the heart of Bhutan's protected area network. It extends across four central and eastern Dzongkhags viz. Bumthang, Lhuentse, Mongar and Zhemgang, of the country. The Park landscape transcends from subtropical in the south to temperate in the central, and to the alpinies in the north. Wide altitudinal and climatic range therefore makes the Park's flora diverse and rich.

Unique and biologically significant Park in the country, Phrumsengla National Park harbour well over 1000 species of plants; 161 trees, 247 shrubs and 316 herbs. More than 154 species of plants are identified as having medicinal properties, 21 species as endemic to Bhutan and one species (*Rubus sengorensis*) endemic to the Park. Phrumsengla National Park is also home to an array of Rhododendron species.

Of the total 46 species of genus Rhododendron described in the Flora of Bhutan and 45 are known to be occurring nationwide, Phrumsengla National Park is home to 38 species, three sub-species, two varieties, and one hybrid of Rhododendron.

It is hopeful that this publication 'A Pictorial Guide to Rhododendrons of Phrumsengla National Park' will inspire conservationists, nature lovers, enthusiasts and professionals and further boost the Rhododendron knowledge base and its conservation.

Tashi Delek

(Lobzang Dorji)

DIRECTOR

Department of Forests and Park Services

INTRODUCTION

The family Ericaceae to which the genus *Rhododendron* belong is composed of herbs, shrubs and trees with leaves that are alternate, simple and estipulate. The genus *Rhododendron* Linnaeus 1753 is characterised by shrubs and small to rarely large trees. Leaves are spirally arranged varying from one to two centimetres (cm) to over 50cm in size. In some species, underside of leaves is covered with tiny scales or hairs. The species are either deciduous or evergreen. Some species are known to have clusters of large flowers. Alpine species are with small flowers and small leaves.

Growing throughout the Northern Hemisphere and extending into Southern Hemisphere in Southeast Asia, rhododendron is a widely distributed genus with highest species diversity found growing in the Himalayas. Grierson & Long recorded 46 rhododendron species for Bhutan in the Flora of Bhutan of which 45 species are noted to be occurring in the country, Phrumsengla National Park is home to 38 *Rhododendron* species.

In this 'A Pictorial Guide to *Rhododendrons* of Phrumsengla National Park' we document 38 species, three subspecies, two varieties, and one hybrid of rhododendron observed over a period of three years. The species are illustrated with colour photographs (flowers, dorsal and ventral leaves, and bark). The names of the species are arranged in alphabetical order for ease and direct reference. This field guide aims to provide basic information and use as a quick and handy reference for forestry professional, nature lovers, enthusiasts, and the general public.

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ABBREVIATION

Dzo.	: Dzongkha
Nep.	: Nepali/Lhotsham Kha
R.	: Rhododendron
Sha	: Sharchop/Tshangla Kha
Subsp.	: Sub-species
Var.	: Variety

Rhododendron areigenosum Hook.f.



Dorsal view



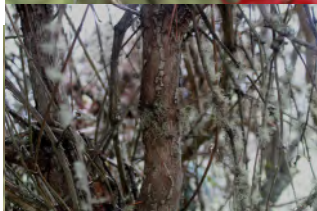
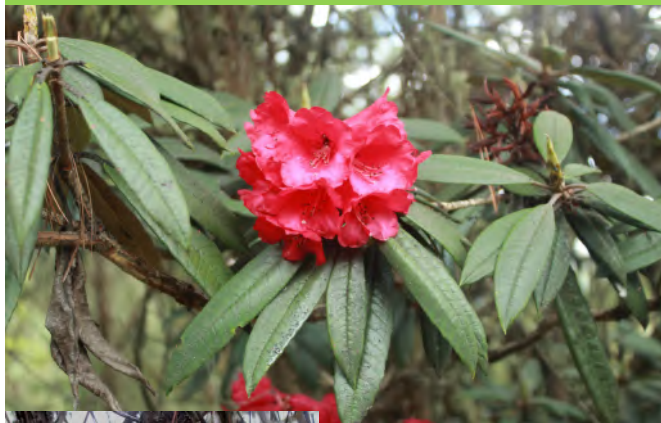
Rhododendron arboreum Smith. Etho Metog (Dz); Zhu-dang Metog (Sha); Gurass, Gurans (Nep).



Rhododendron arboreum var *roseum* Lindl.



Rhododendron arboreum Smith. Subsp. *delavayi* (Franchet)
Chamberlain



Rhododendron anthopogon D. Don (White) **Balu** (Dzo)



Rhododendron anthopogon D.Don (Pink) **Balu** (Dzo)



Rhododendron argipeplum Balfour f. & Cooper



Dorsal and ventral view of the leaves



Rhododendron baileyi I. B. Balf



Rhododendron barbatum G. Don Lal Chimal (Nep).



Rhododendron bhutanense D.G. Long & Bowes Lyon



Ventral and dorsal view of the leaves



Rhododendron camelliiflorum Hook.f.



Dorsal and ventral view of the leaves



Rhododendron camplyocarpum Hook.f.



Rhododendron x candelabrum Hook.f.

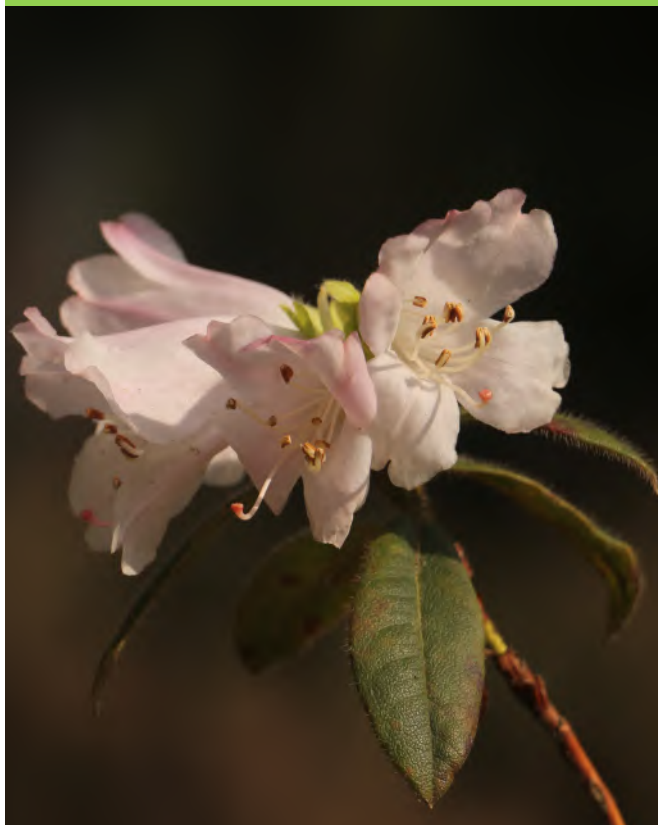


A hybrid of *R. thomsonii* and *R. campylocarpum*

Dorsal and ventral view of the leaves



Rhododendron ciliatum Hook.f.



Rhododendron cinnabarinum subsp. *cinnabarinum* Hooker



Rhododendron cinnabarinum subsp. *Xanthocodon*
(Hutchinson) Cullen



Rhododendron dalhousiae var. *rhabdotum* (Balfour f. & Cooper) Cullen



Endemic to Bhutan



Rhododendron edgeworthii Hook.f
Poso Metog (Tongsa); Lahore Chimal (Nep).



Rhododendron falconeri Hook.f. Khangley Metog (Dz);
Korlinga (Nep).



Dorsal and ventral view of the leaves.



Rhododendron flinckii Davidian



Rhododendron glaucophyllum Rehder



Dorsal and ventral view of the leaves



Rhododendron grande Wight. Local name: Patle
Korlinga (Nep).



Rhododendron griffithianum Wight
Local name: Seto Chimal (Nep).



Ventral and dorsal part of the leaves



Rhododendron hodgsonii Hook.f.



Distinguish from *R. kesangiae* by its silvery to cinnamon indumentum of leaves underside and peeling in large sheets bark



Rhododendron kendrickii Nuttall



Rhododendron kesangiae Long & Rushforth
Local name : Tala (Dz).



Endemic to Bhutan

Distinguished from *R. hodgsonii* by its rough, greyish brown bark and white indumentum beneath the leaves



Rhododendron keysii Nuttall



Rhododendron lanatum Hook.f.



Dorsal and ventral part of the leaves



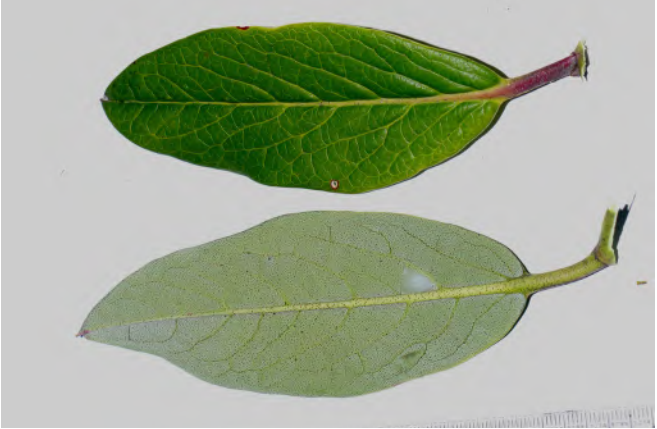
Rhododendron lepidotum var. *obulatum* dværg, gul (white)



Rhododendron lepidotum G.Don (Pink)



Rhododendron lindleyi Moore



Rhododendron maddenii Hook.f.



Dorsal and ventral part of the leaves



Rhododendron nivale J. D. Hooker



Similar to *R. setosum*, it can be distinguished by its elliptic to ovate leaf blade and acute apex.

Rhododendron neriiflorum Franchet



Rhododendron pendulum Hook.f.



Dorsal and ventral part of the leaves



Rhododendron setosum D. Don Sulu (Dzo.)



Dorsal view of the leaves



Similar to *R. nivale* but distinguished by its oblong to obovate leaf, with rounded and shallowly retuse apex

Rhododendron succothii Davidian



Leaves arrangement and whole plant



Rhododendron tsariense Cowan



Rhododendron thomsonii Hook.f. Khema (Tongsa).



Rhododendron triflorum Hook.f. Pahenle Chimal (Nep).



Rhododendron virgatum Hook.f.



Rhododendron wallichii Hook.f.



Dorsal and ventral view of the leaves



Rhododendron wightii Hook.f.



Dorsal & ventral part of the leaves



Rhododendron fulgens Hook.f.



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