

THE SPECIES  
OF  
RHODODENDRON



PUBLISHED BY  
THE RHODODENDRON SOCIETY

1930

## INTRODUCTION

THE purpose of this book is to provide a useful handbook to the species of *Rhododendron*. The botanical explorations of the last quarter of a century have added a surprising number of new species to a genus remarkable for its horticultural interest. The majority of the additions have come from Western China and the adjoining parts of Tibet and Burma. The descriptions of the new species have appeared in many diverse publications. So great has been the influx and so scattered the publications that it is a matter of great labour for those interested in the genus to assemble the necessary data relative to each species and to obtain a general view of the ramifications of the genus.

The aim of those responsible for the issue of the present handbook has been to provide a single-page description of each species and to attempt to group the species into series so as to facilitate understanding and recognition. The first half of this task, though extensive, has been accomplished with a degree of completeness, but the second part is admittedly tentative and will no doubt require adjustment. There are many difficulties. The number of species is in itself somewhat overwhelming; many are inadequately known; sometimes only imperfect dried specimens are available; lines of demarcation between one series and another are sometimes definite, but in other cases very difficult to draw; observations on living material are often not forthcoming, as many species are not yet in cultivation; the original specimens on which the descriptions are based—what are known as the *types*—are to be found some in one herbarium and some in another, scattered throughout the botanical institutions of the world.

It is therefore with no idea of finality that the present book appears. Though one may assume that the majority of the species of the genus are known, there are many still to be found, for the geographical area of the genus is as yet inadequately explored.

## INTRODUCTION

Evidently, therefore, a complete monograph of the genus is not yet possible. But there is an urgent need for a book, however imperfect, which will give a summary of the present position. Some kind of guide to the many species now in cultivation is a present necessity, and one element in the problem is that it should be available without undue delay. This consideration has had two consequences. It has been judged expedient to reserve the Malayan and New Guinea species for future consideration. These are, however, rare in cultivation, are somewhat inadequately represented in herbaria, and their study would add considerably to the time necessary for the production of this handbook. A list, however, of these species will be found in Appendix I. The other result is that the validity of each series must be considered an open question. The arrangement is essentially tentative. Much work remains to be done before the problems herein involved can be taken to be satisfactorily solved.

Those who have grown and have studied *Rhododendrons* know that they tend to fall into several natural groups. Sometimes these groups or series are in accord with the geographical distribution, but exceptions are numerous. Just as the number of species in cultivation of this magnificent genus has increased, so has the need for some more certain means of recognition—some guide in the wilderness. When a new *Rhododendron* “swims into the ken” of the botanist or horticulturist, his first endeavour is to find its nearest relation in the genus—to place it in its group and to note how it differs from its allies. The arrangement into series is a means to this end. Certain of the better known species have been chosen as centres and in many cases give their names to the respective series. Under the wing of each representative species are placed all the species deemed to be of kinship with it. This is in the main the plan of this handbook. There is bound to be diversity of opinion as to the placing of the units. Agreement at this stage, when so much remains to be unravelled, cannot be expected. But a basis for discussion will be afforded.

## INTRODUCTION

Those responsible for the production are well aware that much has yet to be added and much to be amended.

As time was a consideration, the work is the result of the labours of three authors and not of one. The Rhododendron Society has been fortunate in securing the services of three botanists who in recent years have devoted considerable attention to the genus. The elepidote Rhododendrons, excepting two small series, have been worked out by Mr. H. F. Tagg, of the Royal Botanic Garden, Edinburgh, who for many years has devoted himself to the study of the genus; Mr. Tagg also assisted at the beginning of the serialisation of the genus which was started by that great botanist, the late Sir Isaac Bayley Balfour. The lepidote Rhododendrons, a numerous and difficult assemblage, have been dealt with by Mr. J. Hutchinson, of the Royal Gardens, Kew. The important group of the Azaleas and their allies has been undertaken by Mr. Alfred Rehder of the Arnold Arboretum. This division of labour has no doubt led to a certain diversity of treatment, but as these three groups are natural associations in the genus, there is no real loss of unity.

A certain number of illustrations has been incorporated in the book. These are intended chiefly as explanatory of the characters of each series. Considerations of expense have made it necessary to limit the number of such figures.

How is such a book to be used? There is no easy path to a knowledge of this genus. Those who have already gone through the travail of making acquaintance with the many species in cultivation will need but little guidance. They will already know the landmarks. Those who cannot claim such foreknowledge would be well advised to begin with the leading species in each series, to visit some representative collection where they can be seen, and to note the characters by which each series can be recognised. Our friends and acquaintances are best known when seen often, and it is the same with the Rhododendrons. To each series is attached an introduction with key to the species included within it. This key may be easy to turn or it may not.

## INTRODUCTION

It depends on the series. The species in some series fall into line readily and easily; in some they almost defy analysis and alignment. Do not expect, therefore, machine-like accuracy in your first endeavours with the keys. Their use requires a long apprenticeship and a good deal of practice.

There remains the question of the characters to be deemed important in the identification of *Rhododendron* species. That is too wide a question to be solved in an introduction. One may quote once more such ancient items of advice as *Experientia docet* and *Solvitur ambulando*. The habit of the plant is of some moment; so is the shape of the leaf; the presence or absence of "lepidote" scales; the occurrence of hairs forming an indumentum; the presence of glands and their appearance; the number of parts in calyx and in corolla; the shape and colour of the corolla; the number of stamens and their position; the shape of the ovary and also the appearance of the fruit. An endeavour has been made in the introductory matter prefacing each series to give the broad characters serving to indicate its boundaries. And only practice can give facility in recognition of the series and their component species. Make the acquaintance in flower of as many as possible of the representative species and the path of progress will not be too hard. Do not trust overmuch to the written word. There are many problems in this record quite unsolved or but half-solved. Aid us to solve them. The present book will have served its purpose if it affords some clue to the existing maze, and in that expectation it is issued.

The *Rhododendron* Society desire to acknowledge the great assistance that has been given in the preparation of this handbook by Mr. George Forrest and many others, and in particular they wish to record their gratitude and thanks to Professor Wright Smith, M.A., for much kind counsel and help.

For the *Rhododendron* Society,

J. B. STEVENSON,  
Editor.

TOWER COURT, ASCOT, 1930.

## PREFACE TO THE SECOND EDITION

When "The Species of *Rhododendron*" was first published in 1930, a considerable number of the specimens of the explorers' finds still awaited determination.

As many of these have proved to be plants of considerable importance in the genus, they have now been added in this second edition, thanks to the kindness of the late Mr. Tagg and Dr. J. M. Cowan of the Royal Botanic Garden, Edinburgh, and Dr. Hutchinson of the Royal Botanic Gardens, Kew.

As always, Sir William Wright Smith has been most kind.

The 31 species have been inserted as follows :—

amagianum, 112A.	Headfortianum, 492A.	pemakoense, 302A.
auritum, 156A.	igneum, 222B.	pudorosum, 314A.
Beanianum, 518A.	kongboense, 208A.	recurvoides, 666A.
Bulu, 392A.	Lopsangianum, 740A.	Sherriffii, 178A.
compactum, 398A.	Ludlowii, 442A.	silvaticum, 18A.
concatenans, 222A.	magnificum, 310A.	sordidum, 302B.
erosum, 222B.	microleucum, 412A.	spilanthum, 428A.
exquisetum, 774A.	micromeres, 300A.	tsariense, 178B.
fimbriatum, 404A.	minutifolium, 92A.	venator, 368A.
glomerulatum, 406A.	nitens, 594A.	viridiscens, 754A.
		xanthocodon, 792A.

For the *Rhododendron* Society,

J. B. STEVENSON,  
*Editor.*

## CONTENTS

THE SPECIES OF RHODODENDRON, OTHER THAN THOSE  
OF NEW GUINEA, MALAYA AND INDO-CHINA, ARRANGED  
IN THE ALPHABETICAL SEQUENCE OF THE SERIES

SERIES AND SUBSERIES	PAGE	SERIES AND SUBSERIES	PAGE
Albiflorum . . . . .	1	Fortunei— <i>continued</i>	
Anthopogon . . . . .	4	subseries Griffithianum . . . . .	278
Arboreum . . . . .	11	"    Orbiculare . . . . .	280
subseries Arboreum . . . . .	12	"    Oreodoxa . . . . .	281
"    Argyrophyllum . . . . .	20	Fulvum . . . . .	287
Auriculatum . . . . .	38	Glaucum . . . . .	293
Azalea . . . . .	42	Grande . . . . .	305
subseries Canadense . . . . .	44	Heliolepis . . . . .	320
"    Luteum . . . . .	51	Irroratum . . . . .	331
"    Nipponicum . . . . .	73	subseries Irroratum . . . . .	333
"    Obtusum . . . . .	75	"    Parishii . . . . .	361
"    Schlippenbachii . . . . .	110	Lacteum . . . . .	370
"    Tashiroi . . . . .	121	Lapponicum . . . . .	387
Barbatum . . . . .	124	Lepidotum . . . . .	437
subseries Barbatum . . . . .	126	Maddenii . . . . .	447
"    Crinigerum . . . . .	132	subseries Cilicalyx . . . . .	453
"    Glischrum . . . . .	135	"    Maddenii . . . . .	483
"    Maculiferum . . . . .	144	"    Megacalyx . . . . .	492
Boothii . . . . .	155	Micranthum . . . . .	500
Camelliaeflorum . . . . .	171	Moupinense . . . . .	502
Campanulatum . . . . .	175	Neriiflorum . . . . .	507
Campylogynum . . . . .	182	subseries Forrestii . . . . .	509
Camtschaticum . . . . .	187	"    Haematodes . . . . .	516
Carolinianum . . . . .	192	"    Neriiflorum . . . . .	527
Cephalanthum . . . . .	197	"    Sanguineum . . . . .	536
Cinnabarinum . . . . .	221	Ovatum . . . . .	559
Dauricum . . . . .	224	Ponticum . . . . .	567
Edgeworthii . . . . .	228	subseries Caucasicum . . . . .	568
Falconeri . . . . .	235	"    Ponticum . . . . .	582
Ferrugineum . . . . .	252	Saluenense . . . . .	587
Fortunei . . . . .	257	Scabrifolium . . . . .	600
subseries Calophytum . . . . .	259	Semibarbatum . . . . .	607
"    Davidii . . . . .	262	Stamineum . . . . .	610
"    Fortunei . . . . .	268	Taliense . . . . .	628

## CONTENTS

SERIES AND SUBSERIES	PAGE	SERIES AND SUBSERIES	PAGE
Taliense— <i>continued</i>		Trichocladum . . . . .	746
subseries Adenogynum . . . . .	630	Triflorum . . . . .	758
„ Roxieanum . . . . .	650	subseries Augustinii . . . . .	764
„ Taliense . . . . .	671	„ Hanceanum . . . . .	771
„ Wasonii . . . . .	689	„ Oreotrepes . . . . .	773
Thomsonii . . . . .	696	„ Polylepis . . . . .	779
subseries Campylocarpum . . . . .	698	„ Triflorum . . . . .	784
„ Martinianum . . . . .	707	„ Yunnanense . . . . .	793
„ Selse . . . . .	710	Vaccinioides . . . . .	817
„ Souliei . . . . .	725	Virgatum . . . . .	827
„ Thomsonii . . . . .	735	Unplaced . . . . .	832

## APPENDIX I

LIST OF SPECIES FROM NEW GUINEA, MALAYA AND INDO-CHINA . . . . .	842
---	-----

## APPENDIX II

LIST OF ADDITIONAL SYNONYMS, ETC. . . . .	851
INDEX TO SPECIFIC NAMES . . . . .	855



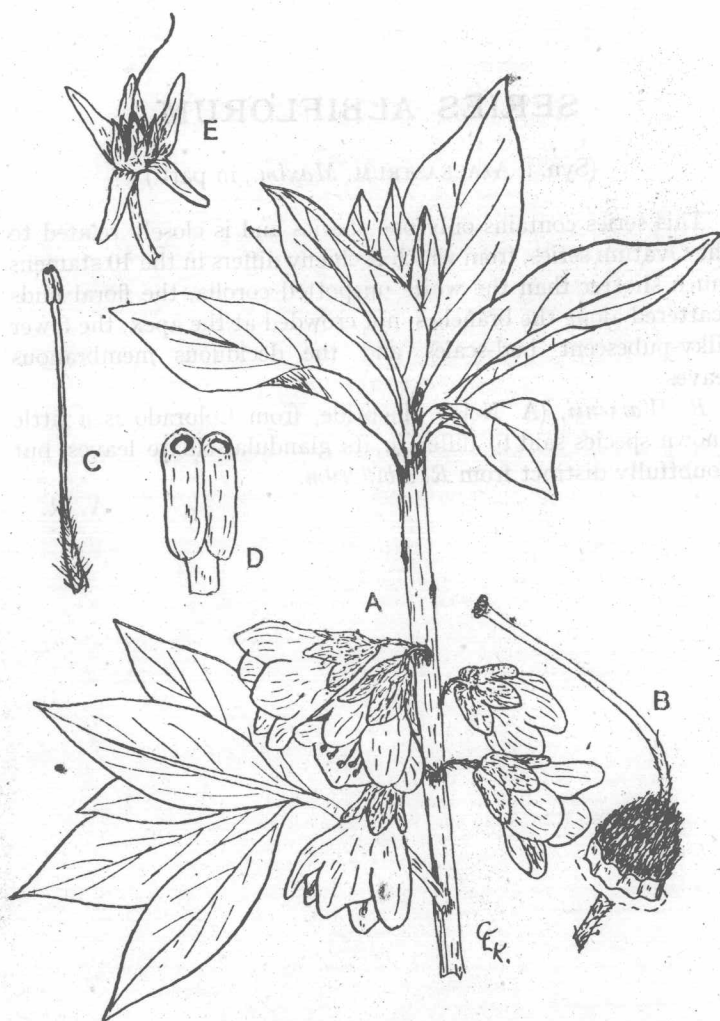
## SERIES ALBIFLORUM

(Syn. : AZALEASTRUM, *Maxim.*, in part.)

This series contains only one species and is closely related to the Ovatum series, from which it chiefly differs in the 10 stamens much shorter than the white unspotted corolla, the floral buds scattered along the branches, not crowded at the apex, the fewer silky-pubescent bud-scales and the deciduous membranous leaves.

*R. Warrenii*, (A. Nels.) Macbride, from Colorado is a little known species said to differ in its glandular-ciliate leaves, but doubtfully distinct from *R. albiflorum*.

A. R.



*RHODODENDRON ALBIFLORUM, Hooker.*

A. Flowering shoot. B. Pistil. C. Stamen. D. Anther. E. Fruit.

**RHODODENDRON ALBIFLORUM**, *Hooker, Fl. Bor. Am.*, vol. 2, 43, t. 133 (1834).

(Syn.: *AZALEA ALBIFLORA*, *Kuntze*; *AZALEASTRUM ALBIFLORUM*, *Rydb.*)

ILLUSTRATION—*Hooker in Bot. Mag.*, t. 3670 (1839).

**HABIT**: shrub to 6 ft. tall, with erect or ascending branches; young shoots with scattered loosely appressed brown hairs and sparse partly glandular pilose hairs, becoming glabrescent and light or yellowish-brown, and light grey or greyish-brown after the second year.

**FLORAL WINTER-BUDS**: oblong-ovoid, with 4-5 greenish-yellow or light yellowish-brown outer acuminate scales, ciliate and with appressed brown silky hairs along the middle.

**LEAVES**: deciduous, membranous, scattered, or clustered at the end of short branchlets, elliptic-oblong to oblong, sometimes broadest above the middle, rarely below,  $1-2\frac{1}{2}$  in. long and  $\frac{2}{3}-\frac{1}{2}$ , rarely to 1 in. broad, acute, cuneate at base, slightly ciliate and often somewhat undulate at the margin, bright green above and, when young, clothed, as also on the midrib beneath, with appressed long brown hairs, otherwise glabrous, pale green beneath; petiole  $\frac{1}{4}-\frac{1}{2}$  in. long, with appressed brown hairs.

**INFLORESCENCE**: 1-2-flowered, from axillary buds along the branchlets of the previous year; flowers appearing after the leaves, nodding; pedicels glandular-pubescent,  $\frac{1}{2}-\frac{2}{3}$  in. long.

**CALYX**: with oval to oblong-obovate lobes,  $\frac{1}{2}-\frac{1}{2}$  in. long, about one-third shorter than corolla, glandular-ciliate, with scattered long brown hairs and glandular-pubescent on back.

**COROLLA**: rotate-campanulate, about  $\frac{1}{2}$  in. across, white, rarely spotted yellow or orange (f. *poikilon*, J. K. Henry), glabrous outside, with ovate lobes about as long or longer than tube which is villous inside.

**STAMENS**: 10 shorter than corolla; filaments pubescent below the middle.

**PISTIL**: slightly shorter than stamens; ovary glandular-pilose; style straight, dilated below the large-lobed stigma, pilose below the middle.

**CAPSULE**: broad-ovoid, about  $\frac{1}{2}$  in. long, shorter than the persistent calyx-lobes, glandular-setose.

**HABITAT**: North America, Rocky Mountains from British Columbia and Alberta to Oregon and Colorado.

A distinct species characterised by the small white rotate-campanulate flowers produced solitary or in pairs from lateral buds along the branchlets, the 10 stamens, and the large calyx enveloping the ovoid capsule.

## ANTHOPOGON SERIES

**GENERAL CHARACTERS:**—Small shrubs. Leaves evergreen, densely scaly below. Inflorescence terminal, capitate, many-flowered. Flowers mostly white or yellow, rarely pink. Calyx large for the size of the flower, ciliate. Corolla narrowly tubular with a spreading 5-lobed limb, rarely scaly outside. Stamens 5-10, included in the corolla-tube, mostly glabrous. Ovary 5-celled; style very short, thick, glabrous. Capsule very small, scaly.

**DISTRIBUTION:** Afghanistan to the Eastern Himalaya, Southern Tibet and Szechuan.

A small series very closely allied to and perhaps not separable by any one character from the *Cephalanthum* group. A useful diagnostic feature is whether the leaf-bud-scales (the "perulae") remain on the branchlets or fall off on the unfolding of the leaves. The reduction to 5 stamens, which are hidden in the corolla-tube, shows considerable advancement in structure, and this group may be looked upon as one of the highest evolved of the small-leaved species.

J. H.

### KEY TO THE SPECIES

A. Stamens 10; winter bud-scales early deciduous; flowers white tinged with rose; calyx-lobes densely ciliate

**Collettianum.**

A. Stamens up to 8:

B. Winter bud-scales persistent; flowers yellow; calyx densely ciliate

**hypenanthum.**

B. Winter bud-scales deciduous:

C. Flowers yellow all over; calyx glabrous or slightly ciliate on the margin; leaves glabrous above

**haemonium.**

C. Flowers pink; calyx finely ciliate on the margin; leaves slightly scaly above

**anthopogon.**

C. Flowers white or blue or with yellow tube; calyx densely ciliate; leaves soon glabrous above

D. Corolla-tube not yellow; calyx-lobes and corolla-tube not scaly outside

**rufescens.**

D. Corolla-tube yellow; calyx-lobes and corolla-tube scaly outside

**tsarongense.**

**RHODODENDRON ANTHOPOGON, D. Don.**

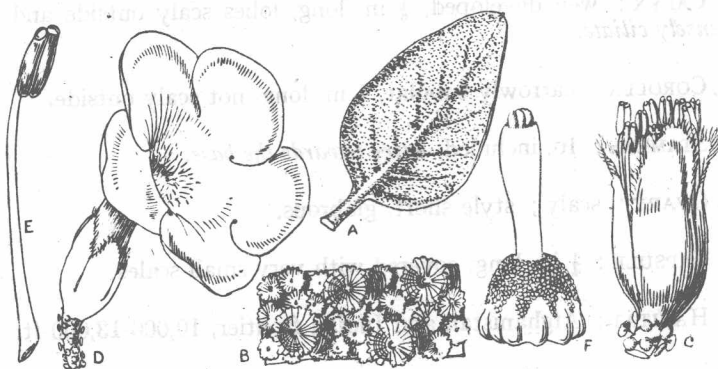
ILLUSTRATION—

**HABIT** : shrub ; branchlets short and twiggy, slightly setulose, scaly when young ; *winter bud-scales deciduous*.

**LEAVES** : obovate-elliptic, obtusely mucronate at the apex, rounded at the base,  $1-1\frac{1}{2}$  in. long,  $\frac{1}{2}-1$  in. broad, slightly scaly above, very densely so below, the larger ones below dry and flakey ; leaf-stalks  $\frac{1}{4}$  in. long, scaly above.

**INFLORESCENCE** : terminal, subumbellate, several-flowered ; flower-stalks about  $\frac{1}{8}$  in. long, *slightly scaly*.

**FLOWERS** : pink.



**RHODODENDRON ANTHOPOGON, D. Don.** Flowers pink.

A. Typical leaf. B. Lower portion of leaf showing the scales. C. Calyx and stamens. D. Flower. E. Stamen. F. Pistil.

**CALYX** : deeply lobed, lobes broadly elliptic,  $\frac{1}{4}$  in. long, *finely ciliate* on the margin.

**COROLLA** : narrowly tubular,  $\frac{3}{4}$  in. long, not scaly outside.

**STAMENS** : 6-8, included, glabrous.

**OVARY** : scaly, 4-5-celled ; style glabrous, very short and thick.

**CAPSULE** :  $\frac{1}{8}$  in. long, embraced by the persistent calyx-lobes.

**HABITAT** : Eastern Himalaya and Southern Tibet (Nepal and Sikkim), 11,000-16,000 ft.

**RHODODENDRON COLLETTIANUM, Aitch. & Hemsl.**

ILLUSTRATION—*Journ. Hort. Ser.* 3, 36 : p. 331.

HABIT : shrub, several feet high ; branchlets covered with scurfy scales ; *leaf-bud-scales early deciduous*.

LEAVES : broadly lanceolate, acute,  $1\frac{3}{4}$ - $2\frac{1}{2}$  in. long, about  $\frac{3}{4}$  in. broad, bright green above and glabrous, covered below with hair-like scales, yellowish when dry ; leaf-stalks  $\frac{1}{4}$  in. long.

INFLORESCENCE : terminal, capitate, many-flowered ; flower-bud-scales soon deciduous ; flower-stalks  $\frac{1}{4}$  in. long, scaly.

FLOWERS : white, tinged with rose.

CALYX : well developed,  $\frac{1}{8}$  in. long, lobes scaly outside and *densely ciliate*.

COROLLA : narrowly tubular, 1 in. long, not scaly outside.

STAMENS : 10, included, *hairy towards the base*.

OVARY : scaly ; style short, glabrous.

CAPSULE :  $\frac{1}{4}$  in. long, covered with very small scales.

HABITAT : Afghanistan and Indian frontier, 10,000-13,000 ft.

**RHODODENDRON HAEMONIUM, Balf. f. & Cooper.**

ILLUSTRATION—

HABIT : shrub ; branchlets twiggy, shortly setulose and scaly ;  
*winter bud-scales early deciduous.*

LEAVES : narrowly elliptic, obtusely mucronate, slightly  
narrowed at the base, about 1 in. long and  $\frac{1}{2}$  in. broad, glabrous  
and dull above, very densely scaly below ; leaf-stalks  $\frac{1}{4}$  in. long,  
scaly.

INFLORESCENCE : terminal, several-flowered ; flower-stalks  
 $\frac{1}{2}$  in. long, *densely scaly.*

FLOWERS : yellow.

CALYX : deeply lobed, lobes broadly elliptic,  $\frac{1}{4}$  in. long, *glabrous*  
or *slightly ciliate.*

COROLLA : shortly tubular, villous within, about  $\frac{1}{2}$  in. long.

STAMENS : 5-6, glabrous.

OVARY : scaly ; style very short, glabrous.

CAPSULE :

HABITAT : Bhutan, 13,000 ft.

**RHODODENDRON HYPENANTHUM, Balf. f.**

ILLUSTRATION—*Bot. Mag.*, t. 3947 (as *R. anthopogon*).

HABIT: shrub; branchlets short and twiggy, slightly scabrid, the young ones scaly; *winter bud-scales persistent* for several years.

LEAVES: narrowly obovate-elliptic, obtusely mucronate at the apex, rounded to slightly cuneate at the base, about  $1\frac{1}{4}$  in. long and  $\frac{2}{3}$  in. broad, soon glabrous above, densely scaly below as in *R. anthopogon*; leaf-stalks  $\frac{1}{4}$  in. long.

INFLORESCENCE: terminal, as in *R. anthopogon*.

FLOWERS: yellow.

CALYX: etc. as in *R. anthopogon*, but calyx-lobes more *densely ciliate*.

HABITAT: Western Himalaya, 11,000-15,000 ft.



**RHODODENDRON RUFESCENS, Franch.**

ILLUSTRATION—

**HABIT** : shrub 1-2 ft. high ; branchlets short and twiggy, scaly and slightly setulose ; the *winter bud-scales early deciduous*.

**LEAVES** : oblong to oblong-elliptic, obtusely mucronate at the apex, rounded or subacute at the base, about  $\frac{3}{4}$  in. long and  $\frac{1}{3}$ - $\frac{1}{2}$  in. broad, glabrous above, very densely covered with reddish-purple scales below except the straw-coloured midrib ; leaf-stalks  $\frac{1}{8}$  in. long, scaly.

**INFLORESCENCE** : terminal, several-flowered ; flower-stalks nearly glabrous.

**FLOWERS** : white to pale blue.

**CALYX** : deeply lobed, lobes oblong-elliptic,  $\frac{1}{8}$  in. long, *densely ciliate*.

**COROLLA** : narrowly tubular,  $\frac{3}{4}$  in. long, not scaly outside.

**STAMENS** : 5, glabrous.

**OVARY** : scaly, style glabrous, very short and thick.

**CAPSULE** :

**HABITAT** : Szechuan, 11,000-13,000 ft.