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Photography by Peter Uhlheer

BEARDED ORCHIDS

(Left to right): *Calochilus paludosus*, *Calochilus robertsonii* (a variety) and *C. campestris*.

BEARDED ORCHIDS—*Calochilus*. "The Genus", page 239; "Growing . . .", page 279; "Orchids in Tasmania", page 283.

HORNED ORCHIDS—*Orthoceras*. Field report, colour plate and description, page 240.

DOUBLE-TAIL ORCHIDS—*Diuris*. Cultivation, page 241; Propagation, page 243.

HIBISCUS — SPRENGELIA — EREMOPHILA

THE AUSTRALIAN CONIFERS

AUSTRALIAN ORCHIDS

We have in preparation a very extensive and complete book under the above title by Alex Dockrill. The scope of the book will be a complete description and detailed illustration of every species of epiphytic orchid native to Australia and every terrestrial species found in the tropical areas of Australia. The professional botanists have been very generous in their support and assistance in the mammoth task of checking specimens and records back to the very first collections. This is taking considerable work and time and it is not expected that the book will be available now until 1969. I am pleased with this delay because of one aspect in which the competent photographers come orchid enthusiasts who read this publication, have let the project down. We do not have sufficient colour slides of the required standard. Some photographers have gone to some trouble to get slides. Most are not good enough and the range of species photographed is very small.

This is a man's life's work and will have world standing for time immemorial. It behoves us to go to extreme efforts to see that it is adequately illustrated. 35 mm. slides are suitable for half the illustrations, but if you have equipment or know a competent photographer who has equipment to take good two inch square slides then please help us. Fill the slide with the subject and do not waste too much space around the slide edges. Be careful of the background. A pale blue board is excellent as a backing board. We do not want super close up shots of a single flower. As many species have such small flowers we must accept some magnification to get some detail but remembering that a slide will be enlarged six times, get as much of the head or a group of flowers with as much of the plant as possible. If you have a rare plant coming into bloom and cannot get it photographed then write to Mr. Deane as below.

We have extended the time for slides to be forwarded to Mr. R. Deane, 157 Beecroft Road, Cheltenham, N.S.W., until 30th November, 1968. This will give another flowering season to make amends. Please go to extreme lengths to support us.

CONTENTS OF THIS ISSUE

Terrestrial orchids are featured as indexed on the front cover. The main subject of this issue is however, our native conifers. The tragedy of the issue is that I have not been able to obtain suitable black and white photographs of specimen trees of the species described. The amazing diversity of foliage and shape of these splendid trees ranging in mature height depending on species from a foot to 100 feet is lost to many readers. Many make perfect specimen trees to give the garden character of its own and they are extremely hardy.

The objective of this publication is to advise on the cultivation of Australian wildflowers. If the layman will just forgive the wealth of very simply written, easily followed botanical descriptions of the many species involved (one day when you get a little more bitten with the bug to grow natives you will refer back to this botanical jargon to check on a desirable specimen), he will find considerable information on this subject.

GROWING WILDFLOWERS

ORCHIDS—These are well covered in the many articles, indexed on front cover.
 HIBISCUS—244-245—A number of easily grown species are fully described and illustrated in colour.
 SPRENGELIA—248-50—The beautiful swamp heaths. An article in a series on this family.
 EREMOPHILA—252-54—Wildflowers of dry inland areas.
 CONIFERS—255—With a further article on page 267.
 BRUSH-BOX, *TRISTANIA CONFERTA*—274-75—A widely grown street tree. *T. conferta* and *T. laurina* also.

PROPAGATION OF WILDFLOWERS

Many wildflowers are so easily grown from seed. A very simple but effective method is: WILDFLOWERS FROM SEED—254—The method used by Kings Park, Perth.
 PROPAGATION OF CONIFERS—255.
 PROPAGATION BY AIR LAYERING—246-7.
 DIVISION OF TUBERS—243—The method is described for *Diuris*, a native orchid but its adaption to all wildflowers with tubers would be very simple.
 PROPAGATION BY CUTTINGS—272—The method described is for conifers but this method is also highly successful with most wildflowers.

OUR PUBLICATIONS . . . AVAILABLE FROM EDITOR BY MAIL ONLY

860 Henry Lawson Drive, Picnic Point, N.S.W. 2213 — Please be patient for a reply.
 AUSTRALIAN PLANTS — PAST ISSUES

Volume No. 1 (bound) issues 1-12, has now sold out. Except for issues 2 & 3 the remaining 10 issues are available at 40 cents each + 5c postage or \$4.00 + 20c postage for the Vol. 1 set. Supplies of Volume No. 2 (issues 13-20) at \$6.00 + 20c postage are still available, many of the issues being no longer available singly. Volume No. 3 (issues 21-28) is now available fully bound at \$6.00 + 20c postage. Issues prior to this issue and later than No. 29 are available singly at 40c + 5c postage. For overseas, postage x3.

Each bound volume also includes a special publication of the Society. Volume No. 2 has "The Language of Botany", a 60 page glossary of botanical terms now available separately at 40c + 5c postage as well as "West Australian Plants". Volume 3 includes the book "A Catalogue of Cultivated Australian Native Plants", a publication of outstanding value available only with the bound volume No. 3.

BINDERS

If you value your copies of "Australian Plants", preserve them by keeping them in the beautiful plastic covered gold lettered binder available at cost price at \$1.20 + 20c postage.

WEST AUSTRALIAN PLANTS

This book lists all the wildflowers indigenous to Western Australia giving for each species, kind of plant, general size, flower colour, flowering months and localities. Price \$1.20 plus 20c postage and pack.

BEARDED ORCHIDS

AUSTRALIAN SPECIES OF THE GENUS *Calochilus* by Leo Cady, Kiama, N.S.W.

Australia has some extraordinary orchids and into this category falls the genus *Calochilus* or "Beardies". A genus of 11 species, Australia has 9 species, 3 extending into New Zealand.

The habitat of the "beardies" is usually swampy or damp areas alongside roads in tall grass or in open areas, the more robust types being found in these conditions; but it can also be found in dry ridge country or open forest areas. As to the type of soils, they mainly pertain to the sandstone country, but can also be found at times in other types of soils.

CULTURE OF GENUS

The writer has not had much success with the culture of the commoner species, the plants only lasting one or two seasons before rotting. It could be that these plants require a fungus at the roots to assist them as quite a few others of our Australian species do. A suggestion for a compost to try these plants is as follows, 40% sandy leaf mould, 30% soil that the plants are found in, and 10% peat moss.

Watering should be as close to the natural rainfall as can be followed, the plants should get plenty of light and up to half sun as long as the roots are cool at all times as the plants usually are found in deep litter at the base of trees or shrubs.

DESCRIPTION OF AUSTRALIAN SPECIES

1. *Calochilus campestris* R.Br.

A robust or slender plant, to 60 cm. high. Leaf erect, rigid and fleshy, triangular in section. Flowers in a raceme up to 15, comparatively small yellowish-green with reddish brown or brownish markings, the labellum with its fleshy rectangular base extending to a widely triangular lamina which is extremely ciliate, the cilia at times even glandular; only the very extremities of the lamina are produced into a naked ribbon-like appendage, the basal $\frac{1}{3}$ is in this species entirely smooth. Petals with red brown stripes. The column is short and wide with a black or purple gland at the base of the column on either side, these not connected by a coloured ridge as in *C. robertsonii*.

Remarks: A fairly common species found in most types of habitats, it is closely related to *C. saprophyticus* but immediately separated by the fact that the former has a leaf and the latter has none.

Flowers: September to January.

Distribution: All States except Western Australia, also in New Zealand.

2. *Calochilus gracillimus* Rupp.

A slender to robust plant up to 35 cm. tall. Leaf slender, deeply channelled. Flowers up to 8, reddish brown or purplish brown, the sepals and petals conspicuously veined, these segments have a translucent look. The labellum long and slender giving the flower a slender appearance, the basal section of the lamina is densely crowded with glands extending then into a densely ciliate lamina roughly triangular in shape the extremity extending into a shortish ribbon which have a few calli. The column short narrow, wings fairly inconspicuous, a dark gland each side at base.

(Continued on page 276 where all species are described and illustrated).

