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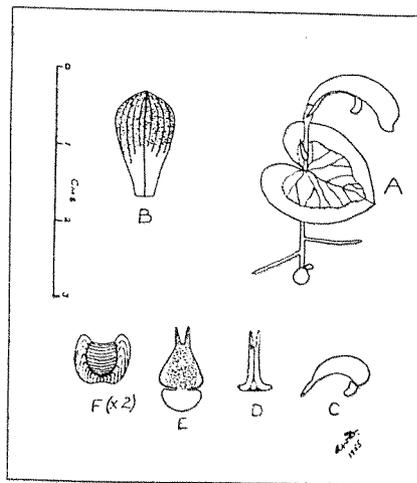
A New Species Of *Corybas* (Orchidaceae) From The Atherton Tableland

By A. W. DOCKRILL

Corybas abellianus sp. nov.

Herba terrestris. Foliolum cordatum, venis albis, c. 12 - 17 mm. longum, 12 - 16 mm. latum. Caulis supra folium c. 9 - 12 mm. longus; Bractea, acuminata, c. 3 mm. longa. Flos pro genere mediocris; in colore rubro-purpureus, medio lobo labelli albo. Sepalum dorsale falcatum, cuculatum, ad basim pellucidum et sensim angustatum. Sepala lateralalia haud discernibilia, Petala linearia c. 1 mm. longa. Labellum trilo-

batum cum 2 auriculis basalibus; lobi laterales, marginibus pellucidis, in formam tubi conjuncti, anticus dilati et obtusi, sepalo dorsali conspicue breviores; lobus medius per c. 90° a tubo deflexus, et quam hic multo minor, sub-orbicularis, concavus, marginibus ad c. 1 mm. usque replicatus; auriculae prominentes, angustae, 1.5 - 2.5 mm longae. Columna c. 2 mm. longa, c. 0.5 mm. lata. Anthera carinata. Stigma magnum, orbiculare. Dimensiones segmentorum in plano compres-



CORYBAS ABELLIANUS sp. nov.

(To scale indicated)

- A. Complete plant. E. Labellum flattened out.
B. Dorsal sepal flattened out. F. Mid-lobe of labellum flattened out to twice scale indicated.
C. Labellum from the side.
D. Labellum from the top.

Spotting and Veining on B and E indicate extent of reddish purple colouring.

sorum sunt; sepalum dorsale obovatocuneatum, c. 10-15 mm. longum, c. 7.5 - 9.0 mm. latum; tubus labelli late cuneatus, obtusissimus, c. 4.5 - 6.5 mm. longus, c. 5 - 6 mm. latus; lobus medius labelli subreniformis, c. 2.5 - 3.5 mm.

North Queensland (Atherton Tableland), Atherton and Ravenshoe, 10 iv 1955. Leg. W.W. et T. Abell; Yungaburra and Ravenshoe 17 iv 1955. Leg. S. F. St. Cloud et J. H. Wilkie.

Holotype in the National Herbarium of New South Wales.

Terrestrial herb. Leaf cordate, veined with white (which does not show in dried specimens), about 12 to 17 mm. long by 12 to 16 mm. broad. Stem above the leaf about 9 to 12 mm. long, elongating to as much as 14 cms. or possibly more, after fertilisation of the ovary; bract acuminate, about 3 mm. long. Flower of medium size for the genus, appearing to be all reddish purple with a white mid-lobe of the labellum, but the basal third of the dorsal sepal transparent, except for the median line, so that the reddish-purple colour of the tubular portion of the labellum shows through. Dorsal sepal falcate, cucullate, narrowing towards the base, apex slightly upturned. Lateral sepals not discernible. Labellum consisting of 3 lobes and 2 auricles at the base; lateral lobes, which have transparent margins, forming a tube which surrounds the column, is

Dendrobium glabrum J. J. Sm. (*Cadetia ruppii* St. Cloud)

In the January issue of this journal, (Vol. 23 No. 110), I described and figured a North Queensland orchid as what I believed to be a new species. At the time of publication, I was unaware of J. J. Smith's description and figure of the New Guinea species, *Dendrobium glabrum*, in Bull. Dep. Ind. Neerl. 5:4 (1907), and Novo Guinea 8:LIV.1, Pl.20, Fig. 64 (1909), but my attention has since been drawn to this fact, and I believe the two to be conspecific. A comprehensive description of the genus

contained within the dorsal sepal, is dilated and very obtuse in front and is about half the length of the dorsal sepal; mid-lobe much smaller than the tubular portion and deflexed at an angle of about 90° from it and thereby protruding from the dorsal sepal, appearing suborbicular, concave, but the margins replicate for a depth of about 1 mm.; auricles prominent, narrow, 1.5 - 2.5 mm. long. Column about 2 mm. long by 0.5 mm. broad. Anther keeled on top. Stigma large, orbicular, segments when flattened; dorsal sepal obovate-cuneate, about 10 - 15 mm. long by 7.5 - 9.0 mm. broad; mid-lobe of labellum subreniform, about 2.5 - 3.5 mm. long by 4.0 - 5.5 mm. broad.

The species has affinities with some New Guinea members of the genus, but the small peculiar mid-lobe of the labellum readily distinguishes it from all other Australian species.

The collectors deserve much praise for finding this very distinctive species and it is the wish of Messrs. Wilkie and St. Cloud, as well as of myself, that it be named in honour of the first collectors. Mr. W. A. Abell has collected a number of new and rare orchids in several localities in Queensland and has generously donated many specimens to various herbaria.

I am indebted to Rev. B. B. Lowery, S. J. of Canisius College, Pymble, N.S.W., for reviewing this description.

Cadetia in English or Latin is not available in any public library in Australia, and is urgently needed by botanists and collectors, particularly in North Queensland, where so much undescribed material exists. The position has recently been somewhat alleviated by Dockrill, who has published a small article, and the translation of Schlechter's key to the differences between the genera *Dendrobium* and *Cadetia* in the Australian Orchid Review, 20:80 (June, 1955).

S. F. St. Cloud.

A New Species Of *Cymbidium* From North Queensland (Orchidaceae)

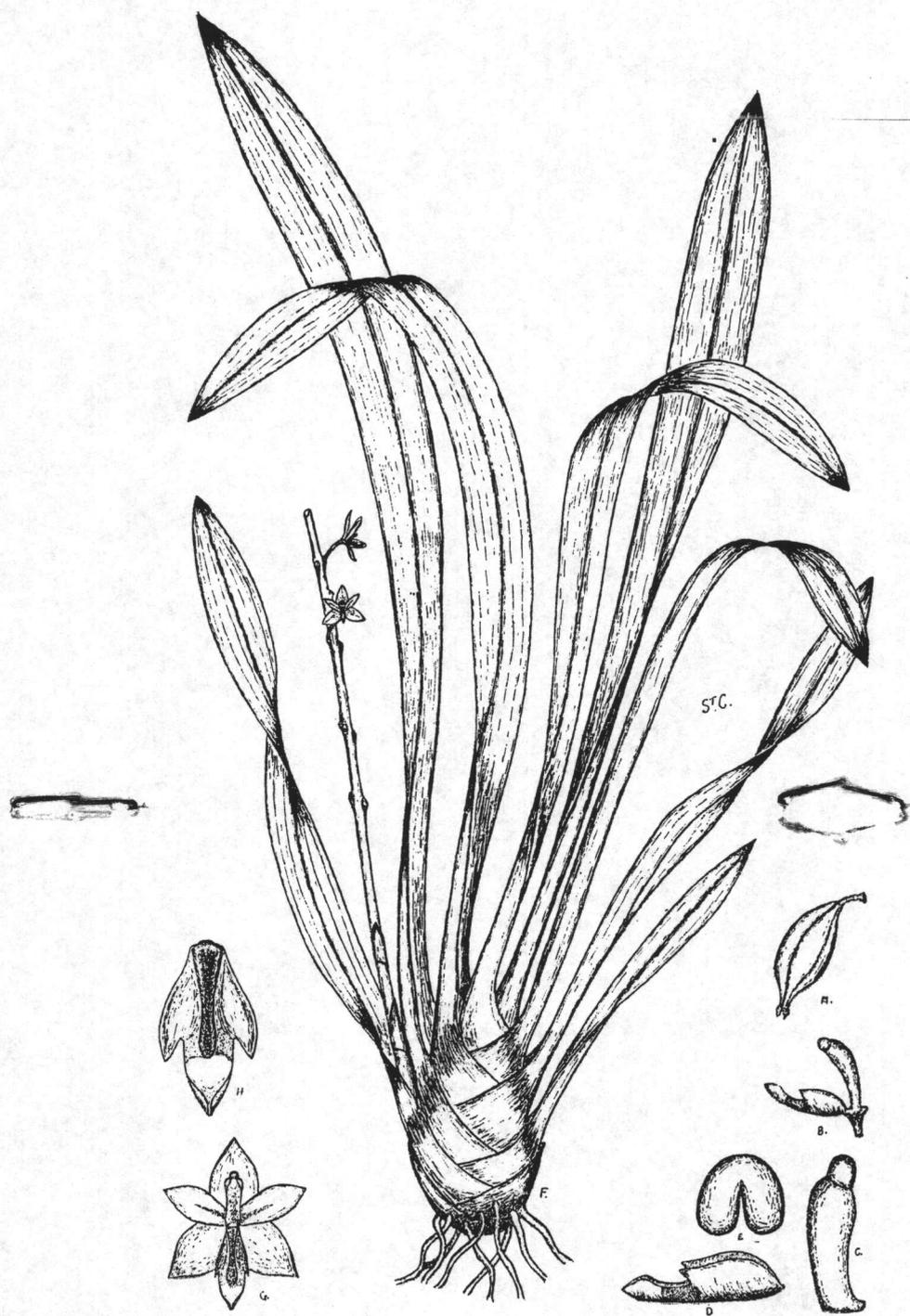
By S. F. St. CLOUD
Cymbidium leroyi sp. nov.

Pseudobulbi circiter 20 cm. longi, 5 - 6 cm. diam., ovati paulus plani curvati. Folia 7-8, 90-100 cm. longi, 4 - 4 cm. lati, lineares cum apice acuto, infra carinati, supra canaliculati, multinerviati, ex viridi subnigri, tenuiter coriacei, paulus torquati curvati. Racemi axillares semi-erecti robustissimi, 60 - 70 cm. longi, cum 3 squamis vaginalibus acutis basalis, 6 - 10 cm. longis. Flores 40 - 50, expandentes, transperianthium circiter 3 - 4 cm. Pedicelli semirigidi, 2.5 cm. longi, bractee acutae circiter 3 mm. longae. Sepala omnia similia, 15 mm. longa, 7 mm. lata ut plana ficta lato-ovata autem margines prope apicem incurvati, superficies externa viridoflavida, cum marginibus viridoflavida, superficies interna subflava. Petala paulo breviora quam sepala, oblanceolata, superficies interna subflava cum striis longitudinalibus rubentibus in dimidio basale. Labellum circiter 12 mm. longum, trilobatum infra convexum, non carinatum. Lamina, lobi laterales, dimidium basale lobi medialis rubentes. Dimidium anterius lobi medialis flavidum; superficies inferior flava, cum duobus notationibus ex rubris subnigris ad conjunctionem lorum lateralem. Lobi laterales 2 - 3 mm. alti, angusti, oblongi, acuti anteriore. Lobus medialis circiter 6 mm. longus, 4 mm. latus, oblongus ut planus fictus, autem margines anteriores sursum versae apicem acutum cymbiformem profundam fissuram fingens. Discus humorem nectareum exsudans, a base dilatatus, in medio contractus, apicem ovatum angustam fingens ad medium lobum extendens. Columna 6 - 7 mm. longa, incurvata, flava cum anteriore infusione rubris. Anther rotundus, flavus. Pollinia 2, flava capsula seminalis ovoidalis, 4 - 5 cm. longa, 2.5 cm. diam.

Pseudobulbs about 20 cm. long, 5-6 cm. diameter, ovate slightly flattened and curved. Leaves 7-8, 90-100 cm. long, 4-5 cm. broad, linear with acute apex, keeled below and channelled above, multi-nerved, dark green, thinly

coriaceous, slightly twisted and curved. Racemes axillary semi erect very robust, 60-70 cm. long, with 3 basal acute sheathing scales 6-10 cm. long. Flowers 40-50, spreading, about 3-4 cm. across the perianth. Pedicels semi rigid, 2.5 cm. long, bracts acute, about 3 mm. long. Sepals all similar, 15 mm. long, 7 mm. broad, broad-ovate when flattened but margins near apex incurved, outer surfaces pale brown with greenish yellow margins, inner surfaces pale brown. Petals slightly shorter sepals, oblanceolate, inner surfaces pale yellow with reddish longitudinal stripes on the basal half. Labellum about 12 mm. long, trilobate, convex below, not keeled. Lamina, lateral lobes, and basal half of mid-lobe, a reddish colour, anterior half of mid-lobe, yellow, under surface yellow with 2 dark red markings at junction of lateral lobes. Lateral lobes 2-3 mm. high, narrow oblong, acute anteriorly. Mid-lobe about 6 mm. long, 4 mm. broad, oblong when flattened out, but the anterior margins upturned to form an acute cymbiform apex which is deeply cleft. Disc exuding a nectary fluid, dilated at the base, constricted at the middle and forming a narrow ovate apex which extends on to the mid-lobe. Column 6-7 mm. long, incurved, yellow with red infusions in front. Anther rounded, yellow. Pollinia, 2 yellow, seed capsule ovoid, 4-5 cm. long, 2.5 cm. diameter. Emmagen Creek, north of Cape Tribulation, North Queensland, Dec., 1954. Leg.-C. G. Le Roy, flowered in cultivation, Cairns, and type locality, January, 1955. This species is abundant as an epiphyte on *Melaleuca* sp., in swamp lands bordering Emmagen Creek. Holotype lodged in North Queensland Herbarium, Cairns.

I have pleasure in naming this species in honour of Mr. Claude Le Roy, who for many years has collected specimens in various parts of North Queensland, particularly Cape York Peninsula, and as a result of his labours, many botanical collections have been considerably enriched.



Key to Plate:—

- A. Seed Capsule.
- B. Column and labellum, side.
- C. Column, side.
- D. Labellum, side.
- E. Pollinia.
- F. Plant.
- G. Flower, labellum expanded.
- H. Labellum, front, lateral lobes flattened .

St. Andrew's Cross Spider, *Argiope aetherea*

By KEITH BARRY

The St. Andrew's Cross Spider, *Argiope aetherea*, is quite common in North Queensland; it builds its web in open places and not in dark corners, the web often being found hung between branches in trees, between high weeds and sometimes in doorways of buildings.

The St. Andrew's Cross Spider can easily be distinguished by the colouring of its abdomen, the upper surface of which is dark reddish brown, and is crossed by three pale yellow stripes. In addition, there are numerous small yellow spots spread over all parts of the abdomen. Two yellow stripes are likewise present on the under surface of the abdomen. The spinnerets are bright red in colour. The upper surface of the head and thorax are beset with numerous fine hairs. The reddish brown legs are provided with small black hairs.

The part of the web destined to catch the spider's prey is circular in shape, being suspended by several strands of silk which are much stronger than that used for the snares, for they must take the weight of the spider as well as the snare in addition to having to bear the strain associated with the struggles of any insect in process of capture. The stronger silk cannot be used for snaring as it is not sufficiently adhesive for this purpose.

The name of St. Andrew's Cross associated with the spider may be derived from either of two circumstances, namely from the building of a cross in the centre of the web, or from remaining in the web with the legs arranged in four pairs thus forming a cross.

Sometimes a cross may appear in the centre of the web, but it may not be present when this centre is first built, although it may be added later or not at all. As the spider grows it continues to build its web and cross larger in proportion to its size. Each of the two limbs of the cross may be up to four inches in length and a quarter of an inch in thickness. Sometimes the cross may vary in width and parts of

it may be curved. When the spider builds the cross it does so in a short time, taking but little care in the neatness of its construction. The web is not built quite perpendicular to the ground but always at a slight angle.

The spider remains in the centre of the web on the under side with its head directed downwards. The first and second legs on each side are held together forming the front pair, and the third and fourth legs are similarly held to form the hinder pair. If a cross is built on the web, each pair of legs will rest on an arm of the cross, the spider's body being thus at the centre of the cross. When looking at the web from certain angles, the spider is completely hidden by the cross, thus protecting it from the gaze of birds and wasps for these spiders are easy prey to such, being always in the centre of the web and in open spaces. On one occasion I opened a wasp's mud nest which contained eight St. Andrew's Cross spider victims.

When an insect is caught on the web, the spider moves towards it very quickly. Reaching the insect it proceeds to wrap it in silk, the insect being held underneath by the spider and spun around by the first, third and fourth pairs of legs at the same time letting cut the silk by which the insect is wrapped. The second pair of legs is used to hold the spider in its web. After enshrouding the insect it is taken to the centre of the web to be eaten. If not devoured immediately it is left where it was caught whilst the spider returns to the centre. If the insect is sufficiently small such as a mosquito, it may be consumed at once without first being wrapped up.

When the spider is eating, the insect is held underneath, being turned around several times by the third pair of legs.

When alarmed, it stands high up on its legs, the abdomen raised high in the air with its head facing downward. Sometimes it will run to the other side

of the web or hide beneath a leaf. On some occasions I have seen a spider drop from its web to the ground by means of its silk. When danger has passed it will climb up this piece of silk and resume its usual position on the web. If the spider is continually annoyed, it will shift its web to another site.

As with many insects, the St. Andrew's Cross Spider will shed its skin when it grows too large for it. Before doing so, it attaches the old skin to the centre of the web with the aid of its legs. Hanging downward, the skin is split along the upper surface, and after much effort the spider removes its body from the old skin, attaching its spinnerets to the old skin by means of a piece of silk about an inch long. Very slowly the spider removes its legs from the old skin and appears to have much difficulty

Winning essay for H. Flecker Natural History Medallion.

Bird Notes

By CLEO SEATON

During the month of March, 1955, the Golden-headed Fantail Warbler, *Cysticola exilis* disappeared and has just returned (end of May) with its new coat. The crown is streaked to match the back and wings, giving it a much darker appearance.

During March and April, the garden was free of feeding finches. All one could see was these birds flying all day long with stems of grass six to eight inches long streaming from their beaks.

The Chestnut-breasted Finch, *Donacola castaneothorax* building amongst the blady grass, *Imperata cylindrica* var. *koenigii* was noted.

The Red-browed Finch, *Aegintha temporalis* attach their nests to forks in trees, some built in my neighbour's orange and lemon trees.

The Banded Finch, *Steganopleura bichenovii* used to fly across the gully, so I never came across any of their nests.

Since 21st May, the finches have been gradually returning to the lawn and bird baths with their young ones, and have now reached the stage of large flocks.

in doing so. Having completely discarded the old skin, it hangs motionless for some time hanging from the small piece of silk attached to the old skin with its head and its legs hanging down as though resting after its effort to get out of the old skin. After a while it begins to move its legs slightly before resuming its normal position in the web. The old skin drops from the web.

The female St. Andrew's Cross Spider lays her eggs about three days after contact with the male. They are laid in a sac made of silk and hung on the outside of the web. The silk in the sac has a slight greenish colouring. I noticed the web of one such spider which had five egg sacs on the outside of the web. The male St. Andrew's Cross Spider is much smaller than the female and has an overall colouring of grey.

The Banded Finches seem to have only a pair, each exactly like the parent birds.

The Chestnut-breasted Finches have three young, these being brown with black chins and grey beaks.

The baby Red-browed Finches have no red brows as yet, although the crimson rump is very distinct. They also seem to collect in threes.

The breeding season at this time of the year does not correspond with that given by Cayley, perhaps owing to changes in the weather. Thus Cayley gives the seasons as follows:

Chestnut-breasted Finch, July to December and often as late as April.

Red-browed Finch, September to January.

Banded Finch, July to December.

15th May, 1955. From the same nest and I am sure the same parents of November, 1954, hatched another pair of sunbirds, which left the nest 30th May and are a happy foursome in the garden, the only difference to take place since my last description in

November last was the method of leaving the nest. When the parents took the first bird on to the fence, the remaining nestling tried to follow but ended fluttering to the ground. The female flew straight to the clothes line, but when she heard the chick's peeping on the ground, kept on calling to it, but the fledgeling kept on stretching its wings and falling over itself with its beak thrust out until it managed another flutter on to a broken banana leaf. The mother went to its rescue and all was well. (I have never seen these birds on the ground).

Neville Cayley's note concerning the breeding of the sunbird is given as September to January and February although consistent with the dates observed in the

earlier clutch is not so regarding the recent hatching.

My reason for believing that it is the same pair of sunbirds which are the parents in each case are the sustained interest in the nest, even when they did not occupy it. Whilst flying about the yard, one of them would observe another bird resting upon the clothes line, when immediately both were much concerned making quick work of removing it, even during the squally gusts of March. When prior to the laying of the second clutch of eggs the nest blew down, both birds set up a frantic chorus, which arrested our attention. With some string and a ladder the nest was made secure, so they had only a few touches to add before using it again.

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CORRECTION

In the last number of this journal, Further Notes on Ooyurkas, it is stated that the Ooyurka illustrated represents that described as No. 13 in the issue of No. 108 of this publication. No. 13 should read No. 18.