

The North Queensland Naturalist

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Family Orchidaceae

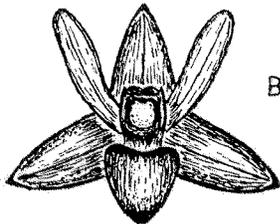
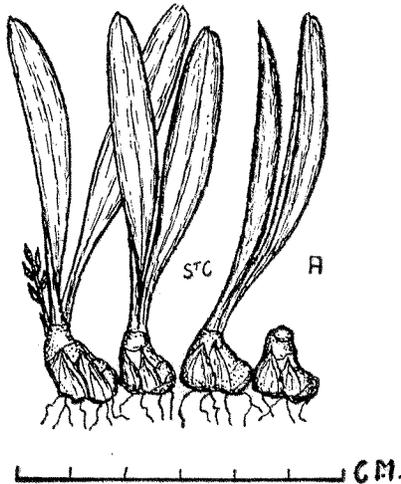
A NEW SPECIES OF *ERIA* FROM NORTH QUEENSLAND

By S. F. St. CLOUD

Eria irukandjiana sp. nov.

Rhizoma breviter repens, pseudobulbi conici obliquiter circa alti 1 cm. atque circa 1 cm. dia. a

base, ad collum breve extendentes, paulo rugosi, viridescentes, cum squamis brunnescentibus tecti. Radices tenues, brunnes-



Key to Plate—

A. Plant

B. Flower from front, segments expanded, greatly enlarged.

centes. Folia 2, terminales, erecti paulo recurvati, linear-obtusi inequaliter emarginati contraentes ad petiolem angustam aase profunditer canaliculati,

circa 5-6 cm. longi, 1 cm. lati, 3-4 mm. crassi, infra rotundi, supra plani, succulentes, virides, tenuiter canaliculati supra infraque in medio. Racemi a base

1881

folii longi, brunnescentes cum circa 10 floribus in pedicillis longis 2 cm. Pedicillis ovariumque tomentosum, facies exteriores sepalum cum capillis albescentibus tectae. Flores minuti, sepalum dorsale circa 2 mm. longum, latum 1 mm. acuti cum marginibus incurvatis et notationibus rubrescentibus; sepalia lateralia similia, extendentia a base lato et cum pede columnae fingentia calcar breviter latum. Petala paulo breviora quam sepalia, linearoblunga, obtusa, translucencia cum veno centrale rufescente. Labellum sine disco squamaeque, 1 mm. alta, in medio alba paulo canaliculatum recurvatumque, sessile in pede columnae, translucente. Columna oblonga, circa latum ovatum, completum paulo gonflata, alae non prominentes breves. Stigma non profunditer inserta. Anthera alba cum incisura centrale profunda. Corpora polliniorum pyriformia, flava fortia.

Rhizome shortly creeping, pseudo-bulbs obliquely conical, about 1 cm. high and about 1 cm. dia. at the base, tapering to a short neck, slightly wrinkled, greenish, covered with brownish scales. Roots slender, brownish. Leaves 2, terminal, erect slightly recurved, linear obtuse unequally emarginate, contracting almost to a narrow, deeply channelled petiole at the base, about 5-6 cm. long, 1 cm. wide, 3-4 mm. thick, rounded beneath, flattened above, succulent and dull green, lightly and centrally channelled above and beneath. Raceme from the base of the leaf, about 1 cm. long with about 10 flowers on pedicels 2 mm. long. Bracts ob-

long acute, brownish, about 2 mm. long. Pedicel and ovary tomentose, outer surfaces of sepals covered with whitish hairs. Flowers minute; dorsal sepal about 2 mm. long, 1 mm. broad, acute, with incurved margins and reddish markings; lateral sepals similar, tapering from a broad base, and forming with the column foot, a short, broad spur. Petals slightly shorter than the sepals, linear oblong, obtuse, translucent, with reddish central vein. Labellum without disc or plate, broad ovate, entire, lightly channelled and recurved, sessile on the column foot, translucent. Column oblong, about 1 mm. high, white, slightly swollen about the middle, wings not prominent, short. Stigma not deeply sunken. Anther white, with deep central cleft. Pollen masses pyriform, bright yellow.

Growing on *Casuarina* species, 1500 ft., Nesbit Range, Trinity Bay, North Q'land. Leg. S. F. St. Cloud, Nov., 1954, flowered Dec., 1954. Type in North Queensland Herbarium, Cairns.

This latest addition to the genus is the smallest yet recorded. The diminutive pseudo-bulb, together with the thick, succulent leaves and minute flowers, makes it readily distinguishable from other members of the genus. All flowers fruit in 5-7 days and suggest self pollination. The host trees, altitude, and dry, open forest country with full sunlight, make an unusual habitat for an *Eria* species. I have named this new species after one of the aboriginal tribes that inhabited the area which includes the Nesbit Range.

New Species Of *Dendrobium* (Orchidaceae) From North Queensland

By S. F. St. CLOUD

***Dendrobium foederatum* sp. nov.**
Rhizoma in cortice arborum repens caulae pendulosae, interdum ramosae, 15-20 cm. longae, cum squamis vaginalibus albidis tectae. Radices robustae glabrae albae. Folii teretes, non sulcati, leviter curvati, subacuti, pallido-

virides circa 5 cm. longi atque 5 mm. diam. Racemi de propinquitate foliorum basium, 2-3 cm. longi; bractee minutissimae. Flores albi, segmenta non late expansa; sepalum dorsale lineare, acutum, 9-10 mm. longum, 5 nervatum. Sepalia lateralia paulo

longiora, cum columnae pede calcar prominens paulo curvatum circa 4 mm. longum fingentia. Petalia linearia lanceolata, paulo breviora quam sepalia, 3 nervata. Labellum trilobatum circa 9 mm. longum atque trans lobos laterales planatos 4 mm. latum. Lobi laterales incurvati, acuti ad 1.5 mm. longi; lobus medius circa 5 mm. longus, latus, lanceolatus paulo decurvatus cum marginibus crenulatis. Lamina cum 3 costis similibus aequalibus ad infra coniunctionem lobi medii, tunc tenuiter ordiueque undulata, ad apicem se contrahens abundaque. Loborum margines cum notationibus rubropurpureis. Columna circa 2 mm. alta, crassa cum alis brevibus prominentibus, in apicibus inequiter bidentatis; columna alae pesque rubropurpureae maculosae. Stigma lata oblonga, profunde mersa. Anthera teres, supra planatus, cum crista centrale, viridiflava. Rostellum non prominens.

times branching, 15-20 cm. long, covered with whitish sheathing scales. Roots robust, glabrous, white. Leaves terete, not furrowed, slightly curved, sub-acute, light green, about 5 cm. long, and 5 mm. diameter. Racemes from near the bases of the leaves, 2-3 cm. long, bracts very minute. Flowers white, segments not widely expanded, dorsal sepal linear, acute, 9-10 mm. long, 5 nerved. Lateral sepals slightly longer, forming with the column foot, a prominent, lightly curved spur, about 4 mm. long. Petals linear lanceolate, slightly shorter than the sepals, 3 nerved. Labellum trilobate, about 9 mm. long and 4 mm. broad across the flattened out lateral lobes. Lateral lobes incurved, acute, up to 1.5 mm. long, mid lobe about 5 mm. long, broad-lanceolate slightly decurved with crenulate margins. Lamina with 3 equal parallel ridges to below the junction of the mid-lobe, then finely and regularly undulate, tapering and disappearing towards apex. Margins of lobes with reddish purple markings. Column about 2 mm. high, stout, with short, prominent wings, unequally bidentate at their apices, column, wings, and foot flecked with reddish purple. Stigma broad, oblong, deeply sunken. Anther rounded, flattened on top, with central ridge greenish yellow. Rostellum not prominent.

Type in North Queensland Herbarium, Cairns.

Growing on *Heritiera littoralis* in mangrove swamp, Aeroglen, near Cairns, leg. J. Dyson-Holland, September, 1954, flowering in cultivation, October 1954 to January 1955.

This species has an affinity with *D. rigidum* R. Br., and *D. teretifolium* R. Br. With the former species it is similar in method of growth, and has the same curious and fixed habit of growing only on mangrove trees. In the flower the similarity is in the sepals and petals, but they are longer and more slender, and the sepals are 5 nerved, whereas in *D. rigidum* they are 3 nerved. In the labellum, the claw is consistently longer, the lateral lobes wider, and the mid-lobe is lanceolate. In the disc the 3 ridges are more prominent,



A. Portion of plant.
B. Labellum flattened.
C. Flower from front.

***Dendrobium foederatum* sp. nov.**
Rhizome creeping on the bark of trees, stems pendulous, some-

and not widely separated.

It is readily distinguished from any variety of *D. teretifolium* by its much shorter leaves, smaller flowers, which have shorter segments, and the consistently long spur. An important difference is in the mid-lobe of the labellum, which in *D. teretifolium* is acuminate, and usually filiform at the apex, and much decurved or revolute, whereas in this species it is broad lanceolate, only slightly decurved, and by no means filiform at the apex.

Mr. Dyson-Holland deserves great credit for recognising this species in its mangrove swamp habitat. On a subsequent visit to the type locality with the author, he collected more flowering plants, which correspond to the type specimen. I venture the opinion that the evidence is against a natural hybrid of the

2 species mentioned. There are no known host trees in North Queensland that the varieties of *D. teretifolium* will not flourish on, and if the influence of this strong species were in evidence, it would be shown by the departure of these plants from their mangrove host. The area is surrounded by an abundance of favourable host trees, and all search has failed to discover one of this species amongst them. The plants reproduce themselves, and the flowers are unusually constant.

The specific name is in allusion to the apparent link between *D. teretifolium* and *D. rigidum*, which is shown in the flowers.

I am indebted to Mr. A. W. Dockrill, Georges Hall, N.S.W., whose helpful suggestions have been of great assistance.

Sunbirds At Home

By CLEO SEATON

On 1st May, 1954, a pair of sunbirds (Yellow Breasted Sunbird, *Cyrstostomus frenatus*) started to build their nest, finishing it in stages. The foundation consisted of a piece of electrician's hooked flex hanging from the eaves of our house. To this was fastened a loop greatly strengthened with plenty of spiders' cobweb, mixed with pieces of bark and measuring when straightened out some two inches in length. From this loop, a tapering stem some eight inches long widening to three inches in circumference was avifabricated. Beneath this it expanded into the shape of a hollow pear about six inches deep and nine inches in circumference at the base, leaving an aperture at the side of two inches deep and an inch and a half across. From the lowermost part was suspended an eight inch tapering pennant, quite distinct from the nesting chamber some three inches across at the base of the nest and strongly attached by an abundance of cobwebs. The whole suspended structure is twenty two inches from the point of attachment to the lowermost tip.

The next performance was the making of a small hood project-

ing from the top of the doorway. This is built with stiff bark fibre completely changing the appearance of the front view of the nest, although the back and sides still remained pear shaped. Having completed this, the birds left the nest and confined their daily visits to the garden.

Three months passed by when I had almost given up hope of ever seeing the nest being put to use. After hearing the cock calling from the clothes line, the hen put in several appearances in answer to his calls, but she made no attempt to look over the nest. Then the procedure was reversed, the hen calling to her spouse. Upon his arrival, she would examine the nest, then join him on the clothes line, and together they would sing a duet, a beautiful burst of music gradually fading to a whisper. During these duets, I had the opportunity of seeing their tongues, for after their song, the tongue was thrust out like a silver thread of cotton an inch in length.

At last the month of October had arrived and work had started in earnest. Poking wattle flowers, dried leaves and small moulted feathers all over the exterior of the nest, including

the stem and pennant, at the same time fraying out the edge of the hood, they proceeded to line the nest with small feathers and soft downy silken floss gathered from the dehiscing carpels of *Mallotus ricinoides*, a euphorbiaceous shrub growing wild in the neighbourhood. This was worked up into a thick, downy mattress and spread over the bottom of the nest. This work was often carried on right through the heat of the day. For another week periodical visits and pokes were made at the nest.

At last she settled in the nest, flying off at frequent intervals, and so absorbed was she in her task of building the nest that she ignored the presence of all human society, although after she had begun to occupy the nest she became timid, flying away when anyone came to the back door, so it was decided to move the nest to the other side of the laundry. This was done very carefully, but the hood prevented peeping to see the eggs. When the lady returned, discovering the absence of the nest from its usual site, she hovered over this area before returning to the clothes line. The next flight was to the nest in the new position, but again she returned to the clothes line and decided to call her mate, who evidently recognised the urgency of the call and was soon alongside of her and was just as bewildered as she was. Eventually he decided to try the nest out and finding it in order he called to her. Rejoining his spouse, she finally flew back to the nest and entered, while he flew away across the gully, only to return in a short while when once again their duet resounded. Even after he had flown away again, she could be heard singing quietly to herself some lovely sweet music. All this took place on 20th November and all went well and the two chicks were hatched ten days later on 30th November. From my kitchen window I was enabled to note the behaviour which is the subject of these notes.

These birds show a striking eagerness to share things in common, even when not nesting. The discovery of a fresh flower

or the turning on of the sprinkler will bring forth a constant call to the mate to share in the joy. For their benefit the garden spray is placed amongst the papaw and banana trees, where they bathe, slither, and fluff their feathers in the small droplets of water on the leaves. A similar performance is likewise carried out after a heavy dew, but I have never seen them drink or bathe in the bird baths.

With the aid of a small mirror I was enabled to see the young, featherless babes hatched on 30th November. They were about an inch and a half in length, with heads no larger than a pea, and were seen gasping for breath, their skin having the appearance of a piece of boiled bacon.

While the parent birds kept a close watch over the nest, they seldom entered it until late in the afternoon, when both took a share in feeding the youngsters. Mother settled down with them for the night while her spouse flew up into a tree. For several minutes they would call to each other. The same procedure was continued for the next three days.

On 3rd December, the first feeble, but musical squawk was heard, when feeding became more frequent and the very proud parents brought another male and female to join in the special celebration upon an adjoining clothes line.

On 5th December, the beaks of the fledgelings appeared above the opening in the nest, after which the parents clung to the outside of the nest, thrusting their heads through the opening to feed their babes.

On 6th December, almost continuous feeding took place, both parents flying off and returning together to feed their young. Dad always settled on the clothesline while Mum went direct to the nest, after which the other took his turn. To celebrate this performance both put on an acrobatic performance while they sang together lustily, thus providing a beautiful display.

During the frequent feedings, the parents always removed dried pellets and later, as the birds grew somewhat, a small white feather from within. They never merely dropped these pellets or

feathers but flew away with them in their beaks.

By 7th December when they were a week old, the heads of the young were fully covered with feathers, the chin still being a bit raw and the eyes no longer so prominent.

The above procedure continued for another week until the evening of 15th December, when both parents entered the nest, father taking the bottom position, both heads being seen through the doorway during the lusty chorus of harmonious squawks from the fledgelings.

On the 16th, after the young had been fed, with much chatter both parents clung to the outside of the nest, mother caressing the young with her beak along their chests. Father now entered the nest, passing beneath and pushing one of the young ones to the aperture. Mother seemed to balance on the edge with her tail inside. She then descended with the chick into the open, flying straight to the fence thirty feet away, giving the impression that the youngster had its first lift on its mother's back. Father now joined them when a full half hour was spent in establishing confidence in the chick, at the same time encouraging it to move down to a begonia in flower, where it was

sheltered. Flying back to the nest, the same procedure was repeated until all four were settled in the creeper with lots of chattering and demonstrations, at the same time keeping all other birds away from the creeper.

Both chicks were now plump, with thick necks, the breast being of a light lemon yellow colour, greyish green above and with very little development of the tail.

By 11.30 a.m., at the age of sixteen days, both young birds were high up in a tree fully twenty yards away from the creeper, when a similar performance was undertaken by both parents to assist in their transport, one fledgeling at a time being given the appropriate instruction. During the afternoon they flew across the gully.

Now, on 10th January, 1955, when the young are six weeks old, I often see them. They are still plump with the lemon-tinted breast deepening in colour showing signs of small, dark, pin-like feathers on the throat. They soon learnt to bathe in the papaw leaves when the garden spray is turned on and are fairly tame around the garden. They still squawk and fascinate me a great deal.

Retraction Of A Species Of Orchidaceae (*Acianthus sublestus*)

By A. W. DOCKRILL

In the January number of this Journal (Vol. 23, No 110, Jan., 1955), the writer described, as a new species of orchid, *Acianthus sublestus*. This description was prepared from herbarium specimens (dried), as, at the time, it was thought most unlikely that fresh specimens would be collected for a number of years, and the details of the floral structure were able to be worked out quite well. These details did not coincide with those of *Acianthus amplexicaulis* (F. M. Bail), Rolfe, Arch Rev. 11: 344 (1903) (Syn. *Microstylis amplexicaulis* F. M. Bail., Bot. Bull. 9: 18 (1891); *Listera amplexicaulis* (F. M. Bail.) F. M. Bail., Qld.

Flora, 5: 1560 (1902) given by Bailey l.c., but since January, I have had access to the unpublished, original plate of this latter species by R. D. Fitzgerald in the Mitchell Library, N.S.W., and to another unpublished plate by the Rev. H. M. R. Rupp (who pointed out the similarity of the two species) and I have received a number of excellent though small, freshly collected (April, 1955) specimens, preserved in formalin solution, from W. W. and T. Abell, S. F. St. Cloud and J. H. Wilkie from the Ravenshoe-Atherton district, and I now believe *A. sublestus* and *A. amplexicaulis* to be conspecific.

Bailey could have had no idea

of the extreme variability of his species when he prepared his description, and a few notes on these variations might not be amiss. None of the 1954 specimens (over 20) had the peculiar lobed leaves stressed by Bailey, but three of the twelve 1955 specimens had them. The labella of the 1955 specimens varied in shape from lanceolate to trapeziform to oblong to even being cut off quite straight in front but prominently dentate; all had a prominent central apical point; the dentation, irregular and varying from none to five prominent teeth on either side of the apical point.

It would appear from the specimens examined, that, as

the flower is opening, the labellum is quite horizontal for its entire length and the margins upturned so that the segments appear almost cymbiform (this stage is illustrated by Fitzgerald l.c.), but as maturity is reached, the margins tend to become slightly decurved and the whole labellum decurved about the middle for approximately ninety degrees.

The recording of this rare South Queensland species from the Atherton Tableland is of particular interest and stimulates speculation on just what other temperate terrestrial orchids might yet be collected on this Tableland.

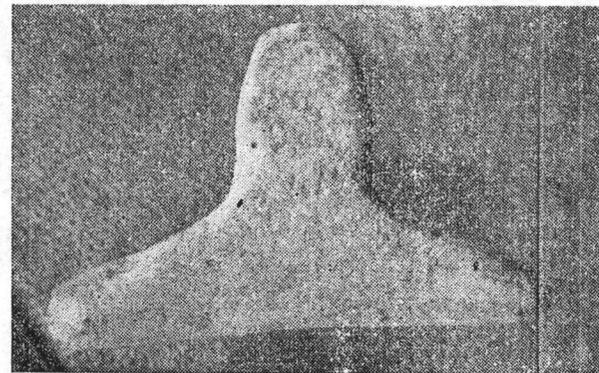
Book Review

28. — THE COMMERCIAL FISHES AND FISHERIES OF QUEENSLAND. By J. Douglas Ogilby, 121 pp., 123 photographic figures, revised and illustrated by Tom C. Marshall, Fisheries Branch, Dept. of Harbours and Marine, Brisbane. Originally published by Queensland Govt. in

1916, it has been out of print for some years. Written in narrative style, devoid of technicalities, it is without headings or chapters, the index alone giving the clue to the location of its contents. It should find favour amongst Queensland fishermen, professional as well as amateur.

Further Notes On Ooyurkas

By H. FLECKER



The accompanying photograph of an ooyurka represents that described as no. 13 in the issue of no. 108 of this publication, issued May, 1954.

No. 16 of the same series was ploughed up at Liverpool Creek, Warrabullen, on a farm, collected by J. Courtney.

North Queensland Naturalists' Club

Meets at School of Arts, Shields Street, Cairns, usually on Second Tuesday of month, at 8 p.m.

MEETINGS

9th November, 1954: Amongst exhibits were Purple-crowned Pigeon, Large Vase - shaped Sponge, 19 inches high. Attendance 11.

14th December, 1954: Announcement of death of one of foundation members, Mr. A. J. Moran. Mrs. Moran donated a collection of about 50 books on Natural History to the Club library. Mr. S. Dean was elected Honorary Librarian. It was resolved to display a prominent sign in the School of Arts notifying meetings of the club. Mr. St. Cloud exhibited specimens of new species of *Cadetia ruppilii* St. Cloud and *Dendrobium baseyanum* St. Cloud. Attendance 12 members and 1 visitor.

11th January, 1955: Exhibits included *Eria irukandjiana* St. Cloud sp. nov. A discussion on the Common Myna, *Acridotheres tristis* was carried out. Attendance 9 members and 1 visitor.

8th February, 1955: Lecturettes by Dr. H. Flecker on (a) Fatal stings from jelly-fish in North Queensland, and; (b) Irukandji sting, probably from jelly fish. Short lecture by Mr. C. Coleman was given on Moths and Butterflies. Owing to extremely inclem-

ent weather and to holidays, attendance reduced to 3 members and 4 visitors.

8th March, 1955: Half gross of badges ordered and to be made available to club members. Reference made by Mr. S. Dean and others to excellent services rendered to the club by the President, Mr. Alfred A. Read, for some years past. It was unanimously resolved that he be made an Honorary Life Member, a privilege never previously bestowed on any local member.

Mr. S. Dean read an article on the value of radiocarbon in determining the antiquity of botanical articles— such as charcoal associated with archaeological objects as the famous Keilor skull. Mr. Ziegenfusz reported the finding of an aboriginal kitchen midden at Blackfellow Creek. Attendance 8 members and 4 visitors.

NEW MEMBERS ELECTED

9th November, 1954: Mr. H. R. Schaller, Walsh St., Edge Hill.

14th December, 1954: Mr. C. R. N. Jackson, East Palmers-ton; Mr. Eric Elms, Stratford.

8th March, 1953: Mrs. G. A. Hunter, Glendore Hospital, Nash St., Gympie; Mr. Thomas C. Williamson, 24 Minnie St., Cairns; Herbert A. Williamson (Junior), 24 Minnie St., Cairns; Mr. J. W. Johnston, Balfe St., Cairns.

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