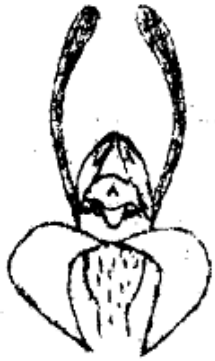


NATIVE ORCHID
SOCIETY
of
SOUTH AUSTRALIA



*Glossodia
major*

Glossodia major



NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA

JOURNAL

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NEXT MEETING

When: Tuesday, 28 August, at 8:00pm

Where: Assembly Hall, Goodwood Boys High School, Hardy Street; Goodwood.

Why: Guest speaker Mr D. Frith, from AGCHEM Pty Ltd, will present a talk, illustrated with slides, on "Foliar Fertilisers".

Also Harold Goldsack will speak about the underground orchid from Western Australia, *Rhizanthella gardneri*, which is so topical at the moment. We have received a series of slides from Western Australia showing the recent discoveries of this orchid and these will be screened. Read Harold's article in this issue for some interesting background information.

Trading table, plant display and commentary, library, raffle.

SEPTEMBER MEETING -

A panel of "experts" (defined: co-opted committee members) will solve all your problems and answer all your questions. To give them a chance to prepare an answer we would like written questions to be handed in at the August meeting. Just write your question(s) on a piece of paper and drop it in the box provided.

NEW MEMBERS

Mr and Mrs B.D. Mahar, 81aokuoqd
Mrs C. Lavell, Fulham.

Mr J. Edwards, Kensington Park.
Mrs D.M. Mitchell Flaxton, Queensland.

INFORMATION WANTED

The Environmental Research and Planning Group has been commissioned to do a conservation study for the South East Coast Protection District (for the coastal region from the Murray mouth to the Victorian border). It will cover all aspects of the natural environment. Anyone having views or opinions on this issue is asked to contact the Group as soon as possible (their deadline is the end of this month) at the following address:

11 Ruthven Avenue
ADELAIDE SA 5000
Telephone 51 6260

Our Secretary, Roy Hargreaves, has details and should be contacted if you require them.

NEDOS SHOW

NOSSA has accepted an invitation to stage an exhibit at the North Eastern Districts Orchid Society show at Broadview again this year. The exhibit is non-competitive.

Can you loan a plant or two or help set up our stand on Wednesday, 5 September from about 7 p.m.? Plants may be left at the hall from 9 a.m. on the Wednesday. All plants must be collected at 9 a.m. on Saturday, 8 September. Venue is St. Philips Parish Hall, corner of Galway Avenue and Staffa Street, Broadview.

The show is open to the public from 10 a.m. to 9 p.m. on Thursday, Friday and Saturday: 6, 7 and 8 September. There is a well stocked trading table which includes native orchids. The Royal Show is also open on the same days.

INFORMATION WANTED

The Conservation Council is seeking to identify sources of information about our natural environment here in South Australia, as part of the South Australian Heritage Survey. They require name, address, and field of interest, of anyone who could be useful as such a source, in order that these details can be recorded on a card index presently being compiled. This information can be forwarded, direct to the Conservation Council at the address below, or given to our Secretary, Roy Hargreaves, who will collate the information and pass it on. The letter from the Council is in Roy's possession, and anyone wishing further clarification may get the details either from him or from the council.

Miss J. Russell
Conservation Council of S.A. Inc.
G.P.Q. Box 2403
ADELAIDE S.A. 5001 Telephone. 223 5155

Miss Russell may be contacted by telephone at the Conservation Centre, any day between 10.00 a.m. and 1.00 p.m.

PLANTS ON DISPLAY - 24.7.79

(F = flowering: B = bud: L = leaf.

Epiphytes

Comment on the orchids benched for the evening commenced with Jim Simmons commenting on the epiphytes. Typical of this time of the year the epiphytes were definitely in the minority. Those benched, however, put on a varied and colourful display. *Dendrobium teretifolium* predominated with some fine examples seen.

Dendrobium teretifolium, F,

Den. dicuphnum - an unusual colour form - F.

Den. johannis x. *bigibbum*, F.

Den. bigibbum - typical form and unusually marked throat form seen, F.

Bulbophyllum auranteacum, F.

Oberonia mulleriana - good quality specimen - F.

In all, ten plants were benched.

Terrestrials

The benching of terrestrials was most extensive with the genus *Pterostylis* predominant. Commentary was given by Bob Bates who drew attention to the importance of provision of adequate amounts of sunlight for growth. He also commented on the effect of previous dry and windy conditions on the early emerging flowers of *Corybas*, saying that a pane of glass over the pot to increase humidity will improve flower quality. The commentary was informative and interesting.

Acianthus reniformis, F, B.

A. caudatus, F.

A. exsertus, F.

Caladenia alba - ex Queensland - F.

C. deformis (plus seedlings) does well under pot culture - F.

C. dilatata x *concinna*, F.

C. dilatata x *patersonii*, F.

C. filamentosa - ex last years trip to Sandalwood - F.

Corybas diemenicus, F.

C. diemenicus, - ex Flinders Ranges.

Diuris maculata - ex Eyre Peninsula large leaf form - F.

D. maculata local form - F.

Pterostylis plumosa (B) and *Pt. nana* (F) - George Nieuwenhoven's community pot - specimens of *nana* flourishing.

Pt. nana - tall-flowered variety, F.

Pt. decurva - very similar to *Pt. obtusa* - ex Queensland - B.

Pt. curta x *nutans* - ex Ray Nash - locally referred to as *Pterostylis*

"*curtans*" - robust specimens - several pots - F.

Pt. concinna - extremely show potful - F.

Pt. alata - Yorke Peninsula form - also common to Eyre Peninsula - F.

Pt. mutica, F.

Pt. cycnocephala, F.

Pt. "rufa alliance" - ex Nullarbor plains area - slow to grow under local conditions as compared with warmer desert areas - B.

Pt. recurva - ex Western Australia - F, B.

Thelymitra ? - species ex Karoonda - B.

In all, 23 species from six genera of terrestrials were exhibited in an impressive evenings benching.

SEEDLING FLASKS J.T. Simmons

Earlier this year your Committee decided to purchase desirable native species or hybrids in flasks on a regular basis - three or four per year - so we have a constant supply of seedlings coming forward for the trading table and prizes, etc.

It was decided to confine the purchase to cool-growing species initially to cover the requirements of as many members as possible and earlier this year two flasks were purchased from P. and M. Orchids in Sydney. These were:

- (1) *D. "Hilda Poxon"* (*D. speciosum* x *tetragonum*)
- (2) *D. speciosum* x (*D. fleckeri* x *kingianum* x *ruppianum*)

D. "Hilda Poxon" has proved to be one of the most successful of the "man-made" hybrids and a consistent prize winner.

The parentage of the third generation crossing in the other flask purchased should prove very interesting.

The seedlings were de-flasked in April and May and are now growing on in community pots. We anticipate availability as established seedlings in 2" pots by autumn 1980 and from this period members should have available a regular supply pf plants at reasonable prices.

INVITATION

The October meeting of the Orchid Club of South Australia Inc. has been changed to Tuesday, 9 October, primarily because of the Tasmanian Orchid Conference. It is because of this Conference that OCSA is able to offer as guest speakers for this October meeting the following:

- (1) Mr Bub Dugger - from U.S.A. to talk on *Odontoglossums*,
- (2) Dr Mike Connor - from South Africa to talk on South African orchids and the Tenth World Orchid Conference to be held in Durban in spring 1981.

Members of NOSSA are cordially invited to attend this meeting to hear these prominent world authorities.

MOP GROUP

In the clean healthy air of Parrakie the idea of a Midweek Observation and Pleasure Group within NOSSA, was first dreamt up. We have a number of retired members with the time to get together on weekdays occasionally for trips to rescue orchids or record flowering times, etc. Committee have endorsed the idea provided the Society's aims and objects are followed.

If you are interested talk to Con Wells, who has agreed to act as coordinator. Since last journal we have heard of one area to be cleared in the country where we can rescue plants. Don is planning en expedition for some time this spring.

This was the Society's first "weekend" field trip. It also turned out to be qualitatively quite different from any of our previous excursions. It commenced with an evening rendezvous at the Geranium Area School (the name being based on the so-called wild geranium *Erodium cygnorum*). For that evening, the onus was on us to entertain our hosts for the weekend - the Parrakie Group of the Society for Growing Australian Plants. This we managed by a combination of slides of orchids from the Adelaide Hills, plus a general discussion on orchid cultivation led by Les Nesbitt. We eventually retired at midnight, somewhat staggered by our experiences. (What a difference it makes when one does not have to be "out" by 10.00 p.m.!!)

The Saturday morning meeting-point was at Geranium Springs. There the prospect of waiting for late-comers was too much for the orchid hounds, who made the most of the opportunity to explore the adjacent hillside. They were soon rewarded. We found odd specimens of *Acanthus exsertus* in flower - what an experience after the surfeits we are used to in the Adelaide Hills. Several examples of *A. reniformis* some of which were in bud, were also found, together with basal leaves of at least two species of *Thelymitra* and two of *Caladenia*. However, the real finds were in the genus *Pterostylis*. Much smaller examples of *P. vittata* than we have been used to were discovered, together with basal leaves of one of the later-flowering *Pterostylis*, possibly *P. biseta*.

We were lucky to have Reg and Flora Mason, from Strathalbyn, with us for the weekend. They proved a most stimulating addition to the group. (Other members of NOSSA will have an opportunity of meeting them when Reg joins us as our guest speaker for the monthly meeting next February.)

Looking at *P. nana* from this area one is struck by the differences between them and the ones from the Mount Lofty's with which we are more familiar. The basal rosettes are different, with the leaves typically on a longer stem, giving a more spread out appearance than our local ones. The flowers look different; and as Reg pointed out, they are typically smaller plants with a single leaf bract on the stem, compared with the Hills specimens where two or more stem leaf bracts are the rule. Reg's contention is that the mallee specimens will probably ultimately turn out to be the true *P. nana* whereas our Hills examples are really what was previously classed in Western Australia as *P. pyramidalis*. There is much merit in his views, especially as although the robustness of the mallee form is enhanced in cultivation, it still manifests these essential characteristics.

The other noteworthy species was *P. alata*. Many examples found showed the features of *P. alata* whereas others had the conspicuously forward-pointing labellum typical of *P. hamiltonii*. However, since specimens characterising each form were to be found growing adjacent to each other, it seems fairly certain that only one species was present: the teasing question is - which one? Irrespective of the outcome, this greenhood is a particularly attractive species with deep burgundy coloured stripes on the galea.

Some vigorous tooting on the horn by Ray Isaacson succeeded in dragging the group away from "those weeds" (for Ray, Australia is covered in gum trees, *Eremophilas*, and weeds), and we adjourned to the Finn's property just down the road. There we added *Prasophyllum nigricans* (?) in seed and the basal leaves of another *Prasophyllum*, possibly *P. elatum*, to the list together with occasional examples of *Pterostylis plumosa* still well short of flowering. Here, however, *Caladenias* were scarce, and no *P. alata* types were found.

No sooner had we got hot on the scent than Pat Holmes fielded everybody out onto the cleared paddock where an impressive barbecue was in the advanced

Field Trip to Parrakie (contd.)

stages of preparation. NOSSA members displayed a hitherto unknown capacity to home in on the appropriate smoke signals - it was quite something to see them all popping up out of the scrub!

Eventually, more than replete, a comfortable nap in the sun would have gone down well, but our hosts had other ideas, so we moved off to Adrian Thorpe's property at Peake. Here we found again the "*P. alata* type", together with *Caladenia filamentosa* and a *Thelymitra*, possibly *T. antennifer*, in bud. The highlight of this stop though was not orchids at all, but an opportunity to see a mallee-fowl's nest, particularly as it was one actively being worked. Of our hosts, Mrs Holmes appeared to be making notes most of the day, so I omitted to record non-orchid species that caught our eye, but in the end she denied it and so left me bereft. Of those in flower, the one I best recall is *Baeckia crassifolia*, with its masses of tiny flowers, especially here on the Peake property.

At this point we had a quick adjournment for an evening meal before reassembling once more for a Members' Slide Evening at the Geranium School. In this Les Nesbitt kept the NOSSA flag flying with slides of orchid cultivation and pollination, while our hosts showed slides of some of their local orchids. These included *Caladenia dilatata*; var *dilatata*, and var *concinna*, and a *Thelymitra*, possibly *T. longifolia*, plus *T. antennifer*, thereby confirming that they had seen those "weeds" before, even if they had not taken much notice of them. We also saw slides of other native flora, including several by Ray Isaacson of rare *Eremophilas*. We also saw films of his, trip around northern Australia. Another delightful supper kept us going once more until midnight.

Sunday morning was set aside for visiting the Finn's home garden, still being planted, and then on to the Lithgows, to see what is probably one of the best native gardens in the state, and undoubtedly the finest I have visited. Here our visit was drawn to a close with a truly sumptuous lunch. Eventually the Wells and the Nunn's were the first to drag themselves away, only to reappear five minutes later. They said they had come back for Brett Lithgow's keys, but nobody believed them.

The full impact of the trip may be gauged from the fact that half an hour later, three carloads were parked at the side of the road near Jabuk while their respective drivers gathered sufficient of their wits to make it back to Adelaide. The Carthews said they were looking for mallee roots, but nobody really fell for that one either!

All in all, it really was a most magnificent and memorable weekend, and words are insufficient to convey our thanks to our kind and generous hosts, who did so much, so quietly and efficiently, for the benefit of all of us. The result is that we have made many new friends, as well as getting to know one another better within our own NOSSA group. The general consensus was that we should organise a return trip for the Parrakie group to come to Adelaide next year, so we are provisionally thinking in terms of an Orchid Festival at the end of September 1980.

Orchids recorded

In flower:

Acianthus exsertus
Pterostylis alata (?)
P. nana
P. vittata

In bud:

Acianthus reniformis
Caladenia filamentosa
Thelymitra antennifer (?)
Pterostylis plumosa

In seed:

Prasophyllum
nigricans (?)

THIS MONTH'S COVER

The orchid shown on this month's cover is *Glossodia major*. It is one of a small genus of two species found only in Australia, with both species restricted to eastern parts of the continent. The generic name is a combination of two Greek words; "glossa" (meaning a tongue) and "eidos" (meaning like) - hence tongue-like - a reference to the distinctive labellum that characterises these orchids. The same stem occurs in two other genera found in South-Australia (as in *Glossogyne tenuifolia* and *Glossostigma drummondii*), a not unusual circumstance when the stem contains an allusion to one of the more characteristic parts of the plant.

"This Month's Cover" last month was devoted to *Acianthus*, and contained two species with names resembling English words. In the case *Glossodia* the two species are generally similar in appearance and have much of their distributions in common. Thus their purely English species epithets of "major" and "minor" are a reflection on their essential difference in stature, though there are also minor structural differences. Indeed, Fitzgerald, in Vol. I of "Australian orchids", illustrated what he considered to be an intermediate form; while Nicholls, in "Orchids of Australia", stated that such hybrids are not uncommon.

In the circumstances it is not surprising to find there is also a citation in the literature for *Glossodia intermedia* and that it is attributable to Fitzgerald. However this is not a reference to the hybrid between *G. major* and *G. minor* but rather an earlier name for one of the forms of the Western Australian species *Elythranthera emarginata*. Previously the genus *Glossodia* was believed to extend to the West, but on the basis of comparisons of fresh specimens of both the western and eastern species, A.S. George (1963) concluded that the differences were sufficient to justify two distinct genera. Thus *Elythranthera* is a purely Western Australian genus, while *Glossodia* is limited to the eastern states.

The generic name *Elythranthera* comes from two Greek words: "elytron" (meaning a sheath) and "antheros" (anther), a reference to the way in which the column wings form almost a cowl over the anther - a feature, not surprisingly, also pertaining to *Glossodia*.

The specific name in *E. emarginata* comes from the Latin verb "marginare" (to provide with a margin), plus the prefix "a" (meaning out), leading to the English verb, "emarginate" (to take away the margin of) - which is a rather roundabout way of saying that the end of the labellum is notched or shaped like the letter "m" rather than pointed!

The other species in this genus is *E. brunonis*, with the species epithet a derivative of the Latin for brown. This time the plant name is not based on its colour but after a person, the species being named by Endlicher as *E. brunonis*, after Robert Brown the eminent botanist. It is likely that, in choosing *brunonis* (instead of the more straightforward *brownii*) Endlicher followed the earlier lead of the British botanist Sir James Smith, who had named the genus *Brunonia* after Robert Brown - a genus unusual in that it contains only one species, *B. australis*. It seems fitting that while we have so many examples where our orchids were named Brown here we have at least one named after him. The powers that be have given their own recognition by naming the new Journal, devoted to the advancement Of taxonomic botany and related fields in the Australian region, as "Brunonia".

Reference: George, A.S. (1963), Notes on Western Australian Orchidaceae; III. West. Australian Naturalist, 9, 3-9.

FIELD TRIPS

Spring Gully Conservation Park

Saturday 8 September 1979

There will be a trip to Clare on Saturday, 8 September, mainly to visit the Spring Gully Conservation Park. Those wishing to do so may digress after lunch to explore the wineries further up the road!

The meeting point is at the Sevenhill Hotel, Sevenhill, just south of Clare, at 10.30 a.m.

YORKE PENINSULA

Saturday and Sunday, 22 and 23 September

Rendezvous: Saturday - outside Warooka Hotel/Motel at 9.00 a.m. Visit areas on "foot" of the peninsula.

Sunday - outside Warooka Hotel/Motel at 8.00 a.m. Visit areas of "lower leg" and "ankle".

2. Fishing gear, barbecue equipment, etc.
3. Take lunch, etc., on each day (see information sheets).
4. Orchids, native vegetation, geology, etc.

Information sheets are available with details of routes, accommodation, itineraries, and other relevant information. Those who are interested please contact the Secretary, Roy Hargreaves.

NOTE. Meeting times have been changed from those in the July Journal. Final decisions on times and venues will be published next journal.

MISCELLANEOUS

In the June Journal it was mentioned that *Caladenia filamentosa* (which incidentally is flowering now) is depicted on the cover of the current area code 088 telephone directory. Since then the area code 085 directory (Barossa Valley, etc.) has appeared with *Caladenia huegelii*, "Spider orchid"; and the area code 087 (South East area) featuring *Caleana major*, "Large Duck orchid".

It looks as though 1979 is the "Year of the Orchid" for Telecom South Australia:

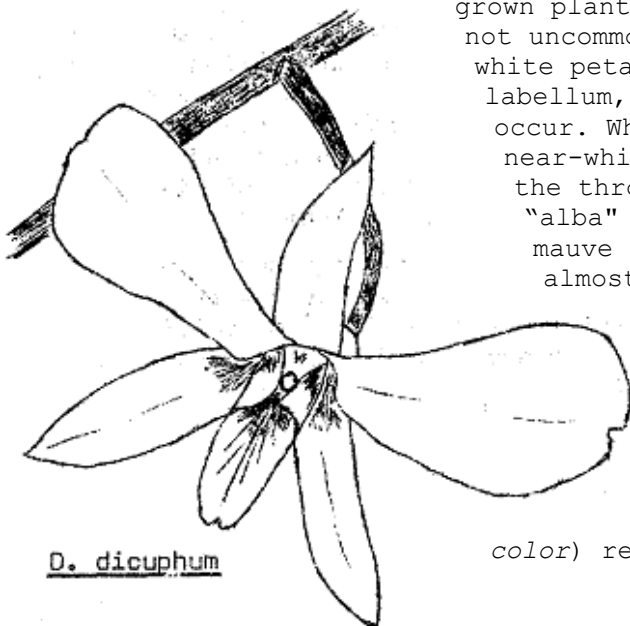
Of the 55 odd species of *Dendrobium* indigenous to political Australia there are two representing the *Phalaenanthus* Section - *Dendrobium bigibbum* and *Dendrobium dicuphum*. This, of course, ignores the rather complex putative hybrids between the *Phalaenanthus* and *Ceratobium* Sections which involve some varieties of *D. bigibbum*. In some respects *Dendrobium dicuphum* has been overshadowed by the more spectacular *D. bigibbum*. Its natural habitat is much less accessible and it was once thought to be endemic to the northern section of Northern Territory but has since been found to occur in the north-west of Western Australia. It also occurs on Groote Eylandt in the Gulf of Carpentaria as well as on Bathurst and Melville Islands.

A recent encounter with *D. dicuphum* in its natural environment gave me some appreciation of what a remarkable species it can be. In mid-July, while returning to Darwin on the Arnhem Highway from a business trip to Ranger 1 at Jabiru, we stopped at a small unnamed creek not far, from the South Alligator Crossing. Just off the road, at the side of the creek, was a large stand of "paperbarks" and among them two *Cycas armstrongii*, each about 12 metres high. Both were hosts to dozens of *D. dicuphum*, although none were observed on the surrounding *Melaleuca* sp.

The plants were nearly all facing north where they enjoyed full sun for much of the day. Flowering had been prolific and although a few flowers remained the inflorescences were carrying hundreds of seedpods. What was remarkable was the fact that all the plants observed were deciduous and not a leaf could be seen. The pseudobulba, which were up to 50 cm long on mature specimens, gave indications of each having flowered up to five times,

It was interesting to reflect on the environment. The rainfall in this area during the "wet" between late November and early May would be about 1250-1300 mm. From May to November almost drought conditions prevail and a nil recording for three consecutive months is not unusual. During the "dry" cloud cover is minimal and daily temperatures range from a maximum of 31-32°C to minimums which rarely drop below 20°C. The average mean humidity is about 65% so, apart from a boost from evaporation of adjacent creeks or lagoons, the species survives on its stored moisture in the pseudobulbs. That they survive, grow and multiply in these conditions indicates what a tough and tenacious species they are and belies the theory that orchids are delicate creatures.

D. dicuphum can be a very rewarding species to grow in cultivation and well grown plants with flowers up to 4 cm in diameter are not uncommon. Although the type species has near-white petals and sepals with a mauve throat in the labellum, a wide range of colour forms are found to occur. While the petals and sepal are normally a near-white or may have a very pale pink shading, the throat of the labellum can vary from the "alba" form through pale lemon yellow, lilac, mauve to a dark mauve/purple, which appears almost black.



D. dicuphum

In recent years *D. dicuphum* has been increasingly used as a parent for a number of man-made hybrids, many of which "bench" very well. *D. "July Leroy"* (crossed with *D. canaliculatum*) and *D. "Chieno"* (crossed with *D. discolor*) reflect the excellence of their parentage.

RHIZANTHELLA GARDNERI Rogers, Harold Goldsack

Corrigin, Shackleton, Goomalling, Munglingup. Western Australia.

A new locality where the subterranean orchid *Rhizanthella gardneri* Rogers has been found, as noted by Don Voigt in his letter to Roy Hargreaves, brings with it hope that after 50 years the secret life of the remarkable orchid may be unveiled. It also brings back memories of my first encounter with this plant.

As a young orchid enthusiast I had been collecting for, and writing to, Dr. R.S. Rogers of Adelaide, who, at that time, was an extremely busy public personality. To my surprise, one day in 1928 I received a note from Dr. Rogers inviting me to call at his house in Hutt Street after surgery hours as he had something to show me which he was sure would be of interest.

Naturally, I took the first opportunity to visit the Doctor, whereon he brought into the room a large jar with some white vegetable pickled in it. With a smile he said "Have you ever seen anything like this before?".

Well, there it was - this unique subterranean orchid from Corrigin, Western Australia, sent over by Mr C.A. Gardiner, the Government Botanist of Perth, who had realised the importance of this discovery.

The first plants were found in an area of virgin land that had been rolled, burnt and then ploughed, which operation uncovered the white underground rhizomes. Mr John Trott, the discoverer, was puzzled by this strange plant growing around the stumps of *Melaleuca uncinata* R. Br., common in the area, and sent it to Mr C.A. Gardiner. He, realizing the orchidaceous nature of the plant, visited the area, made personal observations and then sent a specimen to Dr. Rogers for study, which led to the description of a now sub-tribe, genus and species of orchid- *Rhizanthella gardneri* Rogers.

Soon after this the Field Naturalists Society were to hold their Wild Flower Show in the Adelaide Town hall and attempted to have this unique specimen displayed there. However, the plant was too valuable to risk and an artist - Mr Lyall Lush - made a black and white drawing, which was exhibited instead.

Within three years, on the east coast of Australia at Bulahdelah, another subterranean orchid *Cryptanthemis slateri* Rupp was unearthed. Unearthed is the word, for this one was unearthed by Mr Slater who was digging up rhizomes of *Dipodium punctatum*, the "Wild Hyacinth", to attempt to grow them. All plants of the new orchid were found growing in association with *Dipodium*. The importance of this find was such that Rev. H.M.R. Rupp was given a grant to travel to Bulahdelah to make further studies. This second find aroused worldwide interest and a German botanist suggested that the flowers of *Cryptanthemis slateri* were underground spikes of *Dipodium*. The morphology of the flowers soon disproved that theory.

Regarding this orchid, which Rupp named in 1932, Dr. Rogers commented to me that he was sure that Rev. Rupp's parishioners must have had a very brief sermon the week Rupp received the first specimen of *Cryptanthemis*! Dr. Rogers then lamented that the orchid hunter has to add a plough and a pick to his orchid collecting equipment!!