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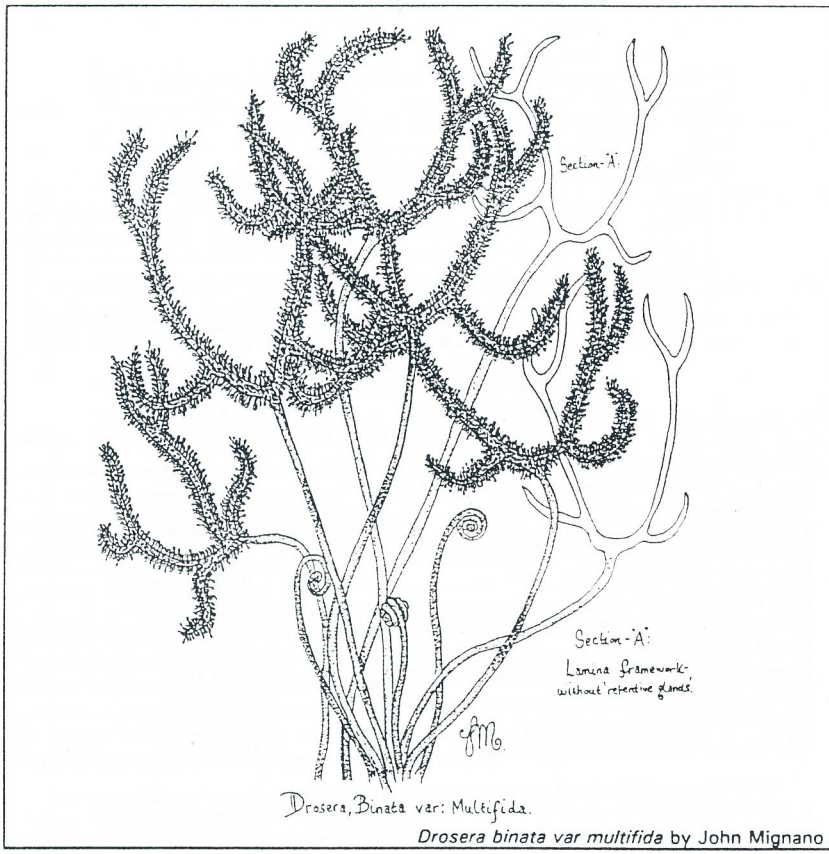

Drosera binata var multifida by John Mignano

NEWSLETTER OF THE CARNIVOROUS PLANT SOCIETY OF New South Wales (Sydney, AUSTRALIA)

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Meetings are regularly held on the second Friday of the following months February, March, April, (May in lieu of April if the second Friday of April is Good Friday) June (AGM), August, September, October and November
TIME: 7.30 - 10.00pm
VENUE: Woodstock Community Centre, Church St, Burwood.

Remaining Meeting Dates for 1996			
		9th August	
		13th September	
12th April		11th October	
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14th June	AGM	8rd December	Christmas *Swap Meet.*

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CONTENTS		Page

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Without Prejudice

Editorial
New PBR Information on PBR Obtained under Freedom of Information Act

After months of waiting, following an application under Freedom of Information Act, 1982, Richard Davion (Tilbrooke) obtained censored copies of three letters, one from Dr. Charles Clarke of August 29, 1994 and two from the PBR holder dated 22nd June 1994 and 7th September 1994 respectively sent to the PBR Office. (Copies of the certified copies are included for your perusal in the green supplement in the centre of this issue.)

Referring to Dr. Clarke's letter.

In paragraph 5 Dr. Clarke states that no one has ever " .... ***formally labelled*** (*Dionaea muscipula*) ***plants as being horticulturally distinct varieties within the taxon*** ". (Considering that John Ellis' original article on *Dionaea muscipula* was published in the St. James Chronicle (British Evening Post), on 1st September 1768 [1] some 225 years before Mr. Mansell lodged his PVR application this is an amazing "oversight" by the worlds botanists and horticulturists.)

How extensive a literature search was conducted, or how deep is Dr. Clarke's specialist knowledge of the history of this species, to be able to make such a definite "logically negative" statement? (i.e. How does he know everything that has, and hence has not, happened in 225 years?)

The second last sentence in paragraph 4 of Dr. Clarke's letter reads:- **" Almost all *D.muscipula* plants offered for sale are either all-green or have varying degrees of red pigmentation on the inner surface of the traps."** This is a clear statement that Dr. Clarke believes that almost all common knowledge *D. muscipula's* are either all green or only have red inside the trap. "Almost all ... "! How long is a piece of string?

The next sentence:- **Any other varieties are so rare that they are either not of common knowledge, or they are not available in sufficient quantities to conduct a comparative growth trial."** confirms that he is not certain that common knowledge varieties, that have red pigmentation on other than the inside of the trap do not exist. The existence of any plants whether they were "common knowledge" or not was simply ignored if they could not locate " **... sufficient quantities to conduct a comparative growth trial."**

The extent of Mr. Mansell's effort to **"tried every available means of finding other varieties of *D. muscipula* which were common knowledge to use as comparators, but could not find any, ... ".** (paragraph 6 of Dr. Clarke's letter) is revealed, in paragraph 5 of Mr. Mansell's letter of 24th June 1994 to the PVR office, as almost certainly nothing more than to look at one suppliers price list. Hardly " ... **tried every available means** ... !

Without Prejudice

Returning to paragraph 5 of Dr. Clarke's letter, he continues "**we felt that any available plant of *D. muscipula* which was *not* "Royal Red" was worthy of inclusion in the comparative growing trial under the broad heading of "typical".**

This method of selecting comparator plants will absolutely ensure that the "**typical**" comparator plants could not look like "Royal Red" **AND**, more to the point, **VICE VERSA**, that "Royal Red" will not look like the comparator plants. Indeed this is the objective of the comparative growing trial as expressed by Dr. Clarke in paragraph 11:- "**... most plants exhibit some degree of red colouration and it is these (as well as any other colour combinations) that Mr. Mansell wants "Royal Red" to be distinguished from.**"

Thus, we have the assertion of Dr. Clarke, in writing, that the data (i.e. the pool of plants from which to randomly select the 30 comparator plants) **has been manipulated in order to achieve a desired or expected outcome from the comparative growing trials.** The majority of the general community would consider this

SCIENTIFIC FRAUD.

Indeed the entire PVR/PBR Act's implementation in Australia and/or its administration by the Australian PVR Office may be so tainted in that it either requires, permits, induces or encourages PVR/PBR applicants and qualified persons to engage in scientific fraud.

There are other inconstancies in logic in Dr. Clarke's letter commensurate with adjusting the data and indeed modifying the design of the growing trial in order to achieve the desired result as follows:-

Paragraph 5 reads "**We chose to use plants of *D. muscipula* from a variety of sources as the comparator. Some had red colouring in the traps, others did not. ..... We labelled all these plants as "typical", because we felt that they provided an excellent representation of the inherent variability of the species, and a good reflection what one could quite justifiably call "typical" *D. muscipula*.**"

It is not valid to contend, without scientific evidence, that amongst all the individuals of this species only those individual plants that are all green or only have red pigmentation present on the inside the traps can be classified as "typical" and that only those two varieties (i.e. "typical" and "Royal Red") exist. (Atlanta Botanic Gardens have ten (10) VFT varieties including 3 red ones [5].)

If it is required to determine if "Royal Red" is different from all of these other plants, including those that exhibit " **... some degree of red colouration, ... (as well as any other colour combinations) ...** ", (paragraph 11) it is logical to expect that one must define those differences in plant characteristics (scientifically) that are to be deemed necessary in order to determine that any two individual plants belong to two different varieties and thus the number of and descriptions of the varieties **PRIOR** to designing the comparative growing trial. (Dr. Clarke's letter does not state that such basic preliminary determinations and definitions were conducted. Indeed his letter strongly indicates that they did not bother with such matters. Atlanta Botanic Gardens has at least ten (10) VFT varieties [5].)

Dr. Clarke's has expressed the opinion that "***.., D. muscipula is a very variable plant in terms of physical dimensions, vigour, and degree of red pigmentation.***" (paragraph 4) yet the data sampling technique he designed to be used in the comparative growing trial is not able to distinguish between surface areas, of various plant parts, that have a tiny spec of red pigmentation and those that are completely red. Any " ... designated plant part ... among the comparators ... " was declared red when "**any amount of visible red pigmentation, no matter how small a percentage of the leaf was coloured, as being red**" (paragraph 7)

How can he hope to take samples that are representative of the plant populations with such a coarse resolution sampling technique?

Dr. Clarke has conveniently ignored the fact that **the Mann Whitney test is only valid if the random samples are themselves truly representative of the populations to be compared.** [2]

Dr. Clarke' criticisms of the objectors and protestations, in paragraph 13, with regard to the output of the Mann Whitney analysis viz:- "**The level of significance returned by this test was 6.61×10^{-11}. Heaven knows .....**" are ridiculous given he rendered any result, obtained by analysing flawed, non population representative data with the Mann Whitney test, useless.

Mr. Mansell's two submissions to the PBR Office.

While I shall draw your attention to some remarkable statements written by Mr. Mansell I shall not analyse in depth his letters. (Rather I will leave it to the reader to read these letters and form their own opinion.)

Without Prejudice

Mr. Mansell's letter of 24th June 1994

Paragraph 5. His choice of comparators. He is not the independent qualified person. How Dr. Charles Maxwell Clarke designed, supervised the set up and conducted continuing supervision of the three month growing trial, given that he lived in the Townsville suburb of West End (Post Code 4810) [3][4] and lectured at James Cook University, Townsville (paragraph 12 of Dr. Clarke's letter) which is some 800km distant from the growing trial site at Cordalba (paragraph 1 of Dr. Clarke's letter), is all rather AMAZING. (The address on the letter and [3] indicates that he moved to the Bluewater address around the time he wrote the letter. He had not notified the electoral office of his change of address in time to be included in the 1/9/94 roll at Bluewater and was listed as resident at West End 4810 [3].)

Paragraph 7. Mr. Mansell is sure that if there had have been totally red form of *Dionaea muscipula* of common knowledge he would have known about it. To this remarkable statement a sceptic would surely utter BULLSHIT! (Atlanta Botanic Gardens has classified at least ten (10) VFT varieties including 3 red ones [5].)

Mr. Mansell's letter of 7th September 1994

In paragraph 7 we read:- ***"At this point I will bring to your attention some other differences between 'royal Red' and the 'typical' forms of venus flytraps. The differences being the colour of the flower stalk, the shape of the bud, and the shape and colour veining of the petals of the opened flower. These differences are pointed out in the photographs supplied. At the time of the growing trials, we did not feel these facts were relevant for inclusion in the description as venus flytraps are not sold for their flowers."***

Yet, amazingly Dr. Clarke does not bring this remarkable discovery to the attention of his fellow botanists world wide. (Surely if one was to have "*.... formally labelled ..... horticulturally distinct varieties within the taxon*" it would be a normal requirement to describe all parts of each variety including the parts of the flower.)

References

[1] Aphrodite's Mousetrap: a biography of Venus' Flytrap with facsimiles of an original pamphlet and the manuscripts of John Ellis, E. C. Nelson, Aberystwyth, Wales, Boethius c1990
[2] Statistics for the Social Sciences, William L. Hayes, second edition, 1973, published by Holt, Rinehart & Winston Inc. ISBN 0-03-077945-6, page 778.
[3] Commonwealth Electoral Rolls dated 15/2/93, 11/1/94, 1/9/94 & 16/2/95 published by the Commonwealth Electoral Office.
[4] 1995 A-K Sydney Telephone Numbers White Pages p1556 and confirmation at Burwood NSW Post office from On Line Post Code Listings.
[5] Bulletin of the ACPS Vol 15 No 1, March 1996, paragraph 5 page 17, ISSN 0813-135X.

Without Prejudice

Drosera regia

Richard Sullivan

I have been growing ***Drosera regia*** for more than 15 years having obtained my ***D. regia*** plants from Ian English many years ago. My experiences in the cultivation of ***Drosera regia*** are such that I disagree with the need to prevent ***D. regia*** from flowering as recommended by Ken Harper in reference [1].

As with most of my Drosera collection I grow my Drosera regia in a mixture of 50/50 peat and sand (the sand used for D. regia is coarse). The pots stand in a water tray in full sun all year. The minimum size pot used is a 125 mm (5 inch) full length.

For a number of years the plants grew at my mothers house (in Kelso) on a north facing window. These plants grew to a large size with 25 mm long stems. One year, after the family had been away for a week, the plants were found to have died back. This was probably due to the cold of winter.

As the stems were so long I cut back the dead parts of the stem (and leaves) from the stem until live material was found. From three pots of plants I finished up with 40 growing points on a number of stems. The plants were left to grow for a number of years in the same place always sitting in a water tray. In that time the plants grew larger with some of the stems over 90mm long. But the plants never flowered.

After splitting up one of the pots I ended up with 13 large plants. With so many plants and not enough room at mum's place I moved them into my glasshouse after some frost proofing. (After frost proofing my glasshouse the temperature inside falls to 3°C when the outside temperature was -9°C.) After two years in the glasshouse the plants flowered for the first time (in the summer of 1994/1995) at 12 years old. The plants left at my mothers house did not flower. (It may well be that the cooler winter temperatures in the glass house induced the plants to flower.)

The flowers took 55 days to open from the time when I first saw the buds appear. There were 18 flowers on each scape with 9 blooms on each side. Although I had around 120 flowers I could not pollinate any of the flowers. Enquires, including overseas correspondence, confirmed the need to have two unrelated clones to effect pollination as reported by Ken Harper [1].

The flower stem scape on my plants are longer than the 45 cm leaves. The distance to the first flower spike is 60 cm.

I have not found it necessary to remove the flower scape on my plants as recommended by Ken Harper in reference [1] as none of my plants have died during or after flowering. My Plants are now flowering for a second year in a row now (summer 1995/1996).

(**Editors note:**- The reader is referred to the photograph on page 10 of Volume 9 number 2 of Flytrap News [2] where a Drosera regia plant in flower can be seen in a deep red pot. Pink flowers are clearly visible in front of the Sarracenia's with some blooms silhouetted against the left hand side of the rear windscreen.)

I have found ***Drosera regia*** easy to strike from root cuttings as has Ken Harper has also reported [1]. I have also struck ***Drosera regia*** from stem cuttings. However I have been unable to raise ***Drosera regia*** from seeds and I have not had success with leaf cuttings.

The stem of ***D. regia*** seems to have dormant buds along the stem. When a stem touches (or is covered by) the soil it develops roots at multiple points along its length. I cut the stem into 12mm (half inch) lengths each with some roots still attached. The stem is placed on top of the mix with soil covering the cut ends, the roots go into the mix. In about 50 days signs of growth are apparent while the plants grow to flowering size in 12 months.

In inquiring of Silverhill Seeds of South Africa with regard to the pollination of seeds part of their reply gives an insight into the natural habitat of ***Drosera regia***:- *" Plants growing naturally also set seed poorly and flower best after fire. Often if the season is particularly dry the plants will flower but abort their capsules and go into a dormant state. most years the place they grow are permanently moist."* [3]

My plants at Bathurst (Kelso) have withstood temperatures below freezing (-3°C) on occasions with consistent minimum temperatures of 3°C. The maximum daytime temperatures have ranged between 28°C to 30°C in winter while in the summer the temperature can reach 40°C.

References

[1] ***Drosera regia***, Ken Harper, pp 11, 12, FlyTrap News published by The Carnivorous Plant Society of New South Wales, Sydney Australia Vol 8 No 4, April May June 1995 (ISSN 1323 8159)

[2] Photograph page 10, FlyTrap News published by The Carnivorous Plant Society of New South Wales, Sydney Australia Vol 9 No 2, October November December 1995 (ISSN 1323 8159)

[3] Correspondence from Silverhill Seeds of 18 Silverhill Crescent, Kenilworth. P.O. Box 53108 Kenilworth 7745, South Africa.

Plant Breeders Rights
Australia

Department of Primary Industries and Energy
GPO Box 858
Canberra ACT 2601
AUSTRALIA

Telephone (06) 272 4228
Facsimile (06) 272 3650

Mr Richard Davion (Tilbrooke)
GPO Box 248
ADELAIDE SA 5001

Dear Mr Davion

I refer to my letter to you of 13 November in which I undertook to advise you whether a further appeal had been lodged by the third party in respect of the decision for partial release of the documents requested under the *Freedom of Information Act 1982*.

I am now able to advise you that the matter has been finalised and that the third party has decided not to exercise his right in this matter and has agreed to the partial release of the documents.

Acting upon this advice, certified copies of these documents have now been prepared and are attached.

Yours sincerely

Margaret Winsbury
Plant Breeders Rights Office

21 December 1995

S1

CERTIFIED COPY OF ORIGINAL
01 SEP 1994
PLANT VARIETY RIGHTS OFFICE
for the Registrar, dated 29.10.95
PLANT VARIETY RIGHTS OFFICE AUSTRALIA

COPY

Dr. Charles Clarke
165 Rossetti Rd
Bluewater
Queensland 4818
Australia

Tel. (077) 88 6277

August 29, 1994

Dr. Mick Lloyd
Registrar of Plant Variety Rights
Plant Variety Rights Office
Commonwealth Department of Primary Industries and Energy
GPO Box 858
Canberra
ACT 2601

Dear Dr. Lloyd,

Re: Objection to *Dionaea* 'Royal Red': Application No. 93/069

(1) I am writing to clarify various aspects of the design of the comparative growth trial for *Dionaea muscipula* 'Royal Red', conducted under my supervision at Cordalba early this year.

(2) So that I am best able to address the objections of Mr. Davion (Tilbrooke), Mr Geoff Mansell has provided me with copies of your latest letter to him (ref. 93/069/ROYAL084.HLL), and Mr. Davion's letter to your office, dated August 5th, 1994.

(3) Before dealing with Mr. Davion's remarks specifically, I will explain why we decided to run the trial using plants labelled as *D. muscipula* "Typical" as comparators in the trial.

(4) As Mr. S. Clemesha points out in his letter to Mr. Davion, *D. muscipula* is a very variable plant in terms of physical dimensions, vigour, and degree of red pigmentation. However, until very recently, nobody has seen fit to identify any varieties, simply because the variations observed were not considered important, either horticulturally or commercially. Furthermore, the stability of many of these characters was unknown, and because many people continually crossed their plants with others, few were ever retained through more than a couple of generations. It was only when "Royal Red" emerged that people realised the commercial implications of defining some varieties of *D. muscipula*. Almost all *D. muscipula* plants offered for sale are either all-green or have varying degrees of red pigmentation on the inner surfaces of the traps. Any other varieties are so rare that they are either not of common knowledge, or they are not available in sufficient quantities to conduct a comparative growth trial.

(5) We chose to use plants of *D. muscipula* from a variety of sources as the comparator. Some had red colouring in the traps, others did not. Vigour and physical characteristics were not considered, as they were not relevant to the trial. We labelled all of these plants as "typical", because we felt that they provided an excellent representation of the inherent variability of the species, and a good reflection what one could quite justifiably call "typical" *D. muscipula*. A broad term like this can obviously lead to mis-understandings. For instance, some people might say that a plant of *D. muscipula* with dark red pigment in the traps is typical, but that an all-green plant is not. Others, depending upon what plants they have seen and/or grown, may say the opposite. Such a term is subjective and, *given that nobody has ever formally labelled plants as being horticulturally distinct varieties within the taxon*, we felt that any available plant of *D. muscipula* which was *not* "Royal Red" was worthy of inclusion in the comparative trial under the broad heading of "typical". Had any other distinct varieties been either common knowledge and/or readily available, we would have used them as distinct comparators.

(6) Mr. Mansell tried every available means of finding other varieties of *D. muscipula* which were common knowledge to use as comparators, but could not find any, so I do not feel that any realistically available varieties were omitted from the trial.

(7) In determining whether or not a designated plant part (eg. petiole - upper surface) among the comparators was red or not, I took *any amount* of visible red pigmentation, no matter how small a percentage of the leaf was coloured, as being red. It did not matter whether or not the red pigmentation was lighter than that of "Royal Red" or not. This rule was easy to extend to plant parts of "Royal Red" as they were, with the exception of the trap margins, nearly always dark red *throughout*. We assembled a pool of plants labelled "typical", and from them randomly selected 30 for the trial. I feel that this method showed no bias towards greener or redder forms within the "typical" plants, giving the best possible representation of "typical" *D. muscipula*.

(8) If there was any bias in the experimental design, it was *against* showing "Royal Red" to be significantly different to its comparators. While bias is generally something to avoid when designing experiments, I always feel that in an experiment like this, where it is so important for an applicant to get a significant result that, even with the best conscience, slight biases can affect the way results are presented or interpreted, particularly if the result is only just significant (or not). Hence the need for independent QPs. By designing the experiment as I did, I have no doubt that significant results in favour of "Royal Red" could only have been returned if there were exceptionally strong differences between this variety and the comparators. I feel that this is the most conservative and honest way of testing a characteristic. Under these strict parameters, "Royal Red" was shown to be distinct from "typical" *D. muscipula*.

(9) I hope that this justifies our choice of comparators. If you require any further details or clarifications, please do not hesitate to contact me.

I now deal with some of Mr. Davion's points specifically.

(10) As I understand it, Mr. Davion feels (see ¶8 of his letter of 5/8/94) that the selection of comparators for the trial was not appropriate, since the comparators contained some degree of red pigmentation. He suggested that the trial could only have been performed using *D. muscipula* plants with no red pigmentation as comparators, but that this procedure would still not have been "statistically acceptable".

(11) These comments lack any substance and should not be entertained any further: Mr. Davion clearly has no understanding of experimental design or statistical procedures. He does not at any point define the term "statistical acceptability" (acceptable to whom, might I ask?), and the concept of using *only* the all-green form of *D. muscipula* as a comparator is irrelevant, as most plants exhibit some degree of red colouration, and it is these (as well as any other colour combinations) that Mr. Mansell wants "Royal Red" to be distinguished from. As I have explained above, we chose to include a variety of colour forms under the heading "typical". To run the trial using "all-green" plants as comparators would have produced results which were both irrelevant and statistically *weaker* [1] than the trial we performed.

(12) To put my design to the test, I used the results in some of my lectures to second year students at James Cook University this year. The design and statistical analyses were scrutinised by almost 200 students (most of whom are not unintelligent, and are happy to disagree with me if they see fit), and I invited their comments, but the only feedback I got was how sensible the design appeared to them. It is always my intention to make statistics and experimental designs simple enough for anyone to understand.

(13) I bring to Mr. Davion's attention the results of the Mann-Whitney U-test as a general indicator of how distinct "Royal Red" is from the comparators. Even if we had chosen comparators which only had two plant parts which were green (Royal Red has one), this

[1] the actual results of the tests would have been more significant, but because the choice of comparators would have been incorrect, they would have been less meaningful.

test would have returned a significant difference. This is a non-parametric test based on ranks. For each of the six plant parts examined, each plant was scored (out of 6) for the number of red parts it exhibited (on all leaves of the plant). The level of significance returned by this test was 6.61×10^{-11}. Heaven knows what level of significance would have been returned if we only used all-green *D. muscipula* as comparators. Does Mr. Davion feel that 10^{-11} is not statistically acceptable? He is alone in the world of Biometrics if he does. This result is so conclusive that no further discussion on the matter seems warranted to me.

(14) I trust that this particular complaint of his can now be put to rest. Please note that, for the sake of future correspondence, I will be leaving Townsville around 20/9/94, and leaving Australia around 6/10/94, to take up a position in Hong Kong. I will send you a separate letter providing further details about this shortly.

(15) In closing, may I thank you for your support and assistance over the last year, and say how much I have enjoyed my work as a 'qualified person'. I particularly enjoyed the workshop you gave in Melbourne earlier this year: it was very interesting and informative.

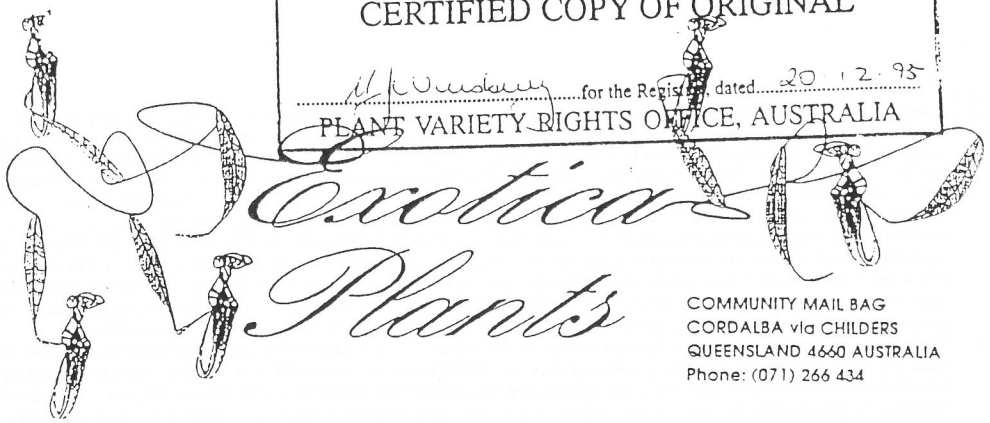
Yours sincerely,

Charles Clarke.

Charles Clarke.

(S4)

CERTIFIED COPY OF ORIGINAL
for the Registrar, dated 20 · 12 · 95
PLANT VARIETY RIGHTS OFFICE, AUSTRALIA



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CORDALBA via CHILDERS
QUEENSLAND 4660 AUSTRALIA
Phone: (071) 266 434

RECEIVED
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PLANT VARIETY
RIGHTS OFFICE

22nd June 1994

Dr. Mick Lloyd
Registrar of Plant Variety Rights
P.V.R.O. Commonwealth Dept. of
Primary Industries and Energy
G.P.O. Box 858
CANBERRA ACT 2601

Dear Dr. Lloyd

Re: Objection to Dionaea 'Royal Red': Application No. 93/069

(1) I am in receipt of your letter and copy of objection by Mr. Richard Tilbrooke and I thank you for same. After reading through the letter of objection and accompanying documents, I feel that a lot of the information supplied is superflous and I have to wonder at Mr. Tilbrooke's reasoning in including it. Still, I shall address the matter at hand by firstly stating that Mr. Tilbrooke does not meet the first criterion in lodging a formal objection, that is, he does not have any commercial interest in 'Royal Red' and the grant of rights cannot possibly affect him. (Plant variety rights No.2, 1987 - page 12, Section 20 (1) (a)).
I would also draw your attention to Mr. Tilbrooke's letter where he uses plural inferences such as 'us' and 'we' to indicate he is acting on behalf of other people or organisations but the letter is signed only by himself.

(2) Regarding my grant of rights affecting the commercial interests of other carnivorous plant dealers in Australia, I fail to see Mr. Tilbrooke's proof. In his letter he makes reference that it will affect the commercial interests of Mr. Colin Clayton (Dingley Home and Garden), Mr. Fred Howell, and Mr. Allen Lowrie (third page, second paragraph) but, again, there is no proof or objections to back up this claim except for Mr. Clayton's.

(3) In regards to Mr. Clayton's price list, listing a red/purple venus flytrap, what Mr. Tilbrooke failed to point out was that this price list was issued in March/April of this year. Mr. Clayton's previous list of January 1994 did not contain any such plant (please find relevant copies enclosed). Proof of the date of the price lists can be found in the letterheads when Mr. Clayton's 'Dingley Fern Market' underwent a name change around December 1993 to 'Dingley House and Garden' and then another change to the present 'Dingley Home and Garden' around March 1994. These name changes were documented in the December 1993 and March 1994 issues of the Australian Carnivorous Plant Society's Bulletin. This shows that 'Royal Red' was under provisional protection before Mr. Clayton even listed his plant. Furthermore, what Mr. Clayton is selling as a red/purple venus flytrap is substantially different to 'Royal Red' as the enclosed photograph shows

(4) As for 'International Repercussions' affecting overseas businesses, I fail to see how a grant of rights to 'Royal Red' in Australia will affect overseas businesses. Also, there are no formal objections to back up Mr. Tilbrooke's claim on this matter.

(5) I will now address the matter of my choice of comparators. As no forms or varieties of venus flytraps have formerly been described in any scientific literature, my choice of comparators for the growing trials (11-93 to 1-94) were those venus flytraps that were of common knowledge at the time, being all green through to green with red traps. Other red forms were not of common knowledge and Mr. Clayton's 'Red' varieties were not available at this time as can be seen by his price lists.

(S5)

(6) It appears that a lot of correspondence accompanying Mr. Tilbrooke's objection is based on a misunderstanding of the term 'All Red' venus flytrap, with many correspondents thinking this was a green plant with red traps only as used as a comparator in the growing trials. This is evident in the E/Mail correspondence included with Mr. Tilbrooke's objection. Mr. Tilbrooke apparently tried to clarify the situation by then basing his objection on what he calls an 'All Red Petioled' venus flytrap. This, again, is a misnomer and must have added to the confusion he had already created. On this note I also have to wonder what particular type of venus flytrap he actually has in mind for his objection. Such confusion is understandable, though, as no photograph of 'Royal Red' had been published prior to or at the time of Mr. Tilbrooke's objection. Where there is any mention of a totally red form of venus flytrap similar to 'Royal Red', there is also mention of it's rarity, even in the U.S.A. where venus flytraps have their origin. In fact, there has been no mention of a totally red form of venus flytrap in any carnivorous plant reference book that I have seen, until very recently (Gordon Cheers - A guide to growing carnivorous plants of the world - 1992/93), and then the only mention of it was 'Rare Red Form'.

(7) There have been red forms of venus flytraps similar to 'Royal Red' in a few carnivorous plant collections for a number of years but these were not of common knowledge (i.e. commonly grown or commercially available). I have been growing carnivorous plants for over fifteen years and propagating and selling them commercially for the past six years with regular exports to overseas countries. Had a totally red form of venus flytrap been of common knowledge, I'm sure I would have been aware of the fact. Mr. Tilbrooke's flow charts are theories and it is my belief that a lot of his information is based on hearsay.

(8) Additionally, I will state that 'Royal Red' meets the P.V.R. 'New Variety' requirements in that it has not been sold in Australia or longer than six years in another country; it is distinct in that it is substantially different from other commonly and commercially grown varieties as demonstrated in the comparative growing trials; and is uniform and stable as it is vegetatively propagated through tissue-culture.

(9) My aim is to make this rare, attractive, and unusual plant available to all carnivorous plant enthusiasts and the general public alike, many of who are students and children, at an affordable price.

Therefore, to sum up, Mr. Tilbrooke has no commercial interest in the 'Royal Red' venus flytrap; no proof of prior sales; and is acting solely on his own behalf.

(10) I trust I have addressed the relevant points and will do my best in answering any further queries in this matter.

Yours sincerely,

Geoff. Mansell
(Exotic Plants)

S6

Exotica Plants

(Wholesalers of carnivorous plants)

CMB. CORDALBA via CHILDERS. 4660 Phone 071 ~~26~~ 6434

CERTIFIED COPY OF ORIGINAL

.....for the Registrar, dated 20.12.

PLANT VARIETY RIGHTS OFFICE, AUSTRALIA

RECEIVED
0 8 SEP 1994
PLANT VARIETY RIGHTS OFFICE

7th September, 1994

Dr. Mick Lloyd
Registrar of Plant Variety Rights
P.V.R.O. Commonwealth Dept. of
Primary Industries and Energy
G.P.O. Box 858
CANBERRA ACT 2601

Dear Mr. Lloyd,

Re: Objection to Dionaea 'Royal Red': Application No.93/069

(1) I feel the first item to address in this submission is the claim that 'Royal Red' is of common knowledge and not distinct from other varieties grown in Australia and overseas. Regarding the Statutory Declaration from Mr. Stephen Jackson included in Mr. Davion's (Tilbrooke) submission, I have spoken to Mr Jackson at length and have record of our telephone conversation where he informed me that out of the 100,000 + seedlings that arose from venus flytrap seed he had imported, there were four colour variants observed - one seemingly similar to 'Royal Red'. He stated that he never advertised or sold this variant on the basis that it was red. He said he sold off seedlings in lots of 50-100 and larger all as 'typical' venus flytraps but the occasional red variant may have been among them, although, again, none were ever sold as 'red'.

(2) The next reference I would like to make is to the letter from Mr. John Pietropaulo of Peter Pauls Nursery in New York. I notice that Mr. Pietropaulo has no evidence to substantiate his claim that he has been growing and selling an 'all red' venus flytrap for over nine years. I am in receipt of his most recent price list (copy enclosed) that shows the plants he has for sale. I find it very hard to believe that Mr. Pietropaulo has been growing and selling 'all red' venus flytraps for over nine years when, in this most recent list, he does not even offer one for sale. I would think that if he had been producing and selling any 'all red' venus flytraps for any length of time, he would have stocks for regular sale by now. Therefore, I find it difficult to accept what he has stated in his letter.

(3) As far as the letter from the Atlanta Botanic Gardens is concerned, I feel that it only goes to strengthen my case as to the rarity of 'all red' venus flytraps similar to 'Royal Red'. They state the plant they obtained for their collection and that of other botanic gardens was imported from Holland from previously field collected bulbs. Therefore, if this plant were of common knowledge, I have to wonder why the botanic gardens had to go to such great lengths to obtain a specimen.

(4) The next letter in Mr. Davion's (Tilbrooke) appendix is that of Mr. Colin Clayton of Dingley Home and Garden. As I pointed out in my first letter, Mr. Clayton has never had or offered for sale a venus flytrap similar to 'Royal Red' before my P.V.R. application was accepted, as can be seen by the dated copies of his price lists. It appears to me that Mr. Davion's (Tilbrooke) statement that Mr. Clayton has been growing and selling an 'all red petioled' venus flytrap for a number of years is a fallacy. I can further prove the fact that Mr. Clayton did not possess an 'all red petioled' venus flytrap similar to 'Royal Red', in my diary notes taken from a telephone conversation with

(5) He states that Mr Clayton obtained this 'all red petioled' venus flytrap from him in mid/late 1993. 'Royal Red' was under provisional protection at this time. This plant of Mr Clayton's can be seen in the photocopies supplied by Mr Davion (Tilbrooke) in his first objection portfolio as 'Colin Clayton's "Chocolate Red/Horse-Chestnut Brown" "All Red Petioled" variety', in both its winter and summer forms. I have no doubt that this plant is the same as 'Royal Red', although the colour quality of the photocopy/photograph is poor and the summer form appears leggy and weak, indicating it has been grown in poorer light conditions. This condition has also been observed in 'typical' venus flytraps I have purchased from Mr Clayton in the past. Mr Clayton has described this plant to me on previous occasions and it appears to me that it is characteristically the same as 'Royal Red' in all aspects.

2/-

S7

(6) You can see by this photocopy how misguiding the photocopies of Mr Clayton's plant, submitted by Mr Davion (Tilbrooke) are. In paragraph eight of Mr Davion's (Tilbrooke) letter of objection, he makes reference to the design of the comparative growing trial even stating, in his opinion, that it was ill-conceived. He has obviously misinterpreted the results of the trial by stating that all the plants used showed a degree of red pigmentation when, in fact, there were four plants of the 'typical' venus flytrap that displayed no red colouration whatsoever. These four plants are what Mr Davion (Tilbrooke) refers to as 'Albino' but this, again, in his own terminology as no formal taxanomic description of variants of the 'typical' venus flytrap have been published. You will note in the accompanying photograph of the growing trial set up an all green ('Albino") form can be seen in the forefront. Also used as comparators in the trial were the following colour variants: Prostrate form - all green with red traps; erect form-all green with red traps; Prostrate form-all green with 'banded' traps; semi-erect Form-all green with red traps; erect and prostrate forms with varying amounts of red/pink on the inner trap surface. All of the plants used as comparators in the growing trial are of common knowledge and sold commercially under the common name of 'Venus Flytrap'. This is what we referred to as 'typical' in the trial.

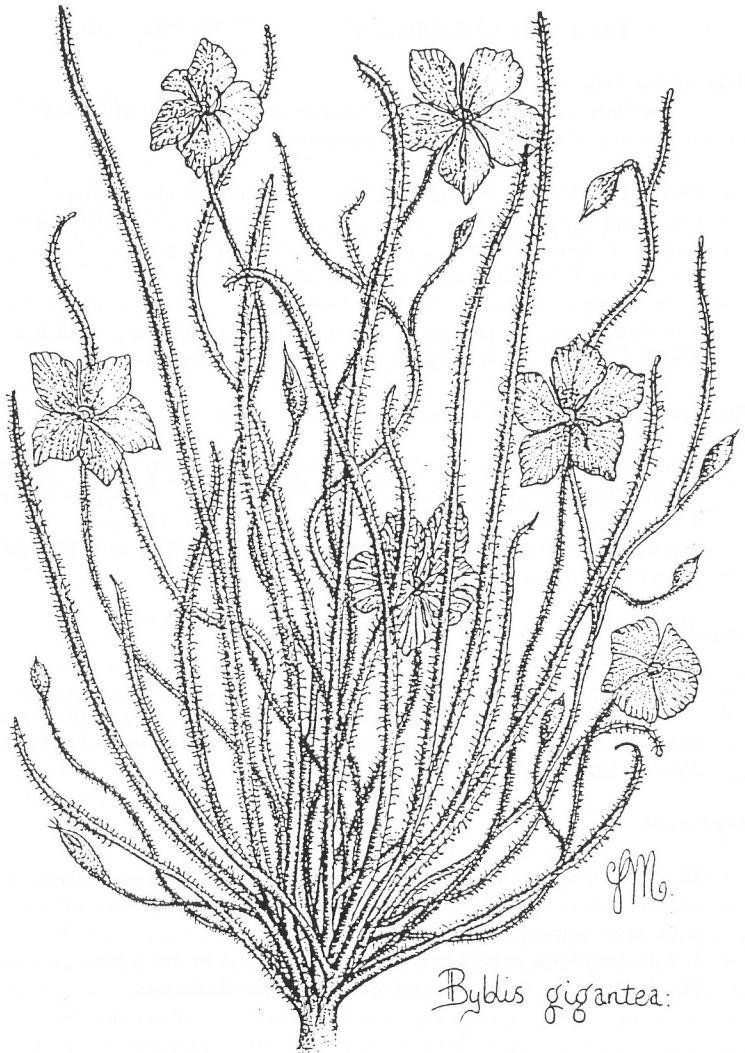
(7) As I was a regular purchaser of venus flytraps from Dingley Home and Garden (Colin Clayton), I included all variants of venus flytraps that they had available at that time, in the growing trial. On several recent visits to Dingley Home and Garden, it was observed that only the 'typical' forms of venus flytrap were displayed and offered for sale.
Mr Davion (Tilbrooke) puts forward the question, should the lack of the green terminal margins on an 'all red' venus flytrap be sufficient to class it as dinstinct from 'Royal Red' ? Please note that all plants of 'Royal Red' I am producing have been tissued-cultured from a single plant and while most of the plants display this margin at some point, there are various stages in their growth where this green margin is not evident, as can be seen in the accompanying photograph. At this point I will bring to your attention some other differences between 'royal Red' and the 'typical' forms of venus flytraps. The differences being the colour of the flower stalk, the shape of the bud, and the shape and colour veining of the petals of the opened flower. These differences are pointed out in the photographs supplied. At the time of the growing trials, we did not feel these facts were relevant for inclusion in the description as venus flytraps are not sold for their flowers. In fact, unless required for breeding purposes, all flowers are removed as the plants put their strength into flowering instead of trap growth therefore making them unsaleable.
I hope this satisfies all of your concerns regarding this matter.

Yours sincerely,

additional 'D' characters.

GEOFF MANSELL
(EXOTICA PLANTS)

S8



Byblis gigantea by John Mignano

Some ideas on Federation

Richard Sullivan

Role of the Federation

The Federation could provide maximum mutual benefits to all individuals and their participating Societies by:-

- Promotion of existing Societies both Australian and overseas
- Importing seed of plants not in cultivation in Australia into Australia.
- Pooling resources to finance the cost of the importation of plants not in cultivation in Australia into Australia.
- By bringing all participating Societies together, all their resources, knowledge etc., to one point where members can easily find out about a plant or where to get a plant that they want.

Resolving Financial Issues

- Increase membership by $5.00 for single CP society or $50 to $60 for membership of all Societies in the Federation . The extra $5.00 for membership of a Society to go to the Federation. The total membership dues to be split up between the Society with a small percentage to go to the Federation.

Logistics associated with journal publication

- Each Society to each have its own Journal.
- The Federation to put out one or two journals per year with at least one article from each member society. The Federation to fund the Journal from their own funds.

Seed bank

- Member societies to keep their own seed banks and all moneys for sale of seed together with any arrangements, financial or otherwise, with seed suppliers.
- The Federations seed bank to consist of hard to get seed. The Federation to swap seed with overseas Societies.

Code of ethics

- Expulsion from Federation and all member Societies for ripping wild plants out of a protected habitat.

Associate Membership

- Half Price to join the Federation.
- Receive only the Federation Journal. (Full price if they want all journals from member Societies.)
- Federation to help in joint shows. e.g. CP and Orchid show.
- Let associate member clubs advertise in the Federation Journal.

Editors notes:-

1) Suggest add smuggling as an expulsion offence as such actions endanger our collections, and Australia, by exposure to exotic pests and diseases.

2) The points raised above by Richard are his initial inputs into the Federation brainstorming. They are somewhat different from my I original ideas and raise concepts that I had not considered. But that is what I was hoping for **FRESH IDEAS.** Of course they also create their own unique financial and logistic problems that will need to be resolved. Thank you Richard. What about the rest of you? What do you think? **SEND IN YOUR IDEAS!**

Importation of seeds and Plant Material

Denis Daly

Import of seeds should be in **PARCEL POST** and must have the **GREEN INTERNATIONAL CUSTOMS DECLARATION** attached and correctly completed. (If sent in a letter you will have to go to the international post office to witness the customs inspection whereas the parcel post can be opened by the customs officers, inspected, and forwarded on to you in the mail.) Seed must be **clean, free of disease and chaff,** in individual packets marked with the genus and species.

Import of plants "in vitro", from an approved supplier who is recognised to issue the appropriate sanitary certificate, is essential.

If the Federation imports plant material, (as proposed by Richard in the preceding article,) it will need to employ a **customs agent,** or have an office bearer make the necessary prior arrangements with customs, attend to transport the **SEALED** parcel from the air port bond store to the customs inspection office by the shortest quickest route, pay the inspection fees, complete the paper work and then pick up the flasks after inspection.

CITES may apply to some species. **Additional documents** attesting to the source of the material and appropriate licence issue may be required for compliance with **CITES.** (Some of these documents will need to be obtained from the supplier of the seeds or "in vitro" plant material.)

Devil's Claws DANGER

Denis Daly

No doubt those who's *Ibicella lutea*, Yellow-flowered devil's claw, and *Proboscidea louisiana*, Purple-flowered devil's claw have successfully set seed have noticed the seed pod's rather viscous hook. These plants disperse seeds by utilising this vicious hooked seed pod which attaches to any hapless animal brushing past. As the animal moves about the seeds are dispersed from the drying (splitting), seed capsule.

These seed pods can "hook into" humans in locations such as adults knee, toddlers face etc., where their presence is quite undesirable. Pets are also likely to become victims of these hooked seed capsules which have been listed by the Department of Agriculture of NSW as capable of causing death or serious injury to farm animals if they attach over the nose, under the throat or in a leg joint. [1]

Cut off the tip of the hook before it starts to harden. Do not let the seeds of these plants escape.

Reference:-

[1] Medical and Veterinary Aspects of Plant Poisons in New South Wales E.J.McBarron, 1976, published by the Department of Agriculture New South Wales, pp 134 - 135.

Boosting Plant growth with Gibberellic Acid

Denis Daly

The growth of *Nepenthes*, *Darlington* and *Cephalotus* is dramatically increased by the addition of 5 ml of 1g/litre strength Gibberellic Acid directly into the pitchers. Transplant shock is overcome and the plants seem to be able to actively grow at low temperatures. (Does not seem to do anything for *Sarracenia's* or *Drosera's* though. Have not tried *Heliamphoria* yet.)

Drosera schizandra

Drosera falconeri Robert Gibson

Drosera falconeri is a distinctive and attractive sundew of the ***Drosera petiolaris*** complex endemic to northern Australia. Following is a brief description of this species and my experience in growing it.

I purchased a plant in April 1994 which was an impressive 9 cm diameter. The leaves had transversely elliptic lamina to 2.5 cm across by 2.2 cm long held on flaring petioles to 2.5 cm long and up to 8 mm wide which were conspicuously narrowed at the junction of the lamina. The plant had a variable cover of white unbranched hairs which formed a dense cover over the undersurface of the petiole, lamina and around the sunken growing point. Fewer hairs were developed on the upper surface of the petiole. From the conspicuously, and densely hairy undersurface of the developing lamina, it appears that these hairs develop early in the leaf history and are reduced in density as the leaf expands as it grows to maturity.

Aside from the large diameter lamina and relatively wide petioles, which are the largest in any of the ***Drosera petiolaris*** complex, this species has another distinctive characteristic: the sunken growing point. The central 5 mm of the rosette contains the growing point which is well protected by a dense covering of hairs and lies 1 cm or more below the soil surface. The zone of new growth is surrounded by the vertical basal portions of leaf petioles, many of which persist after the upper portion has died away. The architecture of this growing point is unusual and appears similar to that of a true bulb, and it probably protects the new growth from desiccation, fire and all but the smallest herbivore.

My plant was placed in a 15 cm full length plastic pot in a peat and sand mix. This was kept in a 10 cm deep plastic trough which was almost filled with coconut fibre. A clear plastic dome was placed over the pot and the set up was placed on the edge of a south facing verandah which received very little direct sunlight. Despite low humidity of the area and occasional winter frosts, the plant survived in the subtropical desert of Western Australia.

When I received the plant it was approaching dormancy as there was no new growth in the centre of the rosette, and the mature leaves started to die down shortly after I planted it. A few leaves barely emerged from the centre of the rosette in June, but remained in an arrested state of growth until September when they died, this coincided with the production of new leaves from the rosette centre. These new leaves grew to maturity, producing a rosette 2 cm in diameter by early November.

In mid December, 1994 I placed the pot in a terrarium lit by artificial lights prior to taking a holiday. Upon my return in mid January the plant had died. The growing point, the petioles and most of the lamina had rotted under the cool damp and humid conditions.

Although my plant died I learnt a lot about ***Drosera falconeri***, particularly that it was amenable to cultivation at higher latitudes than its origin and is able to survive mild frost. When I grow this species again I will expose it to more sunlight and avoid keeping the potting medium too wet. In general this species is attractive and generally easy to grow.

A visit to Richard Sullivan's Nursery Denis Daly

By the time this issue goes to print Richard Sulivan (author of two of the articles in this issue) will have relocated from Kelso to Bathurst.

I visited Richard on Sunday 17th March 1996 for a mornings field trip in the local Bathurst area. However we were not seeking Carnivorous Plants but acted as navies, implement carriers, photographers, etc., while my student daughter collected weeds.

Richard was kind enough to consent to act as a guide and take us to areas infested with weeds in his four wheel drive dual cabin utility. Many thanks Richard! (I would have experienced extreme difficulties driving over the rough terrain encountered in the Ford Laser that I drove to Bathurst.)

Family duties completed, at least for the time being, in the afternoon we visited Richard's new abode in Bathurst (5 minutes from Kelso). The back yard is huge and half full of carnivorous plants particularly *Sarracenia's*. (Indeed only his large *Darlingtonia californica's* remained at his old Kelso address.)

Richard has experience in growing Carnivorous Plants in the cold wintered Bathurst area. Indeed as reported in the last FlyTrap News (Vol 9 No 2) the germination of *Darlingtonia californica* seeds by the frozen block method devised by Fred Howell (refer FlyTrap News Vol 9 No 1) was based upon Richard's experiences at Kelso (Bathurst).

The *Sarracenia's* benefit greatly from their yearly freeze with the Sarracenia purpurea's producing intricately shaped "snail ice's". (Richard feeds his *Sarracenia purpurea* crushed snails.)

In the 1996 spring Richard Sullivan will offer mail order sales of Carnivorous Plants.
Address is 166 Seymore Street, Bathurst 2795,
Telephone 063 32 1655

MAIL ORDER
CARNIVOROUS PLANTS
Available from

Dingley Home and Garden
233 Centre Dandenong Road
DINGLEY VIC 3172 Australia

We cater for—
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- Commercial Growers
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We have the Southern Hemisphere's most comprehensive display of Carnivorous Plants for sale at the Nursery

Editorial Note:- Dingley Home and Garden's plant lists now include the "Dutch" plants from Cresco following Colin Clayton's "interchange of material agreement" with Mr. Theo de Groot. The latest word is that Colin and Tina have effected another interchange of plant material, this time with Atlanta Botanic Gardens. I suggest that you keep watching Dingley's plant list.