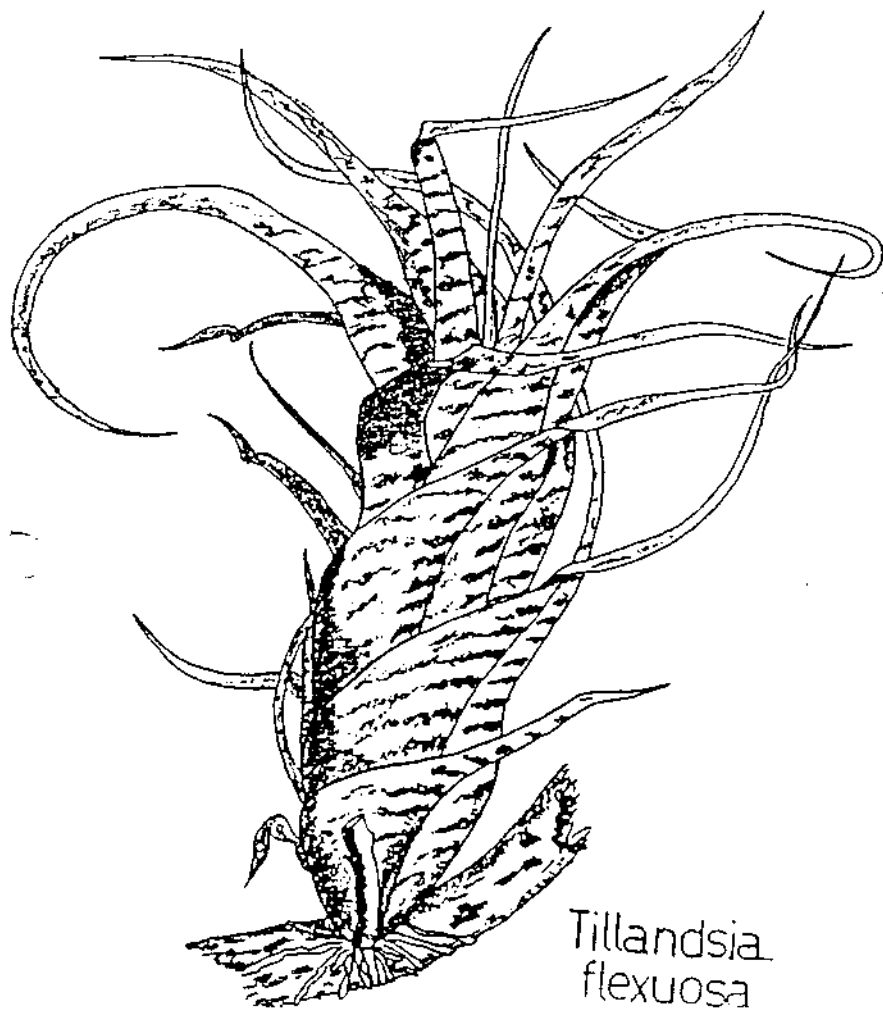


Bromeliaceae

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JANUARY - FEBRUARY, 1988



Tillandsia
flexuosa

BROMELIAD SOCIETY OF QUEENSLAND

Postal Address: P.O. Box 565,
 FORTITUDE VALLEY,
AUSTRALIA. 4006

General Meetings are held on the third Thursday of each month except December, at the Uniting Church Hall, Warner Street, Fortitude Valley, commencing at 7.30 p.m.

PATRON:	Mr. H. Caulfield	
PRESIDENT:	Mr. R. Paulson	2970415
SECRETARY:	Mrs. M. Marshall	2774275
TREASURER:	Mr. G. Stewart	2779965
EDITOR:	Mr. L. Butt	8483515

PROGRAMME

JANUARY, 21st: General Meeting
 Growing Cryptanthus by Norm Catlan
 Beginners - Growing Bromeliads from Seed
 by Norm Catlan

FEBRUARY, 18th: Annual General Meeting
 Beginners - Potting Mixes for Beginners
 by Peter Paroz

MEMBERSHIP FEES

Members are reminded that Subscriptions for 1988 were due and payable by 1st January, 1988. Fees must be paid by the beginning of the Annual General Meeting in February, and failure to do so will render the member unfinancial, and therefore ineligible to vote at the A.G.M.

Fees have not been altered and remain at the very reasonable rates of

Family	\$8.00	Single	\$5.00
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EDITORIAL

The Christmas break-up meeting was, I believe, a big success.

Santa Claus duly arriving and leaving a lot of happier children behind him, the atmosphere was very friendly, and far more informal than previously.

Three tables of good raffle plants were passed out to lucky winners and there was plenty of food and gallons of punch to drink.

John Higgins managed to be present, sporting a set of metal crutches. Let us hope he soon gets on his feet again after the accident to his foot.

Other important news was that our Patron, Mr. Harold Caulfield was confined to a hospital bed with a severe heart spasm. Since then we learn that he is off the danger list and getting back to being his usual self. Harold's great interest in the bromeliaceae is well known.

Len Butt

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WHAT AN ENCOUNTER!!

As told to me per the medium of a letter, the Amazon and its mighty jungle not only grow bromeliads, orchids and aroids, but harbor some rather fascinating but repulsive forms of life.

There had been a great storm all one day, and we pitched our tent up a tributary of the main river. Needless to say, most of the party spent that night in a thatched cabin that had been long used as a stop-over place. My correspondent says that he was then introduced to one of the fauna. A giant tarantula had entered our cabin, apparently disliking the drenched outside forest. This particular spider was covered with hair which appeared to be standing straight up, as was my own. In size, it was as big as a soup plate! The bite is quite lethal to birds and small animals, and can make a man quite sick. The owner of the cabin would not let us kill it there, and eventually it returned outside. He told

cont.

us that this spider can dislodge its hairs and they are extremely irritating if they contact human skin. That is why hi did not want it killed in the cabin.

Oh, the joys of bromeliad hunting!

Len Butt

OFFSETS OR SEEDS?

In the last four years, I have been concentrating on setting seed on my Tillandsias for the purpose of growing from seed.

I have been very successful on most plants in setting a good crop of viable seed, especially on some of the rarer varieties, (i.e. *Tillandsia duratti*, *T. deappeana*, *T. venusta*, *T. viridiflora* *Variegata*, *T. dyeriana*, to name a few). I have two clones of most species, so self sterile plants don't worry me, as I have an alternative pollen supply.

One thing, however, that worries me, is that since I have been setting seed, my offset production and quality has fallen away remarkably. Some of the offsets on the silver varieties of *Tillandsia* have been reaching only half their growth potential before flowering, and I must put this down to the seed the plant was carrying prior to, or during pupping. The larger, greener *Tillandsias* are not affected so much as the silver and grey varieties, but it is still a little disconcerting, as it is always better to have nice robust offsets. Any plants which I have not set seed on seem to be producing normal large offsets, with no stunting effect.

In summary, I must say that somewhere along the line, a decision must be made to either go with the setting of seed and risk reduced offset size, or don't set seed, or on self fertile varieties cut the inflorescence off directly after the plant has finished flowering. The ideal situation of course, is having two clones of each variety and set seed on only one, leaving one for offset production only. I am now working toward this goal.

Greg Stewart

BROMELIAD NUTRITION

A recent letter from Evan Williams asked about the composition and use of some 'old fashioned' fertilizers - bone meal, blood and bone, and hoof and horn. While blood and bone is often available, the other two materials are no longer commercial products.

Dried Blood

~The analysis of dried blood is somewhat variable, but the following figures are typical - Nitrogen 13%; Phosphorus .65%; Potassium .47%; Calcium .24%; Magnesium .10%, with useful amounts of Iron, Copper and other trace elements. Although the nitrogen is bound up in the organic form, it breaks down readily and quickly becomes available. The nitrogen is much too high in relation to the other nutrients for a balanced fertilizer.

Bone Meal

This is finely ground bone, predominately Tricalcium phosphate with some organic matter. A typical analysis would be - Nitrogen 3.8%; Phosphorus 9.8%; and Calcium 22%. Sometimes the bone is steamed to remove the oil and this results in a lower nitrogen content, typical figures being Nitrogen 2.2%; Phosphorus 12%, and Calcium 25%. The availability of all the nutrients depends on the fineness of the grind. In addition, the phosphorus and calcium only become available if the pH is less than about 5.6.

~Hoof and Horn

As suggested by the name, this is finely ground up hooves and horns. It is essentially pure but insoluble protein, and as a result, the nitrogen is only slowly available, the rate depending on the fineness of the powder, moisture and bacterial activity. The nitrogen content averages about 13.8%.

To correct the nutrient imbalance in dried blood, I would suggest the following mixture -

Dried Blood	1000 gm
Potassium Sulphate	200 gm
Magnesium Sulphate	50 gm
Calcium Sulphate	25 gm

cont.

Finely powder the ingredients and mix thoroughly. All the nutrients are readily available so that the mixture should be used sparingly and at regular intervals. The nitrogen content is too high for highly coloured plants such as Neoregelias.

A mixture of equal parts of bone meal and hoof and horn makes a slow release fertilizer, but lacks potassium and magnesium. This can be corrected by adding sulphate of potash and magnesium sulphate (Epsom salts). A suggested ratio would be -

Hoof and Horn	1000 gm
Bone Meal	1000 gm
Potassium sulphate	500 gm
Magnesium sulphate	500 gm

Finely powder the ingredients and mix thoroughly. This combination has a serious disadvantage in that the potassium and magnesium are readily available but the other nutrients are not. This can be corrected in part by substituting powdered serpentine, (a rock mineral which is mostly magnesium silicate) for the Epsom Salts, but there is no readily available slow release source of potassium

Peter Paroz

QUESTIONS & ANSWERS

Q. Mr. E.B. of Ingham asks -

Is the *Vriesea splendens* propagated only by seed, because mine does not produce suckers?

A. *V. splendens* can be propagated from offsets but the manner of removing them is a bit more delicate and difficult than most other bromeliads.

The new shoot appears at the axis base of the inflorescence and not at the base of the plant. When the offshoot has reached 5 to 6 inches in height, it can be carefully removed with a very sharp knife. The cut must not injure the basal tissues of the new offshoot.

BIOGRAPHY OF EARLY BROMELIANS, NO. 3

This month we discuss two inaugural members of our society, in Jim and Mary Hyde of Salisbury, Queensland.

Jim was born at Stanthorpe in 1907, and was always a lover of plants of many kinds. His favourite hobby was fishing, and Mary recalls his many excursions to Stradbroke Island to surf fish, and also the times he threw a line at Amity Point.

In the early days, Jim and Mary often visited Doug Jackson's nursery in Orange Grove Road, and purchased bromeliads. They put together a really fine collection of the Bromelioideae and Tillandsioideae at their Maurice St., Salisbury home, and finally the bromeliads became Jim's real obsession.

In January, 1967, they formed part of the little group that started our Society, and were always very good workers for the club. Jim corresponded with the American and Australian Societies, and finally, after much research, produced the first Australian aureo-marginate leaf version of *Aechmea nudicaulis*. This was registered in Victoria I am told, and given the name '*Aechmea Mary Hyde*'. The structural body of this plant is squatter than the new variegates that began to be imported later, but it still is quite a unique plant. Mary reminisces that Jim corresponded with bromeliad notables like Bernard Stonar of W.A., and Bill Symes of Casino. Jim was also quite probably one of the reasons that Mr. Kretschmann of Petrie took to growing good bromeliads.

Jim passed away on the 9th November, 1983, and much of his large collection was broken up, some going to the Mt. Coot-tha Botanic Gardens, and some to Cairns Gardens.

Mary is still the plant enthusiast, even today, and of recent date has started to visit the meetings of our Society once more.

Len Butt

INTO THE MATO GROSSO AGAIN

On the third level of practically any Brazilian jungle we find a predominance of the species *Aechmes*. This stiff, hardy type of bromeliad seeks more light and more currents. *Vriesea* and *Tillandsia* seem to occur on a level just below the third level, toward the second level. Sometimes this is made up of the lower limbs of giant trees whose leafy heads form the jungle roof above us.

In a southern BANIA forest not far from Ilheos, we found two new species - *Aechmea conifera* and *Aechmea depressa*. They were huge and had to be lowered with ropes.

A. conifera had a cone-like flower head, which was 18 inches long and weighed 12 lbs (5.5 Kg) approximately. With its many offsets, this plant probably weighed over 50 Kg.

A very interesting point worth mentioning was the great diversity of life found in this plant - enough to interest botanist, entomologist, or herpetologist. A great mixture of small snakes, frogs, beetles, and aquatic mosses and algae. Apparently these plants can hold several litres of water, but are only secured by thin, wire-like roots to the host.

To be continued:

Len Butt

(ex letters sent to Len Butt by Mulford B. Foster in 1966)

QUESTIONS & ANSWERS

- Q. Once I asked Mulford Foster if it was true that bromeliads grew better with access to rain water.
- A. Unfortunately bromeliads and orchids as glasshouse/greenhouse or house plants cannot always get the rain water which means so much to them, and have to keep growing on chemically treated water which generally has the very life taken from it. That many of them hold up demands our admiration. One caution is, however, important. Bromeliads and orchids will not do well on excessive alkaline water.