# **ILLAWARRA BROMELIAD SOCIETY INC.**

# 30th ANNI VERSARY

# **1992 – 2022**



### **NEWSLINK - JANUARY 2022**

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- The Society is, by the holding of meetings, displays and competitions, to provide a forum for the people of the Illawarra region who are interested in the culture and collection of bromeliads.
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#### ILLAWARRA BROMELIAD SOCIETY INCORPORATED

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BANK DETAILS FOR FEE PAYMENT, ETC:

ETC: GREAT SOUTHERN BANK; BSB No. 814 282; Account No. 50997160

MEETINGS - The Society meets from 12.00 noon to 4.00 pm on the first Saturday of each month (February to November) at the Berkeley Neighbourhood Centre, Winnima Way, Berkeley\* See April 2021 Newslink
MEMBERSHIP SUBSCRIPTIONS - Due 30<sup>th</sup> June each year: \$15 single/\$25 family.
NEWSLINK ISSUED QUARTERLY - January, April, July, and October and at <a href="http://www.bromeliad.org.au">http://www.bromeliad.org.au</a>

#### VISITORS ARE ALWAYS WELCOME

## Foolproof plant for budding gardeners



 Wollongong Botanic Garden curator Steve Popple accepts some rare plants from Merv Henderson to mark the launch of the Illawarra Bromeliad Society.

#### By FIONA CLEGG

During his epic sea voyage, Christopher Columbus made two historic discoveries — America and the pineapple.

But while the pineapple (and the United States) have gone on to become household names, some of the spiky fruit's less well-

ally fool-proof plants. "I've been growing bromeliads for about 25 or 30 years and I've found they are one of the hardiest

To help kick off the Wollongong society, the Sydney group has donated some rare plants to the Wollongong Botanic Garden.

A new club to foster

the hardy bromeliad

For more information on the Illawarra Bromeliad Society phone Steve Popple on 27 7456.

At our March meeting we will celebrate the 30<sup>th</sup> Anniversary of the formation of our Society. It Il began after an article appeared in the Advertiser newspaper to let Illawarra residents know of the possibility of starting up a local bromeliad society in the area. This article had been at the instigation of Mery Henderson, a member of the Bromeliad Society of New South Wales, who had the dream of introducing more people along coastal New South Wales to the beauty of bromeliads. And so it was that on February 1, 1992 about 20 people met at the Education Centre of the Wollongong Botanic Garden to discuss this proposition. Tremendous support was also given by other members of the Society, many of whom travelled down from the Sydney area to stage a very beautiful exhibition of bromeliads in readiness for the visitors who would attend the meeting. It was apparently a most inspiring, friendly and successful occasion and Merv's aspirations were fulfilled as the Illawarra Bromeliad Society was formed, the inaugural meeting being held on March 7, 1992. At this March meeting Jeff Bartley was elected President, Rob Stone, Vice President, Peter Rieck, Secretary and Bob Gray, Treasurer. However, due to Peter's failing health, Margaret Bartley took over as Secretary in early 1993, a position she held until 2000. Later, Steve Popple, then Curator of the Wollongong Botanic Garden, was approached regarding becoming our Patron, a position which he accepted.

**MONTHLY RAFFLE PRIZE ROSTER:** Each rostered member is asked to bring up to five bromeliad plants-or goods related to the cultivation of bromeliads--for the raffle. The quality of plants should comply with the requirements of 'Plants for Sale' and should you be unable to provide items for the raffle on your rostered day please contact the Program Officer (Bob Stephens 04 1283 4985) so that appropriate rearrangements can be made.

February	-	Graham Bevan, June Casey, Jim Clague, Sharyn Baraldi
March	-	Noel Kennon, Monica De Clouett, Anne Mobbs, Pam Townsend
April	-	Michael Drury, Christine Stephens, Sandra Carnie, Barbra Jones-Beverstock
May	-	John Toolan, Eunice Stark, Carole Taylor, Les Thain
June	-	Bob Stephens, Steve Wain, Eileen Killingley, Suzanne Burrows

**OUR NOVEMBER 6<sup>th</sup> GET-TOGETHER:** Many, many thanks to Rita and John Toolan for once again opening up their beautiful home and garden to us for a long-awaited get-together. John provided another delicious sausage sizzle and there were also mouth-watering salads and desserts supplied by our members. Around 30 people were there and in spite of a not-so-promising weather forecast it turned out to be a beautiful day and was so very much enjoyed by all those who were able to attend.

MARCH 2022 SALES DAY AT WARILLA: Following on from our short November 6th meeting and gettogether at John and Rita Toolan's lovely home we are looking into booking space at the Warilla Neighbourhood Centre for the weekend of March 19/20—a week later than usual because two of our key players are celebrating a milestone anniversary during the second weekend in March (Graham and Elizabeth's 60<sup>th</sup> wedding anniversary!). The matter will be taken to the committee and also given discussion among our members to see whether we should make it a one or two day event and so we will be able let you have more details later via email/Facebook posting/and at our February and March meetings.

**OUR AGM IN AUGUST:** Graham gave a short talk on the business side of the above get-together, mainly brought about by the Garden Clubs of Australia asking affiliated Societies to nominate a co-ordinator able to liaise between them and their society who would also have to hold a position as such on our committee. From past experience over the last 20 or so years Graham has been working with the GCA he has found that most people in clubs/societies are hesitant to put their hand up for a committee job, and he asked that we begin to think about this sort of thing as committee positions could be opening up within our own Society by the time our AGM rolls around in August and we will be looking for members willing and able to fill them.

LINK TO OUR SOCIETY'S FACEBOOK PAGE: https://www.facebook.com/groups/448297386598187

We hope that you will feel free to join the group which Romina has set up for us. When someone searches "Illawarra bromeliads" under groups on Facebook, the Illawarra Broms group should be the first to be listed. Also, if you have bromeliad photographs/photos of your garden, etc. that you might like to share on our new Facebook page, Rowina has volunteered to handle this for you. To do this, just use the email address: <illawarrabroms@gmail.com> that she has set up for this purpose.

**KIWI BROMS CONFERENCE – POSTPONED UNTIL LATE MARCH, 2023:** We have learned from the New Zealand Society that their *Kiwi Broms* Conference, scheduled for April 2022, has once again had to be postponed, with the dates now March 22—26, 2023. This is something beyond their control but these new dates mean that it will be two weeks before Easter and will now be within daylight savings hours—a great positive.

**MEMBERSHIP FEES:** We still have quite a few membership fees outstanding, and while we recognise that getting the money to us is not as easy when there have been no meetings to attend, this is a reminder that you must be a financial member to be eligible to vote, to be elected to the committee, enter plants into competition, and receive our quarterly newsletter, etc.

#### WHEN AND HOW TO REMOVE NEOREGELIA OFFSETS

**By Scott Sandel** (Reprinted 'President's Message' from *The Bromeliad Blade*, Newsletter of the San Diego Bromeliad Society, July 2018)

This month I am turning my attention to potting up a gang of neoregelia offsets that have been growing in my collection. So I thought—why not incorporate this into July's *Blade*? This is basic stuff—cutting off offsets, mixing up potting media and planting them. I do not pretend to have the best techniques or recipes, but I've had a lot of fun with this particularly rewarding genus of the bromeliad family. Why rewarding? Well, they grow relatively fast, going through their life cycle often in just 2-3 years from small offset, to adulthood, to blooming and to then producing the next generation of offsets. More often than not your neoregelia, or neo, will produce several offsets that can be easily propagated, as I will discuss here. July [in the Northern hemisphere] is a good time to bounce around some propagation topics as many neos have pups on them large enough to remove now and in the next few weeks. Maybe you'll join me in bringing some bare-root offsets of your favorite for the raffle table!

#### When and How to Remove Neo Offsets

When my favorite neo hybrids have bloomed and have begun production of offsets I impatiently keep an eye out to see how many offsets I'm going to get. And then I keep watch to monitor the size of the offsets because once they're about one-third of the mature size it is time to propagate. Not to worry if they stay attached and get bigger; you can cut them off the 'mother' plant even when they approach maturity! In these cases, keep only actively growing roots, not the old roots from the 'mother', which could rot in the new pot. If you remove the offset(s) earlier, your mother plant may produce more pups. Some hearty, slow-dying plants can produce a second and sometimes even a third round of offsets. For me, this is typical of xSincoregelia 'Galactic Warrior' and other bigeneric hybrids made with a neoregelia crossed with Sincoraea (formerly Orthophytum) navioides. It is not uncommon with a well-grown 'Galactic Warrior' to get another offset or two after removing the first 3-4. Use a sharp knife or your Felco pruners to get below the soil line where the offset is attached to the mother plant. Be sure to cut as close to the attachment point as possible so that when you remove your offset you get all of the offset, especially the base where roots will later emerge and grow. Once removed you will find that the offset [may have] quite a bit of roots, just a few emerging rootlets or none at all. After removal, I dust the cut end with Root-tone, a powder with rooting hormones and (more importantly) fungicide. Then, before potting them, I place them upright in an empty plastic pot for a couple of days for the cut end to dry up a bit.

#### **Potting Your Neo Offsets**

Most neos are not too particular about their potting medium as long as it is free-draining. While many neos will grow an extensive root system, they often grow in their habitat attached to a substrate rather than on the ground in soil. As epiphytes growing attached to trees, their substrate is free-draining. Most of us have favorite recipes for growing media, and we'll vary it to suit the particular species or hybrid in question. And eventual plant size matters. So-called mini neos are small and don't want to be in a huge pot, and I find that smaller pots dry out more easily, so I add more water-holding media like peat and coir to these. Large-growing neos, like ones that have N. concentrica or N. carcharodon in their parentage, will get a large pot that could become waterlogged, so I use more chunky perlite and lava rock for those. For longer-living species and hybrids, I plant for permeability of the medium over time by using more inorganic material (perlite and lava rock) and chunky organic material that takes longer to break down in the pot. For medium and large growing neoregelias I typically use 5" to 8" [12 cm–20 cm] plastic pots, and I fill the pot to within an inch with lightly packed medium, placing the offset in the middle of the pot. Often I lodge small cobble around the offset to brace it to be as motionless as possible. Another technique is to brace the newly potted offset with three bamboo stakes. It is important to keep the offset braced so that it can be undisturbed while it grows its first roots. My typical neo recipe is as follows:

- 30% light potting soil, such as "seed starter mix" (a soil-less peat/perlite media)
- 20% coir chunks
- 15% ground coir
- 10% medium size orchid bark
- 10% large-aggregate size perlite
- 15% 3/8" volcanic "Lava" rock gravel.

Place your potted offsets in a bright place with indirect light. Being under 50% shade cloth is ideal for me. Your young neos will grow and establish themselves quickly in the next few summer months!

#### UNPOT BEFORE IT'S TOO LATE

By Andrew Wilson (Reprinted from The San Diego Bromeliad Society's The Bromeliad Blade, Feb.2016)

Before I knew anything about bromeliads a 'good' friend provided me with a starter plant, an *Aechmea distichantha*. Based on that you may guess what happened. After potting it into the largest decorative container (24-inch diameter) available at the time I let it look after itself. Years later the plant was 7 feet across and the pot seemed to be splitting open due to expansion of the roots. It had to be extracted.

As you know, the spines on *A. distichantha* come free of charge. Even with arm protection and heavy gloves the handling risks are significant. An alternative approach was needed. The detailed mechanics would require much explanation. Suffice it to say that a rope fastened around the upper portion of the pot, two 6-foot pry bars and heavy wooden logs were the tools used. Using them the pot could be moved without touching the plant. As the pot was standing on a slope, at the foot of which were puyas and alcantareas that would not have survived a crushing blow, tilting the pot and wedging it had to be done in multiple stages. Eventually, it was laid on its side, split but still intact. After that the going was easy. The plant was heavy due to the weight of water in its tanks after the rains in late December. When emptied the total load was greatly reduced so that it was then possible to rotate the pot and cut off the extensive side-growths. Much to my surprise the roots occupied only the top foot of the pot. So, the friction between them and the inner walls was far less than expected and it was possible to pull out the central portion of the plant. Mission accomplished!



IT WAS INTERESTING THAT AFTER YEARS OF GROWING, NO MOISTURE HAD REACHED THE MIX BELOW THE ROOTS. ALL RAIN OR RARE WATERING HAD BEEN INTERCEPTED IN THE TANKS AND IN THE UPPER ROOT ZONE.

Knowing that would have made the job both easier and less risky. Another year in the pot could have been disastrous. (Capitals mine—Ed.)

Two pieces of advice: (1) Do not pot up your *Aechmea distichantha;* and (2) Do not ask me to unpot it!

#### SYMBIOSIS

**By Robert Kopfstein** (Reprinted from 'The President's Corner' of *The Bromeliad Blade*, the San Diego Bromeliad Society's, April 2016 newsletter)

#### Consider symbiosis.

The word is derived from two Greek roots that mean "together" and "life", and in biology two or more organisms that mutually co-exist. Not only do they live together, but they depend one on the other for their very existence.

A prime example is lichen, a combination of a fungus (*ascomycetes*) and certain green or bluegreen algae. This duo has been so successful that you can find lichen almost ubiquitously, from tropical climates and deserts to the Arctic—reindeer moss is a staple without which children in the West would have to do without all those goodies they receive on December 24 (that is, unless Santa would locate another food source for Dancer, Prancer, and the rest of that herd).

Bromeliads, too, exhibit symbiotic traits. Those that are epiphytic most often live in concert with other plants, trees, shrubs, and cactus. The lithophytes may use rock as a substrate, but they do not cling to the rocks alone. If you visit bromeliads in habitat you will find that most often the tree branch or the rock has been previously colonized by lichens and moss. This biotic substrate allows the bromeliad seeds the necessary moist "cushion" to germinate and it provides protection for the tiny seedlings to survive until they are large enough to fend for themselves.

Once the bromeliads are large enough, they, too, are the site of symbiotic relationships. The socalled "tank type" broms trap water, and these little reservoirs not only provide essential water for birds, mammals, and reptiles that live high in the forest canopy, but they are home to frogs and insects—alas, including mosquitoes. If you grow any of the tank bromeliads in your garden you have likely observed the variety of critters that soon make themselves at home in your plants Years ago when I first began to grow large neoregelias I was perplexed as to why the leaves near the centre had elongated scratches, the smaller neos seemed immune to this problem. Then one day I noticed that the neighbourhood birds were using my "big horse neos" as a birdbath. The scratches came from their frequent ablutions.

Some tillandsias—especially the ones with bulbous bases—are myrmecophytes; they provide a home for ants, who are safely tucked away in the dry shelter of the leaf bases. In turn, the plant has its own built-in security force. Heaven help the hapless collector who might try to dislodge the tillandsia. The ants attack—stinging—and the collector, if he or she is wise, will best do a hasty retreat leaving the plant unmolested.

This concept of symbiosis apparently caught the attention of author Terry Pratchett, who writes mostly fantasy fiction. In 1998 he published (Harper Collins) *The Bromeliad Trilogy*, a series of three short, connected novels telling the story of a group of nomes (not gnomes), little people who have been stranded on Earth for many, many generations. Apparently their exploratory spacecraft became separated from the mother ship. They eke out a miserable existence in a meadow until they decide to move on, ultimately winding up in a British department store. Then to their surprise they encounter another group of nomes who can remember no other existence other than inside the store, and who have never had to deal with "outsiders."

In effect the trilogy is an extended metaphor for the human condition. Using a simile of frogs that know no other world other than the bromeliad that acts as their miniscule universe, the nomes face catastrophe when they discover that their miniscule universe, the department store, is to be closed and then demolished.

While the book is entertaining it raises several very serious issues that we humans face today. Our bromeliad—or department store—is obviously in trouble: the Earth is facing climate change, global warming, pollution, gross overpopulation (no need to go on). Perhaps we have forgotten that we live in a symbiotic relationship with nearly everything that surrounds us, and every symbiotic relationship, if it is to succeed, has to work both ways. Each participant must work to the benefit of the other.

#### **GROWING TIPS FOR BEGINNERS**

(Extracted from BSNZ information <u>www.bsnz.org/articles/growing-tips-for-beginners?start=1</u>)

#### 1. Acclimatisation and Light

While most bromeliads are often extremely adaptable, a common mistake that is often made is to bring home a plant or cut off a pup and put it straight into an environment it is not used to. This often causes the plant to go into shock, fade/burn/elongate its leaves, or flower prematurely, regardless of whether it is a young pup or a mature specimen. Always try to find out what conditions it was growing under before you got it. A brom taken from a warm, sheltered greenhouse will normally not survive very well if planted immediately into a cold, wet and windy garden—a bit like us really! If you wish to have it positioned in a much sunnier or windier spot, make sure you acclimatise it slowly over a few months by giving it gradually more outdoor time/sun/wind before planting. However, any pups that emerge from the mother plant in the new environment, will normally be able to handle the new conditions much better than mum did—remember, they are quite adaptable!

Finding the correct light levels for each of your bromeliads in order for them to look their best cannot be overemphasised. This is often a trial and error process that may take months or even years, depending on your growing environment. A general rule to remember: more light = more warmth = better colour and better form. Most broms love warmth and humidity, so experiment positioning them in places where they can handle as much light and sun as they can take, without scorching or bleaching the leaves and drying out. Conversely, placing most broms in full shade areas will often cause the plant to lose any red/orange/yellow colours or patterning, reverting to longer strappy green leaves that often look nothing like what it's supposed to look like! This can be very disappointing (especially after paying good money for a special plant), so use shade with as much caution as planting in sunny areas.

#### 2. Growing Media

Almost all bromeliads like a very free-draining, or 'loose' growing media. Do not plant them in clay or heavy waterlogged top-soils, as they are likely to suffer and rot at the base. Any fine bark or pumice- based potting mix is ideal to use. The key is to ensure any bagged mix does NOT contain high levels of nitrogen slow release fertiliser, as this can cause the plants to grow excessively soft and strappy. However, a small amount of 3-6 month slow release fertiliser in potting mix is normally fine for most broms and will give pups a good start.

#### 3. Planting and Potting

Most bromeliads do not need roots to be formed when they are planted. They will develop good roots over time if the mix is free-draining, they are watered and not knocked around or stressed.

**Garden Planting:** Dig a 5-6 inch wide and deep hole for smaller plants and 6-9 inches for larger plants.

If the soil is heavy clay, etc. use a steel rod or garden fork to make a few 4-6 ich deep drain holes in the bottom of the hole. This will aid draining water away from the base of the plant after heavy rain/excessive watering. Three-quarters fill the hole with your free-draining potting mix (as explained above), insert the plant into the mix and press the mix firmly—not tightly—around the plant on all sides. Take care to ensure the plant is NOT positioned too deeply, as excess moisture and pressure can cause basal rot. Fill the rest of the hole around the plant and use larger bark pieces, pebbles or small stakes if necessary to keep the plant stable in any wind, etc. Alternatively, a good tip is the whole pot the plant is in can either be partially or fully buried in the ground This allows easy removal and repositioning at a later date if desired.

**Potting:** Choose a pot big enough to house a mature plant of the type you are potting. Put around 1 inch deep of larger media (chunky bark, polystyrene chips, scoria, etc.) in the bottom of

the pot to ensure good drainage so the pot and roots will never sit in any water. Pot the plant in the centre of the pot as above (as high as possible without it becoming unstable). Two or three thin bamboo skewers are great for holding young pups upright in the pot until they form their roots and can stand on their own. Another good tip is to also put a layer of smaller bark (or pebbles) around the top of the potting mix to prevent moss growth and weed growth and help retain moisture in hot weather.

**Tree and Rock Mounting:** Many bromeliads are also epiphytic (will grow well in trees) so they do not need any soil at all. These can simply be tied on with wire, strips of elasticised ribbing material or simply glued, nailed or stapled through or around the woody part of the base (stolon) onto the tree or rock. However, DO NOT fix them to or allow them to touch any tanalised timber fences, trellis, decks or oil painted surfaces, as the chemicals used in these are highly toxic to most bromeliads and can kill them. Always ensure the plant base is stable and doesn't move in the wind. It will then normally put out new roots, helping it attach more securely.

#### 4. Removing Offsets (Pups)

Most bromeliads self-propagate by producing offsets, commonly known as 'pups' from around their stem or root areas. This normally happens when they mature near or after flowering, as they attempt to create offspring that will continue to grow after the mother plant slowly dies, post-flowering. However, it can also occur any time when the plant is stressed or has a change in environment that triggers the plant to produce pups or flower before maturity.

Basically, all pups can be removed either by cutting or pulling them gently off the mother plant. As a general rule, wait until the pup is around a third to half the size of the mother before removing it. They will grow much faster when still attached, so the longer they are left on, the better. There are four main types of pups you will have to deal with, as follows:

#### (a) Basal

If the pup is emerging from the basal root area or inside one of the bottom leaves, firstly remove the plant from the pot or ground. If the pup is joined to the root ball, remove any soil and cut off the pup as close as possible to the mother, trying to retain any small roots that have formed on the pup's base. For pups that emerge within the lower leaf axils, remove the leaves BELOW the pup by splitting and pulling them to the sides to expose where the pup joins the mother. These types of pups often have a natural 'joint' where the pup's base forms very close to the plant. If the pup can be gently pulled downwards and twisted without squeezing its stem, it will often come off quite easily without using a knife at all. However, this may be difficult with very large pups that are tighly connected to the mother. In this case, a thin serrated knife or saw can be inserted between the pup and mother and a cut made down towards the roots, taking care not to cut through the stem of both mother and pup.

#### (b) Stoloniferous

If the pup has long, woody stolons, they can easily be cut close to the mother using secateurs, or a sharp serrated knife or saw. The stolons can then also be trimmed further, close to the pup if required, before planting or mounting.

#### (c) Axial

Some bromeliads form their pups very high up the stem of the plant in the central leaves close to the inflorescence. These must be removed with great care, also using a sharp knife with minimal cutting into the stem of the mother. Most of these plants only produce one or two pups before dying, so it is sometimes best to leave the pups in-situ, so they eventually grow through the mother.

#### (c) Adventitious

Other varieties (mainly in the *Vriesea* and *Alcantarea* genera) produce tiny adventitious or 'grass' pups from the basal area. This normally occurs when the mother plant is very young and sometimes these are the ONLY pups the plant will have. Therefore, it is a good idea to remove them when the grass pups are quite small (between 8-12 cm long) and grow them on as you would a seedling in fine mix, with regular water and fertiliser in a warm and sheltered area. The critical point to remember when removing any type of pup, is NOT to cut into or damage the soft white tissue in the base or stem of the pup or the mother, as this is the 'live' growing tissue that forms roots and leaves. Rotting and/or infection of the base or centre of the plant is highly likely if this occurs, or it may take a long time to recover. So take extreme care!

#### 5. Watering

Most bromeliads like humidity and moisture to grow well, so it is important to look at their growing environment to ensure they are getting regular water. Broms growing in the garden will normally only need watering during hot summer months. Check the centre cups and soil moisture each week to ensure they are not dried out. Rain during the cooler seasons is all they will need to survive, so there is no need to water them at this time unless direct sun is drying them out. For broms in pots, inside or in greenhouses that do not get rain, again regular checking is necessary and some prudent watering may need to be done during the colder months as well—but DON'T overdo it! Too much water in cold weather can exacerbate fungal growth and promote 'cold damage' marks on the leaves. In winter, keep water in the centre cups and leaves to a minimal level and try to let the pot soil dry out between waterings.

As a general rule, water each plant until the cups and leaves just overflow and water runs out the bottom of the pot. Soil should be moist, but not soaking wet and the pot should never sit in water. One other thing to remember in summer is to run your hose well before watering. The water in garden hoses can get very hot in summer and will badly scold and even kill broms.

#### 6. Fertilising

Fertiliser for bromeliads is a much debated and complex issue, as it can have such a huge effect on the appearance of the plant—both good and bad. Most broms grow perfectly well WITHOUT applications of any artificial fertiliser. Remember, the 'tank' types are well adapted to collecting nutrients in their cups and leaf axils. However, it is generally accepted that some fertiliser does help young pups grow roots and get well established—and also helps maturing plants to look their best. The trick is to find the right methods and type of fertiliser for your plants—as many of them have different nutrient requirements and growers have differing preferences as to how certain plants should look.

Without getting too complex, the more fertiliser that is applied, the larger and greener the plants will normally be. The leaves will probably also be longer and thinner than if no fertiliser is used. As a general rule, plants with soft, green leaves respond well to fertiliser, whereas shorter, darker/coloured leaves will normally look better with NONE at all. Therefore, look carefully at your types of broms, the colours, sizes and form they have—and decide which ones would benefit from fertiliser and which ones wouldIn't. One size (amount of fertiliser) does not fit all! If in doubt, ask an experienced grower.

The best method of fertilising for beginners is to use 6-12 month slow release pellets (e.g., Osmocote). Select a type which is medium/low in Nitrogen (N), very low in Phosphorus (P) but quite high in Potassium (K). Look for the NPK ratio which should be something like 14:4:24 where the 'K' ratio is near twice that of the 'N'. Simply mix a small teaspoon of pellets into the soil when planting a pup and from then on a small teaspoon around the soil surface each Spring. This is normally sufficient for most broms to look good and grow well throughout the year. The slow release method is less likely to cause problems with form, colour change and burning of the plant than if regular 'foliar spray' feeding is undertaken. The foliar method is best left for more experienced growers or until you are sure how your plants repond to fertiliser in your growing environment.