

**ILLAWARRA BROMELIAD SOCIETY  
INCORPORATED**

**NEWSLINK**

**January 2024**



***Tillandsia ionantha***

**“Fiesta”**

**Photograph by Ann Kennon**

**Winner of the Meri Stefanidakis Memorial Trophy Award**

**2023**

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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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**BANK DETAILS FOR FEE PAYMENT, 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

**MEMBERSHIP SUBSCRIPTIONS** - Due 30<sup>th</sup> June each year: \$20 single/\$30 family + \$2 joining fee/rejoining fee.

**NEWSLINK ISSUED QUARTERLY** - January, April, July, and October and at <http://www.bromeliad.org.au>

**NEWSLINK:** After June 30, 2023 a copy of Newslink will be emailed to members; however, after that date should you like to receive a hard copy then there will be an additional cost of \$10/year.

**NEW MEMBER:** A very warm welcome to our new member, Graham Kohler, who joined at our November meeting. We wish you a long and happy association with our Society.

**POINTS SCORE WINNERS:** Hearty congratulations to our Points Score winners for 2023. But thanks go to all of our members who participate in our monthly competition as seeing all of these beautiful plants on display is, for many of us, one of the highlights of our meetings.



<b>Open:</b>	<b>Stephen and Edwina Wain</b>
<b>Novice :</b>	<b>David Hastings</b>
<b>Tillandsia:</b>	<b>Stephen and Edwina Wain</b>

**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 re-arrangements can be made:

- |           |   |  |
|-----------|---|--|
| February  | - | Graham Bevan, Jim Clague, Sharyn Baraldi, Monica DeClouett               |
| March     | - | David Hastings, Freda Kennedy, Glenn Martin, Deniece Crutchley           |
| April     | - | Noel Kennon, Barbara Jones-Beverstock, Christine Stephens, Maadi McKenna |
| May       | - | John Toolan, John Boyd, Isabella Chambers, Pam Townsend                  |
| June      | - | Michael Drury, Colleen Claydon, Nina Woodcock, Heather Thain             |
| July      | - | Carol Burgdorf, Jenny Starling, Sandra Carnie, Fay Crozier               |
| August    | - | Steve Wain, Eileen Killingley, Dawn Harvey, Katie Chin                   |
| September | - | Bob Stephens, Julie Stringer, Val Miller, Romina Di Noro                 |
| October   | - | Cheryl Mathews, Anne Mobbs, Sandra Southwell, Dianne Ljubovic            |
| November  | - | Suzanne Burrows, Ana Mallon, Edwina Wain, Beverly Irvine                 |

**CLEANING ROSTER:** We have decided to reintroduce a cleaning roster so that the same people are not left to do a final tidy-up after each meeting. While our members are very good with helping to stack and store all of the tables and chairs, it's just the last-minute chores of making sure that the floor is clean, etc. before we lock up for the day.

- |           |   |  |
|-----------|---|--|
| February  | - | Graham Bevan, Sharyn Baraldi, Monica DeClouett   |
| March     | - | Deniece Crutchley, David Hastings, Glenn Martin  |
| April     | - | Freda Kennedy, Maadi McKenna, Christine Stephens |
| May       | - | John Toolan, John Boyd, Faye Crozier             |
| June      | - | Michael Drury, Nina Woodcock, Heather Thain      |
| July      | - | Sandra Carnie, Jenny Starling, Isabella Chambers |
| August    | - | Dawn Harvey, Steve Wain, Val Miller              |
| September | - | Belinda Drury, Brian Smith, Bob Stephens         |

**GENERAL MEETING – SATURDAY, FEBRUARY 3, 2024:** At our first meeting for the year we have the opportunity to have as our guest speaker, Greg Aizlewood, from Queensland who will give a PowerPoint presentation on ‘Bromeliads in Habitat’. You may remember that Greg gave a very interesting talk on the bromeliads of Mexico in early 2023 and he will again be bringing some plants, plant stands and hangers, with illustrations and prices of his ‘Wireworks’ set out in our October 2022 *Newslink*.

**GARDEN VISITS – SATURDAY, FEBRUARY 17, 2024:** We have three gardens to visit for our first visits for the year. At 10.00 am we will meet at the home of Ann and Noel Kennon, KANAHOOKA (Phone: 02 4262 7614) where we will have morning tea. Tea and coffee will be provided but please bring cake/slice/fruit to share. At approximately 11.15 am we will move on to the home of Christine Stephens (also in KANAHOOKA – Phone: 02 4261 6663). At approximately 12 noon we will then move on to the home of Cheryl Mathews in DAPTO (Phone: 0438 612 971) for lunch. Cheryl is going to have a sausage sizzle and provide tea/coffee but please bring salad/sweet items to share. Please note that Cheryl has 13 back steps (with railing either side) to her garden. To help with seating can some members bring along foldup chairs. For any further information please contact Bob Stephens on 0412 834 985.

**SATURDAY, APRIL 13, 2024 – COACH TRIP TO COLLECTORS’ PLANT FAIR, CLARENDON:** Please put your name down if you are interested in going to the Plant Fair. As soon as we have an idea of how many will be going costing/pick up times will be provided. For any further information please contact Bob Stephens on 0412 834 985.

**October 7, 2023 – Competition Plant Results**

**Open:**

1 <sup>st</sup>	Edwina and Steve Wain	<i>Neoregelia</i> ‘Pinegrove Tiger’
2 <sup>nd</sup>	Glenn Martin	<i>Neoregelia</i> Sweet Rosay
3 <sup>rd</sup>	Suzanne Burrows	<i>Nidularium</i> Red Queen

**Tillandsioideae**

1 <sup>st</sup>	Ann Kennon	<i>Tillandsia</i> <i>aeranthos</i>
2 <sup>nd</sup>	Edwina and Steve Wain	<i>Tillandsia</i> <i>kegeliana</i>
2 <sup>nd</sup>	Edwina and Steve Wain	<i>Tillandsia</i> <i>tequendamae</i>
3 <sup>rd</sup>	Edwina and Steve Wain	<i>Tillandsia</i> <i>sprengeliana</i>

**November 4, 2023 – Competition Plant Results**

**Open:**

1 <sup>st</sup>	Edwina and Steve Wain	<i>Canistrum</i> ‘Canvey Royale’
2 <sup>nd</sup>	Ann Kennon	<i>Billbergia</i> Our Rena
3 <sup>rd</sup>	Edwina and Steve Wain	<i>Billbergia</i> Allan Ladd

**Novice**

1 <sup>st</sup>	David Hastings	<i>Neoregelia</i> ‘Burnsie’s Spiral’
2 <sup>nd</sup>	Katie Chin	<i>Orthophytum</i>
3 <sup>rd</sup>	David Hastings	<i>Orthophytum</i> ‘Warren Loose’

**Tillandsioidea**

1 <sup>st</sup>	Suzanne Burrows	<i>Tillandsia</i> <i>albertiana</i>
2 <sup>nd</sup>	Suzanne Burrows	<i>Tillandsia</i> <i>scheidiana</i>
3 <sup>rd</sup>	Ann Kennon	<i>Tillandsia</i> <i>ionantha</i>

## **FUNCTIONS OF YOUR POTTING MIX**

**By John Catlan (Reprinted from Far North Coast Bromeliad Study Group January 2024 Newsletter, but originally published in the May-June, 1999 issue of the J. Bromeliad Society, Vol. 49(3))**

Stop! And for the rest of this article think about what your potting mix should be, then compare it with what you use. Don't defend your mix because you use it. Everyone must take into account cost, time you want to devote to your hobby, and also the availability of ingredients, but your plants have predetermined requirements that do not relate to these constraints. Over the years, our basic philosophies on the culture of bromeliads in containers have changed and so has the potting mix. Viewed from this angle, the ideas are important as they motivate the evolving change for the improvements.

The bromeliad growers belonging to any one affiliate have an enormous number of plants that are the same or require the same conditions but the soil mix for every grower is different and they all place their faith in the good/bad results they achieve with their personal mix. I believe that often the mix we prefer is based around a special group of broms that were grown during a particular season. The possibility that some factor other than the potting mix may have been largely responsible for the superior results is totally ignored because the potting mix is a tangible that we can touch. The intangibles such as temperature and its variables, humidity, shade or lack of it from a nearby tree, rain, watering program, wind or lack thereof, attention through having time or interest or keenness are all hard to define or remember, so we place our trust in our lucky potting mix.

There are four sections to this article: Support, Moisture, Aeration and Nutrients.

### **Support**

Where do your plants grow? They may grow on cliff faces attached to trees, rocks, deep litter and, yes there are some that only grow in the ground—e.g., pitcairnias, bromelias and ananas. How many of these terrestrials do you grow in comparison to the epiphytes such as neoregelias, vrieseas, tillandsias, billbergias, aechmeas, etc.? The pot contains the growing medium and the growing medium supports your plant. The bromeliads that we normally grow do not grow in soil but in great clumps of roots and leaf litter attached to trees as well as the dead leaves (of the bromeliad) that fall down over the root ball.

### **Moisture**

Living plants are largely composed of water that is normally obtained from the soil and it is usually the limiting factor in their growth. It seems to me a constant supply of moisture and/or water is so important to bromeliads that they have developed more adaptations for collecting, storing and conserving water than is their due. For example:

- Pineapples and bromelias grow in huge clumps that protect the ground from drying out and the shape of the plant channels rain and dew towards the base of the plant.
- Pitcairnias grow in moist, shady locations along streams and soakages.
- Dyckias and hechtias grow in open situations around and between rocks that collect and funnel rain to their edges. Rocks are great collectors of dew and also very good mulch. They keep the soil underneath moist. Although these plants are bromeliads they are classified as succulents because they have developed thick, fleshy leaves to hold water.
- Billbergias are generally tube-shaped and in the wild much more so than you find in collections. They grow in open conditions towards the tops of trees where they get maximum light. Their adaptation is a very tight tube that holds water and is subject to very little evaporation. This tube sheds and resists heat in the sun similar to a crowbar standing upright
- Guzmanias grow in darker areas that are moist. This ability to grow in darker areas is a very important adaptation because as the temperature drops, the relative humidity rises and evaporation of moisture from the plant is slowed down. You can be pretty certain that plants growing under these conditions do not like to dry out.

- Neoregelias typify what people consider to be a bromeliad: a circular bunch of leaves with a cup in the centre that holds water, but the plants deceive you. They hold far more water in the outer leaves than they do in the centre. A lot of bromeliads that do not have a well-defined cup hold water in the outer leaves.
- Tillandsias, the silver scurf you find on the silver tillandsias helps to protect the plant from moisture evaporation and holds moisture in contact with the plant for a longer period of time so the plant has a better chance to absorb its requirements. Plants normally manufacture their food during daylight hours. This results in moisture evaporating but tillandsias have reserved this process by manufacturing their food at night then there is less evaporation of moisture.
- Brocchinias have adapted to survive under very wet conditions. The one thing that they do not lack is water but there is a downside to such a situation inasmuch that nourishment is leached from the soil, so to counteract this at least two of this group of bromeliads are carnivorous: *Brocchinia reducta* and *Brocchinia hechtoides*. Their style of growth as a tube is a pitfall trap with waxed walls and a lower digestive zone.
- Aechmeas, big or small, seem to have developed the ability to hold a respectable quantity of water in their foliage but *Aechmea brassicoides* seems to have developed an adaptation to conserve moisture that is not found in other bromeliads (as far as I know). The pups form normally with a central cup that holds water. When more than half the leaves have developed, the last few leaves totally seal the cup and when you look down onto the plant, it looks like a small cabbage, hence the name '*brassicoides*' (like a cabbage). Any evaporation from the cup is stopped. The flower spike punches a hole through the leaves when emerging. The flower is long-lasting and has a very delicate and pretty appearance.

#### Aeration

The roots of plants obtain water and nutrients which are carried upwards to the leaves. The leaves manufacture compounds required for growth and reproduction and in the process use carbon dioxide from the air. For the roots to function, they must be supplied with a source of energy and conditions suitable for using it. The top of the plant sends some of its energy back down to the roots to promote their growth. Roots need oxygen and expel carbon dioxide, and because of the tiny air spaces in the soil through which the gases move aeration of the roots can become a limiting factor. A good soil mix must ensure the best possible aeration consistent with its other requirements. Excess moisture retained by the mix in a container reduces the air space. This makes it important to have maximum porosity. It is primarily by diffusion that gases move into and out of the soil but with pots water is effective in displacing soil air. If the soil pore spaces are very small, water will fill them and reduce aeration until the water content has been reduced by evaporation or by the plant's use. Bromeliads can exist without roots, but will they be vigorous enough to withstand adverse conditions and reproduce and look good?

#### Mineral Nutrients

Nowadays with liquid feeding and slow release, this should not be a problem. It should only need slight adjustment for superior results—but how much is wasted by not having a good root system?

#### UPCOMING EVENTS:

<p><b>March 22 – April 2</b>  <b>April 13 – 14</b>  <b>April 27</b>  <b>May 4 - 5</b></p> <p><b>September 21 – 22</b></p>	<p><b>ROYAL EASTER SHOW</b>  <b>COLLECTORS' PLANT FAIR – HAWKESBURY RACE CLUB, CLARENDON</b>  <b>ILLAWARRA BROMELIAD SOCIETY PLANT SALES DAY – BERKELEY</b>  <b>BROMELIAD SOCIETY OF AUSTRALIA AUTUMN SHOW – FEDERATION PAVILION</b>  <b>CASTLE HILL SHOWGROUND – Saturday 9 am – 4 pm/Sunday 10 am – 3 pm</b>  <b>ILLAWARRA BROMELIAD SOCIETY SPRING SHOW – BERKELEY COMMUNITY HALL</b></p>
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## GENERAL INTRODUCTION TO THE *BROMELIACEAE* FAMILY

[While this article is reprinted from the November-December, 1999 issue of *Bromeliaceae*, newsletter of the Bromeliad Society of Queensland, it did in turn come from “Edited extracts from the BSI’s *Handbook for Judges*, which was prepared around 30 years ago. Since then, due to research using advanced technology, quite a bit has changed (e.g., there are now 8 subfamilies as the subfamily *Pitcairnioideae* was split into six new subfamilies, and subfamily *Tillandsioideae* has grown to 22 different genera, and contains the greatest number of species, now numbering around 1400. Also, at the time the article was written, there were only about 57 genera listed, and this number has now grown to 80, at last count, with some genera being resurrected (e.g., *Alcantarea*, *Cipuropsis*) and new ones being formed (e.g., *Barfussia*, *Lutheria*, *Wallisia*, *Zizkea*, etc.). Our April 2020 *Newslink* has a more in-depth listing of these changes. However, I felt that the article gives a very nice overview of the family *Bromeliaceae* and so decided to include it as is!—Ed.]

The family *Bromeliaceae* is one of the larger plant families and one of the most diversified. This diversity of form that exists in its 2000-plus recognised species is what makes their study and collection so fascinating. It is virtually impossible for one person to have viewed the majority of the species, and the thousands of hybrids. No-one can collect or grow them all. Another interesting fact that leads to confusion is that the same plant (genus, species, variety, form, hybrid or cultivar) will look different when grown under different growing conditions. Bromeliads respond to all changes to their environment, but their response to changes in light intensity and duration is dramatic. Sometimes even the more expert growers are deceived by the appearance of a plant whose growing conditions are “different”.

Geographically, bromeliads are found in the U.S. from Virginia to Florida and then across the southern states in a gentle arc through Louisiana and Texas, then down through Mexico, Central America and the West Indies and finally into South America, all the way to central Argentina and Chile. Only one species is found outside the Americas—*Pitcairnia feliciana* comes from French Guinea in West Africa.

Bromeliads are remarkably tolerant and adaptable plants. They are survivors! They can be found growing where salt sprays upon them as they grow on the seashore, and then into the extreme heat and drought of the coastal deserts of Peru and Chile where they flourish without roots in an area so stark that even cacti are unable to grow. They are found in the filtered, broken light of the rainforest, and perched high in the tree tops where there is a great deal of air movement. They grow from sea level in Chile to 16,000 feet in Bolivia. Often they are found growing on rocks and cliffs along the coast. The greatest number of ornamental plants comes from eastern Brazil. It is a veritable treasure chest. No-one can satisfactorily explain why but such is the case. Another area that houses many species of bromeliads is Mexico and down through Peru. More species appear at higher altitudes.

Botanically, the family possesses parallel veined leaves with scales on the leaves. The parallel veining is very prominent in the guzmanias and scales are very apparent in the heavily scaled tillandsias and in some aechmeas, such as *Aechmea fasciata* and *A. chantinii*, where they are not only useful, but beautifully ornamental. Botanically, the leaf scales are very significant. According to Dr Lyman B. Smith, “Of all the characters that distinguish bromeliads as a family, only the leaf scales are unique . . . that is not to say that no other families have scales on their leaves—a great many do. However, in all these other families, the scales are only a protection against loss of moisture, and absorption of water remains a function of the roots. In the *Bromeliaceae*, the leaf scale is not merely an outgrowth of the epidermal layer, but it has a complex organisation with a column of stalk cells beneath it that penetrates the leaf and pumps in the water collected by the scale.”

These highly specialized leaf scales are called trichomes and are of a very complex nature. They guarantee a water supply to the bromeliad. They fill much as an accordion would and effectively gather in all available moisture and nutrients from the dew. When dry, they are filled with air and reflect light, making the plant appear white. When you water a bromeliad the air space is replaced by water, the cap

of the trichome becomes transparent and the green colour of the chlorophyll of the leaf plastids appear. The trichomes act like a piece of filter paper and draw water into the stalk cells.

It is also important to know that all bromeliad flowers are composed of three petals of a form different from the sepals, that the three sepals combine as a unit, and that there are six stamens. Most bromeliads are rosette-shaped which serves as a collecting area for humus and water. While many plants of the *Pitcairnioideae* subfamily have lateral inflorescences, in the majority the inflorescence is terminal and arises from the centre of the plant.

Reproduction is sexual (seeds) or vegetative (offsets). There is great variation in the plants produced from seeds, but usually, unless a sport develops, the plants developed from offsets are true to the parent.

Bromeliads in nature are either saxicolous (growing on rocks), terrestrial (growing in the ground), or epiphytic (growing on another plant, usually a tree). They are never parasitic and never take any nourishment from the plant on which they perch.

In terrestrials, the root system is well developed and acts like that in any other group of plants, taking in food and nourishment by means of its specialized cells. In epiphytes and saxicoles, the roots serve for the most part as hold-fasts. They are tough and wiry and serve to anchor the plant to its host. Very little water or nutrients are taken in by them.

The family *Bromeliaceae* can be broken down into three large subfamilies: A. *Bromelioideae*; B. *Tillandsioideae*; C. *Pitcairnioideae*.

The first subfamily is the *Bromelioideae* and includes:

<i>Acanthostachys</i>	<i>Distiganthus</i>	<i>Ochagavia</i>
<i>Aechmea</i>	<i>Fascicularia</i>	<i>Orthophytum</i>
<i>Ananas</i>	<i>Fernseea</i>	<i>Portea</i>
<i>Andrea</i>	<i>Greigia</i>	<i>Pseudaechmea</i>
<i>Androlepis</i>	<i>Hohenbergia</i>	<i>Pseudananas</i>
<i>Areococcus</i>	<i>Hohenbergiopsis</i>	<i>Quesnelia</i>
<i>Billbergia</i>	<i>Lymania</i>	<i>Ronnbergia</i>
<i>Bromelia</i>	<i>Neoglaziovia</i>	<i>Streptocalyx</i>
<i>Canistrum</i>	<i>Neoregelia</i>	<i>Wittrockia</i>
<i>Cryptanthus</i>	<i>Nidularium</i>	

This group of 29 genera has the greatest variety of plant forms. About a quarter of the species belong to the genus *Aechmea*, i.e., about 150 of the 600 species. The plants are mostly epiphytic with rosettes that hold water. A few are terrestrial. Almost all the members of this group are strong plants which adapt well to pot culture and develop strong root systems. They all have spiny leaves and berry-like fruit. The seeds are dispersed by birds or other animals. The ovary is completely inferior except for *Acanthostachys* where it is in slight part superior.

The next subfamily is the *Tillandsioideae*, and includes:

<i>Catopsis</i>	<i>Guzmania</i>	<i>Tillandsia</i>
<i>Glomeropitcairnia</i>	<i>Mezobromelia</i>	<i>Vriesea</i>

While there are only six genera in the subfamily, one-half of all known species of bromeliads falls here. There are over 400 species' of *Tillandsia* and over 250 species of *Vriesea*. Most of the members are epiphytes; all have entire (not spiny) leaves. They have capsular fruits with plumed seeds that are fuzzy and sail like kites in the breeze for seed dispersal. The ovary is superior or nearly so, except for *Glomeropitcairnia* where it is about half inferior.



Subfamily *Pitcairnioideae* includes the following genera:

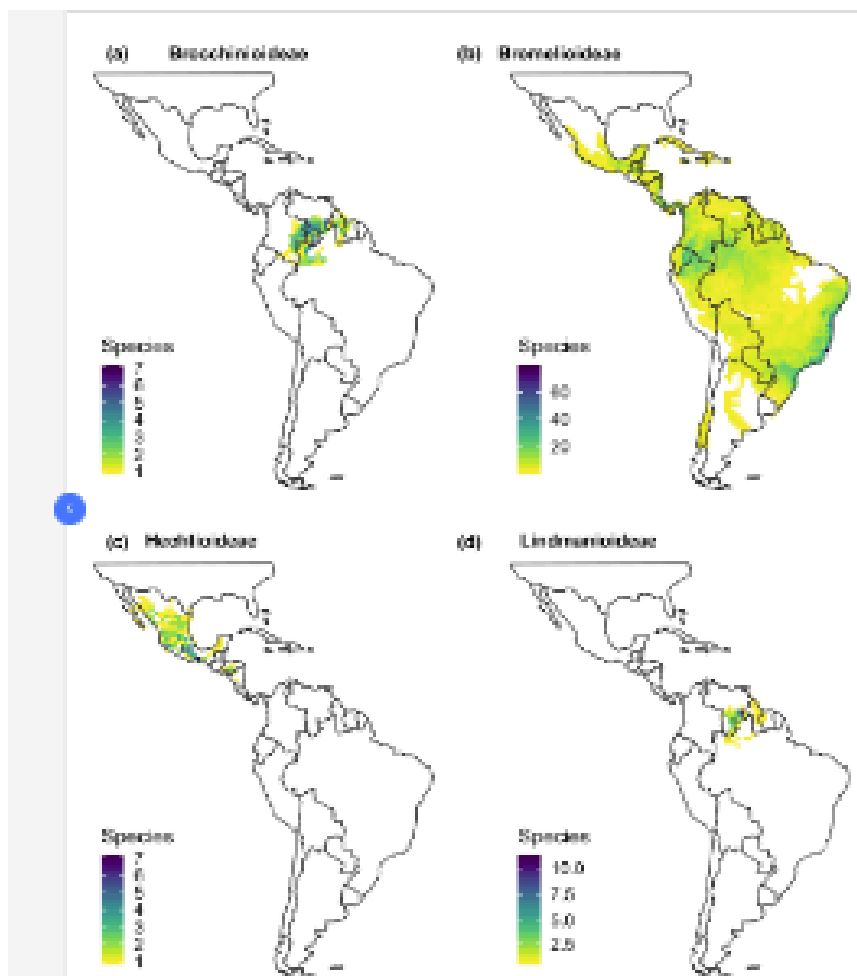
*Abromeitiella*  
*Ayensua*  
*Brocchinia*  
*Connellia*  
*Cottendorfia*

*Deuterocohnia*  
*Dyckia*  
*Encholirium*  
*Fosterella*  
*Hechtia*

*Navia*  
*Pitcairnia*  
*Puya*

They are the most primitive, often mesophytic, and the oldest forms in the entire family. They are, for the most part, terrestrial and saxicolous, and generally lack the water-holding rosettes of the epiphytes. Often they are grass-like in appearance. Their flowers are tubular in form, and their fruits are capsules with winged or tailed seeds. These are easily dispersed by the wind. Most all of the members are spiny, but a few are completely without spines—e.g., *Pitcairnia decidua*. The ovary is mostly superior with a few species of *Pitcairnia* and *Navia* having inferior ovaries.

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**Note from Editor:** These figures, which I found interesting, I found on Wiley – in an article by Zizka, A., Azeveda, J., Leme, E., and Zizka, G. – *Biogeography and conservation status of the pineapple family (Bromeliaceae): Diversity and Distributions*.



The species richness of *Bromeliaceae* subfamilies. The subfamilies differ strongly in their distribution. The *Brocchinioidae* and *Lindmanioidae* are restricted to northern Amazonia, and the *Hechtioideae* to Central and North America, whereas the *Bromelioideae* occur throughout the range of the family, with high species richness in the Atlantic Forest of eastern Brazil.

## HOW TRICHOMES PROTECT BROMELIADS

(This article I took from a New Zealand Journal but in turn it was reprinted with permission of *Bromeliana*, newsletter of the New York Bromeliad Society.)

The epidermis of many plants grows attachments consisting of one or more cells and takes many different forms. These attachments are called trichomes (pronounced 'Tri-combs'), a word derived from Greek for 'hairy' and, indeed, the trichomes we are most familiar with are the ones that give a downy or furry appearance.

They are also referred to as scale as they resemble fish scale under the microscope. However, this type of scale, unlike its pest with the same name, is there to protect the plant.

Bromeliad trichomes are complex cellular structures somewhat similar to an umbrella with a short shaft—the 'shaft' being stalk cells, the 'screen' being a disc-shaped shield. Not only does each bromeliad have its own unique trichomes, the trichomes on the upper (adaxial) side of the leaf are different from those on the lower (abaxial) side.

If shield edges turn up the leaf surface will be rough (lepidote) as in *Tillandsia ionantha* (photo). The disc may be more fully developed on one side, producing a fuzzy surface (*T. crocata*). The extreme is the hair-like (tomentose) extensions on the trichomes of *Tillandsia tectorum* and *Tillandsia velickiana* (photos).

The trichomes have two important functions: to protect the plant from too much sun and to acquire and conserve moisture. Tillandsias (and other bromeliads) which grow in shady, humid environments have fewer trichomes than those exposed to full sun, and they are green (glabrous).

Depending on the amount of sun exposure to which they have adapted, the density and extensions of the trichomes cause the leaves to appear grey, silver or white. The cells of the extensions are hollow so that they reflect the light (up to 45%) and form a good insulating barrier. When the leaf is wet the cells fill with water and reflect very little light and the leaf appears green.

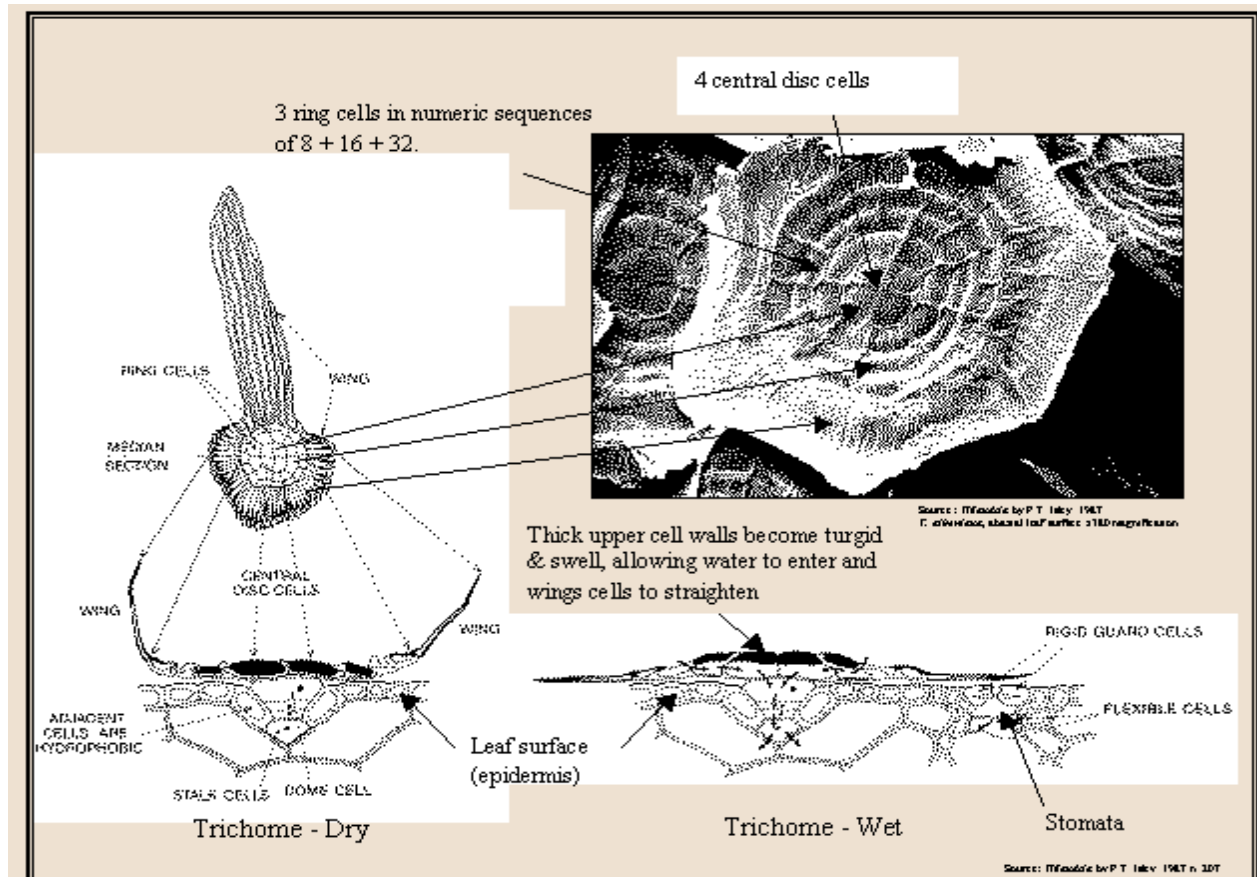
The trichomes channel water very quickly through the stalk cells into the leaf interior but prevent water (vapour) from escaping. With good air circulation the trichomes dry out again and the plant regains its normal grey or silver lustre.

<sup>3</sup>  
This sketch oversimplifies a fascinating but complex aspect of bromeliad anatomy and physiology. For greater detail, the reader is urged to read David Benzing: *The Biology of the Bromeliad*, 1980 and Paul Isley, *Tillandsia*, 1987 [and *Tillandsia II*, 2009].



*Tillandsia velickiana* showing  
adaxial trichomes

*Tillandsia ionantha* showing  
abaxial trichomes



### OBITUARY – DEREK BUTCHER

The bromeliad world loses 'Uncle Derek' - Notes by Murray Mathieson - BSNZ January 2024 Journal 2024` has started on a sad note with the news from Adelaide that our former long-serving BSI Cultivar Registrar and special bromeliad character, Derek Butcher, passed away on January 4<sup>th</sup>.

The New Zealand Society Life Member, Andrew Flower, is credited with coining the affectionate name of 'Uncle Derek' and that was it—from then on, 'Uncle Derek' he was!

Derek took over from the first BSI Cultivar Registrar, Don Beadle, in 2000. Don had the vision to create an easy to access database in the rapidly-developing online world and did the early spadework. Derek then took over and he worked tirelessly over many years to make it all happen. There were lots and lots of problems finding and accessing good photos but Derek persevered, working closely with Michael Andreas of The Florida Council of Bromeliad Societies to create the reference websites that we value and use so much today. 'Uncle Derek' retired as Registrar in March 2019 and handed over the reins to current Registrar, Geoff Lawn.

Derek has been a prolific writer of bromeliad articles, with a focus on nomenclature. He has also been a presenter at multiple bromeliad conferences, including in 2003 in Auckland at our first New Zealand Australasian conference. Along the way, he received many accolades. Derek was elected an Honorary Trustee of Bromeliad Society International (BSI) in 2008. In 2012 he was the recipient of the BSI Wally Berg Award of Excellence and, together with his wife, Margaret, he also received the high honour of the Order of Australia. Through Derek's dedicated work on the bromeliad websites and his prolific writing over many years his positive influence on the bromeliad world will live on and he leaves a rich legacy. Thank you, 'Uncle Derek'.

## 2024 PROGRAM

February		Bromeliads in Habitat	Greg Aizlewood
February	17	Garden Visits #1	
March	2	Where Not to Grow Bromeliads	John Toolan
April	6	Growing and Mounting Tillandsias	Graham Bevan
April	13	Bus trip – Collectors’ Plant Fair, CLARENDON	
April	27	Plant Sales Day – Berkeley Neighbourhood Centre	
May	4	Bromeliad Makeover	Noel Kennon
June	1	Annual Show Schedule – Discussion	Edwina Wain
June	15	Garden Visits #2	
July	6	Christmas in July – Soup ‘n Sweets	
August	3	Annual General Meeting	
August	17	Workshop/Garden Visit/Barbecue	John Toolan’s Residence
September	14	Monthly Meeting	
September	20/21/22	30 <sup>th</sup> Annual Show – Berkeley Neighbourhood Centre	
October	5	Monthly Meeting	
October	19	Garden Visits #3	
November	2	Monthly Meeting	
November	16	Workshop - Q & A Session	Sharyn Baraldi’s Residence
December	7	Christmas Party	

### WEB LINKS FOR CHECKING CORRECT IDENTIFICATION AND SPELLING

Bromeliad Cultivar Register (BCR): <http://registry.bsi.org/>

Refer to this site for correct identification and spelling of your hybrid or cultivar

New Bromeliad Taxon List: <https://bromeliad.nl/taxonlist/>

Refer to this site for latest species name changes and correct spelling

Bromeliads in Australia (BinA): <http://bromeliad.org.au>

Refer to this site for its Photo Index, Club Newsletters-many with Table of Contents Index and Detective Derek Articles