

# ***Journal of The Bromeliad Society***



**VOLUME 45**

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**NOVEMBER–DECEMBER 1995**

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**NUMBER 6**

# Journal of the Bromeliad Society

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Vol. 45, No. 6

November–December, 1995

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**Cover photographs.** Front: *Bromelia balansae* Mez. The text by Harry Luther is on page 261. Photo by Vern Sawyer. Back: *Orthophytum navioides*, first called *Cryptanthopsis navioides*, was one of the discoveries made by Mulford and Racine Foster in 1939. Text is on pages 254–258. Photo by Bob Wands for Selby Gardens.

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The *Journal*, ISSN 0090-8738, is published bimonthly at Orlando, Florida by the Bromeliad Society, Inc. Articles and photographs are earnestly solicited. Closing date is 60 days before month of issue. Advertising rates are listed in the advertising section. Permission is granted to reprint articles in the *Journal*, in whole or in part, when credit is given to the author and to the Bromeliad Society, Inc. **Please address all correspondence about articles and advertising to the editor.**

Subscription price (in U.S. \$) is included in the 12-month membership dues: single—\$25.00, dual (two members at one address receiving one *Journal*)—\$30.00, fellowship—\$40.00, life—\$750.00 Please add \$7.50 for international surface mail, except for life members. For first class or airmail add \$10.00.

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Printed by Fidelity Press, Orlando, Florida.

## Call for 1997 Nominations for the Office of Director

### THIS IS THE CALL FOR NOMINATIONS FOR THE 1997–1999 TERM

Regions having vacancies for the three-year term:

Australia	1 director
International	2 directors
California	2 directors
Central States	1 director
Florida	1 director
Northeast	1 director
South	1 director
West	1 director

**Who may nominate?** Any voting member of the society who resides in a region for which there is an opening may nominate a candidate for an opening in that region.

**Who may be nominated?** A nominee must: (1) be a voting member of the society and have been a voting member for the three consecutive years prior to nomination; (2) reside in the region for which nominated; (3) not have served two consecutive terms as a director immediately preceding nomination; (4) agree to being nominated; (5) agree to serve as a director if elected.

**Procedure for nominating:** (1) obtain the consent of the prospective nominee and verify compliance with the qualification criteria; (2) mail nominations to the chairman of the Nominations Committee between 1 January 1996 and 16 March, inclusive. (Nominations must reach the chairman of the Nominations Committee by 20 March 1996.) Nominations by telephone will be accepted through 14 March but must be confirmed in writing; (3) supply with each nomination the full name, address and telephone number of the nominee, the position for which the nomination is being made, the local society affiliation, and a brief autobiography of the nominee.

**Mail nominations to:** Pending election of a Nominations Committee chairman, mail nominations to:

Gerald A. Raack, President  
472 Greenhollow Drive  
Pataskala, Ohio 43062, USA

# *Ochagavia elegans*: An Introduction to an Under-cultivated Bromeliad

Paul Wilkin

*Ochagavia* has the most southerly distribution of the genera of the Bromeliaceae with the exception of *Fascicularia*. It is found in coastal and montane sites in central Chile as far as 39° South, while *Fascicularia* is restricted to coastal southern Chile (Smith & Downs, 1979). The two genera appear closely related: they are most easily distinguished by their sepals, which are ecarinate and acute or acuminate with an apiculus or small apical mucro in *Ochagavia* and obtuse or rounded and carinate in *Fascicularia*.

The relatively temperate region in which *Ochagavia* is found makes it one of the hardiest genera of bromeliads, though the genus is not widely cultivated. Of the three species of *Ochagavia* recognised in Smith & Downs (1979), *O. carnea* (Beer) L.B. Sm., from mainland Chile, is encountered occasionally in cultivation, and is included in Rauh's (1979) extensive manual on bromeliads. A photograph of an individual of this species grown at Kew was included in the Journal of the Bromeliad Society (anon. 1979); sadly, this plant has since died. Only two other articles on *Ochagavia* have been published in the Journal of the Bromeliad Society: one on the nomenclature of *O. carnea* (Foster, 1956), and the other two paragraphs in a wide-ranging review of Chilean bromeliads (Rauh, 1986). Thus, this is a genus in need of greater attention.

*Ochagavia elegans* Philippi is endemic to the island of Masatierra of the Juan Fernandez Archipelago, and has been collected rather infrequently. It is a caulescent terrestrial bromeliad of suffruticose habit, forming extensive colonies on exposed slopes and rock faces, even those of vertical aspect. The stems of plants collected in the wild can grow to over 1 m long, and the older leaves die on the basal part, leaving a mass of brown leaf sheath and vascular tissue remains, among which adventitious roots arise. These roots probably act to anchor the plant on unstable rocky substrates. The many recurved-spreading, thick, leathery leaves are polystichously arranged along the apical part of the stem, rather than forming a rosette as in *O. carnea*, and the ventral leaf surface has a dense covering of pale grey scales (figure 1). *O. elegans* inhabits strongly insolated sites with little soil or water, and thus is somewhat xeromorphic. Like the other species of *Fascicularia* and *Ochagavia*, the apical inflorescence is scapeless and sunk in the centre of the leaves, with the flowers in a flat, dense, subcorymbose arrangement. Some of the leaves immediately surrounding the inflorescence are reduced in size and often purple-hued and bract-like (figure 1). Unlike *O. carnea* and *O. chamissonis* (Mez) L.B. Sm. & Looser, which have inflorescences surrounded by a dense involucre of rose-pink or blood red bracts, *Ochagavia elegans* lacks



©RGB, Kew

Figure 1.  
*Ochagavia elegans* flowering in the Alpine Glasshouse at Kew.



©RGB, Kew

Figure 2.  
The inflorescence of the same plant showing the petal colouration and the slightly exerted sexual parts.

true inflorescence bracts. The inflorescence is densely subcorymbose and relatively flat, while those of the other two species are more globose in shape.

It is in floral morphology that the main differences between *O. carnea* and *O. elegans* are encountered. Each flower is subtended by a 35–48-mm long, obovate to oblong floral bract, with a pungent apex and spinulose-laciniate margins. The bracts are lepidote like the leaf ventral surfaces, but less densely so. The flowers are short-pedicellate, and consist of a 21–26-mm long ovary and a 10–14 (–19)-mm long epigynous tube at the apex of which the sepals, petals and stamens are inserted. The tube does not exceed 5 mm in the other species of the genus. The sepals are 16–18-mm long, free, narrowly ovate-triangular, chartaceous, especially towards the margins, and have a few fine marginal teeth, while the petals are 18–28-mm long, free, erect, obovate and violet-pink to dark purple in colour (figure 2), darker than that of *O. carnea*. This floral colouration and the presence of the relatively long epigynous tube suggest that hummingbirds may be the vector of pollination in this species, though experimental tests of this hypothesis are required. The slightly exserted position of the stamens, which are 19–25-mm long, also supports the hypothesis of bird-pollination. The style is 38–43-mm long and slightly exceeds the stamens, and the stigma is trifid. The fruits set by the plants in the field are indehiscent, coriaceous and apparently rather dry; their means of dispersal is unclear. They contain many globose seeds at maturity. The plant grown at Kew appeared to set fully formed seed, but Skottsberg (1953) reports that the plant he grew did not. Its vigorous offset production suggests that reproduction in *O. elegans* is probably predominantly vegetative, rather than sexual.

The plant now being grown at Kew was germinated from seed in 1987 and established in a vertical rock crevice in the Alpine Glasshouse. It was severely damaged by frost in 1990 when the heating failed, but fortunately some of the buds near the stem base were unharmed and it regenerated and flowered freely in June 1993 (figures 1 & 2). It is not hardy, and a cool, well ventilated, frost-free greenhouse is probably ideal for its cultivation in the UK, though if grown in a pot it would probably benefit from being placed outside in the summer and would thrive in mild coastal climates like those of Masatierra. The related *Fascicularia pitcairniifolia* (Hort. ex Verlot) Mez is grown in sheltered gardens in the extreme southwest of Britain. *O. elegans* is easily propagated from its prolific pups, which are simple to root, and need little attention or feeding. Indeed, the key to flowering *O. elegans* in cultivation seems to be restricting root growth. Skottsberg (1953) described sowing seed in 1918 and 1919, which germinated freely and grew well, but failed to flower in an open bed in a succulent house. He finally flowered a cutting in a small pot in 1944. Perhaps the gravest threat to this extremely attractive bromeliad in cultivation is other gardeners; the single offset on the plant when it was in flower in the Alpine Glasshouse disappeared one weekend in spite of the presence of security cameras!

[Continued on page 269]

## Two Little-Known Species From the Brazilian Rainforest

Elton M.C. Leme

Illustrations by the author

Nowadays there still exist innumerable species of bromeliads practically unknown not only by collectors but by botanists as well. This condition exists despite the fact that large numbers of them were presented to science approximately 100 years ago. These gaps in botanical knowledge are the result of the drastic transformation of the original collection areas with the extinction of populations that used to live there, or the lack of studies in the regions where these species probably occurred. It is not only the small species that go unknown for decades. It is not rare for large species such as *Vriesea hydrophora* and *V. pastuchoffiana* to reflect this situation. Both of them were recently found again in the wild and introduced into cultivation.

*Vriesea hydrophora* was originally described by Ernst Heinrich Ule in 1899,<sup>1</sup> based on a specimen collected in Nova Friburgo, State of Rio de Janeiro. Years later, a specimen was found by Brade and Abendroth in the mountainous Teresópolis region relatively close to the original site. It was collected once again recently in that same area.

In the Teresópolis area, this species lives in the cloud forest at altitudes over 1200 meters. It is epiphytic, but in the higher parts of these mountains it lives terrestrially, protected by a shallow, low, tree-like vegetation. When in blossom, this species may reach 2 meters in height and in spite of the mostly greenish yellow of its inflorescence the bracts are extremely shiny, a condition that gives it uncommon beauty.

*Vriesea hydrophora* Ule. (figures 3 and 5).

**Plant** terrestrial or epiphytic, flowering 150–200 cm high; **leaves** many, rosulate, suberect-arcuate, forming a broad and dense funnelform rosette; **sheaths** inconspicuous, dark castaneous toward base, densely and minutely lepidote mainly abaxially; **blades** linear, 60–80 × 9–10 cm, not narrowed at base, green, concolorous or marked with inconspicuous, dark, transverse lines by transmitted light, glabrous, apex rounded, broadly apiculate, apiculous brown, recurved, stiff. **Scape** stout, ca. 70 cm long, ca. 17 mm in diameter, erect, green, glabrous; **scape bracts** the basal ones subfoliaceous, the upper ones broadly elliptic to suborbiculate, suberect, inflated, green, lustrous, strongly nerved, subdensely brown-lepidote inside, glabrous outside, apex subrounded and apiculate, slightly recurved, its base enfolding the scape, surpassing the internodes. **Inflorescence** paniculate, subdensely bipinnate, 70–100 cm long,

<sup>1</sup> Arch. Mus. Nac. Rio de Janeiro 10:189. 1899; Ber. Deutsch. Bot. Ges. 17:2. 1899



Figure 3.  
*Vriesea hydrophora* in habitat at  
Teresópolis, Rio de Janeiro



Figure 4.  
*Vriesea pastuchoffiana* in the region of Paraty, approximately 150 km  
west of the city of Rio de Janeiro

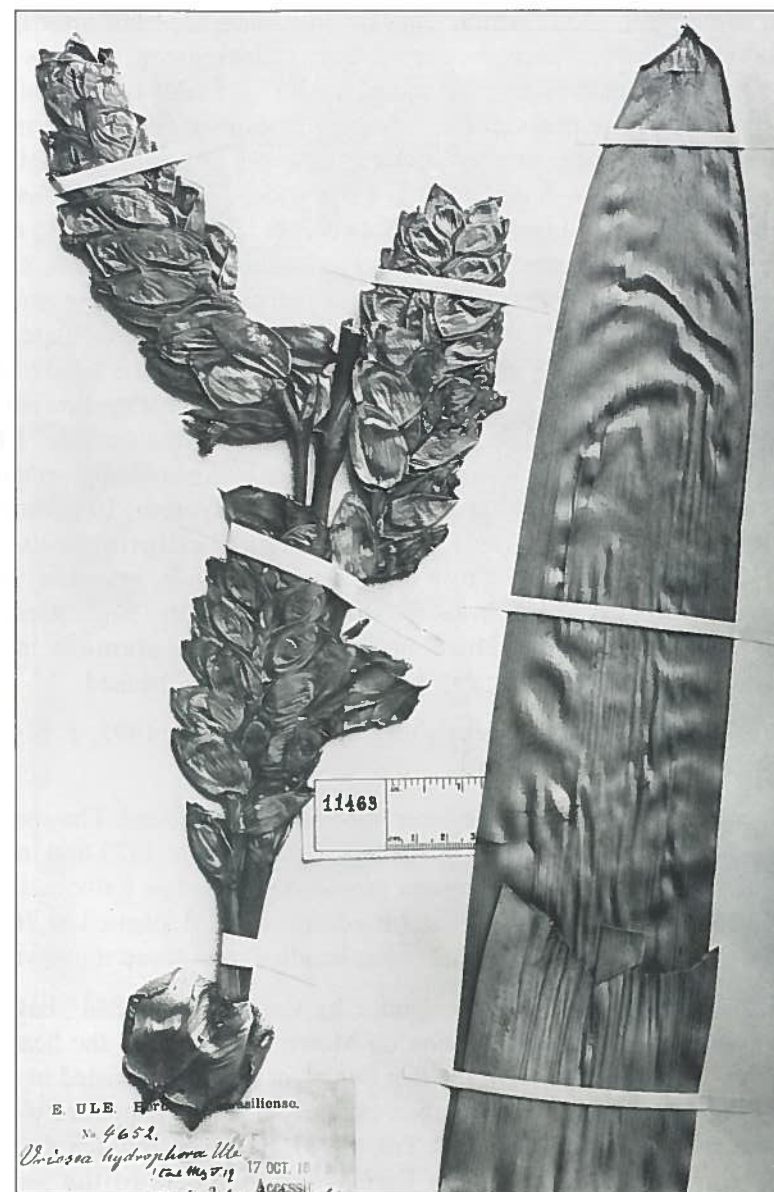


Figure 5.  
Phototype of *Vriesea hydrophora*

30–40 cm in diameter, erect; **primary bracts** orbiculate, the basal ones apiculate, 4–5 × 6–7 cm, suberect, strongly convex and inflated, green, lustrous outside, strongly nerved, subdensely brown-lepidote inside, glabrous outside, shorter to near equaling the sterile bases of the branches; **branches** 10–15 in number, the lateral ones 20–26 cm long, suberect, densely flowered at anthesis and after, with 11–16 flowers, peduncle 4–8 cm long, ca. 1 cm wide, complanate, the basal ones bearing 1 sterile bract, the upper ones ebracteate, the terminal one ca. 35 cm long, peduncle ca. 9 cm long bearing 2 sterile bracts, rachis stout, flexuous, ca. 5 mm in diameter, green, glabrous; **floral bracts** distichous, suberect but not secund with the flowers, intricate before anthesis, broadly elliptic to orbiculate, obtuse, to slightly cucullate, 30–40 × 40 mm distinctly exceeded by the sepals, strongly convex and inflated, mainly the basal ones obtusely carinate, yellowish green, subdensely brown-lepidote inside, glabrous and lustrous outside. **Flowers** distichous, probably nocturnal, suberect and strongly downwardly secund after anthesis, ca. 55-mm long (excluding the petals), pedicels stout, 10–15-mm long, ca. 7 mm in diameter, green, glabrous; **sepals** elliptic, apex acute, 34–38 × 15–16 mm, inconspicuously brown-lepidote inside, ecarinate, greenish yellow toward the apex; **petals** broadly ligulate, emarginate, slightly exceeding the sepals, yellow, bearing 2 lanceolate scales at base; **stamens** included; **filaments** thickened toward apex; **capsules** ca. 50-mm long, beaked.

**Material examined:** Rio de Janeiro: Teresópolis; 4 March 1995, *E.M.C. Leme* 2941 (HB).

*Vriesea pastuchoffiana* is the other species recently found. The sparse data available concerning the collection of the type dates back to 1879 and in the last 116 years the only new information was provided by Raulino Reitz in 1975. He collected the species the year before (dried specimen deposited in HBR not examined, but the photo of its two sheets was handled) and stated it was very rare.

The species was presented to science by Carl Mez in 1894<sup>2</sup> based on a specimen collected by Auguste Glaziou on Morro Queimado in the heart of the city of Rio de Janeiro. It was believed that this plant no longer existed in this area because of the destructive effect of urban expansion, as has happened with other species such as *V. warmingii* (Leme & Till, 1993). However, through the work of Angelo S. Garcia and Rafael O. de Faria, both members of the Sociedade Brasileira de Bromélias, two populations were found about 250 km from each other.

A more important population by reason of its historic value, although very much reduced in number, was found on a mountain near the type locality confirming previous data provided by Reitz. This population, although located in the Parque Nacional de Tijuca, is on the verge of collapse because of periodic burnings and the impact of tourist traffic. We found only four adult specimens in the entire area: two of them in post-floral stage, and 15 young individuals from

<sup>2</sup> Martius, Flo. Bras. 3(3):564. 1894.

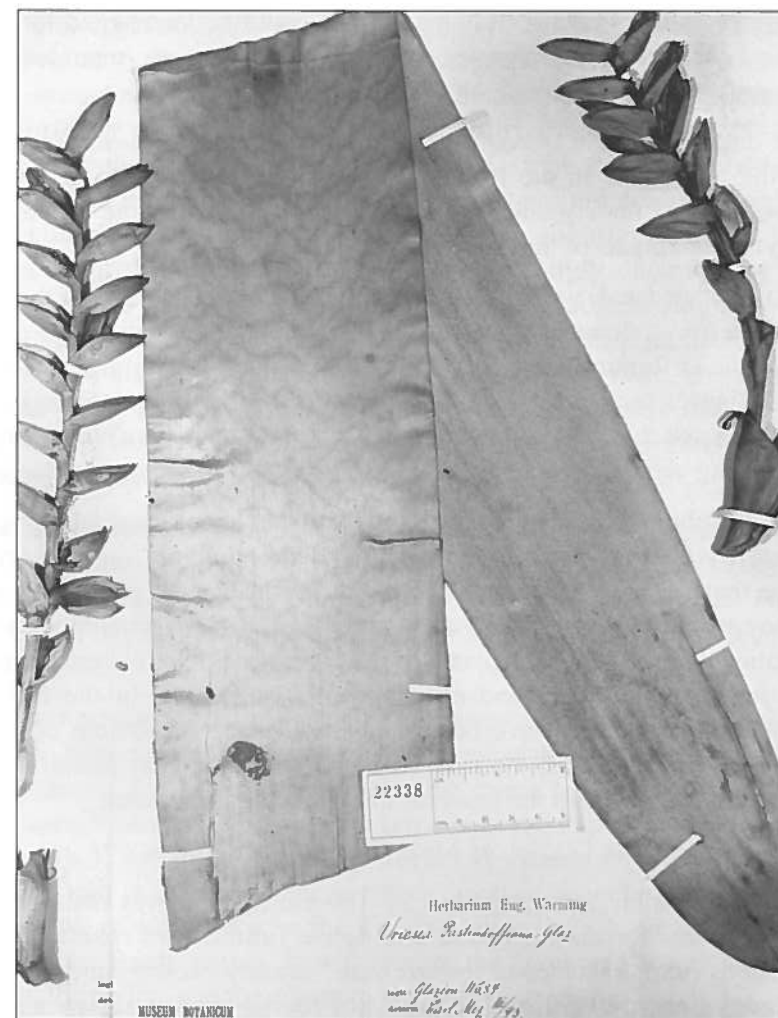


Figure 6.  
Phototype of *Vriesea pastuchoffiana*

one to five years old. Perhaps, if human traffic could be interrupted for a while and the few survivors were managed to promote their growth, reproduction and recolonization, this small population could be preserved.

The discovery of the second population of *Vriesea pastuchoffiana*, at the crest of the mountains in the Paraty region of the State of Rio de Janeiro at altitudes of approximately 600–700 meters, gave proof that the species is not limited to the mountains of the city of Rio de Janeiro.

On the other hand, we regret that this discovery is connected to the trail of destruction left by criminals who steal the plants. At this location, we observed *V. pastuchoffiana* forming large communities. The size of those groups has made it easy for thieves to remove very large quantities of the plants for sale. Local people have stated that after removing the plants, the “extractors” have set fire to the surrounding vegetation in order to make their product the more exclusive.

The morphological characteristics of the specimens studied coincide in every detail with the original description of the species, such as with the phototype that we have analyzed. The plants of the Paraty population do not present any variation worth noting when compared with the small population of Tijuca National Park. As for the plants of the park, we did not collect samples for obvious reasons. All notes and observations were made in the field. The photographs that we took have been deposited in the herbarium in order to document the finding. Thus, the data collected permitted easy identification of the specimens and served as the basis for the following description:

*Vriesea pastuchoffiana* Glaziou ex Mez. (figures 4 and 6).

**Plant** terrestrial, flowering ca. 150–180 cm high; **leaves** many, rosulate, suberect-arcuate, forming a broad and dense funnellform rosette; **sheaths** inconspicuous, dark castaneous toward base, densely brown-lepidote on both sides; **blades** linear, 80–90 × 9–12 cm, not narrowed at base, apex acute to shortly acuminate and apiculate, yellowish green marked with dark green, flexuous, transverse lines, sparsely and inconspicuously white-lepidote. **Scape** stout, ca. 60 cm long, 18–25 mm in diameter, erect, green, glabrous; **scape bracts** the basal ones subfoliaceous, the upper ones narrowly ovate, acuminate, enfolding the scape at base with the exception of the suberect-recurved apex, green, lustrous, distinctly surpassing the internodes. **Inflorescence** paniculate, laxly bipinnate, ca. 90 cm long, 30–40 cm in diameter, erect; **primary bracts** suborbiculate, short acuminate-caudate to acute and apiculate, 4–7 × 5–6 cm, green, lustrous outside, densely lepidote inside, distinctly shorter than the sterile bases of the branches, apex recurved; **branches** 8–13 in number, the lateral ones 22–34 cm long, suberect-ascending, densely flowered at anthesis, with 12–24 flowers, peduncle 7–10 cm long, ca. 8 mm in diameter, slightly complanate, the basal ones bearing 2 sterile, suberect obtusely carinate bracts, the upper bearing a single sterile bract at the middle, rachis stout nearly straight, ca. 5 mm in

diameter, green, glabrous, the terminal one ca. 40 cm long, peduncle ca. 20 cm long, bearing ca. 5 sterile, ecarinate, subinflated bracts; **floral bracts** distichous, suberect, spreading or slightly reflexed at anthesis, very slightly secund with flowers, broadly elliptic to suborbiculate, subacute, 25–30 × 25–27 mm, distinctly exceeded by the petals, subinflated, light green, glabrescent and lustrous outside, inconspicuously lepidote inside, not enfolding the sepals and about equaling 1/2 of its length, ecarinate, apex slightly incurved. **Flowers** distichous, probably nocturnal, suberect and strongly downwardly secund at anthesis, 40–45-mm long (excluding the petals), pedicels stout, 10–15-mm long, ca. 5 mm in diameter, green, glabrous; **sepals** elliptic, apex subacute, 26–28 × 12–14 mm, inconspicuously lepidote inside, ecarinate, greenish yellow toward the apex; **petals** known from fragments, apparently orange-yellow, bearing two sublinear, irregularly bidentate, 10 × 2 mm appendages at base; **ovules** long caudate; **capsules** ca. 45-mm long, beaked.

**Material examined:** Rio de Janeiro state: Paraty, Alto da Serra, January 1995, Rafael O. de Faria s.n. (HB). Rio de Janeiro, Parque Nacional da Tijuca, 3 July 1995, E.M.C. Leme, Angelo S. Garcia, Rogerio Ribeiro, Rafael O. de Faria s.n. (photo, HB). Parque Nacional da Tijuca, 21 May 1974, R. Reitz 7603 (HBR, N.V.; photo HB).

*Vriesea pastuchoffiana* is usually terrestrial, living at altitudes that vary from 600 to 900 meters. It forms dense groups at the crest of mountains. The species possesses irrefutable ornamental value owing to the beautiful, transverse patterns imprinted on the leaves. Its terrestrial habit permits cultivation. In contrast with *V. hydrophora*, which occurs in reasonably preserved areas, *V. pastuchoffiana* is faced with the concrete threat of becoming extinct, whether by destruction of its habitat in the Tijuca National Park, or by the thievery practiced in the Paraty region. It will require the combined forces of scientific authorities, the police, and the courts to stop that practice.

#### ACKNOWLEDGMENTS:

We thank the collectors Rafael Oliveira de Faria and Angelo Santana Garcia, (members of the SBBR), for providing information about *Vriesea pastuchoffiana* and for their cooperation during the field activities concerning these species.

#### REFERENCES:

- Leme, E.M.C.; Till, W. 1993. Revalidating the status of an old species. J. Bromeliad Soc. 43(2):51–54  
Reitz, Raulino. 1975. Encontro e reencontro de bromélias — I. Sellowia 27(26):50  
Smith, L.B.; Downs, R.J. 1977. Tillandsioideae (Bromeliaceae). Flora Neotropica. Monograph. 15(3). New York: Hafner Press.

Rio de Janeiro, Brazil

# Brazil

## (Selections from the book BRAZIL)

### by Mulford B. and Racine Foster

### III

#### JACOBINA

Leaving any collecting locality was a big job. Every plant had to be written up in the notebook and labeled. All blooming plants had to be pressed, numbered and labeled again. It was endless.

Mulford was not wholly satisfied with the scarcity of a certain blue-leafed *Vriesia* so he spent most of the morning out with the boys trying to locate it, while Racine worked on the herbarium. When he returned the bags were full of these beautiful plants and his heart was satisfied to have made up for yesterday's lack. A few months later, however, the desire for this lovely *Vriesia* was back again, as every one of these collected plants were killed by fumigation in Washington.

Thirty-five different bromeliads was our count for this area, making a total, so far, of 82 species, and we had just started!...[and a few pages later...]

In the wake of every collecting jaunt were hours, days, of herbarium work, drawing, and jotting down of notes. The floor, the bed, every available square foot of space in the inadequate room was spread with seeds and drying specimens which from time to time needed changing in the presses, or to catch the moving sun's rays. Many of them, not having had an opportunity to dry properly, were in a sad state of mold which scented up the room properly. It is an endless amount of work connected with making herbarium specimens and keeping plants alive under transport conditions. To preserve seeds, to clean them, to pack them for sending, is a thankless job. Some seeds burst from a dry pod and hold their fertility for months. Others are contained in succulent juicy berries or fruits all of which must be removed before mold sets in. Palm seeds, which often appear so hard and look as though they should hold their embryo for a long while, perfectly protected, are generally the seeds that spoil the quickest. Most palm seeds must be placed in charcoal or sand very soon after being gathered and cleaned, otherwise they will spoil in a few weeks. Of course there are exceptions to all these conditions...

At last we were on the little train going inland to Jacobina. We had left at four in the afternoon in a flurry of excitement because at the last moment we learned that we had to have our baggage weighed before it could be put on the train. The one bag between us, a big Gladstone, weighed so much that the inspector would not believe it contained only *roupas*, clothes. Finally in

desperation that the train, in the course of this argument, might leave without us, we bribed a *carregador* with extra money to get us out of the mess, which he promptly did, and we barely got the last seat in the crowded car. The first few hours were comfortable, but sleeping sitting up all night in small, divided, wooden slat seats became anything but comfortable by morning. These little narrow-gauge trains, of course, do not have sleepers.

By five a.m. daylight woke us up and we were in a new country. Very dark, brush-covered, rolling plains, to most people unbeautiful country, but to us filled with many interesting plants. This was our first sight of the Brazilian *catinga* (white forest). Similar country would be called a desert or mesquite in the United States and Mexico. In the half dark we sat up alert, eyes penetrating the shadows trying to see every leaf and blade, even those at a great distance.

Great numbers of cacti and bromeliads were there among the spiny scrub growth. We were constantly exchanging exclamations over some beauty we had just spied. Two years without rain made this section completely dry. It was so dehydrated that all leaves on shrubs and small trees were withered and drooping. The cacti and terrestrial bromeliads survive this severity best.

Once the train stopped in a cut of rock where the sides were so close to the train that one need only put the hand out of the window to touch them. We had no idea how long the train would stop there, but Mulford took a chance and climbed up the rocky bank to snatch a cactus. It was a gem. A funny little wrinkled *Opuntia* with orange fruit of which we hoped to see more. He also took the chance of the train pulling out most any minute to snatch a *cereus* type of cactus. The risk in getting these two cacti made them very precious. It is quite dangerous to put your hand out of a moving train, for here, trees, brush or rocks are cleared just sufficiently for the train to pass through, and even then the branches often slap you through the open window while the train is moving.

Suddenly Mulford gestured. There under grey, leafless stems of sage brush was the plant which we had hoped most to find, but had not known where to even look for it! A living plant was unfamiliar. We had known it only through a description written after it was found nearly fifty years ago. An unpretentious plant very much hidden by its protective coloring, looking too much like the grey sage which grew around it. It was difficult to see even after it was pointed out; how could anyone see it from a moving train! This was *Neoglaziovia variegata*, a prize find, but how to get it was the question. The train didn't seem to stop where it was growing. Perhaps it was isolated to this section only. How tantalizing—we did so much want a few plants for our collection. So far as we could ascertain it had never been carried from its native habitat to any botanical collection in the United States. The train couldn't know how much we wanted to stop its noisy chugging when those particular plants were in sight! It plugged along, having a terrible time pulling up small hills over slippery rails. At any station or water-tank stop, ironically, there was no *Neoglaziovia* in sight...

It was nearly dark when we arrived at Jacobina, situated at the head of a range of lumpy mountains running the length of Bahia. Two very small boys, thin and not very strong looking, took up our suitcase and presses, deposited them on their heads and carried them thus across the bridge and up the hill to town, where we found Captain and Mrs. Griete, who insisted that we stay with them, an invitation we were grateful to accept as they were English-speaking people...

Bright and early the next morning we set out on foot for our first collecting in this vicinity. We took a trail along the river bank leading into mountainous terrain...

We had gone up the mountain but a short time, when a slow drizzle of mist blew up the canyons and continued for most of the day. Fortunately we had our raincoats with us and we continued to collect comfortably in the rain. In the first hours of our tramp we found six bromeliads new to us.

Up and around the mountain we scuffed, finding many *Billbergias*, *Tillandsias* and *Hohenbergias* as well as some other interesting types of plants. From a lovely sweet-pea vine with brilliant large red flowers we have seeds which we hope survive. A delightful *Mulhenbechia* was very common here and it is a pity that we lost our specimen for identification. A small, fat, almost spineless *Opuntia* grew prolifically all over the rocky cliffs. Collected plants of this survived the long journey around Brazil and finally to the States along with a noble *Melocactus* with a cephalium and several other kinds of cacti from this section. They are now awaiting identification.

The unhappy part of these excursions is that we see so many gorgeous plants which we should love to carry back, but either because they have no seeds at the time or because cuttings of them would not survive the long trail back to the States, or because it is impossible to move the entire plant itself, we go away reluctantly, with longing glances backward, beaten by the nature of things...

Emerging out of the wooded section we arrived on the western slope where foliage was dry and sparse, being reduced to thorny scrub cactus which had adjusted itself to most severe conditions. It was too dry to expect to find much here in the way of bromels. A few cacti and the spine-covered terrestrial bromeliads were all that were evident at first. But coming up to a withered tree we saw some nice specimens of *Tillandsia streptocarpa*, a treetop bromeliad, which we eagerly added to our collection. This gray, twisted, stringy air plant, which lives so happily in the most arid conditions, blooms a lavender flower with lovely fragrance. It was difficult to get even the first plant. The tree, being completely covered with thorns, was impossible to climb. But maneuvering with long sticks and the big *facão* we brought down a branch bearing a cluster of little gray epiphytes. Then to our surprise came down another *Tillandsia*, a dwarfed species, light gray with a tomentose, fuzzy appearance. It was a little gem, a perfect miniature, resembling the form of a *Vriesia*, named *Tillandsia liliaceae*. A scrawny tree in arid scrub land filled with commercial gems held for us two dainty, delicate jewels of plant life...

For several days we had been trying to arrange for a truck or horses to take us cross country to Queimadas, the region where from the train we had seen *Neoglaziovia*; that was one bromeliad we knew we wanted. When we discussed this plan with the Captain he urged us to try another hill in a different direction there near Jacobina. He declared that the same type of granite soil as at Queimadas was just over the hill to the south. Since plants follow soil conditions and since he was so emphatic that it was the same granite vein as along the railroad we were willing to make one more walking trek for the *Neoglaziovia*...

Scuffling along in the dry, dusty soil we spied, in a thicket, a finger-thin *Arrojadoa* cactus crowned with a small red cephalium out of which blossomed delicate, pink-cerise flowers. We photographed it and had much ado about its pristine beauty, for it belonged to a small and very rare genus. Then suddenly Mulford looked at Racine with a startled, guilty and sheepish look as he pointed to the ground. "You're stepping on it!" he wailed. There was our long anticipated *Neoglaziovia* directly under our feet begging for recognition which we were too busy to give it! The cactus had distracted us so much that it eclipsed everything else. There it was, our striped, whip-like bromeliad for which we had planned to make an extensive cross-country trip. Here, we had walked only a few miles for it, proving again to us that plants, although they may have extensive range, are yet restricted to favorable and specialized locality. This bromeliad, here, grew on granite soil, not a foot further down the valley where the granite stopped short, although to the layman's eye the ground and type of country was just like the surrounding catinga (white forest). We were much amused at the situation. Mulford had been able to see this plant with its excellent protective coloration from the train window moving along at 25 miles an hour; yet here he had stood absorbed in examining a cactus while the *Neoglaziovia* was practically under his feet!

*Neoglaziovia* is a bromeliad that has always been more than botanically interesting. In northern sections of Brazil they are extracting its fiber for cloth and rope which is considered stronger, by far, than the best sisal. From other bromeliads, such as *Bromelia serra* [see figure 10, page 262], as well as two or three species of pineapples (*Ananas*), they are successfully making cloth which has long-wearing qualities for men's suits yet very suitable for tropical climates. We wanted very much to buy some of this material but we were never fortunate to be in the section where it was sold.

The Indians of course have used its fibers for centuries past; they called it *caroa* and like so many other "new" things that have been known a long time, they are rediscovered and given a new name.

As we gathered many specimens and photographed this prize we stumbled upon a newcomer. Here and there deserted and bare rocky spots cropped out punctuated now and then with whorls of spiny leaves from which emerged tall compact flower spikes. Little then did we realize that this was not only our first new species in the genus *Encholirium* but the first time we had ever seen a

member of this genus. So far as we know no one can tell an *Encholirium* from a *Dyckia*, *Hechtia* or a *Deuterocohnia* unless they are in flower or fruit, the plants are that much alike in form. Our collected plants survived the trip home and are now growing in our garden. This one was named *Encholirium Hoehneanum* in honor of Dr. Hoehne...

A few days later we decided to retrace some of our first excursion. We had left some plants along the path and we were eager to explore in directions out from the trail, to ferret out some hidden plant sheltered in the mysterious little ravines. It was cool and a driving mist made the way again very wet, but our inconveniences were well rewarded. After finding a large cluster of *Gravisia*, which pleased us not a little, something really exciting happened. Mulford worked his way down a little rocky gully to the stream below in pursuit of a big *Anthurium* which he had spied from the distance. Reaching the bottom of the ravine he noticed grass-like clusters growing in the perpendicular wall of the rocky ledge above him, but from across the stream supposed that they were simply clusters of the common "semper vivas," the little hatpin plants growing everywhere here. Desiring a close-up photograph of the *Anthurium*, he jumped across the stream from rock to rock. As he landed on the opposite bank he was practically slapped in the face with the realization that the grass-like whorls all around the *Anthurium* were not "semper vivas." His sharp eyes discerned the tiny spines on the "grass" and with breathless surprise he realized that here indeed was a bromeliad of quite different character than anything we had yet seen. There was no doubt about it. Its delicate but stiff, green, slightly serrated, leaves were bursting from the center, and like a *Cryptanthus*, little sucker shoots were growing out from underneath. If he could find a flower he would be positive of the family. There followed an intense search in complete silence. Then with a shout of joy he called across the canyon. "I have a new bromeliad and I have just found the flower. Racine, you must climb down here somehow to see it in its native setting. There is only a small colony of it and I am sure you will never see it again." It was a mean descent but well worth it. A delightful and dainty plant when green, but superb when in flower as the entire plant turns brilliant red, and from the green center bracts emerge delicate white flowers like pearls displayed on the most resplendent, brilliant red cushion. To our astonishment the flower has a perfume which is 99 & 44/100 per cent pure, unmistakably, the clean fresh odor of Ivory Soap!... Later this was identified by Dr. Smith as a new species and he called it *Cryptanthopsis navioides* [please see back cover]...

[To be continued]

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## New President of the Society is Elected; Vice-president is Reelected.

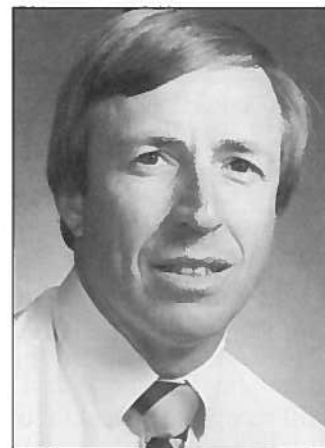


Figure 7.  
Gerald A. Raack

Jerry Raack was elected president of the society at the St. Louis meeting of the board in June 1995. Jerry served two terms as director, 1985–1987, and has been a contributor to the JOURNAL. In addition, Jerry brings with him a managerial background gained through 28 years with American Telephone and Telegraph.

Jerry has been growing bromeliads for the past 24 years and is a life member of the BSI. He and his wife Joanne have made collecting trips through Brazil, Costa Rica, and Ecuador. Growing cool-weather guzmanias and soft-leafed tillandsias is his specialty.

Thomas W. Wolfe of Tampa, Florida, was reelected vice-president of the society at the same board meeting. His experience as an officer and board member will be appreciated as he continues his service.

## Appointment of the New Editor



T.U. Lineham  
Figure 8.  
Chet Blackburn

President Raack has announced the appointment of Chet Blackburn to the editorship following the resignation of Tom Lineham from that office. Chet will assume his duties with the production of the January–February 1996 issue of the JOURNAL. His appointment is expected to be confirmed by the board at the annual meeting in July 1996.

Chet served as a director of the BSI from 1984 through 1986. He has been a member of the Sacramento Bromeliad Society since 1976 and has served that group as president for three terms. He is well known by BSI members for his many informative and entertaining articles in his home society newsletter, which have been reprinted widely.



# ORLANDIANA 96

Twelfth World Bromeliad Conference • Orlando Florida

July 1–8, 1996

For several months Bromeliad Society members throughout the state of Florida have been busy at planning meetings thinking of ways to make your stay at Orlandiana '96 an exciting and educational one. We have activities planned to keep you busy the entire week. Let us review with you some of the activities included in your registration.

All of you who have attended world conferences will recognize a weekful of activities that are standard fare: a judges school on Tuesday, the BSI rare plant auction on Friday, the Cryptanthus Society rare plant auction on Saturday, and postconference tours to outstanding private and commercial greenhouses.

We have added some features to Orlandiana '96 we are sure you will like:

\* On Tuesday, July 2nd, we will have tours to Selby Botanical Gardens in Sarasota. As you may know, Selby is the home of the M.B. Foster Bromeliad Identification Center. It boasts a wonderful collection of our favorite plants. On Tuesday there is also a special tour to two of Central Florida's most complete collector nurseries — Boggy Creek Bromeliads and Pineapple Place.

\* Thursday morning, the Fourth of July, we officially open Orlandiana '96 with a Welcome to the Conference breakfast. Hospitality desks will be set up in the registration area to help registrants who are new to the Central Florida area make plans for any free time they may have during their stay. We are busily organizing a database that will cover every imaginable recreational activity. This source will be a great help for those spouses and friends who have interests other than bromeliads.

\* A special cocktail party that opens the show and plant sale area to Orlandiana '96 registrants will begin at 5:30 p.m. It will allow time to socialize with all your friends before entering the sale and show area and still leave time for everybody to enjoy the many Fourth of July festivities that are staged at attractions such as Walt Disney World and Sea World.

\* Friday, Saturday, and Sunday we will have more tours, as well as seminars on a wide range of bromeliad subjects. (Yes, we reviewed ALL of your seminar suggestions from the San Diego questionnaire and are incorporating many of them into Orlandiana '96. Because the World-Wide Show and Tell is such a popular conference activity, it has been moved to Friday afternoon.

[Continued on page 269]

## Some Cultivated Bromelias: Thorny Problems

Harry E. Luther

Large-growing members of the genus *Bromelia* are mostly cultivated in the warmest areas of the United States; few greenhouse growers would or could give these plants the space they require. Their vicious marginal spines make them unwelcome in confined quarters. Several bromelias are common in Florida gardens, but it appears that their identities are open to question.

The first example (figure 9) is the plant that everyone knows is *Bromelia balansae*. This plant in flower is a meter or so tall and the rosette is one to two meters in diameter. The petals are maroon with white margins. I doubt that this is true *B. balansae*; it may be *B. sylvicola* S. Moore.

The second plant, illustrated on the front cover, is much larger, nearly two meters tall with leaves four to seven meters long. The petals are violet with a white margin. This plant is a much better match to *B. balansae* and I consider this to be the correct name.

Another rather commonly grown bromelia is *B. serra* Grisebach and especially forma *variegata* (M.B. Foster) M.B. Foster ex L.B. Smith (figure 10). The picture shows a standard, green leaf *B. serra*, but the variegated plant (figure 11) represents another species, *B. pinguin* Linnaeus!

Does a real variegated *Bromelia serra* exist? I suspect that the form name was attached to the wrong species epithet.

A few collectors have *Bromelia alsodes*, *goeldiana*, and *chrysantha* in their gardens. Are there any other large-growing bromelias in cultivation?

M.B. Foster Bromeliad Identification Center  
The Marie Selby Botanical Gardens  
Sarasota, Florida

Please see also "A Sensational Bromeliad" by Racine Foster with a reproduction of a painting by M.B. Foster in *JOURNAL*, November–December 1990, pages 244 and 245. TUL

Figure 9.  
The most commonly cultivated  
bromelia in Florida may be  
*Bromelia sylvicola*.



K. Tan



V. Sawyer

Figure 10.  
*Bromelia serra*. Note the dense,  
globose inflorescence.



B. Wands

Figure 11.  
This is the plant cultivated as a  
variegated form of *B. serra*; it is  
really a cultivar of *B. pinguin*

## Results of the Election of Directors for the 1996–1998 Term

REGION	DIRECTOR
California	Pamela Koide
Florida	Don A. Beadle
Louisiana	Harvey C. Beltz
Texas	Don Garrison
International	Jacqui Watts

Only the California and Florida nominations required votes since a single name was proposed for each of the other vacancies.

# On the Identity of *Tillandsia meridionalis*

Walter Till<sup>1</sup> and Harry E. Luther<sup>2</sup>

During herbarium studies at the Royal Botanic Gardens Kew (K), it became evident to W. Till that the type specimen of *Tillandsia meridionalis* Baker is different from the plants commonly known by this name, which are treated as such in Smith & Downs (1977) and cultivated world wide. We shall refer to them as *T. meridionalis* auct. in the following text. There are illustrations in Baensch (1994: p. 188), Castellanos (1945: pl. 84), Gross (1992: p. 69), Isley (1987: p. 77), Kawollek (1992: p. 92), Rauh (1990: fig. 40a), Roth (1991: p. 142), Shimizu (1993: p. 24), and Smith & Downs (1977: fig. 256).

*Tillandsia meridionalis* auct. usually grows as an epiphyte on trees and palms, rarely is it found growing on stones. It is a species with stiff, narrowly triangular, often more or less secund, densely gray, submentosely lepidote leaves, and usually with an arching scape that bears a simple, polystichously flowered inflorescence. The elliptic floral bracts are rose-colored in different hues and densely lepidote at least in the apical half. They distinctly surpass the membranaceous sepals, which are equally subfree and more or less lepidote at the apex. The apically spreading petals are white (figure 12). Its distribution ranges from southeastern Bolivia and Paraguay to northeastern Argentina and the Brazilian state of Minas Gerais. The record for Bahia cited in Smith & Downs [1977, *Blanchet 3524* (G)] is wrong since it represents *T. stricta* Sol. It has not yet been recorded for Uruguay.

The holotype specimen of *Tillandsia meridionalis* Baker (figure 14) in Kew is a plant with appressed lepidote leaves, the more lanceolate floral bracts are scarcely surpassing the sepals, which are adaxially half-connate and apically more or less glabrous. The plant was collected by [John] Tweedie in Banda Oriental (an ancient name for Uruguay) and the type sheet was part of the "Herbarium Hookerianum," which is now incorporated in Kew.

J.G. Baker determined the plant to be *Tillandsia meridionalis* and published it validly in 1888. The name is written in pencil in his characteristic handwriting on the type sheet with *Anoplophytum refulgens* Morren as a synonym. Six years later, C. Mez annotated the plant as "*T. ixioides* Gris." and stated, "specimen giganteum, sed nullo modo separandum! a *T. refulgens* Morr. toto coelo divisum!"<sup>3</sup> Although W. Till in 1983 followed the opinion of Mez (1894) in determining the type as *T. ixioides*, he no longer agrees.

<sup>1</sup> Institut für Botanik, Universität Wien, Rennweg 14, A-1030 Wien, Austria.

<sup>2</sup> Director of the Mulford Foster Bromeliad Identification Center, The Marie Selby Botanical Gardens, 811 South Palm Avenue, Sarasota, Florida 34236, U.S.A.

<sup>3</sup> *T. ixioides* Gris., giant specimen, but in no way different!, from *T. refulgens* Morr. immensely different!"

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The type specimen, further, bears a letter of Edouard Morren to Baker with the following comment (translated): “Liège, 21 April. Dear friend, your *Anoplophytum* seems to be new to me—with the reservation of only an examination in the herbarium. If you agree, I would name it *A. refulgens*, as if it were opalescent, because of the striking nacreous bracts, two words that do not exist in Latin. As for the 8th of October, I do not say no. We shall see what will be possible. At that time it could be manageable. In friendship, E. Morren. I will travel on Tuesday to Basel, Zurich, and Zermatt.”

At the moment it remains open to discussion whether *Tillandsia meridionalis* Baker is a synonym of *T. aëranthos* (Loisel.) L.B. Smith or a distinct taxon. It is, however, doubtlessly distinct from *T. meridionalis* auct., which, therefore, requires a new identification.

There is only one synonym under *Tillandsia meridionalis* in Smith & Downs (1977): *T. stricta* Sol. var. *paraguariensis* Hassler. This plant, however, differs from *T. meridionalis* auct. in the appressed indument of the leaves and the violet petals and, hence, cannot be used as the basis for a new name of our plant in question.

*Anoplophytum refulgens* was interpreted by Baker in a different sense than perhaps intended by Morren and is a mere name in the synonymy of *T. pohliana* Mez as are the validly published *T. latisejala* L.B. Smith and *T. windhausenii* Hassl. ex Rojas. In checking the nearest related species [*T. stricta* Sol and *T. rosea* sensu Smith & Downs (1977)], the most conformity was found with *T. recurvifolia* Hook. (figure 13), which was treated as a synonym of *T. rosea* and to a smaller extent with *T. hilaireana* Bak., which was treated as a questionable synonym of *T. pohliana* Mez. *T. recurvifolia* is typified by plate 5246 of Hooker’s Botanical Magazine, *T. hilaireana* by the herbarium specimen of Saint-Hilaire 508, which was studied by H. Luther in 1992 and subsequently by W. Till. Saint-Hilaire #508 in Paris (herbarium P, isotype) bears two plants with nearly glabrous floral bracts and glabrous sepals that are adaxially connate for one third. Its identity cannot be discussed at the moment as there is no living material available that is in full accordance with the type of *T. hilaireana*. Consequently, we do not consider it to be a synonym of *T. recurvifolia*.

We propose that the following is the valid and correct name for *Tillandsia meridionalis* auct. non Baker:

*Tillandsia recurvifolia* Hooker, Bot. Mag. pl. 5246 (1861).

Type: original description and plate in absence of any herbarium specimen.

Syn. *T. meridionalis* sensu Smith & Downs 1977 et auctorum, non Baker 1888.

In 1983, Wilhelm Weber and Renate Ehlers described a new variety of *T. meridionalis* auct. from the Brazilian state of Parana: var. *subsecundifolia*

Figure 12.  
*Tillandsia recurvifolia*. This  
plant shown as cultivated in  
the Vienna Botanical Garden  
is from Sta. Ana, Misiones  
Province, Argentina



Author



Figure 13.  
*Tillandsia recurvifolia*. Hooker  
Botanical Magazine, pl. 5246.

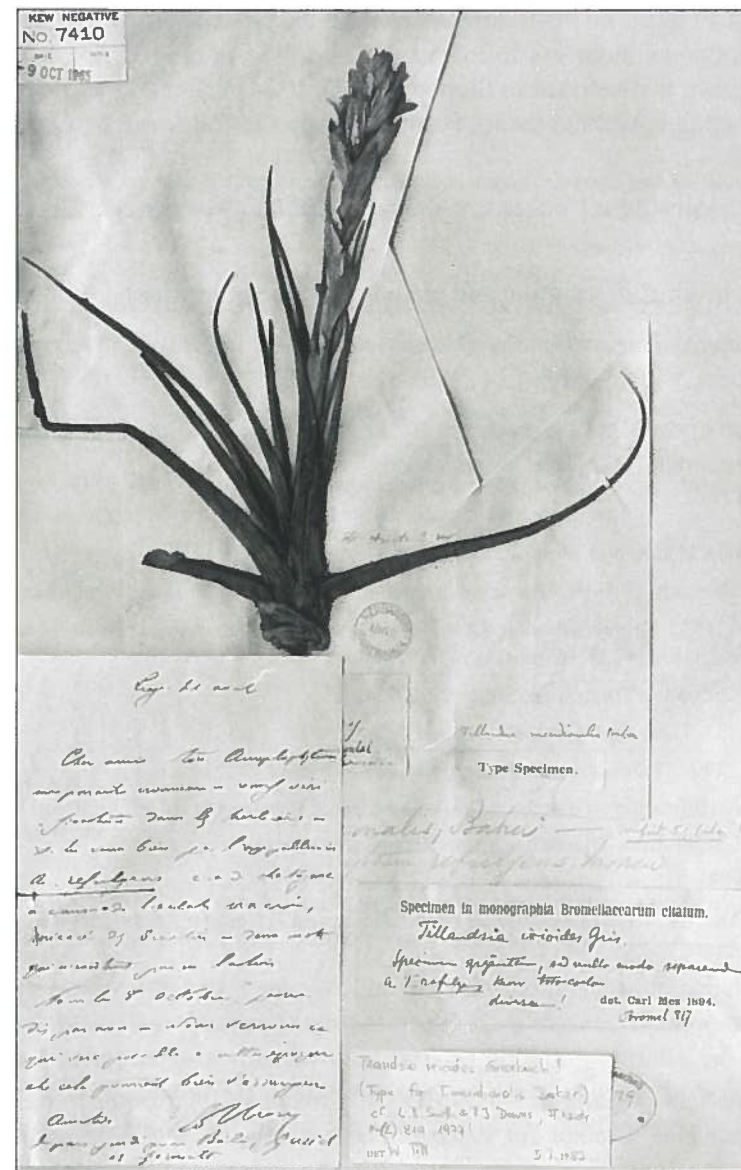


Figure 14.  
Holotype of *Tillandsia meridionalis* Baker, Kew Herbarium

W. Weber & Ehlers. The main differences from the typical variety of *T. recurvifolia* are the sometimes more lax inflorescence and the orange-red floral bracts (not pink). The plant is illustrated in Shimizu (1993: p. 21) under #71 as *T. leonamiana* Pereira, a certainly distinct taxon. For this variety the following new combination is proposed:

*Tillandsia recurvifolia* Hooker var. *subsecundifolia* (W. Weber & Ehlers) W. Till, comb. nov.

Type: original description and plate in absence of any herbarium specimen.

Basionym: *T. meridionalis* Baker var. *subsecundifolia* W. Weber & Ehlers, Feddes Rept. 94:615, Abb. 12 (1983).

We are grateful to the directors of the herbaria G, K, and P for making their valuable specimens available for this study.

#### LITERATURE CITED:

- Baensch, U.; Baensch, U. 1994. Blooming bromeliads. Nassau: Tropic Beauty Publishers.
- Castellanos, A. 1945. Bromeliaceae. In Descole, H.R., ed. *Genera et species plantarum argentinorum* 3:107-382, tab. 22-123. Buenos Aires: G. Kraft.
- Gross, E. 1992. *Schöne Tillandsien*. Stuttgart: E. Ulmer.
- Isley III, P. 1987. *Tillandsia*. Gardena: Botanical Press.
- Kawollek, W. 1992. *Tillandsien*. Augsburg: Naturbuch Verlag.
- Rauh, W. 1990. *Bromelien: Tillandsien u.a. kulturwürdige Bromelien*. 3rd ed. Stuttgart: E. Ulmer.
- Roth, J. 1991. *Tillandsien-Blüten der Lüfte*. Radebeul: Neumann Verlag.
- Shimizu, H. 1993. *Tillandsia handbook*. Japan Cactus Planning Co. Press.
- Smith, L.B.; Downs, R.J. *Tillandsioideae (Bromeliaceae)*. Fl. Neotrop. Monogr. 14(2). New York: Hafner Press.

We are very grateful to Charles Dills, a frequent contributor to the JOURNAL and a former BSI director for his invaluable help with the 1995 annual index. With his persistence and computer skills the index was completed with the November-December text. —TUL

## *Ochagavia elegans*

[continued from page 246]

#### ACKNOWLEDGEMENT:

Thanks are due to Tony Hall for his stimulating discussions on this plant and its skillful cultivation at Kew.

#### REFERENCES:

- Anon. 1979. *Ochagavia carnea* (Beer) Smith & Looser. J. Bromeliad Soc. 29:176.
- Foster, Racine. 1956. Clarification of the nomenclature of *Ochagavia lindleyana* (Lem.) Mez. Bromeliad Soc. Bull. 6:94-96.
- Rauh, W. 1979. *The Bromeliad Lexikon*. Poole, Dorset: Blandford Press.
- \_\_\_\_\_. 1986. Chile and its bromeliads, Part II. J. Bromeliad Soc. 35:208-214.
- Skottsberg, C. 1953. The vegetation of the Juan Fernandez Islands. In: C. Skottsberg, ed. *The natural history of Juan Fernandez and Easter Island*. Uppsala.
- Smith, L.B.; Downs, R.J. 1979. *Bromelioideae (Bromeliaceae)*. Flora Neotropica. Monograph 14(3). New York: New York Botanical Garden.

*The Herbarium  
Royal Botanic Gardens, Kew  
Richmond, Surrey TW9 3AB  
United Kingdom*

## Orlandiana 96

[continued from page 260]

\* At our Saturday evening banquet you will be treated to a buffet served by the award-winning staff of The Clarion Plaza Hotel.

We have a special staff who will be busy during the conference doing lots of things such as taking photos of unusual bromeliads on the garden tours, awarded plants, and rare plants in the show, as well as collating outlines of all material covered in the seminars. All of this material will be available in book form and mailed to registrants within weeks after the end of the conference.

We will have raffles and auctions of unusual and exciting bromeliads and bromeliad-related items throughout conference week. The most exciting drawing, however, will be on Saturday evening at our banquet buffet. The names of all conference registrants registered at The Clarion Plaza Hotel for three or more nights will be eligible for an extraordinary drawing. The grand prize will be a pair of airline tickets on Continental Airlines for travel anywhere within the continental United States.

We hope you are making plans to join us for Orlandiana '96

*Bud Martin  
Peggy Nuse  
Carolyn Schoenau*

## Recent Gifts to the Society

We are happy to acknowledge gifts from the following named members and friends who have contributed to the Color Fund, to the BSI general fund, or to the Bromeliad Identification Center, some to all three:

Charlie Haas	Kay Netscher
George and Marilyn Long	Alexander Stoddart
Whitman H. Merrin, Jr.	Lloyd Van Epps
Ervin J. Wurthmann	

Checks or international money orders should be made payable to The Bromeliad Society, Inc. They may be mailed to Membership Secretary Linda Harbert, 2488 E. 49th St., Tulsa, OK 74105 or to Editor Chet Blackburn, 720 Millertown Road, Auburn, CA 95603.

## NEWSLETTER EXCHANGE

The Bromeliad Society of New Zealand, Inc. secretary requests that any affiliated societies that would like to swap their journals or newsletters to write to him and, "and I will arrange for our journal to be sent in return." he adds, "we do have around ten societies on our list and feel that any information can benefit both parties." Write to: Len Trotman, 40 Tirimoana Road, Te Atatu South, Auckland 8, New Zealand. *The New Zealand society BULLETIN is edited by Andrew Flower who also takes care of the seed bank. We have reprinted his articles and those of Bea Hanson frequently. The BULLETIN consisting of 18 pages with illustrated covers includes black and white illustrations. It is 21 x 14.5 cm and is published monthly. Surface mail from New Zealand may take up to 30 days. If you want airmail, I am sure that the society would appreciate receiving a contribution because of the highly unfavorable exchange rate.*—TUL

**CORRECTION:** Vol. 45(5), p. 210, Fig. 8. Change to read: *Guzmania besseae*.

## BROMELIAD SOCIETY, INC. BALANCE SHEET AS OF 12/31/94

	1993	1994
<b>CURRENT ASSETS:</b>		
Cash - Texas Comm Bank	21,997.28	—
Cash - Gen Fund Spec	44,062.92	45,708.52
Cash - Life Memshp Spec	12,894.73	13,368.99
Cash - Padilla Research	843.92	
Cash - Padilla Endowment	4,395.21	5,775.10
Cash - Dayton State Bank	—	19,725.55
Total Cash:	84,194.06	84,578.16
<b>ADVANCES:</b>		
Beltz - Seed Fund	200.00	200.00
WBC - San Diego 1994	1,000.00	—
WBC - Orlando 1996	—	2,500.00
Total Advances:	1,200.00	2,700.00
<b>FIXED ASSETS:</b>		
Library & Equipment	5,728.39	5,728.39
LESS Depreciation	2,089.54	2,089.54
Total Depreciated Assets	3,638.85	3,638.85
<b>OTHER ASSETS:</b>		
Investments - Unisys 2 Sh	200.00	200.00
Investments - USTN	14,665.65	14,665.65
Inventory	52,497.00	52,497.00
Total Other Assets	67,362.65	67,362.65
<b>LIABILITIES:</b>		
BSI Memorial Fund General	125.00	125.00
<b>NET WORTH:</b>	156,270.56	158,154.66

## BROMELIAD SOCIETY, INC. INCOME STATEMENT 1994

	1994	1994	1994
Checking Account			
Balance - Start			21,997.28
<b>RECEIPTS</b>			
Advertising - Journal	3,277.67		
Back Issues	1,777.59		
Color Fund	4,683.51		
Cultural Sheets	111.24		
Interest - General	2,481.85		
Interest - Endowment	1,384.19		
Judges Certification	330.00		
Memberships	31,796.50		
Postage Refund	41.05		
Seed Fund	1,573.00		

	<u>1994</u>	<u>1994</u>	<u>1994</u>
Slide Library		45.00	
Donations		2,702.00	
Publications		9,466.44	
Total Receipts			59,670.04
<b>DISTRIBUTION</b>			
Administrative		71.88	
BSI Meetings		473.38	
Grants		1,000.00	
Journal - Allowance	1,800.00		
Journal - Mail Service	8,011.26		
Journal - Misc	820.81		
Journal - Prtg & Photo	25,102.75		
Journal - Typesetting	7,600.00		
Journal - Storage	636.00		
Journal - Envelopes	937.04	44,907.86	
Judges Certification		104.79	
Membership - Contract	5,400.00		
Membership - Expenses	2,129.04		
Membership - Envelopes	—	7,529.04	
Presidents Expense			
Publications		1,622.64	
Roster		2,260.20	
Secretary Expense		379.68	
Seed Fund		1,399.43	
Slide Program		340.63	
Treasurer Expense		96.41	
Contingency Fund		100.00	
Total Distribution			60,285.94
Total Gain/Loss period			-615.90
<b>TRANSFERS—INCOME/EXP</b>			
Interest - Spec Accts		-3,568.24	
Charges - Spec Accts		61.38	
World Conference Adv		1,000.00	
From Padilla Research		851.03	
Total Inc/Exp Transfer			-1,655.83
Checking account balance end of period			19,725.55

**BROMELIAD SOCIETY, INC. SPECIAL ACCOUNTS  
YEAR ENDING DECEMBER 31, 1994**

<b>GENERAL FUND:</b>	<u>1994</u>
Beginning Balance	44,062.92
Interest Received	1,689.22
Total Income	1,689.22
Bank Charges, Fees	43.62
Total Disbursements	43.62
Ending Balance	45,708.52

**LIFE MEMBERSHIPS:**

	<u>1994</u>
Beginning Balance	12,894.73
Interest Earned	486.89
Total Income	486.89
Bank Charges	12.63
Total Disbursements	12.63
Ending Balance	13,368.99

**PADILLA RESEARCH:**

Beginning Balance	843.92
Interest Received	7.94
Total Income	7.94
Bank Charges	0.83
Close Account	851.03
Total Disbursements	851.86
Ending Balance	-0.00

**PADILLA ENDOWMENT:**

Beginning Balance	4,395.21
Interest - Bonds	1,200.00
Interest - Other	184.19
Total Income	1,384.19
Bank Charges	4.30
Total Disbursements	4.30
Ending Balance	5,775.10

**BROMELIAD IDENT CEN:**

Beginning Balance	19,456.09
Interest Earned	723.55
Donations	315.00
Auctions	7,646.50
BSSF Interest Earned	—
Total Income	8,685.05
Bank Charges	19.07
Director Expenses	6,985.00
Total Disbursement	7,004.07
Ending Balance	21,137.07

**BROMELIAD SOCIETY, INC.  
APPROVED BUDGETS—1995 and 1996**

	<u>1995</u>	<u>1996</u>
<b>RECEIPTS</b>		
Advertising - Journal	5,000.00	3,500.00
Advertising - Roster	—	—
Back Issues	4,000.00	2,000.00
Color Fund	1,500.00	2,000.00
Cultivar Registration	—	—
Cultural Sheets	400.00	150.00
Dividends	—	—
Donations - BSI	500.00	500.00
Donations - Endowment	—	—
Interest - General	3,000.00	2,500.00
Interest - Endowment	1,500.00	1,500.00
Judges Certification	100.00	100.00

	1995	1996
Medallions-Trophies	200.00	200.00
Memberships	35,000.00	32,000.00
Postage Refund.	100.00	100.00
Publications	12,000.00	9,500.00
Research Fund - Padilla	—	—
Rosters	—	—
Seed Fund	1,500.00	1,500.00
Slide Program	200.00	100.00
BIC	—	—
Deficit - General Funds	12,228.00	13,310.00
<b>TOTAL RECEIPTS:</b>	<b>77,328.00</b>	<b>68,960.00</b>
<b>DISBURSEMENTS:</b>		
Administrative Exp	100.00	100.00
Affiliate Newsletter	200.00	200.00
Bank Charges	100.00	50.00
Computer Upgrade	—	—
Conservation	—	—
Cultivar Registration	100.00	100.00
Cultural Booklet	5,218.00	—
Cultural Sheets	1,750.00	—
Depreciation	—	—
Director/BSI Mtgs.	600.00	600.00
Franchise Tax	10.00	10.00
Grants	3,000.00	2,000.00
Journal - Allowance	1,800.00	3,600.00
Journal - Mail Service	8,000.00	9,000.00
Journal - Misc	1,500.00	1,000.00
Journal - Print & Photos	28,150.00	27,150.00
Journal - Typesetting	7,300.00	7,600.00
Journal - Envelopes	1,000.00	—
Journal - Storage	650.00	650.00
Judges Certification	200.00	200.00
Medallions-Trophies	3,000.00	2,000.00
Membership - Contract	5,400.00	5,400.00
Membership - Expenses	2,000.00	2,000.00
Membership - Envelopes	—	—
President Expense	200.00	200.00
Publications	1,500.00	1,500.00
Roster	3,600.00	—
Secretary Expense	100.00	200.00
Seed Fund	1,350.00	1,400.00
Slide Program	400.00	400.00
Treasurer Expense	100.00	100.00
Contingency	—	—
Reserves	—	—
BIC	—	—
Research	—	—
CITES Program	—	1,000.00
Glossary	—	2,500.00
<b>TOTAL EXPENDITURES:</b>	<b>77,328.00</b>	<b>68,960.00</b>

## So Long, It's Been Good . . .

After 13 years and one month, 12 volumes, 72 separate numbers, 3,456 pages, many dollars, many miles, it's time to hand the editorship to someone else.

Not so long ago, Victoria Padilla in one of her last editorials wrote:

The one thing that holds the Society together is the JOURNAL. Unfortunately, it is the work of just a few people. In fact, the editor works with so little material that every time an issue comes off the press it is for her "a miracle of rare device." An organization such as ours should be a mutual group, a give-and-take affair, in which ideas and points of view are exchanged, discussed, and commented upon. Our JOURNAL should not be the reflection of the thinking and experiences of just a few member, as it is now, for the picture presented is too one-sided and does not consider the problems of growers who do not make their failures or successes known. We need to know more about the members themselves—what they are doing, the plants they are growing, the experiences they have encountered—and only they can supply this information. It is hoped that many new names will be added to the list of contributors [in the coming] year.

I don't know of any way to improve on her words. After all, she edited the JOURNAL for twenty-two years.

We truly have knowledge going to waste as far as most members are concerned because hybridizers don't write, seed growers are silent, indoor growers, experimenters, travellers, backyard beautifiers, beginners, and those with experience dating just about from the Foster era don't contribute. We have members who give illustrated talks with or without remuneration, who jolly us along with little stories, beautiful pictures, earsful of spoken words—and not a keystroke from them. How selfish!



Sarah Nell Spivey

Figure 15.

*T. U. Zwickham*

On the other hand, there are the faithful: I could not have gone past the first issue of volume 34 without the advice and contributions of the Editorial Advisory Board members. Dr. Lyman B. Smith and Dr. Werner Rauh were always available with help and their invaluable articles. It would be dangerous to list the names of the many others who have filled the pages for fear of leaving out some. One way or another every issue has come together thanks to interested and friendly people. It might seem that having worked with the information on these 3,456 pages I would be a walking compendium. It just didn't happen, but I could tell you more about printers and mailers than you would want to know.

I wish Chet Blackburn, the new editor, great success with his task, or opportunity. He is more prepared for the work than I was because of his long-standing interest in growing, collecting, and studying bromeliads. He is better prepared to work with data management and machines because of his professional experience. He will need both the encouragement of the cheering section and the genuine effort of concerned members to succeed. He is, without doubt, a capable and entertaining author but this is no one-man band. Everybody out! Everybody help! Thanks for your support. See you around.—TUL



## You are cordially invited to become a member of The Bromeliad Society, Inc.

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### The activities of the Bromeliad Society consist of

- The publication of the *Journal*, a bimonthly magazine for both amateur and professional, well illustrated in color and black and white.
- The publication of information booklets on bromeliads such as Cultural Handbook, Glossary, and the Handbook for judges and Exhibitors, etc.
- The fostering of affiliated societies. There are many such groups throughout the world.
- The sale of bromeliad seeds through the Society Seed Fund.
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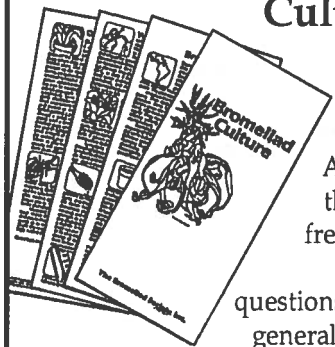
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