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Cover photographs: John Arden describes his cultivars 'Wildfire' (front) and 'Inferno' (back) on page 62. Photographs by the author.

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A New Brazilian *Wittrockia* Species

Elton M.C. Leme

Wittrockia corallina is found growing epiphytically on the lower tree trunks inside the very humid, typical Atlantic Forest under the domain of the Bocaina Mountains. At an elevation of about 1300 meters, this new ornamental and delicate species shares its habitat with many other unusual species including *Fernseea bocainensis* Pereira & Moutinho, *Neoregelia pontualii* Leme (a new species collected on the same occasion),[1] *Nidularium antoineanum* Wawra, *Vriesea pabstii* McWilliams & Smith, *Wittrockia campos-portoi* L.B. Smith.

When in full bloom, *Wittrockia corallina* cannot be confused with any other previously known species, mainly because of its vividly colored bracts and flowers. In other respects it is similar to *W. azurea* L.B. Smith, differing by the acute floral bracts, which are not densely serrate, the long acuminate sepals, the longer petals of an intense coral coloration, as well as by the obtuse ovules.

Thriving in a private, protected area owned by the biologist Francisco B. Pontual, *Wittrockia corallina* and the rich bromeliological flora of the Albion Farm have their survival for future generations assured.

***Wittrockia corallina* Leme sp. nov.**

A *W. azurea* L.B. Smith, cui affinis, bracteis florigeris acutis et haud dense serratis, sepalis spice longe acuminatis, petalis ca. 30 mm longis, corallinis, ovulis obtusis differt.

Plant epiphytic, stemless, flowering ca. 25 cm high. *Leaves* ca. 15, rosulate, arcuate in an open rosette; *sheaths* narrowly elliptic, ca. 8 cm long, ca. 4.5 cm wide, on both sides and toward the base densely and finely brown lepidote, dark green or wine colored; *blades* sublinear, slightly narrowed toward base, ca. 30 cm long, ca. 2.5 cm wide, apex acuminate-caudate, dark green and inconspicuously white lepidote above, green or magenta and subdensely white lepidote beneath, margins subdensely serrulate with very minute spines less than 0.5 mm in length. *Scape* ca. 15 cm long, ca. 0.5 cm in diameter, erect, inconspicuously lepidote, greenish, distinctly surpassing the length of the leaf sheaths; *scape bracts* foliaceous, completely hiding the scape. *Inflorescence* few-flowered, somewhat stellate, ca. 4 cm long, ca. 5 cm in diameter at apex, distinctly raised above the leaf rosette; *primary bracts* narrowly lanceolate, acuminate-caudate, the outer ones ca. 7 cm long, ca. 2.5 cm wide at base, suberect with recurved apex, without

[1] Bradea (in press).

Figure 1.
Wittrockia corallina Leme. The long, narrow, dark green or wine-colored leaves with inconspicuous spines and the raised inflorescence are basic characters of this new species. In contrast, *W. superba*, the type species of the genus, is noted for its tough, spiny, red-tipped leaves and sunken inflorescence.

Author

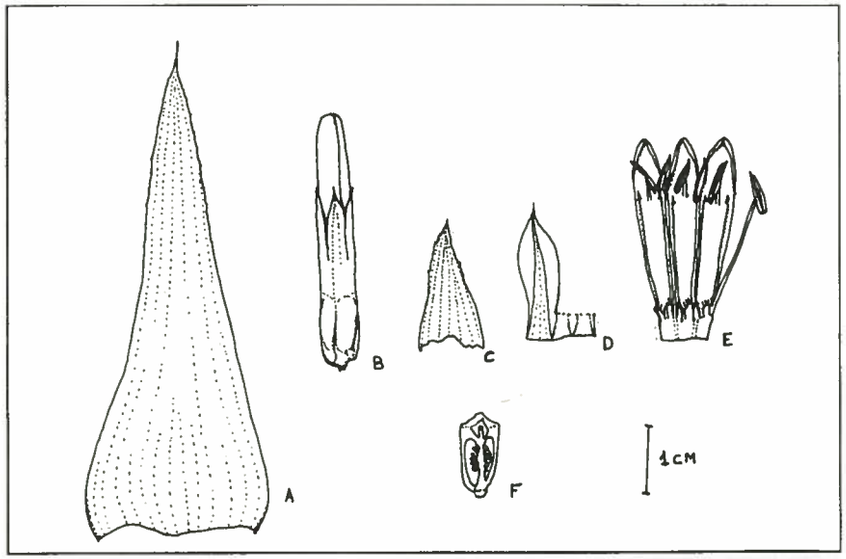

Figure 2
Wittrockia corallina Leme: A) primary bract; B) flower; C) floral bract; D) sepal; E) petals; F) cross-section of the ovary. Drawing by the author.

evident distinction between blade and sheaths, purplish red toward apex, inconspicuously white lepidote on both sides, subdense but very inconspicuously serrulate toward apex; *branches* inconspicuous, ca. 5, the outer ones with ca. 2 flowers; *floral bracts* triangular-lanceolate, acute and inconspicuously apiculate, ca. 20 mm long, ca. 10 mm wide at base, obscurely and irregularly spinulose, reddish, not exceeding the middle of the sepals, lepidote on both sides, carinate. *Flowers* ca. 40 mm long, subsessile, *sepals* elliptic-lanceolate, long-acuminate, ca. 20 mm long, ca. 6 mm wide, connate for 3–4 mm, red, glabrous, *petals* ca. 30 mm long, ca. 5 mm wide, irregularly agglutinate at base for 3–5 mm, coral colored, apex obtuse-cucullate, bearing 2 fimbriate scales 5 mm above the base and 2 well-developed longitudinal calli equaling the length of the filaments; the epipetalous *filaments* highly adnate to the petals, the episepalous weakly adnate to the petals at base for 3–5 mm; *anthers* sublinear, about 5 mm long, base obtuse, apex apiculate, fixed near the middle; *ovary* 10 mm long, 6 mm in diameter, white, glabrous, subclavate; *epigynous tube* 2.5 mm long; *placenta* subcentral; *ovules* numerous, obtuse.

Type. Brazil. State of São Paulo, County of Bananal, Sertão des Cobras, Albion Farm. Epiphytic in the Atlantic Forest, about 13 meters above sea level. Leg.

Elton M.C. Leme 1427, September 23, 1989. Flowered in cultivation in August 1990. Holotype: HB.

Rio de Janeiro

FINAL CALL FOR NOMINATIONS

This is the third reminder that there are vacancies for one director for the 1993–1995 term in each of five regions: Australia, California, Florida, Louisiana, and Texas. If you or your local society have not yet sent nominations to the chairman of the Nominations Committee you are not doing your part of the job.

While it is true that the directors elect the officers and committee chairmen, you are entitled to make nominations to those positions also. This year the offices of both president and vice-president will become vacant in addition to the other positions. All that you have to do is to obtain the consent of your candidates and to send their names and qualifications by letter to: John M. Anderson Chairman, Nominations Committee, P.O. Box 5202, Corpus Christi, TX 78465-5202, Telephone: 512-882-4551.

NOMINATIONS MUST BE MADE BY 18 MARCH 1992. You may nominate by telephone through 15 March but you must send written confirmation. The details are listed in the November–December 1991 *Journal.*—TUL

A New Tillandsia from Guerrero, Mexico

Renate Ehlers

In March 1990, we spent several weeks in the state of Guerrero, Mexico, which is probably best known to travelers for its resort city, Alcapulco. The map shows a road, a very small one, going from Filho de Caballo to Ventos Frios to the Pacific coast. We had wanted to go to that area for many years although we knew that the road was pretty bad and not very safe. Our friends, Lotte and Helmut Hromadnik, had used that road and now we wanted to try it, too.

Very early in the morning while it was still dark, we started from Chilpancingo de los Bravos and climbed up to the dense, foggy forests near Filho de Caballo. Since we had been to the area before and knew that there was a long way to go, we resisted the urge to stop. Later, in the drier hills, we stopped because I saw a tillandsia with a colorful, pendent inflorescence and I went off to collect it. Klaus was close to the car when a military car stopped. The soldiers, with their guns directed at him, jumped down. The officer asked what we were doing and soon came to the point: they wanted money. Klaus gave him 20 pesos. It was very obvious that he had counted his soldiers because then he decided: "It's not enough for the gasoline we need." So Klaus gave him another 20 pesos and they departed peaceably.

Later we came to a little village and there we met the soldiers again. Just like in a movie, one soldier was standing in front of every cottage with his arm directed to the door of the house. When the officer gave the signal, they jumped in! The officer gestured in our direction and we moved on very glad we had already bought his friendship.

The road became very bad and near Yerba Santa it became evident that something was wrong with the car. One wheel drove to the right and the other to the left. When we saw some houses, we asked for a mechanic and, of course, there was none, but we were very glad when a man tried to help us. After hours of waiting, and late in the afternoon, it looked as if the car could make it again for a while. The man charged 50,000 pesos, probably the amount he normally earns in a month, but we were glad we could go on.

Of course, now we were short of time and could not stop as often as we would have liked. We went through wonderful forests and saw many trees and plants, including tillandsias, that we had never seen before. Much too early, the sun went down and with the last light we made photos of *Tillandsia quaquaflorifera* Matuda, a tillandsia that had not been re-collected since the original collection in 1976.

The description said that the plants grow near some mines near Petatlan Guerrero at an altitude of 1500 m. As there are two towns named Petatlan in Guerrero we searched for the plant in both places for days, as had the Hromadniks, without result. We concluded that the plant could never grow in an area as dry and hot as the Petatlans.

We were very happy, then, that we finally succeeded in finding the plant. It was growing in a forest at 3100 m and the wonderful, red inflorescences in the dark green rosettes, blushing in the last rays of the sun made us forget for a while that we had no place for the night. We had to stay in the car. At that altitude the nighttime temperature is about zero degrees Celsius. Every hour, we ran the motor for five minutes to warm up, and we were very happy when morning came.

Now, we had more time to make occasional stops to take photos and to collect plants. Suddenly, I saw from the car in the very high trees above the road clusters of narrow-leafed, red tillandsias, too high to reach. But we knew at first glance that it was a new tillandsia. We never before in Mexico had seen plants like these: very long plants with narrow spikes. Normally, when we find an unidentified tillandsia we study it carefully and make many comparisons before deciding it could be a new species. We were very excited, of course, and when we found out that it was impossible to collect specimens of those plants we were very disappointed. After driving a while, we stopped again and entered a forest. We walked for half an hour before deciding to go back to the car and at the same moment we saw a cluster of the so-extremely desired plant! Although it was very high in the trees, Klaus managed to get a part of it.

When we came to El Paraiso, we were back in the world again and, best of all, they had a barrel of gasoline. With gasoline in the tank and on a road that was not too bad, we arrived in good spirits in Atoyac de Alvarez.

***Tillandsia paraisoensis* R. Ehlers, sp. nov.**

A *Tillandsia rettigiana* Mez foliis magis coriaceis, subtus distincte nervatis, laminis brevioribus nec filiformibus, inflorescentia solum bipinnata, thyrsoides, bracteis primariis laminis erectis nec reflexis, pungentibus, brevioribus, rubris nec longe angustis viridibusque, vaginis bractearum primariarum angustioribus, apicis multo longioribus stipite distincto magis foliis sterilibus, bracteis florigeris sepala non superantibus, deltoideis nec ellipticis et internodiis spicarum rhachidis brevioribus differt; a *T. rodriqueziana* Mez foliis viridibus squamis inconspicue adpressis nec canescentibus, spicis longioribus angustioribusque, lanceolatis, longe stipitatis basi foliis multis sterilibus, bracteis primariis infernis longe laminatis spicas superantibus et bracteis florigeris non cucullatis internodiis spicarum duplo solum longioribus recedit.

Figure 3
Tillandsia paraisonensis R. Ehlers. A new species shown on a temporary perch near the type locality is notable for its very large (up to 32 inches) size and many-branched flower cluster.

Figure 4.
A branch of the inflorescence of *T. paraisonensis* with flower details.

Photos by author

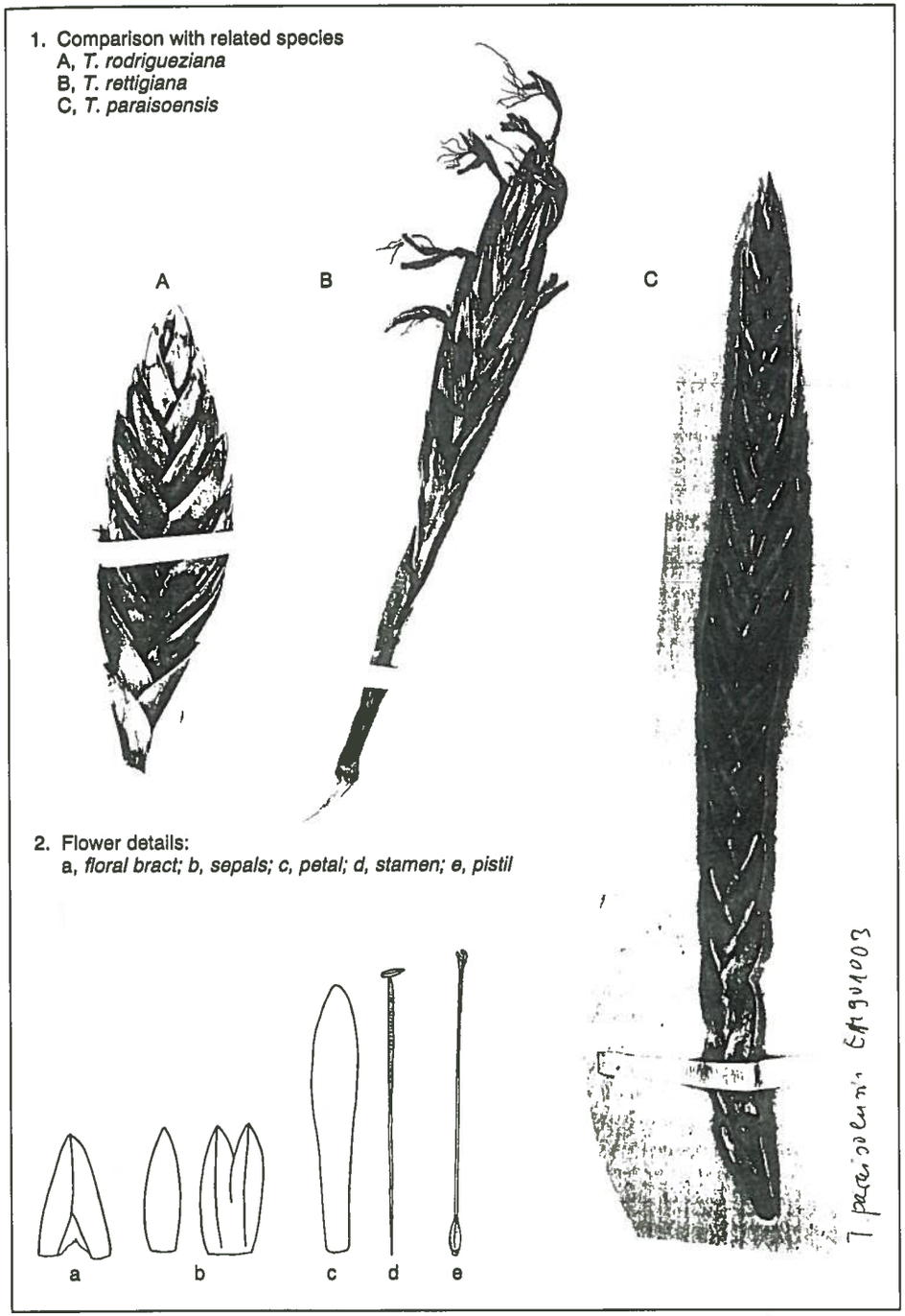

Figure 5
Studies of *T. paraisonensis*.

Type: Mexico. Estdo Guerrero; in via Puerto Gallo–El Paraiso, epiphytica in arboribus altis, 1500 m.s.m., 10. 3. 1990, leg. *R. & K. Ehlers EM 901003* (holotypus WU).

Plant stemless, flowering to 80 cm high, growing in big clusters. *Leaves* many in a dense rosette, very rigid, dark green, to 40 cm long. *Sheaths* elliptic, distinct, to 10 cm long, 4 cm wide, brown on both sides, very finely adpressed lepidote. *Blades* to 30 cm long, 2.5 cm wide above the sheath, triangular attenuate, slightly spreading, involute-subulate, keeled, green or tinged with red, the abaxial side prominently nerved, very finely adpressed lepidote on both sides. *Scape* erect, stout, equaling the leaves. *Scape bracts* densely imbricate, foliaceous, the elliptic sheaths to 3 cm long, the triangular, narrowly attenuate, pungent blades to 17 cm long, erect, nearly appressed to the scape, red, finely appressed lepidote. *Inflorescence* bipinnate, thyrsiform, to 30 cm long, to 13 cm in diameter, 8–15 branches, internodes of the lower spikes 3 cm, the apical ones 5 mm. The sheaths of the *primary bracts* elliptic 3–2 cm long, the blades of the lower ones narrow attenuate, red, erect, exceeding the branches, the upper ones reduced and merely acute. *Spikes* 5–18 cm long, 1–1.5 cm wide, narrowly lanceolate, complanate, densely 5–11 flowered, to 4 cm stipitate with many (to 11) imbricate sterile bracts at the base. The sterile base of the branches erect, the lower spikes spreading 30–40 degrees, the apical ones suberect. *Flowers* sessile. *Floral bracts* suberect, densely imbricate, concealing the rachis, internodes 8–12 mm, to 2.1 cm long, (2–3 times as long as the internodes), 1.1 cm wide, deltoid, acute, equaling the sepals or 1 mm shorter, carinate, bicarinate towards the base, coriaceous, distinctly nerved adaxially, minutely fine-punctulate lepidote, abaxially green, lustrous, glabrous. *Sepals* to 2.3 cm long, 5 mm wide, narrowly elliptic, acute, coriaceous with thin margins, glabrous, adaxially nerved, the posterior ones alate carinate and connate for 9 mm. *Petals* ligulate, forming an erect tube with slightly revolute apices, corolla throat closed around the filaments, to 4.3 cm long, 8 mm wide narrowing to 4 mm at base, pale violet (#46 amethyst),[1] with a white base. *Stamens* exceeding the corolla up to 1 cm, filaments to 4.5 cm long, in 2 sets of unequal length, flat, broadened near apex, concolorous with the petals, anthers 3.5 mm long, 1 mm wide, elliptic, versatile, dorsifixed ⅓ from base, light brown, pollen lime yellow. *Style* 4.3 cm long, white, apical 12 mm violet, *stigma* 1.5 x 1.5 mm, lobes erect, papillose (Type II of Brown & Gilmartin, 1984). *Ovary* 6 mm long, 2.5 mm in diameter, elliptic, green.

Type: Mexico. Guerrero, along the road from Puerto Gallo to El Paraiso, epiphytic on high trees, 1500 m, 10. 3. 1990, *Klaus and Renate Ehlers EM 901003* (holotype WU).

Distribution: Known only from the type collection.

[1] From color chart in A.B. Graf's Exotica, Pictorial Cyclopedia of Exotic plants as reproduced in P.T. Isley's Tillandsia (Gardena, CA: Botanical Press, 1987), p. [241].

According to Gardner (1986) this new species belongs to Group I, subgroup I. According to the Smith & Downs monograph (1977) the plant keys out to *Tillandsia rettigiana* Mez or *T. rodriqueziana* Mez. These may be distinguished by following characters:

From *T. rettigiana* leaves more coriaceous, abaxially distinctly nerved, blades shorter and not filiform. Inflorescence only bipinnate, thyrsoid, blades of the scape bracts erect, not reflexed, pungent; primary bracts shorter with narrower sheaths and shorter, red, not long, narrow, green blades, spikes much longer with more sterile bracts at the stipe, floral bracts not longer than the sepals, deltoid not elliptic, internodes smaller. From *T. rodriqueziana* Mez leaves green with inconspicuous adpressed, not canescent scales, spikes much longer but narrower, lanceolate, long-stipitate with many sterile bracts at the base, lower primary bracts long-laminate, longer than the branches, floral bracts not cucullate, about twice the internodes instead of 4 to 5 times.

ACKNOWLEDGEMENT:

My thanks to Dr. Walter Till, University of Vienna, for his cooperation and for the Latin diagnosis.

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Stuttgart, Federal Republic of Germany

Deadlines: Calendar and advertising material must be sent to the editor at least 60 days before the mailing date, for example: July–August copy must be in by 1 May 1992.

Correction

Credit for the photograph of *Aechmea sphaerocephala* shown in figure 10, page 258 of the November–December 1991 *Journal* should have been given to Dr. George Zizka.

Misnamed Bromeliads, No. 11: *Neoregelia sapiatibensis* Pereira & Penna

Harry E. Luther

During the 1980 World Bromeliad Conference in Orlando, Florida, Luiz Correia de Araujo introduced into North American horticulture an interesting, very stoloniferous *Neoregelia* species. Recognizing it as an undescribed species, the present author applied the provisional epithet "scandens" with full intention of

Drawing: Lisa C. Megahee

Figure 6.

Neoregelia sapiatibensis habit, a portion of the unpublished plate.

validating the name "eventually." The plants multiplied like rabbits, attained wide distribution in cultivation as *Neoregelia* "scandens" and "eventually" dragged on for a decade. Unknown to me, the Brazilian botanists Pereira and Penna described this species as new in Boletim no. 62 (February 1985) of the Museu Botanico Municipal, Curitiba, and named it *Neoregelia sapiatibensis.* I have only recently obtained a copy of this publication and now urge all readers to change the tags on their *Neoregelia* "scandens" to *N. sapiatibensis,* an alteration possibly requiring a label upgrade to 6-inch size.

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

This notice was published also in the January–February issue of Bromeletter, *the journal of the Bromeliad Society of Australia.*

WANTED: MERITORIOUS PROJECTS FOR SUPPORT BY THE VICTORIA PADILLA MEMORIAL RESEARCH FUND

Most readers have probably seen previous notices advertising the availability of modest research grants to pursue worthwhile inquiries on bromeliads. We hope that you haven't failed to apply for the wrong reasons. Potential investigators certainly don't need university degrees! Much useful information has been gathered by serious amateurs pursuing good questions carefully. There is no shortage of challenging problems on culture and propagation; in fact the possibilities are enormous.

There are, of course, some rules and expectations including a report of findings suitable for publication in this *Journal.* The granting committee also wants to see a clear statement of the problem and the intended methods of investigation. What questions do you plan to ask and how do you intend to test the possibilities? How will you spend the funds? What if any materials will be purchased? Is travel involved? What is the planned timetable?

If you have an idea, let the committee know. We'll do our best to provide useful comments.

David H. Benzing
Chairman, Research Grant Committee

Notes on Two New Cultivars

John Arden

John Arden is a most orderly man. He is today systematically combining the gene structures of Tillandsioideae on a hilltop in Vista, California. He recently registered two fine, new hybrids: Tillandsia *'Wildfire'* (T. multicaulis x T. deppeana) *and* V. *'Inferno'* (V. ensiformis x V. regina).—Don Beadle, Registrar

Notes on *Tillandsia* 'Wildfire'.

The history of creating this hybrid [front cover] goes back some 13 years. My first try at hybridizing with *T. multicaulis* as the seed parent was in late 1978 and early 1979 when I pollinated with 11 different *Tillandsia* and two *Vriesea* species. To my disappointment the plant did not produce any seeds at all. The following year I tried again, using a great number of different tillandsias and vrieseas as pollen parents to determine if it was possible to get some seeds. One or possibly two seed capsules resulted.

I planted the seeds in February 1981. Several years later, when one seedling became bigger than the mother plant, I realized that I had created a hybrid. After eight years of growing, the same plant started to show signs of forming an inflorescence in January. The inflorescence became 32 inches high and the rosette grew to two feet in diameter. It was in full bloom in the middle of May 1989. I have named that hybrid *Tillandsia* 'Wildfire'. Perhaps if other members of that seed batch develop their own distinctive characters I shall chose cultivars from among them.

After creating this beautiful hybrid, I tried to do more hybridizing using *T. multicaulis* as the seed parent. In 1990, I pollinated 63 places on three plants, all with negative results. From the three plants used, only one produced one seed pod—as the result of self-pollination.

I shall probably give up using *Tillandsia multicaulis* as a seed parent, but I am making extensive use of that species as a pollen parent with other tillandsias and vrieseas.

My notes on *Vriesea* 'Inferno' [back cover] are much briefer: I pollinated the seed parent, *V. ensiformis,* in August of 1983 and one plant of the seed batch bloomed in July 1990. The plant size, leaf color, shape, and branching of the inflorescence resemble *V. regina.* Individual branches of the inflorescence are sword-shaped, the floral bracts are red, the petals yellow. The plant including the inflorescence is 5 feet tall, the rosette 2 ½ feet in diameter.

Vista, CA

Bromeliad Internship Applications Are Invited

Harry E. Luther

The Bromeliad Society, Inc., in cooperation with The Marie Selby Botanical Gardens, invites applications for internships involving intensive study of bromeliads. College-level students who have demonstrated an interest in pursuing a career in horticulture, botany, or a related field are encouraged to apply.

Bromeliad Society and Selby Gardens representatives will screen applications for this work-and-study program consisting of 14 weeks of 40 hours at the garden in Sarasota, Florida. Successful candidates will be awarded a stipend of $11.00 per day and living quarters. Intern sessions begin in February, May, and September.

The work portion will be assigned and supervised by the director of the Bromeliad Identification Center. A study portion should be devoted to a project mutually agreed upon by the intern and the director. A study proposal should accompany each application, and must be approved within the first two weeks of the program.

In order to complete the program satisfactorily, the intern is expected to prepare a project report of general interest and acceptable quality. The reports will be forwarded to the *Journal* editor for possible publication.

The director of the Bromeliad Identification Center continues to welcome suggestions from society members for relevant projects.

Director, M.B. Foster Bromeliad Identification Center
The Marie Selby Botanical Gardens
811 South Palm Avenue, Sarasota, Florida 34236

Publication Schedule

The *Journal* is mailed the last week of January, March, May, July, September, and November. Please send us your address changes as soon as possible. If you don't, we will have to ask you to pay postal fees for replacement copies. Plan ahead. Save money. Get the *Journal* without delay.

Articles and pictures are earnestly solicited. We have been saying that for more than twenty years. Many members have responded, but we are always interested in letters, articles, reports of all kinds: what I did and what I learned, casual observations, trip reports, any kind of hobbyist information, conservation work, and scientific reports. We are a diverse community and we are serious about our individual interests, but we need to keep each other informed. Notes to contributors concerning style and photographs were published in the January–February 1992 issue—Ed.

BROMELIAD SAFARI

10TH WORLD CONFERENCE
JUNE 11 - 14, 1992
TAMPA, FLORIDA

(813) 961 1475
TOM WOLFE
General Chairman

Dear Fellow BSI Members:

Our World Conference, "Safari Expo" will begin with a poolside buffet including a steel drum band, fire eaters and limbo dancing. Later the show and sales Area will open to all registrants for your "safaring pleasure."

Many interesting displays are being planned and many fine collectables are promised for the rare plant auction.

A free continental breakfast of coffee, juice, muffins, and pastries will be available Friday and Saturday mornings at approximately 10:00 a.m. outside the seminar rooms. The continental breakfast will also be served to those who are on the home bus tours.

Our Saturday night banquet will be held in a luxury air-conditioned "Safari" tent. Roberto Burle Marx will be our banquet speaker and Dr. Lyman Smith and Racine Foster will be especially honored. There will also be a 50s–60s band for your dining and dancing pleasure.

For those of you who may not know, Roberto Burle Marx is the world's foremost landscape architect, having designed landscapes for public properties and private individuals all over the world. He specialized in bromeliads and has a formidable collection at his home in Rio de Janeiro, Brazil.

Rooms at Saddlebrook are going fast. Another convention has been booked for the same time. If you plan to take advantage of staying at this wonderful resort at the discount rates, you need to make your reservations as soon as possible.

It's all shaping up to be a great "Safari Adventure" so we hope to see you somewhere on the trail at Saddlebrook.

Until then, happy trails to you all,

Tom Wolfe, Chairman

Bromeliad Culture, No. 5: *Canistrum*

T.U. Lineham

The genus *Canistrum* has ten species and two recorded hybrids. In addition, this genus has been hybridized with *Aechmea* to form x*Canmea* and with *Nidularium* to form x*Canularium.* If you have never heard of the product of *Canistrum lindenii* var. *roseum* crossed with *Nidularium billbergioides* (unnamed), you are probably not alone, yet it was reported in 1899. All except two of the registered products of *Canmea* were the work of Ed. Hummel. The exceptions are the hybrids Carmin by Luis Ariza Julia and Smokey by Nat DeLeon, and those records are incomplete.

Victoria Padilla says that the name *Canistrum* is from the Greek *kanos* for basket, referring to the inflorescence, which resembles a basket of flowers. The type is *C. aurantiacum,* described by Edouard Morren in 1873.

The species of *Canistrum* are usually somewhat larger than *Neoregelia concentrica* and *Aechmea fasciata.* The most distinctive character in some species is the compact flower head surrounded by colorful bracts that rises above the flowers, giving the effect of a tulip or a basket of flowers, as for example *C. aurantiacum, C. cyathiforme,* and *C. fosterianum.* In other species, such as the varieties *lindenii* and *roseum* and their several forms, the inflorescence may be carried on a very short scape so that it appears to be sunk in the rosette. The leaves are green with darker green mottling and in rosette form. They are attractive throughout their life cycle and offset freely. In at least one intergeneric, the unregistered x*Canmea* 'Galaxy',[1] there seems to be no set season for blooms.

In terms of size, *Canistrum lindenii* can become tremendous. That species includes several varieties and forms including (in horticulture) one with white-marginate leaves and another that is variegated. These are desirable plants for shady places if you have lots of space. Species of moderate size are *C. aurantiacum* with unusually attractive, bright red floral bracts and golden sepals; *C. cyathiform* with a semierect bloom spike with rose-colored or purple bracts; *C. fosterianum,* which is possibly the most popular because of its tubular growth habit, and its lilylike red or yellow bloom; *C. seidelianum,* not to be confused with *C. fosterianum.*[2] One other worthy of the search is *C. triangulare.* Harry Luther noted [3] that this plant is universally grown as *C. fosterianum* "var. pardinum," a name of no official standing.

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[1] *(Canistrum fosterianum* x *Aechmea chantinii),* H.R. Bullis, Jr.

[2] J.Brom.Soc. 41:23, fig. 14, misidentified as *C. fosterianum.*

[3] J.Brom.Soc. 38:209.

C.M. Johnson

Figure 7
Canistrum lindenii var. *lindenii.*

C.M. Johnson

Figure 8
Canistrum triangulare. This plant has been called *C. fosterianum* "var. pardinum," a name of no official standing (*see* vol. 38:209)

Photos by the Author

Figure 9
Canistrum fosterianum. The attractive, lilylike inflorescence is distinct in this photo.

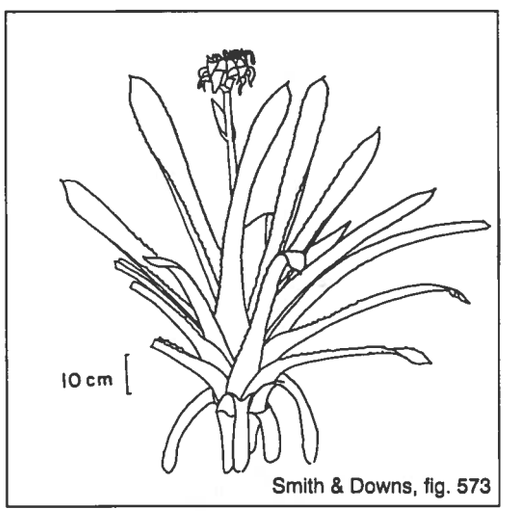
Figure 10
x*Canmea* 'Galaxy' *(C. fosterianum* x *C. chantinii),* a cultivar produced by H. R. Bullis, Jr., emphasizes the best characters of the parents.

This genus is moderately sensitive to cold. Just don't leave the plants outdoors when the temperature starts dropping into the 40s Fahrenheit or much lower than 10 degrees Celsius. They like the sandy loam of this area, that is plain Florida sand reinforced with years of rotted oak leaves. An open potting mix should be about right. Indoor plants need to be watered frequently to keep the potting medium somewhat moist and the cups should have water at all times. The bigger they get the thirstier they become. To fertilize or not is probably a personal preference. These are sometimes pretty big plants and you may not want to encourage size. On the other hand, you should observe the general health and development of your specimens.

Canistrum species like bright, filtered light but the light green leaves may burn in full sun. Some growers keep them in lower light even than nidulariums. This is another matter to be determined by experience. In Florida, the July sun will cook anything, so shade after midmorning is essential. You can tell from your other relatively soft-leafed plants how much light to allow (if you have a choice). You already know that low light and too much fertilizer will produce marvelously long, green leaves.

Several of our advertisers list *Canistrum.* An inducement, if you don't already have one or more of the species, is that they are infrequently exhibited and judges like to see out-of-the-ordinary plants.

This report was compiled by the editor with Carol Johnson's help from references that you already have or should get: the Luther *Alphabetical List of Bromeliad Binomials;* the Beadle preliminary *Checklist of Bromeliad Hybrids and Cultivars; Growing Bromeliads,* by the Bromeliad Society of Australia; *Bromeliads,* by Victoria Padilla.



Canistrum cyathiforme

Newsletter Editing; A Devotional Exercise

Not long ago, and during the course of three days of rain and with more promised, this editor reread a stack of newsletters contributed at no little expense by at least nineteen affiliated societies. Since the shelves, bookcase, and filing cabinets of this little office are loaded with reference books, the BSI Library, and back issues of the *Bulletin/Journal,* there is no alternative but to clip and save other material on computer disk. That's what I was trying to do but my thinking got sidetracked to the subject of newsletter editing.

The amount of enthusiasm and energy shown by the few people who write the newsletters on a monthly schedule for so many local readers is really wonderful. It is even more remarkable that most of them have done the work for years. At least one newsletter has been published for nearly 30 years. There may be others with equal or greater longevity that these files don't know about.

The Bromeliad Society/Houston *Newsletter* of December 1991 carried Editor Bob Heer's notice of retirement after 10 years. In a few modest words he characterized his work as a labor of love. Perhaps all of our newsletters should include that phrase as a subtitle.

Do you know who your newsletter editor is? Have you thanked her or him recently? Have you contributed news items or articles about your experiences with bromeliads? Has your society ever presented some kind of formal recognition of your editor's work?

Thank you, editors, for carrying out the mission of the society: to promote and maintain public and scientific interest in bromeliads. Thank you also for keeping this office on your mailing list.—TUL

Recent Gifts to the *Journal* Color Fund: We acknowledge with many thanks the recent gifts to the color fund made by Catherine Buckley, Ulrich and Ursula Baensch, and John Arden. Their support is greatly appreciated. Since printing and mailing costs for 1992 have been increased over those of 1991, it is inevitable that color separation costs will be greater. We invite your support.—TUL

Icones Bromeliacearum VI: Vriesea duvaliana

Robert W. Read

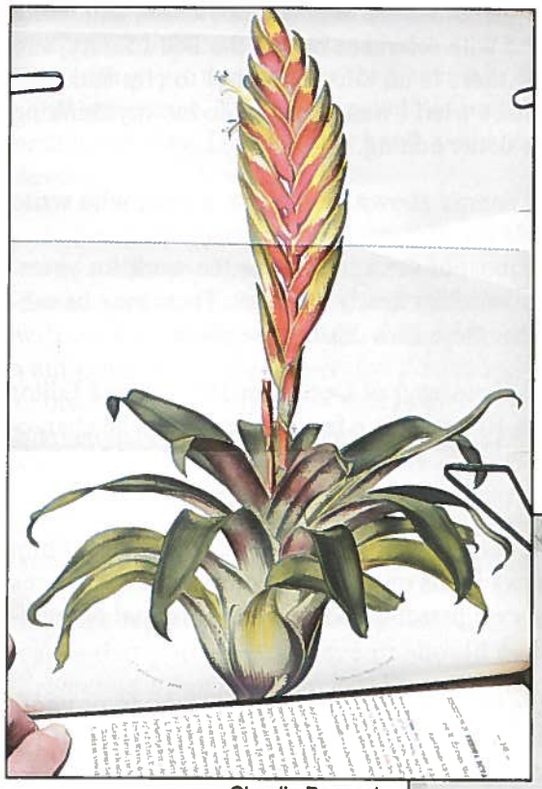


Figure 11
Vriesea duvaliana E. Morren, painted by J. Cambresier, one of a number of artists commissioned by Morren to illustrate his living collection of bromeliads.

Claudia Bonsack

Figure 12
A herbarium specimen of the *Vriesea duvaliana* preserved at the U.S. National Herbarium, Smithsonian Institution, collected by Belém and Penheiro (#2372) in Bahia, Brazil in 1966 and identified by L.B.Smith.

Author

Vriesea duvaliana E. Morren was introduced into cultivation about 1875 and named after M. Léon Duval of Versailles by the noted bromeliad botanist Edouard Morren. Léon Duval was a contemporary of both André and Morren. He was so fascinated by all exotic plants that his enthusiasm quite naturally included bromeliads. He had a special insight and appreciation for the pollination and seed-growing peculiarities of bromeliads and, while untrained as a botanist, possessed an innate understanding of their systematic relationships.

According to the Smith and Downs monograph,[1] *Vriesea duvaliana* flowers at a height of 40–50 cm (15 ¾"–19 11/16"), as shown in the approximately life-size illustration by J. Cambresier, published in Belgique Horticole in 1884.[2] It is curious, however, that Duval should state in his book on bromeliads:[3] "among the smallest of the species, certainly *Vriesea Duvali* [sic] André should be mentioned." And, in his "Note sur un *Vriesea* hybride,"[4] where one of his earliest hybrids was discussed, Duval wrote: "*V. duvaliana* [to use the modern epithet], the mother, is a plant of very small stature and produces its inflorescence when barely a few centimeters tall."

Baker described the species as having leaves "half a foot long," the "peduncle as long as the leaves," with the "spike...5–6 in. long and "2 in. broad."[5] Again, not as tiny as Duval would lead us to believe. Apparently, outside its natural range the species varies considerably in size, perhaps blooming smaller at the higher latitude and peculiar conditions of Versailles. A specimen collected by Belém & Penheiro (#2372) (fig. 12) from Bahia, Brazil, and identified by L.B. Smith as *V. duvaliana* appears to be at least 35 cm (13¾") high when in bloom, matching closely the original plate and description.

NOTES:

1. L.B. Smith & R.J. Downs. Tillandsioideae. Flora Neotropica, no. 14, pt. 2:1220–1221. 1977.
2. Belgique Horticole, E. Morren, ed. 34:105, plates 7–8; 1884.
3. L. Duval, Les Bromeliacées (Paris: Librairie Agricole, 1896), 110. The English translation, R.W. Read and M. Rothenberg, eds. (Pacifica, Calif.: Big Bridge Press, 1990) is available from either of the editors.
4. _____. Journal de la Société Nationale d'Horticulture de France, ser. 3, 9:799, 1887. (This, the earliest reference to Duval's *Vriesea* hybrids is appended with additional lists of his hybrids to the new edition of his *Les Bromeliacées* cited above).
5. J.G. Baker, *Handbook of the Bromeliaceae,* (London: G. Bell & Sons, 1889; Lehre: J. Cramer, 1972), 212.

Library Accessions

During 1991 we added the following titles to the BSI library:

April. *The Bromeliads,* by Léon Duval; the English-language edition by Michael Rothenberg and Robert W. Read. Big Bridge Press, 1990. This book is currently advertised in the *Journal* and a review by Gilbert S. Daniels appeared in the January–February 1992 issue. The library owns a xerox copy of the original edition of 1896 acquired from Victoria Padilla's collection.

June. We bought four books of botanical interest from the estate sale of Racine Foster's miscellaneous property, three of them by David Fairchild. The author was famous for his work with plant exploration and introduction as a member of the United States Dept. of Agriculture. These books are three of the four that he wrote between the years 1930 and 1947. His wife Marian was one of the two daughters of Alexander Graham Bell (her sister Nancy married Gilbert Grosvenor, for many years editor of the *National Geographic* magazine).[1] Mr. Fairchild called their home in Coconut Grove, Florida, The Kampong. The nearby Fairchild Botanical Garden bears his name. David Fairchild was an honorary trustee of this society.

The books are—

Exploring for plants. Macmillan, 1930. "From notes of the Allison Vincent Armour Expeditions for the United States Dept. of Agriculture, 1925, 1926, and 1927."

Garden islands of the Great East; collecting seeds from the Philippines and Netherlands India in the Junk "Cheng Ho." C. Scribner's Sons, 1943. Inscribed, "To Mulford and Racine Foster of Orlando, the great growers of bromeliads, affectionately yours, David Fairchild."

The World grows round my door; the story of Kampong, a home on the edge of the tropics. C. Scribner's Sons, 1947. Inscribed, "To our esteemed friends the great plant-lovers Mulford and Racine Foster of Orlando, affectionately, David Fairchild." With tear sheets from *The Atlantic Monthly,* May, June, September 1947 (dated in M.B. Foster's hand) containing a series of articles on Florida subjects including "The Kampong," by Thomas Barbour.

The fourth book is *Green laurels; the lives and achievements of the great naturalists,* by Donald Culross Peattie. The Literary Guild, 1936. This book is particularly interesting for its chapters on Linnaeus, Lamarck, and Bartram.

[1] Dr. and Mrs. R.W. Read contributed this interesting note about the Bell sisters.

August. *Proceedings of Bromeliads V Conference, "Having Fun With Bromeliads," Melbourne, 1989.* Maurice Kellett, Proceedings Chairman.

Proceedings of Bromeliads VI Conference, Sydney, 1991. Hosted by: Bromeliad Society of Australia, Inc., Central Coast (NSW) Bromeliad Society, and the Hunter District Bromeliad Society.

The several bromeliad societies in Australia have held annual conferences and published the material presented as well as related information since at least 1983. In contrast, the bromeliad societies in the United States, with two exceptions, have not bothered to record the proceedings of "world" bromeliad conferences. The exceptions are The Bromeliad Society 25th Birthday Party (7 June 1975) tape recording of four speeches and the Corpus Christi world conference proceedings of 1982 published in book form. What a shame to have lost so much information.

November. *Flowering plants of Jamaica,* by D.C. Adams; with contributions by G.R. Proctor, R.W. Read, and others. University of the West Indies, Mona, Jamaica, 1972. The principal authors are known for their contributions to the study of bromeliads. Dr. Read, in addition, is an honorary trustee of the society and a member of the Editorial Advisory Board. Please see also *The Bromeliads,* by Léon Duval, listed above.—TUL

December. Our friend and contributor, Elton Leme, gave us a large number of issues of *Bradea,* the bulletin of the Herbarium Bradeanum, Rio de Janeiro, providing taxonomic studies of Brazilian bromeliads. We are grateful for this authoritative material published since 1972 by distinguished Brazilian taxonomists.

Sr. Leme also sent us a scarce publication, a copy of *Les Bromeliacées brésiliennes découvertes en 1879,* by Dr. Henri Wawra, published by Voverie, Liège, 1881. This translation by H. Fonsny includes material separately published earlier in two Austrian periodicals: the autobiography of Henri Wawra and his account of the "Voyage de leurs Altesses Royales, les Princes Auguste & Ferdinand de Saxe-Cobourg au Brésil, en 1879." According to the preface written by Edouard Morren, Dr. Wawra in six weeks collected more than 40 species including 19 that were new.

In addition to these books and periodicals, Prof. Dr. Werner Rauh donates his serially published *Bromelienstudien,* and Selby Gardens provides *Selbyana* on an exchange basis.—Ed.

Tillandsia laui, An Additional Collection

Renate Ehlers

Tillandsia laui, Matuda, was described by Dr. Eizi Matuda in Volume XX, no. 4 of Cactaceas y Succulentas Mexicanas (1975). Dr. Sue Gardner introduced the plant to The Bromeliad Society in *Journal* volume 31, page 122 (1981). She found the plant closely related to *T. imperialis,* as did Matuda, but decided that it was even more similar to *T. ponderosa,* with which it shares the more triangular, somewhat lepidote leaves and larger overall size.

The plant was known originally only from the southern portion of the state of Oaxaca, Mexico. We have found it also near Nuevo Delhi between Filho de Caballo and Paraiso, and near Chilapa in the state of Guerrero.

Tillandsia laui shares its size and the shape of its branches with *T. imperialis,* which appears to be its closest relative according to our observations. Other similarities are the size of the floral bracts and the sepals, and the primary bracts that are longer than the spikes.

Author

Figure 13
Tillandsia laui Matuda, photographed in the type-locality near Copala, Oaxaca.

Stuttgart, Federal Republic of Germany

Regional Reflections

An Easter Tale

Smith & Downs Fig. 86

I've been waiting several years to write this letter. I'm not ready yet, but I'm going to write it anyway. There will be a sequel when the end is known.

I have a *Deuterocohnia longipetala.* It's potted and I have generally ignored it. It gets occasional water but in a fitful fashion. Perhaps it's my kind of plant.

In any case, it apparently likes me. Or, I suppose if I were a pessimist, I could conclude that it is desperate for survival because it put out a long, fine, wand, about 60 cm long and 3 mm at the base, tapering it just over 1 mm at the inflorescence. It erupted into a loose set of about twelve branchlets over the last 10 centimeters. These branchlets produced some little yellow tubes. Not very impressive unless you can muster up some kind of paternal pride like, "They may be small, yellow, and ugly but they're all mine." And I've never had a *Deuterochnia* bloom before.

My desultory attitude probably contributed to my leaving the bloom stalk in although I have a gnawing memory that I read somewhere not to cut it. This first bloom was in early spring 1985.

It's Easter today. Perhaps that's part of why I'm telling this story. One might even call this a Resurrection plant. It bloomed during February and March in 1986 and every year since. I thought about writing this after it no longer bloomed but the way it's going, it may outlast me.

And so, I'm writing to tell you of this plant that puts out its rather unlovely flowers year after year from the same dead stalk. Remember: don't cut it. How can I thank it?

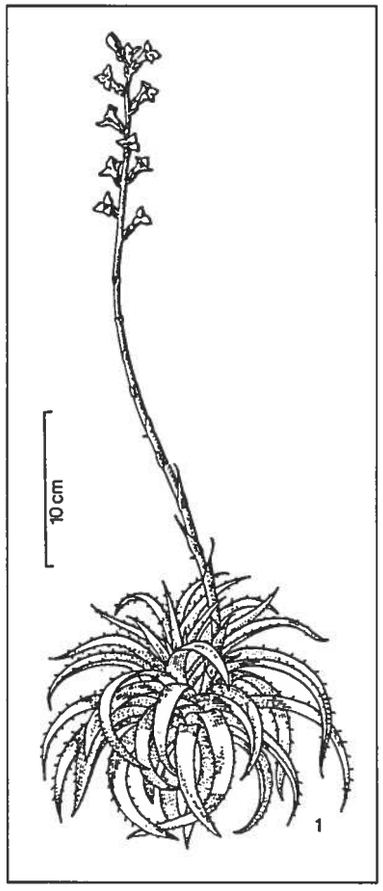
Charles Dills
San Luis Obispo, California

On *Dyckia remotiflora*

In March 1983, I sowed seed of *Dyckia remotiflora,* a native of Brazil, Argentina, and Uruguay and "very pretty according to Werner Rauh's book, *Bromeliads for Home, Garden, and Greenhouse.*[1]

My plant is about two inches high, 2½ inches in diameter and it has five symmetrical whorls of leathery, dark green leaves. The Rauh book says that the mature plant is to "30 cm long." How many years will it take to reach that size, if after eight years the leaves are less than two inches long? And when will it flower? It can withstand any kind of mistreatment or neglect. I hope that someone will give me encouragement.

Martin Tall
Woodhaven, New York



[1] Blandford Press, Poole, Dorset, 1979. Drawing of flowering plant from same source, page 372

The Dishdrainer

Being brought up in the depression when everything had to have an afterlife and nothing could be thrown away because it was too useful, I still possess a lot of that philosophy, or is it the plain adventurous inventor spirit?

What to do with a worn out dishdrainer? Well, line it with hessian, or shade cloth will do, but hessian is the best. Next put in a lining or layer of peat from the elkhorn or coir (if you don't have any coconut fibre, then I suppose you could use coarse *Osmunda* fiber)...

Next, add a little potting mix. I know you'll tell me it won't hold much as the drainer is very shallow and almost full already, but that does not matter. All you need is enough mix to hold the roots of the plant in place. Attach four lengths of wire, one to each corner of the drainer so as to form a hanging dr... I mean basket.

Into this masterpiece of invention you can plant any stoloniferous neoregelia, for example *Neoregelia ampullacea, N. pauciflora, N. punctatissima.* I think the small-leaved specimens give the best results in these conditions. There is only enough mix to hold the plants, but in no time the roots attach to the peat or fibre and the plant enjoys the situation. In a few years the plant will multiply to such an extent that it will cover the whole of the basket and form itself virtually into a big ball. Of course you could do this with any shallow hanging basket but think of all the fun you've missed along the way.—Des Andersen

Reprinted from Bromeliaceae, *the Bromeliad Society of Queensland, Nov.–Dec. 1990.*

Growing Tillandsias in Turface

This article owes its inspiration to the fact that in June 1977 our chapter placed a plant order with Kurt Meyer in Guatemala. I purchased a *Tillandsia xerographica x T. brachycaulos,* described as a natural hybrid, for $3.50. It was potted in my usual mix in a 5" clay pot and placed on the bottom shelf of my light cart. It flowered about one year later and produced 12 pups over 2 years, the largest number I've had from any bromeliads.

Then my troubles started. I mounted a few pups on cork and the rest I potted. I was not soaking my tillandsias then and the pups dessicated and died, except for two sickly survivors growing in 4" clay pots in my usual bromel mix which hung on for 7 or 8 years, losing leaves and barely replacing them. In 1988 I began experimenting with Turface as a potting medium. Turface is a clay pebble that I suspect has some important mineral content.

I first used the smallest size Turface chips and the *Tillandsia xerographica x T. brachycaulos* began to stabilize though growing only minimally. In early 1991 I repotted it in ¼" Turface and the plant took off, doubling in leaf size in 6 months. It is now healthy, growing on the top of the cart in good sun and is sprayed daily and watered heavily with fertilizer once or twice a week. A smaller pup potted in a 2½" pot of 100% small size Turface has done poorly. This leads me to conclude that the small size Turface chips do not provide sufficient aeration and that the ¼" size is best for potting Tillandsias.

This conclusion was borne out by a *Tillandsia garderni* which did poorly in small Turface chips, but then produced a vigorous pup after being repotted in ¼" pebbles. I had the same experience with a *Tillandsia seleriana x T. caput medusae* which did poorly in my regular potting mix and then produced a big offset when repotted in ¼" Turface pebbles.

Edward L. Sard

[continued on page 78]

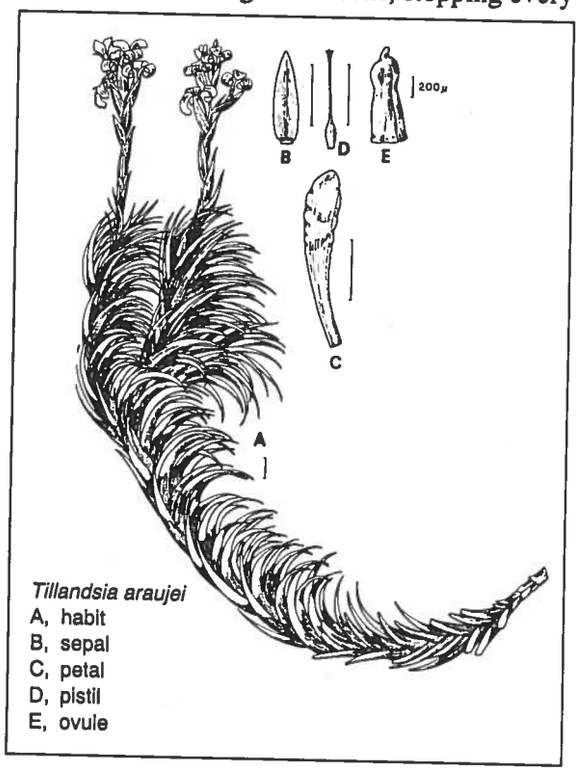
Reprinted from Bromeliana, *New York Bromeliad Society, Nov. 1991*

Turface is available from OFE International, Inc., P.O. Box 164402, Miami, FL 33116, Phone: 305-253-7080; FAX: 305-251-8245. Send $2.00 for catalog and price list. They list all of the supplies that you can possibly think of.—Ed.

Tillandsia araujei

Back issues of the Bulletin/Journal *can give readers hours of instruction on unchanging matters that may not show up in the cumulative or annual indexes no matter how carefully prepared. Here, for example, is Mulford Foster writing about* Tillandsia araujei:

Tillandsia araujei decorates the rocky boulders that slope right down to the water's edge on the ocean front not far from the city of Rio de Janeiro. It bathes, daily, on sun and salt air and lazily crawls over the granite rocks, stopping every spring to express its gratitude in short spikes of delicately colored pink and white flowers. Sending out a few holdfast roots every now and then this tillandsia seems to grow on and on, endlessly. Unlike a centipede that must use its legs over and over again, this plant can develop new ones continuously and leave the old and useless ones behind. In cultivation it still thrives with the main plant securely fastened to cypress bark.



Tillandsia araujei
A, habit
B, sepal
C, petal
D, pistil
E, ovule

Adapted from "Editor's Notes," The Bromeliad Society Bulletin, *vol. 6, page 2. The drawing is from Smith & Downs, p. 827, fig. 260. We still have limited quantities of the* Bulletin *for sale. Please see the notice on page 85.*

Letters to the Editor

Editor:

In a recent article (Sept.–Oct. 1991, pp. 205–207) you state, "The first crop of bromeliad judges received its certificates at the World Bromeliad Conference in Corpus Christi in 1982." I was among the first 23 bromeliad judges who were presented their certificates on September 30, 1978...

Jeanne R. Garman
New Orleans, LA

The editor did it. Carol wrote "Florida" and I was thinking that this international society should work harder to get members from all over the world accredited as judges so the statement came out wrong. I apologize to the first 23 accredited judges for the error.—TUL

Editor:

Mrs. Ella Kelley, our first and only Honorary Member of the Seminole Bromeliad Society, will be celebrating her 104th birthday on March 15, 1992. She is a true bromeliad enthusiast who loves reading journals and newsletters from our various bromeliad societies. She loves letters, cards, people, and life in general. Visiting Ella Kelley is truly an uplifting experience.

Chuck Tait
Deltona, FL

Happy Birthday, Ella. Thanks for reminding us, Chuck.—Ed.

Editor:

I read with horror Mr. Skotak's recounting entitled, "Capturing of *Aechmea castelnavii"* in the September/October, 1991 issue of the *Journal.* First of all, the fishing line he left hanging in that host tree so thick "it looked like rhipsalis cactus hanging down," will remain there for at least 10 years [to] maintain the potential mal-threat of ensnaring wildlife and girdling the tree...He proceeded to nail a ladder to [the bark] creating a permanent problem and an eyesore...I am hopeful that the majority of collectors exercise respect and a heightened concern for the environment and that the practices outlined here are not standard.

Sherry R. Galceran
Capistrano Beach, CA

While it is impossible not to agree with the indignation expressed by Mrs. Galceran and others and to regret Mr. Skotak's tactics, the whole thing must be considered an aberration because Mr. Skotak is known for his concern for the environment and his conservation of native plants.—TUL

Editor:

Thank you for reprinting Carol Johnson's piece on bromeliad shows (Sept.–Oct. 1991, pp. 205–207). I hope that it will stimulate discussion on the purpose and mechanics of shows. I believe that the primary purpose of a show is to introduce bromeliads to the public and to stimulate interest in this ever-fascinating group of plants. Furnishing a platform for demonstrating growing ability and showing off is a secondary purpose. Following the handbook for judging exactly does produce ribbons and makes the show dull and monotonous. Encouraging innovation and variation in techniques of culture and presentation should be an important secondary purpose. Judges should not be so influenced by the handbook that they believe [it to contain] absolute dictates of perfection...they should have a lot of experience in cultivation and observation and they should have a wide latitude of judgment based on their experience...I would like to see more stimulation of innovation in culture of plants.

Frank E. Sherman
Miami, FL

Editor:

The Sept.–Oct. 1991 issue of the *Journal* page 216 was an event in that two major advances were announced. I refer to Harry Luther's *Alphabetical List* and Don Beadle's *Preliminary Cultivar Listing* and would like to comment from an Australian point of view.

I quote: "Mr. Luther says his list is a spelling guide." We refute this and ask that if it is so, why does he remove names from his list? This causes us to rush out and find out why Harry should do such a thing. We even have a computer file to keep tabs on him! Yes, the "Bromeliad Binomials" is much, much more than a spelling bee and is the best thing since sliced bread. I quote again: "Mr. Beadle denies that his list is intended to influence show classification specialists." We refute this also because names are important, which is emphasised by Carol Johnson in an article in the same issue. What the list does show is the many hybrids that have originated in the United States where both parents are unknown. This is a sad state of affairs because it indicates that the "hybridist" didn't even care or know which plants provided the seed, let alone father. If everyone did this then Beadle's work would be just a list, not an historical archive. Now is the time to start encouraging the registering of hybrids or at least writing down parentage...Prizes on the show bench are just one way to provide an incentive. Both writers/compilers are to be congratulated on their initiative and accomplishments. Yours "hopefully."

Derek Butcher
Adelaide, S.A.

What more can we say?—Ed.

Questions & Answers

Conducted by Derek Butcher

All readers are invited to send their questions and observations about growing bromeliads as a hobby to the editor. Answers will be sent directly to you and some questions will be published.

Q. How often should you water bromeliads?

A. This question is undoubtedly the most frequently asked wherever bromeliads are sold to the general public. It is also the hardest to answer because there are so many conditions to be considered: outdoors or indoors? shade house or glass house? have you a supply of rainwater?

One answer that may satisfy for a short while is: water regularly so that the potting mix is never completely dry or always saturated. The frequency depends on whether the weather is hot or cold, the humidity high or low.

To give more details: 1) All bromeliads need water to some extent. 2) Most tillandsias and some vrieseas will not easily adapt to pot culture but should be attached to pieces of wood or rock. These plants should be watered frequently with a fine mist spray to imitate fog or cloud dampness. An expert at apartment house bromeliad growing supplements the recurring cloud forest treatment with bathtub soakings. A few words on this point will not suffice. 3) Bromeliads with natural vases, such as most aechmeas and billbergias, need water in both the vases and in the potting mix. The complication is that outdoor plants with funnelform leaf shapes will house mosquito larvae unless flushed regularly (which is a good cultural practice, anyway). 4) Some pitcairnias are deciduous and should be allowed to dry during their dormant period. Others come from boggy places and need a great deal of water at all times.

These answers are not to tease you. We all have to learn by observing and by reading. Charles Wiley wrote what is probably the best outline on the subject in his article, "Water and Good Growing," in the March–April 1976 issue of the *Journal,* pages 59–65.[1] You will learn from it. He said, "when you water, do a lot of it." And I add, "but don't ever use water from a water softener."

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[1] Available from the editor. See page 85 for special sale of back issues.

Q. Why do some bromeliad descriptions mention colors while others do not?

A. Botanists rely heavily on herbarium specimens backed by written descriptions and line drawings. Paintings have been used when they could be afforded. The latter provide the colour not usually available in dried specimens. Even with the relatively cheap color photography of today, there remains the problem of exact color reference since there is no universally accepted color standard. The collector's labels or the herbarium specimen often but not always include color notes. If not, color is rarely discernible from dried specimen.

A further problem is that the manufacturers of colour and color film have not arrived at a standard. We cannot believe implicitly that what we are seeing on the printed page is a true reproduction of the film image, or even that the film has truly recorded the original color. We have all noticed that *Tillandsia cyanea* petals appear lavender in pictures even though we know that they are deep blue and that the epithet "cyanea" was applied carefully. As another example, the *Tillandsia tortilis* petals shown in figure 8 of the September–October 1990 issue of the *Journal* appear to be pale yellow with a hint of green but the description states most specifically, "#80 Nile green."

Still another matter is variability. As soon as one taxonomist says "white petals," a collector will show up with the same plant with violet petals. *Tillandsia xiphioides* var. *tafiensis* is an example and *Tillandsia lorentziana* is another one.

Q. Why is it that several adjectives are sometimes used to describe the same variety of a species?

A. A short answer might be misinterpreted so I shall give you my usual long answer. The *International Code of Botanical Nomenclature* is not new and it is revised frequently to tell us how plant names are to be constructed. It applies to all names. More detail concerning the names of hybrids is contained in the *International Code of Nomenclature of Cultivated Plants.* The problem is that not everybody reads the Codes and not everybody has access to the various records. Both botanists and horticulturists are working to reduce the confusion. The Luther List of binomials is a great help and it will be even better with the addition of synonyms (stop calling that plant *Tillandsia circinnata).* The revised list of grex and cultivar names, we hope, will be enlightening. We can help by recognizing the difference between a real name and one applied for sales purposes. Red leaves do not necessarily justify calling a plant "variety rubra," or green leaves "green form." Those

tags may be useful for sales catalogs but try to keep them out of your collection. They won't help you.

It seems that most recent descriptions now include the plant colors but the dried specimens in the herbaria retain their value since they provide the essential characters without the distraction of the variables. After all, many bromeliads will develop short, intensely red leaves under bright light conditions while duplicates grown in the shade will have long, green leaves.

Last Minute Notes

Be sure to read the notice of the special sale of selected *Journal* volumes on page 85.

The Third National Exposition of Bromeliads sponsored by the Committee of Bromeliologia (Venezuelan Society of Natural Sciences) was scheduled to be held on 14–16 February 1992 at Torre Consolidada, Plaza, La Castellana, Caracas.

Calendar of Shows *[continued from back cover]*

16–17 May	Bromeliad Society of South Florida Annual Show and Sale. Fairchild Tropical Garden, 10901 Old Cutler Road, Coral Gables, FL 33156. Thursday, entries 12 noon to 8 p.m.; Friday, judging, 9 a.m. to 4 p.m.; show hours Saturday and Sunday, 9:30 a.m. to 4:30 p.m. Milt Lesser 305-865-0020.
4 June–7 Sept.	"Epiphytic Jewels; Canopy Dwellers of the Tropical Rain Forest," by Ms. Bonnie Arant Ertelt. Museum of Botany and the Arts, The Marie Selby Botanical Gardens, 811 South Palm Avenue, Sarasota, Florida. This show has been scheduled to coincide with the 1992 World Bromeliad Conference.
11–14 June	1992 World Bromeliad Conference sponsored by The Bromeliad Guild of Tampa Bay, Inc., The Florida Council of Bromeliad Societies, Inc., and The Bromeliad Society, Inc. Saddlebrook, Tampa, Florida. Tom Wolfe, General Chairman, 813-961-1475.

Please send 1992 show and related notices to reach the editor at least 60 days before publication date of the *Journal.* The deadline for July–August 1992 is 1 May 1992.

BROMELIAD SAFARI

10TH WORLD CONFERENCE
JUNE 11 - 14, 1992
TAMPA, FLORIDA

FEATURED SPEAKER:
Harry E. Luther, Director
Mulford B. Foster Bromeliad Identification Center,
Marie Selby Botanical Gardens, Sarasota, Florida

CONFERENCE HIGHLIGHTS:

* JUDGED PLANT SHOW * SEMINARS * POOLSIDE PARTY * PLANT RAFFLES *
* PLANT SALES BY FOREIGN & DOMESTIC GROWERS * CRYPTANTHUS AUCTION *
* HOME GARDEN TOURS * OUTSTANDING EXPERT SPEAKERS * DISPLAYS *
* RARE PLANT AUCTION * HONORARY TRUSTEES * TEA & CRUMPETS * EXHIBITS *
*WORLD WIDE SHOW & TELL * EDUCATION * RECREATION * FUN *
* BANQUET SPEAKER–World Famous Landscape Architect —ROBERTO BURLE MARX

REGISTRATION DETAILS:

Adult Regular ——$120.00—per person (Nov. 2, 1991 to April 1, 1992)
Adult Late ————$145.00——per person (after April 1, 1992)
Children 16 & under -$ 45.00——per person without bus tours (no deadline)
Children 16 & under -$ 60.00——per person to include bus tours
Social —(accompanied by registrant –$10.00 less than registrants's fee

All full registrants are entitled to attend ALL functions, plus early entrance to the show and sales area.
Social registrants must accompany a full registrant and are entitled to reception, show, banquet and rare plant auction.

HOTEL RESERVATIONS:
Saddlebrook Golf & Tennis Resort
5700 Saddlebrook Way,
Wesley Chapel, FL 33543-4499
Phone: 1-800-729-8383 -or-
(813) 973-1111
Fax: 813-973-1312
Conference Rates to April1,1992
Deluxe guest room——$70.00
(Single, or double occup.)
1-Bedroom Suite——$85.00
(Single or double occup.)
2-Bedroom Suite—$120.00
(Single, double, triple or quad.)

Specify Bromeliad Conference rates.

AIRLINES: 40% Discount - Special Fares
DELTA AIRLINES
1-800-241-6760
File No. L0573

AUTOMOBILE RENTAL:
Special Low daily & weekly rates-
AVIS 1-800-331 1600
Rate Code: A/B 786401
Cars available at Saddlebrook location & Tampa Airport.

REGISTRATION FORM:

TENTH WORLD BROMELIAD CONFERENCE

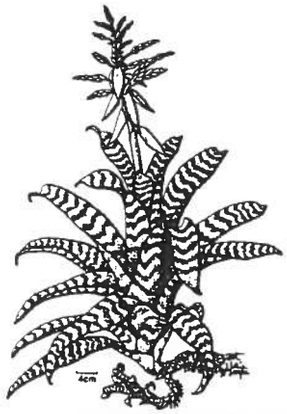
Please make checks payable to: BGTB World Bromeliad Conference
Mail to: Mrs. Gwen Carnegie, Registrar
1734 Magnolia Road
Belleair, FL 34616 Ph.(813)584 7749

Name:_____
Please list any Bromeliad Clubs to which you belong:
Address:_____
City_____ State_____ Zip____

* Direct hotel registrations to Saddlebrook and indicate that you are attending the World Bromeliad Conference to qualify for special rates and a rare plant seedling.

The Bromeliad Page

The Bromeliad Page



What?

A 1993 Bromeliad Calendar just for Bromeliad lovers!!!

When?

June 11-14, 1992

Where?

Bromeliad Safari
10th World Conference
Tampa Florida.

Visit our booth at the Great Tampa show and place your order for the 1993 Bromeliad Calendar. Support the Bromeliad Identification Center when you order this beautiful calendar. This large full color format calendar will have something for everyone. We will include any special club dates for FREE in this 1993 calendar.

Don't miss us at this very special event that is happening in June of '92.

SEE YOU THERE!!!

For advance order forms or to submit your special club dates, write to:

The Bromeliad Page
P.O. Box 1762
Venice, Florida 34284 USA

The Bromeliad Society, Inc.

The purpose of this nonprofit corporation is to promote and maintain public and scientific interest in the research, development, preservation, and distribution of bromeliads, both natural and hybrid, throughout the world. You are invited to join.

This is *Vriesea* 'Inferno', a cultivar of *V. ensiformis* crossed with *V. regina*. The plant, including the inflorescence, is five feet tall and the rosette two and one-half feet in diameter. John Arden, the hybridizer, discusses this cultivar and his *Tillandsia* 'Wildife' on page 62.

J. Arden

Calendar of Shows

14–22 March — The New York Flower Show, "Discovery '92," will be held at Pier 92, 55th St. and the Hudson River, New York City. Weekday hours: 10 a.m. to 8 p.m.; weekend hours: 10 a.m. to 6 p.m. Benefit preview March 13, 1992. The New York Bromeliad Society will be an important participant. For advanced ticket sales or information call or write to: The New York Flower Show, 128 W. 58th St., New York, NY 10019; 212-757-0915; Theresa Begley, Secretary, NY Bromeliad Society, 130 Vanderbilt Ave., Staten Island, NY 10304.

1–3 May 1992 — Bromeliad Society of Mobile 15th Annual Show and Sale. Bel Air Mall, intersection of Airport Blvd. and I-65, Mobile, Alabama. Friday 1 p.m. to 9 p.m.; Saturday, 9 a.m. to 9 p.m.; Sunday, 1 p.m. to 6 p.m. F.D. Armstrong, P.O. Box 746, Daphne, AL 36526.

25, 26 April — The Greater Dallas-Ft. Worth Bromeliad Society Annual Show and Sale. Walnut Hill Recreation Center, 10011 Midway Road Dallas, Texas 75229. Hours 12 noon – 5 p.m. Lorraine Carroll 214-827-3214.

2–3 May — La Ballona Valley Bromeliad Society's Annual Show and Sale. Veterans Memorial Auditorium, Culver City (Overland Ave. at Culver Blvd.) CA. Saturday, noon to 4:30 p.m.; Sunday, 10 a.m. to 4 p.m. Bromeliad display, plant sale, expert advice. Potting demonstration both days at 2 p.m. Free admission. Charlyne Stewart, 11335 Rose Ave., Los Angeles, CA 90066; 310-391-4118.

8–10 May — Bromeliad Society of Houston, Inc. 24th Annual Show and Sale. Houston Garden Center, Hermann Park, 15 Hermann Ave., Houston, Texas. Entries, registration, set up; 1 p.m. Friday, Saturday, 8 a.m. to 6 p.m.; Sunday, 11 a.m. to 4 p.m. Clyde Jackson 713-222-2351.

[continued on page 83]