

FLORIDA COUNCIL of BROMELIAD SOCIETIES inc.

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Quarterly Newsletter

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VOL. V - ISSUE II

EXCERPTS FROM:

NOTES ON MYBRID TILLANDSIAS IN FLORIDA

Marry E. Luther
Marie Selby Botanical Gardens

<u>Tillandsia X floridana</u> L.B. Smith pro sp. et stat. nov. (<u>Tillandsia fasciculata</u> SW. var. <u>floridana</u> L. B. Smith, Phytologia 15(3): 197, 1967)

Plant flowering to ca. 0.6 m high, usually much smaller, leaves numerous, densely cinereous, lepidote, stiff and erect, sheaths triangular, to 2.5 cm. wide, blades very narrowly triangular, to 0.8 cm wide at midlength; scape erect, shorter than to about equalling the leaves; inflorescence densely digitate with 3 to 10 lateral, erect branches; primary bracts elliptic, densely lepidote, pink when alive; spikes 5 to 13 flowered; floral bracts densely imbricate, 2-2.5 cm long, thin, nerved, variably lepidote, pink when alive; sepals 1.7-2.2 cm long, posteriorly connate and carinate; corolla to 4.5 cm long, tubular, violet; stamens and style exserted; capsules to 4 cm long.

TYPE: United States: Florida: Osceola Co., 50 feet, 23 March 1953, M. B. Foster 2820 (Holotype: US).

The narrow leaf <u>Tillandsia</u> taxa of Central Florida have been a source of confusion for many years (Smith, 1966). Previous workers, dealing mainly with herbarium material have found great difficulty in applying names to the variable populations of tillandsias found from Lake Okeehobee northward in peninsular Florida. Only by observing living populations is it possible to understand this variation and correlate characters of the living plants with artifacts of preserved specimens.

In central Florida <u>Tillandsia fasciculata</u> SW. var. <u>densispica Mez</u> (near the northern limit of its range) apparently hybridizes with the dominant species, Tillandsia bartramii Elliot. Specimens more or less morphologically intermediate between these species are fairly frequent. In some populations the proported hybrid plants tend to greatly resemble the <u>T. bartramii</u> parent suggesting further backcrossing. It should be noted that the type specimen (Foster 2820 at US) more closely resembles a typical <u>T. fasciculata</u> var. <u>densispica</u> than most of the additional material examined. Mulford Foster (cf. letter with type at US) suggested a hybrid origin for his 2820 but appeared to dismiss this possibility without explanation. C. S. Gardner (1982, and pers. comm.) also concluded that this taxon was of hybrid origin but did not propose any nomenclatural changes.

<u>Tillandsia X floridana</u> may be distinguished from <u>T. bartramii</u> by its larger size and more ample inflorescence as well as a tendency to form more erect, not hemispherical clusters. It differs from <u>T. fasciculata</u> by being somewhat smaller with narrower leaves and having pink (not red or green) rather thin, usually lepidote floral bracts.

VOL. V - ISSUE II MAY 1985 Tillandsia X smalliana Luther, hyb. nov.

(Tillandsiae polystachya sensu Small non T. polystachia (L.) L.)
Plant stemless, flowering to 0.5 m high; leaves 8 to 18 in number,
densely appressed lepidote throughout, stiff, coriaceous, arching but
not at all recurved or contorted, sheaths broadly elliptic, inflated, to
4 cm wide, blades narrowly triangular, involute, to 2.2 cm wide at midlength; scape erect, exceeding the leaves; inflorescence digitate with
3 to 12 lateral, erect branches (rarely simple); primary bracts elliptic,
glabrous, usually red; spikes 5 to 15 flowered; floral bracts densely
imbricate, to 2.5 cm long, coriaceous, glabrous, red; sepals 2.0-2.4 cm
long, posteriorly comnate and carinate; corolla to 5 cm long, tubular,
violet; stamens and style exserted; capsules to 3.8 cm long.
TYPE: United State: Florida: Collier Co., Big Cypress Swamp, Oct 1980,
Bush, Dragen, Determann & Luther sn (Molotype: SEL).

Tillandsia X smalliana is frequently encountered in cypress swamps, and in brightly lit hammocks throughout the southern portion of Florida (pers. obs.) always in the company of its putative parents T. balbisiana Schultes f. and T. fasciculata Sw. var. densispica Mez. All specimens examined are consistently intermediate, suggesting that these plants are primary hybrids and rarely backcross with either parent. Whether or not these hybrids are fertile has not been ascertained but they often develop fruit both in the wild and in cultivation. Tillandsia X smalliana has usually been misdetermined as T. polystachia (L.) L., a common Caribbean species not known to occur in Florida. Luther (1978) has pointed out the differences between these two taxa and several other authors have expressed doubt concerning the identity and status of this Florida taxon (Smith, 1938; Rickett, 1966; C. S. Gardner, 1982 and pers. comm; R. W. Read, 1984 and pers. comm.).

<u>Tillandsia X smalliana</u> may be distinguished from <u>T. balbisiana</u> by its more numerous leaves that are erect to arching and not at all recurved or contorted and larger inflorescence. It differs from <u>T. fasciculata</u> by having its leaf-sheaths conspicuously inflated, a more slender scape, and narrower, more erect branches of the inflorescence.

Achnowledgements: I thank the curators at US, NY, USF and FLAS for the loan of specimens critical to this study.

Literature Cited

Gardner, C. S. 1982. A systematic study of Tillandsia subgenus Tillandsia.

Ph.D. Dissertation, Texas A. & M. University.

Luther, H. E. 1978. Notes on native Florida bromeliads. Journal of the Bromeliad Society. 28(4):178-180.

Read, R. W. 1984. Natural Hybridization: the problem. Proceedings of the 1982 World Bromeliad Conference 98-104.

Rickett, W. H. 1966. Wild Flowers of the United States. 2(1):86.

Smith, L. B. 1938. North American Flora. Bromeliaceae. 19(2):135.

Smith, L. B. 1966. Notes of Bromeliaceae. XXIV. Tillandsia bartramii.

Editor Note: The above article reprinted from PHYTOLOGIA, An international journal to expedite botanical and phytoecological publications. Volume 57, No. 3, May 1985. Published by Harold N. Moldenke & Alma L. Moldenke; 500 Hemlock Avenue NW; Corvallis, Oregon 07330.

Phytologia. 13(7):4 4-55.

FOLLOW UP:

(This first letter had to be retyped as it would not reproduce. The other two are copies as received).

April 29, 1985

Dear Carol:

It was good to see you at the Miami Show and as promised I am putting in my 2 cents worth on your request for discussion of the pros and cons of the club raffles.

Our Sarasota group sells tickets for 25 cents each and all raffle plants are donated by the members. When you win a plant, you are suppose to bring the second offset back to the raffle. We look upon our raffle as one of the main ways we raise funds for the club and, of course, a nice way to share plants with our members.

Granted the beginner has more fun than the person with a large collection, since they are more likely to find plants that they don't have. However, we have a number of members that have large collections and we try to bring plants that are not quite so common. This does not necessarily mean expensive, just different plants. In addition, many of the so-called trash plants become treasures after the freeze we had in 1984. We certainly do not expect our commercial and collector members to bring a larger number or more expensive plants to the raffle.

I think it is a valuable service to the new collector to have available a number of different plants at low cost, because very few of them would be willing to spend much money on plants which they are not sure they will be able to zaise. However, when they are successful at growing some of the cheapies, they then become bolder and begin to spend money on better plants.

Finally, I think some members of our plant clubs are losing sight of our clubs' purposes. As far as I know, the clubs were formed to share information and enjoyment of these marvelous plants and not to provide income for individuals nor one-up-manship of groups or individuals over others.

/s/ Patsy Worley, Member, Sarasota Bromeliad Society.