

Clone Preservation Project Update - Mar 2010

When we get into the unvariegated clones of *Aechmea orlandiana*, we immediately run into a problem trying to sort out the hybrids created by William Frase. Frase (in the Journal of the Bromeliad Society, Volume 34, Number 4, Page 170, published in 1984) described his starting point as plants of *Aechmea orlandiana*, *Aechmea fosteriana* and *Aechmea* 'Bert' (the hybrid between *orlandiana* and *fosteriana*). Crosses were apparently made in all possible combinations between these plants. Three seedlings were selected from the results of the first crosses on the basis of especially dark color (presumably this means the cross bands were either darker than usual, or more closely packed, making the overall color of the leaf darker; the text is not clear on this point). These were grown to maturity and given the names *Aechmea* 'Black Marble', *Ae.* 'Pickaninny' and *Ae.* 'Shadow', but there was no indication of the exact cross responsible for each of these hybrids. When the names were entered into the Cultivar Registry, they were all listed under a putative hybrid formula: *orlandiana* x 'Bert' x *fosteriana*.. Given that the initial pollinations were reportedly made in 1959 and the seedlings were separated out in 1960, this is misleading. Unless the reported dates are mistaken, each of the seedlings had to be the result of a single cross between a pair of the parental species/hybrid, or a cross between two distinct clones of *orlandiana* or a selfing of 'Bert' (the text suggests two clones of *orlandiana* were available). These three cultivars were apparently maintained as vegetative lines, but innumerable seedlings were produced by crosses between these cultivars and the original parents. None of these crosses were given a recorded cultivar name, but at least some were sold and entered our collections. They were assigned numbers (although, there is no indication whether the actual parents of each seed batch was ever recorded.)

In summary, every time you run across an unlabeled plant in this complex, you have to contend with the fact that there were an unknown number of hybrids, with no known indications of origin, that might resemble *Aechmea fosteriana*, *Aechmea orlandiana* or any possible intermediate between those two.

I have a plant labeled *Aechmea* 'Pickaninny' that matches the pictures on the FCBS website well enough. It has a typical *Aechmea orlandiana* bloom (very compact with no visible separation between the lower branches) and typical *Aechmea orlandiana* leaves. This could be found in a selfing of *Aechmea* 'Bert' (as suggested by Nat DeLeon in 1979 [Grande Volume 1, Number 3, Page 10]), but is more likely to be found in a cross between *Aechmea* Bert and *Ae. orlandiana* (especially if the *orlandiana* is the seed parent) or a cross between two clones of *Ae. orlandiana*. There is also a photo of *Ae.* 'Black Marble' on the FCBS website, and a brief description provided by Frase is

copied in the Cultivar Registry. I have not found any more information on *Ae.* 'Shadow' than the description provided by Frase. I will note that Nat DeLeon (see reference above) considered all three names to apply to a single cultivar (that may or may not correspond to a clone), but have no interest in commenting further without more information.

Another cultivar characterized by overall darker appearance is *Aechmea orlandiana* 'Black Beauty'. This cultivar is defined by the photo in Baensch (Blooming Bromeliads, Page 44, published in 1994). The separation of the lowest inflorescence branch suggests it may be a hybrid.

Frase also mentioned that he obtained a distinct cultivar of *Aechmea orlandiana* from Wyndam Hayward, a pioneer Florida bromeliad (and bulb) grower. The plant, briefly described as larger and more perfect than other clones, was given the cultivar name *Aechmea chantinii* 'Hayward' in the Cultivar Registry. This clone apparently came from the Florida Department of Plant Industry, so it should be possible to check the old DPI distribution lists for more information on the original source of the plant. There is a photo of a plant with this name on the FCBS website.

Forms of *Aechmea orlandiana* with a brown band running down the center of the blade has been recorded at least three times: as cultivars 'Jean Merkel', 'Medio Picta' and 'Muelleri'. I am only familiar with the cultivar 'Jean Merkel'. The brown band is not evident under all conditions, but, when well developed, extends nearly the entire length of the leaf blade. Interestingly, all three of these cultivars were discovered in Florida. Given this, and the apparent similarity of the cultivars, it is possible that they all represent a single clone. FCBS has a photo of 'Medio Picta', but I have no information on 'Muelleri'. It would be extremely useful to bring labeled plants of each cultivar together, so they could be compared directly.

Some cultivars with modified (mostly lightened) ground color on the leaf blade have been named. *Aechmea orlandiana* 'Black Bands' is defined by a photo from Bird Rock Tropicals. 'Snowflakes' reportedly arose in the Hawaiian garden of W. W. G. Moir. This cultivar has nearly white ground color between the dark cross-bands. 'White Knight' is attributed to Jim Irvin. Again, the leaf color between the cross-bands is nearly white. 'Rainbow' is one of many cultivars coming from the Kent establishment. It is characterized by an array of colors in the sections of leaf between the dark bands. Photos of all these cultivars can be found on the FCBS website.

Finally, there are some cultivar names without enough associated information to even assess whether they should be linked to *Aechmea orlandiana*. These are *Ae.*

'Charlie' (attributed with question marks to Tropiflora), Ae. 'Ignotus' (attributed to Ralph Davis) and Ae. 'Rhinelandia' (attributed to Thelma O'Reilly).

To judge from the photo in Baensch (Blooming Bromeliads), *Ae.* 'Fernandae' is a hybrid. The inflorescence appears to have the same structure as *Aechmea orlandiana*, although the inflorescence branches are clearly much more robust than in the species. Acute leaf tips, leaf shape and lack of dark crossbands on the leaves demonstrate a significant distance between this hybrid and the species.

In my own collection, I have plants that match quite well with the photo of the species in the Fosters' book 'Brazil, Orchid of the Tropics', where the initial discovery of the species is described. Unfortunately, I do not have any records that link these plants directly to Foster. It would be very desirable to have plants that are vegetatively linked to the original plants Foster brought back from Brazil. I also have the three variegated cultivars mentioned in the Jan 2010 update ('Ensign', 'Gold Tone' and 'Reverse Ensign'). Otherwise, I only have *Ae.* 'Pickaninny' and two unnamed plants of uncertain origin. One of these two appears to be intermediate between *Aechmea orlandiana* and *Ae.* 'Bert' (perhaps one of the unnamed Frase hybrids.)

As usual, please look at your own collections. If you have plants of any cultivars mentioned above, particularly the cultivars lacking adequate data, please let me know. Pictures of blooming plants, notes on growth habits, any other information you might regard as useful to understanding this group of plants is also welcome.