Some notes on Euphorbia punicea SWARTZ and related species

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Fig. 1: Overlooked beauty: Euphorbia punicea.

uphorbia punicea Swartz is a remarkable plant. It is characterized by an exceptionally beautiful inflorescence. It is also quite easy in cultivation and only demands moderate heat in winter. All this makes it quite astonishing that so little is known about this plant and that it is hardly encountered in our collections.

Jaap Keijzer has had a plant of this species in his col-



lection since 1990. He got it as a seedling from Chuck Hansen. It was never really noticed until the winter of 1996-97 when it showed the beautiful red leaves that surround the actual flowers.

Finding information on this plant is not easy. The first nine volumes of "The Euphorbia Journal", the book of reference for every *Euphorbia*-lover, have no mentioning of *Euphorbia punicea* at all. Only in part 10 a picture of the inflorescence can be found (Koutnik 1997). But with the help of IES librarian Pjotr Lawant I finally managed to find the most important data.

As stated before and clearly visible in the accompanying pictures, a flowering *E. punicea* is truly remarkable. The inflorescence is quite similar to that of the Poinsettia or Christmas Star, *Euphorbia pulcherrima* Willdenow ex Klotzsch, which probably is the most commonly cultivated *Euphorbia* of all. This inflorescence is characterized by a cyme at the tip of a branch, surrounded by a wreath of 'normal' looking leaves. However these so called bracts are not green in *Euphorbia punicea* but an intense red. In this way the inflorescence is quite large and striking.

A member of subgenus Poinsettia

All Euphorbias of the subgenus *Poinsettia*, to which *E. punicea* belongs, are characterized by a similar inflores-

Fig. 2: Proud owner of a flowering Euphorbia punicea, Jaap Keijzer shows his 15 year old plant he has raised from a seedling.



Fig. 3: Geophytic Euphorbia radians has showy white inflorescences with deep concave cyathial glands.

cence, although bracts are not always red but sometimes white or yellow.

The geographic distribution of the subgenus *Poinsettia* is remarkable, too: Its center is Central America and the Caribbean islands with several species reaching out into North and South America as well. The fact that interesting Euphorbias grow amongst cacti will be new to many of us, and only sporadically do we find something about these species in succulent literature. Often these Poinsettias grow as shrubs, while others develop subterranean tubers and herbaceous shoots and belong to the so-called geophytes. In wintertime they lose all their leaves and stalks. As a bonus they start the growing season with spectacular flowering before the production of leaves. Two of these species have been portrayed in the Cactus and Succulent Journal (U. S.), namely *Euphorbia radians* Bentham and *Euphorbia*

Fig. 4: Flowering Euphorbia leucocephala.

strigosa Hooker & Arnott. In that paper both species were pictured with their very special inflorescences (Mostul & Chazaro Basanez 1996).

Robert Mayer found *Euphorbia radians* during a trip to Mexico - although his aim was to find cacti. Thanks to his wide interest in all plants this tuberous rooted species was put on the stage for *Euphorbia*-lovers in Europe. Most likely there are more collectors who have found similar plants, as it seems that this species has a wide distribution.

A plant of subgenus *Poinsettia* that is found more often in collections is *Euphorbia cyathophora* Murray. It looks very much like *E. pulcherrima* but its inflorescence has a wreath of leaves that are not entirely red, there is only a touch of red at the base. *E. cyathophora* has become naturalized as a garden plant from the Canary Islands throughout Africa to Australia and Hawaii.

Another species of subgenus *Poinsettia* that has been planted for decoration in gardens and parcs in many tropical countries around the world is *Euphorbia leucocephala* Lotsy. Its natural habitat is Central America (Costa Rica, Guatemala and Panama). Seed of this species could be bought at Koehres by the name of *Euphorbia* sp. Tsimbazaza. This is the name of a botanical garden on Madagascar. And indeed, according to my information this species has become naturalized on this island. So by this detour it ended up in our collections.

Fig. 5: Flowering Euphorbia punicea (Figs. 4+5: Pjotr Lawant).





Fig. 6: Euphorbia punicea as portrayed in the Curtis's Botanical Magazine Vol. 45 from 1818.

Euphorbia punicea

The natural habitat of *Euphorbia punicea* is in Jamaica. It can also be found on the Bahamas, Cuba and the Vir-

gin Island - most likely as an introduced species; E. punicea has also been introduced in the southern USA. According to Fawcett & Rendle (1920) it grows commonly in the mountains and forms bushes or trees 3 metres high, or sometimes even 10 metres high. Its inflorescence appears to be very

variable, this variation should be examined further so an accurate description of the species can be written. So far this variability has resulted in the description of a synonym: *Euphorbia troyana* Urban.

Thanks to its common distribution in its natural habitat and its striking good looks, *Euphorbia punicea* has been known for a long time. It was introduced to England by a Matthew Wallen in 1778 and was described 10 years later by Swartz. After another 30 years (1818) it was portrayed in some detail in an article in Curtis's Botanical Magazine. This article was accompanied by a beautiful copperplate, a precious possession for a collector.

In Curtis's Botanical Magazine we also find some clues regarding the culture of Euphorbia punicea. It flowers from Christmas until midsummer. This has indeed been the case for the plant which is illustrated on the pictures accompanying this article and is appropriate for all the plants belonging to the subgenus Poinsettia, for these are all so called short day flowering plants. Fortunately these big flowers are easily produced while at the same time this species is said to be easily propagated by cuttings or seeds. However, my own experience on this subject is different: Cuttings can be rooted only with great difficulty and are very slow. Furthermore pollinating seems to depend on the availability of two different clones. After pollinating the female flowers with pollen from the same plant (as we have only one clone in cultivation) one seems successful at first, because for some time fruits start to develop. But later on

Fig. 7: Young Euphorbia punicea in flower (photo: Jaap Keijzer).



these fruits will wilt so that seeds have never been produced.

If you are able to acquire a plant of *Euphorbia punicea*, you have a valuable addition to your collection, as its magnificent caudex is decorated by a huge bright red crown in spring. •

References

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Madagascan Euphorbias finally in revision!!!

It is our pleasure to inform all you Euphorbia enthusiasts and scientists that the notorious subgenus Lacanthis (E. milii and all its relatives) will as of now be under taxonomic revision by us (see below). Thomas Haevermans (Paris) has set the scene by producing an excellent PhD on the phylogenetic relationships between several Euphorbia groups found on Madagascar, based on molecular data. Although preliminary it showed quite conclusively that E. milii and its relatives (incl. the small geophytes like *E. decaryi*) form a natural group. The challenge now is to evaluate all the existing names in subg. Lacanthis, introduced by famous botanists like Baillon, Denis, Ursch, Leandri and Rauh and others. We suspect that several names might prove to be synonymous but also that quite some new species will be presented. It will all hinge on a correct interpretation of the type material of the species described before 1960. Most of this material is kept in the Paris herbarium, where Thomas works.

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Great insight is also expected from studying living plants. The collections of the botanical gardens in Paris, Les Cedres (France) and Wageningen (Netherlands) already hold quite a diversity but it is not nearly enough to do the job well. So we call out to you lovers of this group of Euphorbias to donate/offer cuttings or surplus plants, seedlings, seeds of species that you may have in your collections. We prefer material with a known origin on Madagascar but it is not a must.

If you have material to spare, please contact Wilbert Hetterscheid at wilbert.hetterscheid@wur.nl and then all will be coordinated.

Those outside the European Union who want to contribute living plant material, please contact Wilbert Hetterscheid to discuss possible matters involving CITES regulations.

We hope to be able to intermittently inform you of progress!

Thanks in advance!!

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