

A selection of *Monadenium* species from Tanzania

By Petr Pavelka

I made a trip through the southern and central parts of Tanzania with the intention to visit as many localities of succulent plants as possible. As expected, a fair share of euphorbias were found. The genus *Monadenium* (I am aware that the genus *Monadenium* has been included into genus *Euphorbia* and its new taxonomic status is *Euphorbia* subgenus *Euphorbia* sect. *Monadenium* (Pax) Bruyns – nevertheless, for practical reasons I will give both the old and the new name in this paper) is well represented in Tanzania, with many species only occurring here. A selection of these *Monadenium* species is presented as pictured here to the readers of *Euphorbia World*.

The cultivation of the small tuberous rooted *Monadenium* species

In my experience, the cultivation of all these species presented here is quite easy following the fact that the main growing time always comes after a dry hot period. So do not force your plants to wake up too early in spring by extensively watering, but wait. I have the best results from mid July until October when plants can “stand in water” as long as they are shaded and the place is well ventilated. In nature this shading is provided by surrounding vegetation and, believe me, many species actually “stand in water” (as can be seen in a few of the pictures shown here). I also found geophytic species do not like their tubers to be exposed too much as they tend to dry out in sunlight during their resting period. Small plants are more sensitive than adults.

Author's contact: pavelka@palkowitschia.cz



Monadenium elegans S.Carter

Monadenium elegans (*Euphorbia biselegans* Bruyns) is a small tree growing only in a small area in central Tanzania on the summit of low hills. There are some characteristic features to make this species easy to recognize. The peeling papery bark on the stems of older plants is particularly beautiful. Also the sharply keeled and prominently toothed midrib on the lower surface of the leaf is distinctive and handsome. This feature is not very visible on the pictures presented here as plants had only started to wake up after the first rains.

Despite being a tree species it is also highly appreciated in cultivation, as it remains of moderate size a long time. As long as it is not kept cold in winter it is easy to grow and freely flowering.



Monadenium globosum P.R.O.Bally & S.Carter

No matter how many incredible places in nature I have visited, the beauty of nature never ceases to amaze me. Such a highlight was the visit of one of the two known localities where *Monadenium globosum* (*Euphorbia bisglobosa* Bruyns) is growing. We were very lucky to find this tuberous species in full flower. The rosettes of leaves are very variable in colour and found growing between flat rocks covered by moss and lichens in a very gritty black soil.

This tuberous-rooted species is hard to keep alive for a long period of time in our European greenhouses. I think the reason is because it grows in high altitudes above 2000 m with a lot of rain where local farmers can produce potatoes. It is a cold loving plant and we kill plants with their tubers exposed to full sunlight. I suggest to grow this plant outside with a rain protection cover.



Monadenium arborescens P.R.O.Bally

Another endemic species is *Monadenium arborescens* (*Euphorbia neoarborescens* Bruyns). In the Flora of Tropical East Africa it is said to be known from one collection only. Yet unexpected, we found it very abundant at several localities in a remote area in central Tanzania together with sansevierias, aloes and other shrubby and tree euphorbias. This poorly branched tree species with a height of 2-6 m is not easily overlooked in nature and has a most uncommon habit.

One can be of the opinion it is not a very handsome species in nature, in cultivation it is quite handsome with its robust stems with large leaves on the young parts. It is particularly vulnerable to losing its roots when overwatered.



Monadenium pedunculatum S.Carter

The small tuberous rooted *Monadenium pedunculatum* (*Euphorbia neopedunculata* Bruyns) is very variable and grows not only in southern Tanzania, but also in northern Zambia, Malawi and the Congo. Its main characteristics are the large napoid tuberous root and the cyme or single cyathium produced on a long peduncle, but also variable in length.

This small geophyte is most likely the most common one of this group in nature, as we found it at three different localities.



You either have to join the I.E.S. to read the entire 15 pages on *Monadenium* species from Tanzania – or you'll wait until the year 2023 to order this copy as a back issue.

Monadenium torrei L.C.Leach

Monadenium torrei (*Euphorbia torrei* (L.C.Leach) Bruyns) is a succulent shrub, mainly occurring in Mozambique, but also known from one locality in Tanzania in the very south close to the Mozambique border. This species is readily recognized by the irregularly toothed leaves with a keeled midrib on the lower surface. These handsome leaves make it also an appealing species to grow in cultivation, where it does not present the grower with many problems other than it hates temperatures under 15 degrees Celsius.