

Summary

Rob Bregman

Again in this Succulenta edition, special attention is given to the cultivation of cacti without heating during wintertime.

Ben Wijffelaars's column is a sad retrospection on the death of his wife, who used to participate in all of their local Succulenta activities.

In his series on the 'Verkade' handbooks from the 1930s, Theo Heijnsdijk deals with *Titanopsis calcarea* and *T. schwantesii*, two so-called mimicry species from the Aizoaceae family. Their leaves resemble the whitish calcareous rocks of their habitats in the North Cape region of South Africa. The first-mentioned one was first described by the German botanist Rudolph Marloth in 1907 as *Mesembrianthemum calcareum*. *T. schwantesii* was first described in 1916, also in the genus *Mesembrianthemum*. In 1926 both species were transferred to a separate genus *Titanopsis* by Gustav Schwantes, together with a new species *T. astridae*. Some years later *T. hugo-schlechteri*, *T. luderitzii*, *T. primosii* and *T. fulleri* were published. The three last-mentioned species are now regarded as synonyms. The natural habitat of *Titanopsis* consists of two separate areas, one in southwest Namibia and the other one in the North Cape, with slightly different precipitation regimes. The plants are not cold-sensitive. In cultivation some plants have emerged with unusual flowers (petals with unusual shapes and colors).

Ruud Tropper presents his study on the frost tolerance in the epiphytic cactus genus *Schlumbergera*, plants from the Brazilian Atlantic rain forest. Six species in his collection survived temperatures varying from 0 to minus 5 °C, with *S. microsphaerica* being the most frost-tolerant species. In his series 'In the spotlight', Bertus Spee shows us another four pretty succulents, viz. *Copiapoa humilis*, *Gymnocalycium saglionis*, *Neoporteria taltalensis* and *Parodia maasii*.

Luc Vandecaveye reports about his visit to the habitats of *Copiapoa* in the Atacama desert in Chile. He especially looked for comb-shaped plants. Such plants were found in populations of *C. coquimbana*, *C. dealbata*, *C. columna-alba*, *C. cinerea* and *C. gigantea*.

A second contribution on frost tolerance is given by Jos Huijzer. In his allotment he tested plants from several South American cactus genera which he cultivated in plant boxes covered with glass pane and isolated with bubblewrap, later to be displaced by an optimally isolated greenhouse. The best thing to do is to quit watering in the middle of September. Jos lists about 50 genera with species that survived minus 8 °C without heating, all globular species. Most columnar cacti appear to be less cold tolerant.

Wolter ten Hoeve explains how Canadian wood frogs survive frost by enhancing the glucose concentration in their blood, thus lowering the freezing point. By doing so, these animals are able to survive temperatures to minus 16 °C. The same goes for cacti when they lose water during their rest period.

Theo Heijnsdijk visited the botanic garden of Roscoff (Bretagne, France). Several beautiful plants, not only succulents, can be admired.

Aat van Uijen pays tribute to Thomas MacDougall (1895-1973), a Scottish plant collector who discovered many (predominantly epiphytic) cacti and other succulents in Mexico. *Ortegocactus macdougallii* is the most well-known cactus named after him.

Wolter ten Hoeve made a selection of the most important articles in some foreign journals on succulent plants.

Tom Twijnstra loves not only spectacular large cactus flowers but also small ones, such as the tiny flowers of *Mammillaria glassii*.

r.bregman@contact.uva.nl