

SUMMARY

Rob Bregman

In this edition, much attention is paid to the small Mexican globular cactus *Mammillaria plumosa*. In his opener, Ben Wijffelaars admits that he does not like to graft cacti, particularly since a just grafted *Mammillaria plumosa* was launched into his neighbor's back yard after trying to remove the elastic strings.

M. plumosa is also the subject of the usual contribution by Theo Heijnsdijk, in which he deals with one of the plants depicted in the 'Verkade' cactus handbook from 1931. This plant, first described by the French F. Weber in 1897, is named after the soft feather-like radial spines. The little white to rose flowers usually tend to appear in winter and this is probably the reason why the plant does not readily bloom in our collections. Cultivation should be preferably in wide shallow scales. The German (from Magdeburg) grower Hermann Gruson and his Swedish assistant Albert Mathsson contributed a lot to the popularity of this species in Europe.

In his series 'in the spotlight', Bertus Spee presents *Melocactus matanzanus*, *Myrtillocactus geometrizans*, *Obregonia denegrii* and *Trichodiadema densum* by means of illustrations and short descriptions. A new species from the Bolivian department of Chuquisaca is described as *Aylostera juckeri* by Lothar Diers. The plant is named after its finder Hansjörg Jucker. Both English and German diagnoses are included. When compared to the related *A. azurduyensis*, some remarkable differences are the larger body, totally white spination and scarlet to orange-red flowers. These two species are self-sterile, whereas all other aylosteras from this region are self-fertile.

Jos van Roosbroeck reports about *Yucca lacandonica*, of which two forms are known: a epiphytic form growing on trees in tropical rain forests and a terrestrial form. This latter form seems to originate from the first-mentioned one and can be distinguished from the similar *Y. elephantipes* by its narrow yellow leaf margin.

Ruud Tropper outlines the technique of 'focus stacking', a digital application in order to increase the focus range in macro-photography. With this technique (software 'Combine ZP', 'Helicon' or 'Zerene Stacker'), a number of photos taken with different focus adjustment are combined to one single photo, in which all plant parts seem to be in focus.

Volker Schädlich and Ludwig Bercht went to the Rio Paraguay valley trying to find the type locality of *Gymnocalycium mihanovichii*. This well-known cactus was discovered in 1905 by the Czech Alberto Fric but it was uncertain whether Fric reported the correct location of the habitat. Schädlich and Bercht indeed found the plants at the locality as stated by Fric, with the luck of (relatively) dry conditions in this normally very wet area.

Henk Ruinaard presents part 3 of his comparing inquiry of inert substrates (lava, flugsand, bims, 'Argex' and 'Seramis'). Other substrates such as loess, normal compost and several types of sand were also tested. Topics of investigation were the speed of water uptake and the speed of evaporation (water loss) from both the entire substrate and the surface of it. Water uptake was fastest in flugsand and loess. It was slowest in normal compost but the total amount of absorbed water was around twice as much in comparison to most other substrates. Small particle (up to 1.5 mm) bims took up more water (and also more rapidly) than bims consisted of larger (3-5 mm) particles. All substrates lost their water after 30-45 days, in small (5 cm) pots far more rapidly than in large (13 cm) pots. Desiccation of the surface is also dependent on particle size; the larger the particles, the faster this process passes.

Two readers, Ch. Hartevelt and Riet Maessen, react to part 1 and 2 of the above-mentioned study by Henk Ruinaard by referring to previously published books on hydroculture. However, hydroculture is a somewhat different method because there should always be water at the bottom of the pots or trays.

According to Riet, hydroculture with cacti may be succesfull but is not very easy.

Ludwig Bercht reviews a new book (in German) by Michael Januschkowetz on how to cultivate cacti and other succulents.

Wolter ten Hoeve summarizes the contents of other journals on succulent plants.

R.Bregman@contact.uva.nl