

## SUMMARY

Rob Bregman

As usual, this first 2022 issue of *Succulenta* opens with Ben Wijffelaars's column. While on holiday in France, he found an old Dutch woman magazine in the magazine rack of his apartment. In this there was an article about how to remove cactus spines from your skin. It was advised to roll up a woman's pantyhose like a ball and then to rub it over your skin. The last advise was not use that pantyhose again...

The series on the 'Verkade' cactus and succulent handbooks from the 1930s is continued by Theo Heijnsdijk. This time *Ariocarpus fissuratus* is dealt with, a so-called mimicry plant from the US (Texas)-Mexican border where it grows hidden in gravelly soil. This remarkable flat and spineless cactus was discovered in 1852 by Arthur Schott (or maybe Charles Parry) and first described in 1856 by Georg(e) Engelmann as *Mamillaria* (subgenus *Anhalonium*) *fissurata*. This German/American doctor kept notebooks, in which he not only wrote his own notes but also very precisely recorded the correspondence with other fieldworkers. Several related taxa have been described, such as *A. fissuratus* var. *lloydii*, *A. intermedius* and *A. bravoanus* with its subspecies *hintonii*. These plants exhibit little differences with the type and can be considered as local forms. All *Ariocarpus* plants are placed on appendix 1 of CITES, thus indicating the need for the highest degree of protection. A few years ago, a rather unusual way of monitoring a population of *A. bravoanus* subsp. *bravoanus* was observed. A study group had marked plants by smearing the younger tubercles with red paint in order to measure growth.

Bertus Spee presents part 119 of his series 'in the spotlight', in which he deals with *Aloe polyphylla*, *Echinocereus enneacanthus*, *Echinopsis leucantha* and *Espostoa melanostele*. The last-mentioned species is depicted on the cover of this issue.

Peter Knippels outlines his fascination for caudex plants and succulent euphorbias. Two of his first acquired succulent plants were *Adenium obesum* and *Euphorbia canariensis*. The latter species was one of the aquarel paintings in the famous Dutch Monickx Atlas published from 1686 till 1709. Carolus Linnaeus used these books for his famous 1753 taxonomic standard work 'Species Plantarum'.

Henk Ruinaard explains the meaning of the term 'ploidy'. Inside the cell nuclei of cacti in most cases there are 11 sets of 2 homologous chromosomes (diploid, 22 chromosomes in total) or 4 homologous chromosomes (tetraploid, 44 chromosomes in total). In cacti sometimes the genome consists of sets of 3, 5 or 6 homologous chromosomes (triploid, pentaploid, hexaploid, respectively). The total amount of DNA can be determined by means of flowcytometry, a technique in which the DNA is stained by a coloring agent and absorption of transmitting light of a certain wavelength is measured. The more DNA, the deeper the color and so the stronger the absorbance. In the genus *Echinocereus* 81% of 117 species investigated was diploid, 1% triploid, 17% tetraploid and 1% hexaploid. In the field sometimes hybridization takes place between diploid and tetraploid plants, resulting in a (mostly sterile) triploid offspring. Different species cannot be distinguished by their DNA content only.

Henk Viscaal visited hobbyist Ruud Wouterson. Ruud cultivates several winterhardy succulents in a rock garden behind his house. For his other succulents, he rents a section in a greenhouse owned by a professional flower greenery.

A new item in Succulenta is entitled 'on my window sill', an invitation to our members to tell something about the succulent plants they cultivate at home. First pitch is thrown by Riet Maessen, inventor of this idea, who is showing her South African succulents, predominantly avonias, euphorbias and conophytums.

Wolter ten Hoeve gives his usual abstract of the most important articles in other journals on succulent plants. This time he deals with volumes 6-9 of 'Kakteen und andere Sukkulenten' and volume 2 and 3 of 'Cactus World'.

At the back page, Tom Twijnstra reports about his working place. To cheer up his office a little bit, he put a sansevieria on his desk. Of course, such an 'old fashioned' plant gave rise to a lot of silly jokes from his colleagues.

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