

Title *Echeveria* spp. - rosette tolerance to long-lasting water constraint
Author M.W. Borys, H. Leszczyńska-Borys and J.L. Galván
Citation ISHS Acta Horticulturae 813:255-262. 2009.
Keyword *E. gibbiflora*; *E. pallid*; open sky; shade

Abstract

The genus *Echeveria* offers interesting ornamentals. Its plants are characterized by economic use of water. For this reason more attention should be paid to CAM plants. In *Echeveria* cut flowers, kept without water, lateral inflorescences of keep growing and buds open for weeks. This suggested that rosettes and whole plants could be removed from soil and stored without water for some weeks. The objective of this study was to test this assumption. The rosettes (root free) and whole plants (rooted rosettes) extracted from the soil of *E. gibbiflora* D.C. y *E. pallida* E. Walther at the start of March were exposed for 2.5 and 3.5 months to the open sky (sunny exposition) or shade (without direct sun). At the end of the exposure period the loss in fresh mass was 40%. After that time rosettes were planted in soil. Replanting resulted in stems rooting and the restoration of rosette growth. Every 2 weeks measurements were taken of rosettes and flowering stem growth (vegetative and generative parts). From 1 to 3 flowering stems per rosette were obtained at the end of the experimental time. The rosettes were restored to normal size. The conclusion was that rosettes cut from the trunk or the whole plant, rooted or without roots, extracted from the soil and stored under the open sky or shade, can be stored for at least three months without impairment to their capacity for rooting, growth of rosettes or flowering. This procedure saves water. The results indicated also that rosettes of *Echeveria* can be produced as half-finished product away from their final destination.