

**MORPHOLOGICAL CHARACTERIZATION OF PLANTS REGENERATED FROM
PROTOPLASTS OF *CYCLAMEN PERSICUM* MILL.**

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REFERENCES

- Borchert T., Fuchs J., Winkelmann T., Hohe A. (2007). Variable DNA content of *Cyclamen persicum* regenerated via somatic embryogenesis: rethinking the concept of long-term callus and suspension cultures. *Plant Cell, Tissue and Organ Culture*, 90: 255-263.
- Ewald A., Orlicz-Luthardt A., Winkelmann T., Schwenkel H.-G. (2000). Interspecific hybrids of *Cyclamen persicum* Mill. x *Cyclamen purpurascens* Mill.: propagation, somaclonal variation, resistance to *Fusarium* wilt and suitability as an outdoor crop. *Acta Horticulturae*, 508: 309-310.
- Ishizaka H., Uematsu J. (1992). Production of interspecific hybrids of *Cyclamen persicum* Mill. and *C. hederifolium* Aiton by ovule culture. *Japanese Journal of Breeding*, 42: 353-366.
- Morgan E. R. (1999). Callus production from protoplasts of *Cyclamen persicum*. *Plant Cell, Tissue and Organ Culture*, 55: 63-65.
- Schwenkel H. G., Winkelmann T. (1998). Plant regeneration via somatic embryogenesis from ovules of *Cyclamen persicum* Mill. *Plant Tissue Culture and Biotechnology*, 4: 28-34.
- Winkelmann T., Hohe A., Schwenkel H. G. (1998). Establishing embryogenic suspension cultures in *Cyclamen persicum* 'Purple Flamed'. *Advances in Horticultural Science*, 12: 25-30.
- Winkelmann T., Specht J., Serek M. (2006). Efficient plant regeneration from protoplasts isolated from embryogenic suspension cultures of *Cyclamen persicum* Mill. *Plant Cell, Tissue and Organ Culture*, 86: 337-347.