

## IN VITRO CULTURE OF *DROSERA MAGNIFICA*

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Seeds of *Drosera magnifica* were placed in filter paper and sterilized in a solution containing NaDCC (sodium dichloroisocyanurate) in concentrations of 500 and 700 ppm. In addition to a few drops of polysorbate 20 which acts as a wetting agent supplemented by 35 g l<sup>-1</sup> sucrose in order to receive an isotonic sterilization solution.

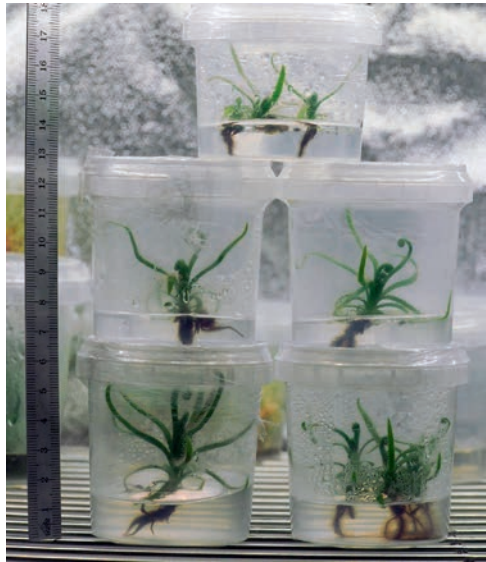
After a period of 24 hours with periodically shaking of the containers, seeds were transferred to an aseptic environment and rinsed once in previously sterilized water. The freshly sterilized seeds were placed on 1/3 Murashige Skoog medium supplied with 25 g l<sup>-1</sup> sucrose and 2.75 g l<sup>-1</sup> gellan powder. The initial pH was set to 5.6 by using HCL and NaOH.

The vessels were placed under lights with a photoperiod of 16/8 hours and daytime temperatures of ±23°C with nighttime temperatures of about ±19°C. The first signs of germination occurred 24 days after establishing shown with certainty on day 30. Overall, I could not observe any drastic changes in the germination rate of the two different concentrations.

With their first replate, the plants were transferred to a 1/3 Murashige Skoog media containing PVP (polyvinylpyrrolidone) at a concentration of 0.5 g l<sup>-1</sup> in order to help absorb possible phenolic exudates of the plantlets.

It seems like *Drosera magnifica* does not multiply on its own as you would typically expect from observations of other species of this genus under sterile conditions. The next step would be to place explants onto cytokinin enriched media to start multiplying this species.

In conclusion, I observed this species as steady growing under sterile conditions. The next steps for me will be to multiply each specimen and start to acclimate the first plants to determine their viability and growth under *ex vitro* conditions.



*Drosera magnifica* cultures 104 days after first germination. (Scale in mm).



Several specimens displayed on a petri dish 132 days after first germination (diameter 15 cm).