

**SHADE LEVELS IMPROVE THE GROWTH AND
ORNAMENTAL QUALITY OF *Henckelia hybrid II* PLANT**



BY

K.M.N.S.ABEYSINGHE



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**FACULTY OF TECHNOLOGY
EASTERN UNIVERSITY
SRI LANKA**

ABSTRACT

Henckelia hybrid II is a hybrid perennial flowering plant produced by wild crossing and raring at Royal Botanic Gardens, Peradeniya. The present study was conducted with the objective of introducing *Henckelia hybrid II* as a potted flowering plant to the floriculture industry in Sri Lanka. Best cutting part for propagation and the effect of different shade levels on growth and of *Henckelia hybrid II* were investigated. This was carried out with two experimental study and the experiments were arranged in Complete Randomized Design (CRD). In experiment 01, 3 treatments with 10 replicates were arranged and for the experiment 02, there were 5 treatments with 5 replications. Growth parameter of survival percentage was taken after one month propagation period in experiment 01. In experiment 02, growth parameter such as Plant height, number of leaves, number of lateral branches, average root length, chlorophyll content and fresh mass were measured at 06th week after repotting the plants.

Plant height was increased significantly ($P < 0.000$) in 80% shaded plants. The lowest plant height was recorded under the 0% shade condition. Shading significantly increased number of leaves ($P < 0.000$) and average root length ($P < 0.000$). Chlorophyll content of the plant and fresh mass of the plant also significantly increased the plants that were highly shaded (80%). Number of lateral shoots were not showed significant difference ($P < 0.708$) between the treatments.

I suggest that the effect of different shade levels on the flowering of *Henckelia hybrid II* before it use as a pot ornamental plant should be carried out.

Keywords: *Henckelia*, shade levels, stem cuttings

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