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The effect of auxins and solidifying on *in-vitro* rooting of shoots for *Exacum petinlare* Griseb

Exacum petiolare is a rare, endemic, flowering plant found in the wild and indentified as having the potential to be introduced as a potted ornamental. It has pale purple fiowers which bloom in bunch. Tissue culture techniques were perfected for the mass propagation of these plants.

Nodal segments were used as explants and cultured on a basal Murashige and Skoog (MS) medium supplemented with 396 sucrose, and the cytokinin, benzyl amino purine (BAP) at 1 mg/ L.

A basal MS medium with or without Naphthaline acetic acid (NAA) was used for rooting of shoots. Two different solidifying agents, Agar and "Kithul" flour were also used. NAA was added at a concentration of 0.1 mg to the basal MS medium, Four treatment combinations, *i,e* "Kithul" flour or Agar with and without NAA were tested.

Roots produced in media solidified with "Kithul" flour were short and thick while those in media solidified with agar were thin and long. Survival of plantlents, once transferred to a soil media for acclimatization was highest for those grown with "Kithul" flour and lowest for those grown with agar.

The auxin NAA also played an important role in root initiation and development. Shoots
Exposed It may be conclude that a basal MS medium supplemented with a combination of 0.1 mg/ L Naphthalene acetic survival of plantlets during acclimatization,