

Establishment of nursery procedures for prevention of foot rot in Japan Araliya (*Adenium obesum*)

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Floriculture is one of the fast growing export industries in Sri Lanka. In the recent past export of live plants has become the most significant income earner among all the floricultural products. *Adenium obesum* shrub, commonly referred to as *Japan Araliya* or “Desert Rose” is one of the highly demanding rooted plants in the export market. It is a succulent shrub which belongs to the family Apocynaceae. However, growers encounter agronomic problems in nurseries as well as in the field, as plants are often affected by foot rot.

Several preliminary screenings and three experiments were conducted to improve the health and vigour of young *Adenium obesum* by preventing foot rot. The experiments were conducted to find out the possibility of preventing rot by selecting the best (well drained) medium, testing of fungicides and comparing two propagules under net house conditions in the *Mid Country Wet Zone*. Six potting mixtures were tested for germination and plant growth using *Adenium obesum*, seeds. Then those were tested for plant growth using seedlings and cuttings in two separate experiments. Propagation by cuttings was selected for the third step where the best two potting media and effect of fungicides/antibiotics against non treated control were tested in a factorial (2x3) experiment. Fertigation and irrigation were done according to the popular procedures of the Growers. Percentage germination, seedling survival, seedling vigour and subsequent plant growth were evaluated.]

Germination percentage of *A. obesum* seeds was the least in compost medium. Cuttings, grown in sand medium reported minor incidence of foot rot symptoms. Best medium for seedling growth was the export quality coir dust.

Seedlings (propagated from seeds) were more tolerant when compared to cuttings under wet zone conditions. Fungicide and antibiotic treated cuttings that were grown in export quality coir dust grew healthily.

[Key Words: *Adenium obesum*, *Foot rot disease*, *potting media*, *Fungicide and Antibiotics*, *Drainage*.]

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