

## ABSTRACT

Desert rose (*Adenium obesum*) is an ornamental plant that has high aesthetic and commercial value. The availability of seedlings is the main factor in adenium cultivation to fulfill its nutrient needs through quality growing media. This study aims to determine the type of growing media and the right dose of manure and their interaction on the growth of *A. obesum* seedlings. This research was conducted in Reuleut Timur, Muara Batu District, North Aceh Regency from December to March 2025. This study used a factorial Randomized Block Design (RBD). The first factor is the planting media which consists of three levels: M1 (soil:sand:humus (2:1:1), M2 (soil:sand:trembesi compost), M3 (soil:sand:bamboo humus: trembesi compost). The second factor is Manure which consists of three levels: P0 (no fertilizer), P1 (100 g/polybag manure), P2 (150 g/polybag manure). The results showed that different planting media had an effect on plant height at 90 DAP, the number of leaves at 30 DAP, and the weight of fresh fruit. The best treatment was obtained in soil: sand: bamboo humus: trembesi compost (1:1:1:1). The application of manure affects the variables of plant height from 60 DAP to 90 DAP, the number of leaves at 75 DAP and 90 DAP, stem diameter at 90 DAP, root length, and wet weight. The best treatment was obtained in the treatment of manure dose of 150 g/polybag. The combination of planting media and manure did not provide more optimal growth results of *A. obesum* seedlings.

Keywords: bamboo, compost, humus, sand, seedlings.