

ABSTRACT

Nursery is the first step in planting which aims to provide good, healthy, and sufficient planting material. The wheel speed is also very influential because the water supply that the plants need must be sufficient so that the plants can grow well, the wheel speed when operating is 0.086 m/s. The selection of the nozzle type must also be considered because each shot produced in the nozzle shot varies greatly in the firing pattern. so the nozzle used in this watering is the Flat Fan Nozzle because the resulting shot pattern is suitable for plant construction in this research, the choice of plant construction must also be precise because it has to accommodate the weight of the plant and its soil so the author uses angled iron which has a wide 3.5 cm, 2.5 cm thick and 6 m long, the total iron used for plant construction is ± 20 m. The maximum power generated is 33.6 Watt with a water capacity of 13 liters and the minimum power produced is 25.2 Watt with a water capacity of 1 liter, the average power is 30.09 Watt.

Keywords : Wheel Speed, Nozzle, Elbow Iron. Power