

**IDENTIFICATION OF APPROPRIATE MEDIUM
FOR POD CULTURE WITH RED ONION
(*Allium ascalonicum*) AS A REFERENCE CROP**

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ABSTRACT

The experiment was conducted at the Agronomy farm, EUSL to identify appropriate medium for pod culture with red onion as a reference crop. Red onion cultivar, *vethalam* was used for this study and four different media were tested to select best medium for red onion cultivation in pot culture technique. The experiment was laid out in a Randomized Complete Block Design (RCBD) with four treatments and five replications. Sandy soil, topsoil, cow dung, coir dust and paddy husk ash were used as potting materials and media were prepared two weeks before planting. Soil sample was collected from each medium before planting and after harvesting of bulb and soil properties were measured to determine the nutritional status of media in both periods. Canopy height and number of green leaves per plant were recorded from second week to tenth week of planting at two weeks intervals. At the time of harvesting, fresh and air dry weights of plant, number of bulbs per plant, weight of bulbs per plant, bulb diameter and bulb yield per pot were measured in each treatment. Finally harvested bulbs were analyzed to determine nutrients content of bulb. The result indicated that organic manures used as potting materials have effect on the yield performance and nutrient content of red onion in pot culture technique. Red onion showed best performance in medium contained sandy soil, cow dung and paddy husk ash at the ratio (v/v) of 6:2:1 among media. Yield obtained in this medium was 451.3 g per pot (50 cm diameter and 25 kg capacity). The yield increased about more than two fold over control. Bulbs harvested in the above medium contained higher nutrient (P and K) than others.

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