## **ABSTRACT**

This research was conducted with the aim of finding out the effect of applying coconut water on the growth and yield of microgreen mustard plants, to find out the effect of various types of planting media on the growth and yield of microgreen mustard plants, to find out the effect of the interaction of coconut water and planting media on the growth and yield of microgreen mustard plants. This research was carried out at Fresko Organik Farm, Paccellekang Village, Pattalassang District, Gowa Regency, from June to July 2024. This research used a Completely Randomized Design (CRD) which consisted of two treatment factors. The first factor is watering with coconut water with 3 levels, namely 100 ml distilled water per tray, 100 ml coconut water per tray and 50 ml distilled water + 50 ml coconut water per tray. The second factor is planting media with 4 levels, namely soil, compost, cocopeat and burnt husks. There were 12 treatment combinations and three repetitions, resulting in 36 experimental units. The observation parameters consisted of plant height, plant wet weight per 25 cm<sup>2</sup>, plant wet weight per tray, plant consumption weight per 25 cm<sup>2</sup>, plant consumption weight per tray and protein content. The results showed that the treatment of giving 100% coconut water showed the best growth and yield of microgreen mustard plants in terms of plant height with an average value (6,83 cm) and consumption weight per tray (10,17 g). Compost planting media produced the best growth with average plant height (7,72 cm), wet weight per 25cm<sup>2</sup> (6.33 g), wet weight per tray (13.67 g), consumption weight per 25cm<sup>2</sup> (4.78 g) and consumption weight per tray (11.78 g). The interaction of providing 100% coconut water and compost planting media resulted in better growth and yield of mustard greens as shown by the height of the microgreen plants (8.18 cm). The test results for the crude protein content in microgreen mustard greens were (3.97%) higher than mature mustard greens with a value of (1.95%).

Keywords: Mustard Microgreen, Coconut Water, Planting Media