GROWTH AND YIELD OF CUCUMBER PLANT (*Cucumis sativus* L.) BUNGAS AND PADANG VARIETIES WITH VARIOUS CONCENTRATIONS OF PACLOBUTRAZOL

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ABSTRACT

Cucumber plants (Cucumis sativus L.) are a fruit vegetable commodity that is popular with many people. Cucumber productivity can be increased by using superior varieties and administering paclobutrazol. The research aims to determine the optimal concentration of paclobutrazol on the growth and yield of Bungas and Padang varieties of cucumber plants. The research method used split plot design with 3 repetitions. The main plot of Bungas and Padang varieties of cucumber plants. The subplot were paclobutrazol concentration levels of 0 ml/l (control), 0.125 mL/L, 0.250 mL/L, 0.375 mL/L, and 0.500 mL/L. Data were analyzed by analysis of variance followed by 5% DMRT test and trend comparison. The result showed that there no interaction between treatment varieties and paclobutrazol concentration. Padang variety cucumber have bigger of tendrils, number of leaves, age of male flowering, age of female flowering, number of female flowers per plant, dry weight of plants without fruit, age of harvest, and number of fruit of plant. Paclobutrazol concentrate 0.375 mL/L has been increased the number of leaves and fruit diameter. Based on the orthogonal polynomial test, the optimal paclobutrazol concentration in the range of 0.295-0.375 mL/L has been increased age of male flowering, age of female flowering, number of female flowers of plant, dry weight of plant without fruit, age of harvest, number of fruit plant, fruit length, weight fruit, and fruit weight of plant.

Keywords: Varieties, Cucumber, Paclobutrazol