

Respon Produksi Benih Induk Tanaman Kedelai Edamame (*Glycine max (L.) Merrill*) Terhadap Pemberian Kolkisin. The Response of Production Edamame Soybean Seeds (*Glycine max (L.) Merrill*) against the Giving of Colchicine.
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ABSTRACT

This research is aimed to determine the response of plants and obtain plants with more morphological appearance, so that pods contains 2 and 3 on edamame soybean can be increased by using soaking treatment of edamame soybean seed using colchicine. This research was conducted in December 2016 until March 2017 in vacant land of PT. Gading Mas Indonesia Teguh, in Klompangan village, Ajung sub-district, Jember district. This research used Factorial Randomized Complete Block Design (RCBD) with 3 replications: the first factor is the seed was soaked for 1 hour (R1), the seed was soaked for 2 hour (R2), the seed was soaked for 3 hour (R3). Teh second factor is concentration of colchicine, consisting of: 25 ppm (K1), 50 ppm (K2), and 75 ppm (K3). The parameters observed were: plant height, leaf width, amount of plant pods, amount of pods contains one, two, and three, harvest age, weight 100 seeds, production of plant. The result of the research showed that the long treatment of colchicine (R) immersion showed no significant difference (ns) in almost all observation parameters except for the pod contains one which showed significant difference. While the concentration treatment (K) showed no significant difference (ns) in all parameters. The interaction between the duration of immersion and concentration (RxK) showed no significant difference (ns) in all parameters.

Keywords: *Colchicine, Duration of immersion and concentration of colchicine, Edamame soybean,*