Pengaruh Penjarangan Buah dan Penentuan Umur Panen Terhadap Produksi dan Mutu Benih Paria Hibrida (Momordica charantia L.). (Effect of Fruit Thinning and Determination of Harvest Age on the Production and Quality of Bitter Melon Seeds Hybrid (Momordica charantia L.) Supervised by: Dr. Ir. Rahmat Ali Syaban, M.Si.

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## **ABSTRACT**

Bitter melon is a horticultural commodity that has a distinctive bitter taste. This research aims to find out the interaction of fruit thinning treatment and determining harvest age on the production and quality of hybrid bitter melon seeds (Momordica charantia L.). This research was carried out in November 2023 – January 2024 on agricultural land in Antirogo, Sumbersart, Jember, East Java. This research used a Randomized Complete Block Design (RCBD) with three replications. The first factor is fruit thinning: 6 fruit per plant  $(B_1)$ , 8 fruit per plant (B<sub>2</sub>), 10 fruit per plant (B<sub>3</sub>). Second factor: 20 DAP, 21 DAP, 22 DAP. Data were analyzed using Anova and further tested with 5% DMRT (Duncan Multiple Range Test) if the data show very significant results. The results of this research showed that thinning 6 pieces per plant  $(B_1)$  gave the best results with average 22,00 seeds per fruit and a germination capacity 89.39%. Fruit thinning with 10 fruits per plant  $(B_3)$  has a significant influence on the parameters of seed weight per plot (165,25 gr) and production per hectare (875,28 kg/Ha). Harvest age 22 DAP  $(U_3)$  has a real influence on parameters of weight 1000 grains (180,84 gr), germination capacity (89,22%), growth speed (25,35%) and growth simultaneity (51,33%). The interaction between fruit thinning treatment and determining harvest age had no significant influence on all observed parameters except germination capacity. The interaction of 6 fruit planting treatments and a harvest age of 22 DAP  $(B_1U_3)$  gave the best results on germination parameters *with a value of 91.33%.* 

Key Words: Bitter Melon, Seed, Thinning Fruits, Harvest Age