

Pengaruh Pemangkasan Cabang dan Pemberian ZPT Giberelin terhadap Produksi dan Mutu Benih Paria (*Momordica charantia L.*). (Effect of Branch Pruning and Gibberellin Application on Production and Quality Seed of Paria (*Momordica charantia L.*)). Supervised by Ir. Sri Rahayu, M.P.

Rizatus Nabila Yullianti
Study Program of Seed Production Technique
Department of Agriculture Production
Program Studi Teknik Produksi Benih
Jurusan Produksi Pertanian

ABSTRACT

Bitter melon is one of the horticultural commodities whose fruits can be used as vegetables and medicine. Each year the average increase in bitter melon seed production is 1.28%, and there was an increase in bitter melon fruit production of 14.6% from 2014 to 2016. Efforts are needed to meet the need for quality seeds that increase every year so that bitter melon production and market demand can be met. Efforts that can be made are improving cultivation techniques such as pruning lower branches so that the assimilate from the photosynthesis process is translocated for more productive growth and the addition of gibberellin which spurs plant growth, stimulates cell division and elongation. This study aims to determine the interaction between branch pruning and gibberellin on the production and quality of bitter melon seeds. The research was conducted from September to December 2023 in the field of Antirogo Village, Sumbersari District, Jember. The experimental design used was Factorial Randomized Block Design (RBD) which was repeated 3 times. The first factor was branch pruning consisting of 2 branches from below (P1), 5 branches from below (P2), and 8 branches from below (P3). The second factor is the concentration of gibberellin consisting of 50 ppm (G1), 100 ppm (G2) and 150 ppm (G3). Data were analyzed using ANOVA, and continued with DMRT test at 5% level. The results showed that the interaction between pruning 5 branches from below and giving ZPT gibberellin with a concentration of 100 ppm (P2G2) gave a significantly different effect on the number of fruits per plant of 6.53 fruits, fruit weight per plant of 1465.99 grams, and 1000 grain weight of 181.06 grams.

Key Words: Branch Pruning, Gibberellin, Bitter melon