PENGARUH PENAMBAHAN PUPUK BORON PADA TANAMAN JANTAN DAN PEMBATASAN JUMLAH BUAH TERHADAP PRODUKSI DAN MUTU BENIH PARIA (*Momordica charantia* L.)

(The Effect of Boron Fertilizer Application on Male Plants and Fruit Restriction on the Production and Quality of Bitter Melon Seeds (Momordica charantia L.))

supervised by Ir. M.Bintoro, M.P

Maisaroh Yuli Purnama Sari
Study Program of Seed Production Technique
Department of Agricultural Production
Program Studi Teknik Produksi Benih
Jurusan Produksi Benih

ABSTRACT

Bitter melon (Momordica charantia L.) is a type of vegetable plant known to have a bitter taste, especially in the fruit. The bitter flavour is produced by the glycoside compounds contained therein, which have various uses, including as a component in traditional herbal medicine. This study aimed to assess the impact of boron fertiliser application on male plants and fruit set on pariah (Momordica charantia L.) seed yield and quality. The research was conducted from July to October 2024 in a farm area located on Jalan Tidar Plindu, Kloncing, Karangrejo, Sumbersari, Jember, East Java. The research method used a Factorial Randomised Group Design with 2 treatment variables and each replicated 3 times. The first variable was boron fertiliser application (B) with three dosage levels: 0.5 kg/ha (B1), 1 kg/ha (B2), and 1.5 kg/ha (B3). The second variable is controlling the number of fruits on each plant (J) with three variations: 5 fruits (J1), 6 fruits (J2), and 7 fruits per plant (J3). The research data were then processed through ANOVA (Analysis of Variance) analysis, then further testing was carried out with the DMRT method at the 1% and 5% significance levels. The interaction between boron fertilizer application of 0.5 kg/ha and fruit number restriction of 6 fruits per plant (B1J2) showed the best effect on the 1000 seed weight parameter, which was 206,89 grams.

Keywords: Bitter Melon, Boron Fertilizer, Fruit Restriction