Pengaruh Dosis Pupuk Kalium dan Pupuk Organik Cair Terhadap Persentase Serangan Penyakit Bulai dan Potensi Hasil Benih Jagung Manis (Zea mays saccharata L.) Hibrida. (The Dose Effect of Potassium Fertilizer and Liquid Organic Fertilizer to The Percentage of Downey Mildew Attack and Hybrid Sweet Corn Seed yield potential (Zea mays Saccarata L.). Supervisor Dr. Ir. Suharjono, MP. and Dwi Kusma Hadiyanto, SP.

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ABSTRACT

Downey Mildew is an important disease in corn plantation, the disease attacks the plantation in young phase until 100% and causes significant loss for farmers. the purpose of this study is to get a recommendation for an appropriate dose of potassium fertilizer and organic liquid fertilizer in suppressing the percentage of downey mildew attack and increase the production of hybrid sweet corn (Zea mays Saccarata L.). This study used factorial randomized completely block design in order of potassium fertilizer (K) consist of 3 stages: K0 (0 gr/plant), K2 (3 gr/plant), K3 (6 gr/plant) and the second factor is in order of organic liquid fertilizer (P) consist of 3 stages: P0 (0 ml/liter), P1 (4ml/liter), P2 (8ml/liter) each treatment is replicated 3 times. The result was showed potassium treatment (K) gave significantly differen effects for the parameter of plant height k₂ with an avarage of 179.0 cm, weight of cobs without husk per plantation K₂ with an avarage 298.5 g, cob lenght K₂ with an avarage21.3 cm, weight 1000 grains K₂ with an avarage 157.6 gr, and potential harvest per hectare K₂ with an avarage 15.3 ton. Gave significant effect for parameter leaf width K_2 with an avarage 9.5 cm and harvest cobs K_2 with an avarage 1.8. The treatment of liquid organic fertilizer (P) also gave significantly differen effects for parameter of harvest cobs P_2 with an avarage 1.9. Gave significant effect for parameter weight of cobs without husk per plantation P_2 with an avarage 293.4 gr, cob length P_2 with an avarage 21.4 cm and potential harvest per hectare P2 with an avarage 15 ton. Together, the two treatments gave significantly differen effects for the parameter of number of seeds per cob K_2P_2 with an avarage 385.5 seed, and gave significant effect for parameter except the percentage of downy mildew attack K_2P_2 with an avarage 55.2%.

Key words: Corn, Fertilizer, Downey Mildew