

Pengaruh Kerapatan Jarak Tanam terhadap Intensitas Serangan Hama dan Penyakit Pada Produksi Benih Jagung (*Zea mays* L.) Hibrida Pioneer. (*The Effect of Planting Distance Density on Intensity of Pest and Disease Attacks on the Production of Pioneer Hybrid Corn Seeds (Zea mays L.)*). Supervisor Dr. Ir. Suharjono, M.P. and Rizki Amrillah Hanif, SP

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ABSTRACT

*The use of 65 cm x 16 cm planting distance is a standard at Corteva Agriscience in producing pioneer hybrid corn seeds. Closer planting distance can increase plant populations and save production costs, but has the potential to increase pest and disease attacks. This research was conducted with the aim to determine the effect of planting distance density on intensity of attacks of stem borer pest (*Ostrinia furnacalis*) and stem rot disease (*Erwinia chrysanthemi*) on pioneer hybrid corn seed production at the Corteva Agriscience company. The research was conducted during four months from September 2018 to January 2019 on the Jember State Polytechnic cultivation area, Tegalgede Village, Summersari District, Jember Regency. This research uses a non factorial Randomized Block Design with four treatments, that is J0 (spacing of 65 cm x 16 cm), J1 (spacing of 65 cm x 14 cm), J2 (spacing of 60 cm x 16 cm), and J3 (spacing of 60 cm x 14 cm). The results showed that plant spacing density had no significant effect on all parameters consisting of plant height, number of leaves, intensity of attacks stem borer (*Ostrinia furnacalis*), intensity of stem rot disease (*Erwinia chrysanthemi*), and cob production per hectare.*

Key words: *planting distance, ostrinia furnacalis, erwinia chrysanthemi*