ABSTRACT

Sweet corn (Zea mays Saccharata Sturt.) is one of the food products that is quite widely used as a vegetable, besides other parts such as young stems and leaves can be used as animal feed. The purpose of this study was to determine the effect of Giberellin ZPT and the effect of increasing the dose of phosphorus fertilizer and the interaction between the administration of Giberellin ZPT and the addition of phosphorus fertilizer on the production and quality of sweet corn seeds (Zea mays Saccharata Sturt.). This research uses factorial randomized block design (RBD) with 2 treatment factors. Each factor consists of 3 levels that are repeated 3 times, namely: the first factor G1: Application of ZPT Giberellin control 0 ml / lt, G2: Application of ZPT Giberellin by spraying 2 ml / lt, G3: Application of Giberellin ZPT by spraying 4 ml / lt. Then the second factor P1: Application of additional fertilizer at a dose of 350 kg / ha, P2: Application of additional fertilizer at a dose of 400 kg / ha, P3: Application of additional fertilizer at a dose of 450 kg / ha. ZPT Giberellin (G) treatment had a significantly different effect on all parameters of the observation except for the weight parameters of cob with cob, ear diameter, seed weight per ear, germination power gave no significant difference (ns) and on the weight parameters of cob without kelobot, seed production per hectare has a real effect. The treatment of phosphorus fertilizer (P) also gave no significant effect (ns) on all parameters observed except for the length of the cob, the weight of 1000 grains that gave a significantly different effect. Together the two treatments (GP) were not significantly different (ns) for all observed parameters except for the weight parameters of cob without cornhusk, seed weight per cob, germination power, seed production per hectare, for the treatment that gave effect significantly different contained in the weight parameters of cobs with kelobot, length of cobs, and diameter of cobs, and the weight treatment of 1000 grains gave very significant different effects.

Key words: Giberellin ZPT, Phosphorus Fertilizer, Production, Sweet Corn.