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## PERFORMANCE ANALYSIS OF “CO SEEDERS” SEED PLANTING TOOLS THAT PRECISION AND FLEXIBLE

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### ABSTRACT

*Regarding to the increasing of Indonesian corn demands, thus it will need more development of technology to support the increase of such productivity. The development of technology could be many ways and one of them is the development of mechanization technology. In order to support corn cultivation is seeding process which is also needed to develop a new technology in planting corn seeds. “CO Seeders” is offered solution due to its technology in planting corn seeds with precise and flexible operation system. “CO Seeders” abilities are make seedbeds, précising the number of seeds, close the bed and make a burrow path for fertilizers. Moreover, in planting corn seeds “CO Seeders” work at 20 x 80 cm planting area. It has 2 type of drill which have different ability in making the seedbed hole. The first is the triangle prism type drill which is obtain 3.65 cm depth of the seedbed hole and the other is the cone type which obtain 4.9 cm depth of the seedbed hole. The ration of seed planted with triangle prism drill is 75% and 64.5% for cone drill. From experiment “CO Seeders” performance provide different results of each drill type. “CO Seeders” with triangle prism drill type capacity obtained is 11.65 hours/ha with 85% field efficiency and the cone drill type capacity is 12.5 hours/ha with 63.49% field efficiency. Nevertheless in operating such machine problems still occurred. There are problem in rotation of furadan metering device because of furadan grain still clogged the gap between hopper and metering device which make the device stuck and won't rotate constantly.*

**Keywords :** corn, “CO Seeders”, efficiency

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