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Evaluation of Local Design Machine for Corn Threshing

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Abstract: The effect of local thresher machine on corn cultivars SYA-16 and R-106 was observed based on some technical indicators, under three revolutions of threshing cylinder (200,300 and 350rpm). The experiments were conducted in a factorial experiment under complete randomized design with three replications. The SYA-16 cultivar was significantly better than R-106 cultivar. For local thrashing machine, the machine productivity, power required, threshing efficiency, broken corn, grain cleaning, unshelled grains, loose grains a kernel outlet and grains damage were 1.226 t h⁻¹, 12.317 kW, 84.438; 6.128; 89.515; 1.908;1.938 and 1.993 per cent respectively. The revolution of threshing cylinder 200 rpm was significantly superior to the other two levels of 300 and 350 rpm in threshing efficiency, broken corn, grain cleaning, unshelled grains, loose grains a kernel outlet and grains damage. While the corn grain moisture content at range of 14% was significantly superior to the other ranges of 16 and 18% in all parameters.

Keywords: Machines, Corn, Cylinder speeds, SYA-16 and R-106 cultivars, Sheller