

CALCULATED FUEL CONSUMPTION AND SOME MECHANICAL PARAMETERS TO NEW HOLLAND TT75 FRONT WHEEL ASSIST TRACTOR.

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ABSTRACT

A field experiment was conducted at the college of Agriculture, University of Diyala to calculated fuel consumption and some mechanical parameters to New Holland TT75 front wheel assist tractor. With disc plow triple body, in clay loam soil. A Split – Plot design under randomize complete block design (RCBD) was used. Two levels of tillage depth included 15 and 25 cm represented the main plot. Three front travel speed levels included 2.56, 3.82 and 5.71 Km/hr represented the sub plot with three replications. The L.S.D test under 0.05 levels was used to compare the treatment means. Slippage percentage %, soil volume distribution m³/h, effect field capacity donum/h, and fuel consumption liter/hectare were studied. The results showed that the depth 15 cm is superior in different effect to the depth 25 cm on all study parameters except Soil volume distribution m³/h. And also the results showed that the speed 5.71 km/h is superior in different effect to the other speed on all study parameter except Slippage percentage %.Mean while the interaction between the first depth 15 cm with the third speed 5.71 km/h are superior in different effect to the all treatment recorded the highest value of the Effect Field Capacity 1.119 donum/h by the less value of the Fuel Consumption 16.90 liter/hectare.

Key word: Fuel Consumption, Plowing Depth and Speed, Tractor Field Performance Parameters .