

**EFFECT OF DIFFERENT AIR PRESSURE IN REAR TIRE ON NEW HOLLAND TT 75  
FWA TRACTORS PERFORMANCE .**

**Amer K.A. AL- Neama**

**Riyadh A. A. AL-Jubory**

**College of Agriculture / Diyala University**

**ABSTRACT**

A field experiment conducted in the college of agriculture, Diyala University, to study the effects of different air pressure in rear tire on some of tractors performance. By using the machine unit tractor type New Holland TT75 FWA, with moldboard plow triple body type Aydin Pullk, in silty clay soil.

The experiment was conducted according to the Complete Randomized design (C R D) by four replicates. The effects of three levels of air pressure in the rear tire tractor (150, 110, and 70) Kpa on actual travel speed (Km / hr), slippage Percentage (%) and effect field capacity (dounam / hr).

The results were showed that the tractor gave the best performance when the air pressure was below in the rear tire. Meanwhile decrease pressure from 150 Kpa to 70 Kpa had showed significant increasing on actual travel speed from 4.99 Km /hr to 5.75 Km/hr. While significant decrease show on slippage percentage from 19.6 % to 5.3 % and this has lead to significant increasing on Effect Field Capacity by increasing quantity ratio 13.29 % under property 0.05 levels.