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RESEARCH PAPER

Effect of tool and operational parameters on soil disruption single point tractor operated cultivator shovels in sandy loam soil

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Abstract : Single point shovels type furrow openers are simple in design and because of their simple low-cost construction; they are widely used in cultivator for opening the soil. The study was conducted on the soil disruption by tractor operated cultivator type single point shovel to improve soil conditions in sandy loam soil using six types of single point shovels at operational speed (1.53 and 1.81 m/s) and depth of operation of (0.10 and 0.12 m), respectively. Shovel S_5 gave more spoil furrow width, spoil furrow depth, spoil area and trench area compared to the other single point shovels.

Key Words : Single point shovel, Spoil profile, Spoil area, Trench area

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