

NEW TECHNOLOGICAL SOLUTIONS FOR GRASSLAND IMPROVEMENT BY OVER SOWING METHOD

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Abstract. *In this paper new technological solutions for mechanization of grassland farming are presented. Technological alternatives are focused on mechanization of over sowing operations for improvement of degraded grasslands invaded by hummocks of different sizes and density rates or invaded both of non-value vegetation and hummocks. New technological alternatives for mechanization of the over sowing operations are based on complex aggregates, using the current research results from agricultural engineering. The utilization of the complex farming aggregates provide realization of 2 or 3 operations by one passing machine, while within usual variants are used simple aggregates, achieving one operation by one pass. In comparison with usual variants, the new technological solutions of mechanization require less fuel consumptions, lower necessary labour force and reduced passing number.*

Keywords: technological variants, over sowing, improvement, equipment, machines.

1. Introduction

The operation of grassland over sowing (direct drilling) consist of introducing the grass and legume seeds into the soil, where competition from the existing sward can be diminished.

The over sowing of degraded grasslands is a rapid, economic and certain method for improvement of degraded grasslands, being succesfully suitable on surfaces, such as: less density of grass sward; the soils where the total tillage (ploughing, rotary cultivating etc.) isn't possible and there is risk of decreasing the soil portability and animal stocking rate; eroded and sliding grounds; nude terrains after the control of non-value wood vegetation and hummocks leveling operation; paddocking surfaces [2].

New technological solutions of mechanization of over sowing workings are based on complex farming aggregates, using current research results from agricultural engineering as fertilizer equipments, EF 2,5 and EF 3,75 type,

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