

INFLUENCE OF SLIPPING OF DRIVE BELT FROM DISTRIBUTION DEVICE AND SLIPPING OF SUPPORTING WHEEL, DRIVING WHEEL OF DISTRIBUTION DEVICES ON SOWING PRECISION, IN CASE OF A SOWING MACHINE FOR EXPERIMENTAL FIELDS

Constantin CHIRILĂ¹, Dan CAZACU¹

chirilac@uaiasi.ro

Abstract

The paper presents the results of the realised tests with a sowing machine for experimental fields, to determine the influence of designing solution for drive transmission of distribution devices and the influence of slipping of supporting wheel which drive the distribution devices, on sowing precision.

Were analysed the possibility to equip the sowing machine for experimental fields with a driving transmission of distribution devices through a Poly V type belt. Was adopted this solution because it have a simple design, an easy exploitation, adjustment and maintenance. The results of the realised tests have the role to offer notions regarding the way in which belt slipping affected the value of the distance between seeds sowed on row and variation which appear regarding the number of sowed seeds per square unit.

At the end of the tests was determining the slipping coefficient of supporting wheel which drives the distribution devices. Also in this case was analysed how affect this coefficient the value of the distance between seeds on row and variations of number of sowed seeds on unit area.

Was also analysed the summed influence of those two slipping coefficients on sowing precision and sowing norm.

At the end of the paper are presented the drawn conclusions after analysis of the obtained data by tests and recommendations for improving of sowing precision of the studied sowing machine.

Key words: sowing, experimental sowing machines, sowing precision
