

LABORATORY RESEARCH OF OCCUPANCY SEED LOTS OF ALFALFA

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Abstract. *The results of laboratory researches of quality of work of the device, determined by its rational parameters depending on the physico-mechanical properties of seed lots of alfalfa.*

When on seed lots of alfalfa elastic blades rupture the main stem hardly occurs, and the side shoots at a high angular velocity of rotation of the rotors will be partially cut off. If the blades of a pair of rotors that rotate with an angular velocity greater than 85 sec^{-1} act on the stems at the same time, the efforts of occupancy higher than the average breakout force side shoots of the main stem, which leads to their breakage. Consistent with the action of the blades this does not occur, even at maximum angular speed of the rotors. It should also be noted that increasing the angular velocity of rotation of the rotors above 75 sec^{-1} , with simultaneous action on plants of the blades of a pair of rotors leads to a more intensive growth of discontinuous efforts in the stems than in serial. This is due to the effect of pinching the stems between the blades.

Moisture content of plant mass significantly affects the quality of occupancy seed lots. At low humidity (15%) in the process of occupancy there is a partial breaking of the stalks, because of their fragility (brittleness). This causes blocking of the seed lots of the particles of stalks and shoots and adversely affects the loading of cars of a stationary processing of the crop. But in practice the moisture content of the crop during the harvest of alfalfa for seed is quite rare, moreover, seed lots with low humidity separated from the stalks without any problems, allowing you to use soft modes of the device and not to impair fractional composition of the heap.

Key words: *alfalfa, seed pile,*