SUBSTANTIATION OF CONSTRUCTIVE-KINEMATIC PARAMETRES OF SCREW CONVEYOR HICKSVILLE MODULE

I. M. Storozhuk

Abstract. *The solving of the actual problem such as improve technological performance of machines for harvesting root crops of fodder beet by improving module for harvesting haulm and reasoning of screw conveyors parameters are given. Mathematical model is designed and based on the analysis of theoretical research of technological process harvesting haulm by module for harvesting haulm. This model characterizes interconnection between estimated performance screw conveyor and seconds filing of chopped plant remains by rotary cutter for root crop tops. Limits of change of angular velocity and diameter of the screw conveyor with conditions of providing the estimated performance of module for harvesting haulm are determined. An empirical model in the form of regression equation which functionally describes change of screw conveyor performance depending on process parameters is obtained.*

Key words: ***haulm, module for harvesting haulm, speed of movement of the module, rotary topper, screw conveyor, performance, angular velocity of screw conveyor, diameter of screw***