

ANALYSIS OF TECHNICAL SOLUTIONS OF PLANTING MACHINES, WHICH CAN BE USED IN PLANTING ENERGY WILLOW

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Energy willow planting process requires the use of highly efficient and productive machines. The analysis of construction of machines for planting energy crops, forest plantations and seedlings and the processes which take place in the process of planting made it possible to systemize the accumulated experience in the design of planting machines, and highlight the most effective technical solutions. The revealed features of planting machines for different types of planting material are compared with the designs of energy willow planting machines. This study found a number of characteristics and advantages of different machine types, which will ultimately lead to an increase in productivity of planting aggregates and will facilitate the work of a planter.

Keywords: *planting machine, plant setter, seedling planter, forest planters, energy crops, cutting, planting material*

References

1. Yermakov, S.V. Perspektyvy udoskonalennia konstruksii dlia sadinniazhyvtsiv enerhetychnykh kultur [Perspectives of improvement of constructions for energy crop planting]. Bulletin of State Agrarian and Engineering University in Podilya, V. 2 (26), p. 37-45 (2017)
2. Dziedzic, K.; Mudryk, K.; Hutsol, T., Dziedzic, B. Impact of grinding coconut shell and agglomeration pressure on quality parameters of briquette. Engineering for rural development, p.1884-1889 (2018)
3. Bartieniev, I.M. Automatizaciya processa posadki rasteniy [Automation of the planting process]. Scientific journal of the KubSAU 75(01), 384-396 (2012)

