Aspects regarding the soil compaction in the forestry nurseries: requirements, means, technology

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The research in cause has as a purpose the identification of the technical means of optimal mechanisation used in the forest nurseries, which are meant to lead to an decrease degree of compaction, a rise of the qualitative level of the processing. The purpose of the research is scientifically motivated through the necessity of introducing new tools for the execution of the works implied for soil preparation about activity settlement. Soil compaction assumes volume compression of the soil under the action of external factors. As solid particles can not be compressed, the air pockets between them reduce and therefore through compaction the dimensions of the pores is modified, their distribution and also the soil durability. The degree of compaction of the soil can be estimated thru apparent density, total porosity and degree of settling. The researches were made in the forest nursery of Iosasel, following the influence of the tillage system over the soil bearing. The tillage systems that were applied were classic system (classical plough + 2X disks) and a minimal system (paraplow + rotary harrow).