## THE MAGNITUDE AND STRUCTURE OF THE BEECH STANDS MANAGED BY THE SELECTION SYSTEM IN THE ACTION RANGE OF THE FOREST DISTRICT MIHAESTI

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## Abstract

The optimization of the structure and magnitude of beech stands with allaged structure where applied as selection system constitutes an older concern of Romanian forest engineers.

The structure and magnitude of the actual production found of the beech stands managed in the selection system is the result of transforming cuts applied to the selection system in Mihaesti for over four decades. The extractions were made by selections of individual trees, groups of trees with smaller diameters than the standard diameter, the dead trees and the depreciated ones, deficient. The purpose of the action was to ensure a maximum functional efficiency of the wood restrictions and achieving ecological restrictions.

These researches ascertained that the distribution of number of trees on diameter's class is nearly the distribution of Mayer type, with small errors. Starting from now the optimization of structure will be made step by step, in a long period of time.

The magnitude of the real production fond is presented by the number of trees, the base area and volume per area. Having so many exemplars in the firsts categories of diameter marks out that the regeneration process is active, witch is good for the treatment applied to the selection system.

The base surface per ha presents variations from 22,98 m<sup>2</sup>/ha up to 33,6 m<sup>2</sup>/ha. For the volume this variation, depending of the type of trees, is from  $235m^3$ /ha up to  $544m^3$ /ha, so the average value is  $425m^3$ /ha.

The optimum production fond estimated in technical norms for second productivity class for the beech stands in selection system is 418m<sup>3</sup>/ha.

**Keywords:** beech stands, selection system, transforming cuts