

ECONOMIC EFFICIENCY OF THE PREVENTIVE WORKS COMPARED TO THOSE OF COMBAT OF THE ACTION OF ILLNESS AND PESTS IN NURSERIES, YOUNG CULTURES AND UNDERGROWTHS

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SUMMARY

The durable administration of forests implies in the first place the application of a complex of technical forest measures that finally lead to some valuable undergrowth, able to fulfill at maximum, the established productive or protective functions. A special attention must be given to maintain an appropriate state of health in all stages of development of the undergrowths. The spectrum of pathogen agents is in continuous progress as effect of adapting to the different conditions of environment. Following those in close relation with the development of the intervention to prevent and combat must have a permanent character. If in nurseries and regenerations the use of fungicides is the most efficient method to combat, in the measure the massif state is realized and the valuable exemplars begin to grow in diameter and height the importance of the chemo therapy diminishes, its place being taken by biologic measures and especially those of forest culture. The effective combat of phyto pathogens, nevertheless the way of applying is an extreme measure that implies human resources and quite important expenses. For this reason during the last period it is studied and tried to impose the measures preventing the apparition and spread of harmful agents. As materials were use the centralized data from Forest Department Cluj-Napoca, for the period of the years 2001-2006, regarding the preventive and combat measures in nurseries and forest cultures, on pest nature. Observations were done on the apparition and progress of the pathogens, their reaction to the applied measures included. The determination of the illness and pests was done within the Laboratory for Forest Protection belonging to I.C.A.S. – Cluj-Napoca Station. Generally the surfaces with preventive works are more reduced than those with effective combat works (in average 806.76 ha against 989.02 ha). Except for the year 2002 when preventive works were done on 1895.5 ha compared to those of combat on 1284.8 ha. From the observations and calculus done it result that consequently to the preventive works in further years the surfaces with effective combat work are in decrease. The expenses with preventive measures are significantly more reduced compared to those of effective combat. The economic efficiency resulted from the calculus is of 22.34%. The works with preventive character are also more indicated in ecologic aspect.

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