RESEARCH REGARDING OF PATOGENS AGENTS FROM FOREST CULTURES IN THE 2006 YEAR

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SUMMARY

The present state of our country’s forests is characterized by decline, pressure and stress factors, which greatly influence their integrity and continuity. Therefore it is imperative that the sylviculturists take immediate drastic action for the ecological reconstruction and restoration of the forests. In this context, it is necessary, among other conservation measures, to afforest and reforest entire areas, both in normal and extreme resorts.

To achieve this, it is required that the forestation material be produced in the appropriate quantity, quality and variety for the process.

This objective can be achieved only when applying modern methods and a modern technology for the prevention and control of the pathogenic agents to be found in solarium and nurseries.

Research has been carried out aiming at determining the diseases and their causes in nurseries and plantations as well as establishing the control methods and techniques. Thus we tried to: identify the pathogenic agents that frequently lead to losses in nurseries and solarium; know the main pathogenic agents from the point of view of biology, etiology and of modern control technologies; establish efficacy for a large spectrum of fungicides and of the applicable doses and concentrations, respectively; establish the optimal phenological stages of treatment application.

As a result of the research and experiments carried out over the last year we conclude the following:

a). The most dangerous pathogenic agents remain Laphodermium pinastri and Septoria parasitica for resinous plants, Dothiochiza populea and Cytospora chrysosperma for Euro American poplars.

b). The pathogens responsible of the plantlets “damping-off”, which is: Fusarium spp., Rhizoctonia solani, Pythium ultimum, Alternaria spp., etc. The most varied mycoflora was observed in soil nutrition, and resinous seed.

c). There is a large spectrum of new fungicides which can efficiently control mildew in the case of oak-plants or other diseases present in nurseries, plantations or regenerations and forest solaria.

d). The fungicides Systhane, Karathne and Alert performed very well in experiments proving an efficacy of up to 90% in the control of oak-plant mildew produced by the pathogen Microspaera abbreviata (f.c. Oidiu alphitoides).

e). We registered the fungicides Systhane and Folpan and the Inter-ministry Commission for the control of mildew and soil pathogens.

f). The fungicides Alert and Karathne with very good results are to be tested for another year for clarifications regarding the most efficient concentration.

g). The fungicides Previcur performs very well in controlling the pathogens in solaria therefore the experimental biological sheet was made with respect to its registration.

h). What is extremely important for the prevention of pathogen agent infections is the moment of the treatment application and this timing varies with the climatic factors, consequently prevention treatments are recommended.

i). The obtained results can be applied in all the area and ranger districts whose activity is the production of forest saplings, in solaria or/and nurseries; these are to apply the products and technologies presented in this study.

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