

NEW TEHNOLOGIES IN CONTROLLING THE PATHOGENIC AGENTS OF SILVICULTURE CULTURE

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ABSTRACT

The researches concerning the prevention and control of pathogenic agents presented, include the carried out with new chemical fungicides.

In order to prevent the damages and the same time to create a good quality afforestation material, all this corroborated with the explosion of new non-toxic and non-pollution chemical products on romanian market, it was considered that testing some of the new fungicides in the forestry field is not just useful but also necessary.

It was also considered useful testing some fungicides that are already used in agriculture for preventing and controlling the same pathogen we can meet on forest plantules.

The experimentations carried out in solarium, forest nurseries, and in young plantations using the different variants.

As a result of all studies, researches and experiments can be drawn a few conclusions.

a. There is a large range of new fungicides which can control efficiently the powdery of quercinee as well as other diseases net in nurseries, plantations and artificial regenerations.

b. Consulting and studing the prospectus we agree on testing for forestry the next fungicides: Alert, Champion 50WP, Karathne, Kasumin 2L, Systhane, Trifmine, Previcur N and Topsin M.

c. The fungicides Systhane, Karathne and Alert reacted very well in experiences accomplishing efficiencies of over 90% in controlling the powdery of oak-

plants produced by *Microsphaera abbreviata* (f.c. *Oidium alphitoides*) fungus.

d. The best results were obtained by the alternative treatments applied on the soil and nutritive substratum with Previcur N (concentration - 0,25%, 4 l/mp) and Topsin M (6 g/kg). Also, the good results were obtained in the variant in which the nutritive substratum and the seeds has been treated with extract of *Allium ursinus*.

e. Approaches have been done at the Interministerial Commission in order to homologate the fungicide Systhane in controlling the above-mentioned pathogen.

f. The fungicides Alert and Karathne, presenting very good results, are to be tested for one more year in order to determine the concentrations.

g. The fungicide Systhane reacted also very well in controlling the pathogen *Cocomyces hiemalis* extremely dangerous for the cherry-tree, therefore new teste will be done next years.

h. Extremely important in preventing the infections with different pathogen agents in the moment when the treatment is applied, being recommended preventive treatments.

Keywords: pathogenic agents, fungicides