

## COMPARATIVE CHEMICAL MANAGEMENT IN COMBATING DISEASES SPECIFIC TO AUTUMN RAPE WITH THE USE OF NEW REMEDIES WITH FUNGICIDAL ACTION

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Autumn rape represents one of the sources of vegetable oil with estimative and bioenergetic potential, which in recent years tends to occupy more and more extensive areas, and in order to obtain stable major harvests, it is necessary to know the etiological composition of the parasitic microflora, which is very diverse and numerous, including several dozen species of pathogenic agents of different etiological nature. But with all these efficient cultivation procedures, the environmental conditions intervene favorably in the initiation and development of a wide spectrum of associated pathogenic microorganisms. It is a particularly sensitive crop to diseases, especially during the time period from seed germination to the formation of the first pair of true leaves, where more extensive and invasive diseases and pathogens intervene, such as: white rot (*Sclerotinia sclerotiorum*), alternariosis (*Alternaria brassicae*), fomis ( *Phoma lingam*), manna (*Peronospora parasitica*), gray rot (*Botrytis cinerea*), rotting and dropping of seedlings (*Pythium de baryanum*, *Olpidium brassicae*, *Alternaria brassicae*, *Phoma lingam*, *Fusarium oxysporum f. conglutinans* etc). The integrated disease protection system involves the use of all the challenges of preventing and combating the attack of pathogenic agents, but also by applying phytosanitary treatments in situations of advanced invasions that compromise the harvest of caryopes. That is why the purpose and objectives presented in the works are focused on the research-testing of new fungicides effective in combating the complex of invasive diseases in the fall rape culture. The results and analysis of the values obtained in the research program - testing in determining the biological efficiency of the new fungicides: Bibnos Activ 380 SC and Joust Pro, in regulating the pathological impact with pathogens, such as: *Alternaria brassicae*, *Phoma lingam* and *Sclerotinia sclerotiorum*, reflected values of the biological efficiency in the medium of 86.6 - 92.9%, compared to variants and doses compared to the standard variant. The tested remedies are up-to-date and welcome in the management of chemical protection in the fall barley crop, with a wide spectrum of fungal action, with proposals to include the tested preparations: Bibnos Activ 380 SC and Joust Pro for their application in the chemical protection system requirement in the rape crop of autumn.

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