

PESTS AND DISEASES IN THE CRACK WILLOW CULTURE IN MOLDAVIA AND CONTROL MEASURES

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ABSTRACT

The crack willow culture has become again a present issue for the Romanian forestry sector, as the basketry products can generate important incomes. Therefore, the protection of these cultures against pests has new dimensions and needs a special attention.

The researches conducted in 2002 resulted in the inventory of the pests existing crack willow osieries. Also, there have been carried out experiments for controlling them in different development stages, by using new more efficient products.

The researches have been conducted in various osieries in Eastern Romania (Moldavia). Many of them are over 10 years old and present strong infestation with *Cryptorrhynchus lopathi* in stumps, as larvae and on twigs, after adult attacks. Osieries from Crasna-Vaslui, Basta and Dealul lui Stan - Roman, Guranda-Trusesti, Lac-Botosani or Traian-Bacau are in this situation.

The pest *Aphrophora alni*, also very dangerous for willow twigs, has a lower frequency as compared to the previous years. Higher densities of its populations have been registered in Iasi (Trifesti-Iasi Forestry District), Vaslui (Crasna), Bacau (Traian).

Frequent attacks have been registered in some old osieries due to a less known pest, that is *Lamia textor*, belonging to the *Cerambycidae*, which as larvae creates large galleries and contributes to stump loss of vitality, and as an adult leads to the rub of the twig bark. The strongest attack occurred in Basta-Roman osiery. The pest was also found in the following osieries: Traian-Bacau,

Guranda-Trusesti, Lac (Poienita)- Botosani, Izvorul Siretului - Pascani, Dumbravita-Focsani with frequencies up to 10%.

The defoliating beetles (Curculionidae, Chrysomelidae) and defoliating caterpillar (*Orthosia* sp.) are less frequent in osieries lately and they have led to less important attacks, because they are more sensitive to pesticides.

In some osieries (Trifesti-Iasi, Salcea-Suceava) new pests have been identified like *Trypophloeus asperatus* (Col. Ipidae), which makes galleries between the bark and the wood or *Cyphocleonus tigrinus*, in Lac (Poienita)-Botosani osiery which attacks the willow twigs.

A series of osieries with a slower vegetation status are affected by the phytopathogen factor *Agrobacterium tumefaciens* (Crasna, Basta, Traian, etc.) or by *Fusicladium saliciperda* (Dumbrava-Tg. Neamt).

Among the abiotic factors, the hail affected a series of osieries, leading to damages from weak (Basta-Dumbrava) to very strong (Guranda).

The experiments for controlling the *C. Lapathi* larvae in stumps, as a very important measure to diminish its population, has shown that the application of granulated products Sinolintox 10G with the dose 100 kg/ha and Counter 5G dose 50-75 kg/ha leads to the similar effects regarding mortality as the bathing with liquid products (ex. Larvin 375 SC 1,5-2,0l/ha) with average efficiency of 60%. It may be said that these products can be successfully used in controlling *C. Lapathi* larvae in case of weak-medium infestations.

Experiments with new products in controlling *C. Lapathi* and *A. Alni* adults shown that the highest efficiency was in the use of Regent 200 SC insecticide with the dose 200 ml/ha (values over 90%). The results were registered when using the spray solution of the adyuvante Nu-Film 17 with the dose 0.5 l/ha, which contributed to the use of some classic products like Decis in much smaller doses (1-1.5 l/ha).

The Larvin 375SC product had an efficiency over 85% at doses of 400 ml/ha in mixtures with the adyuvante Nu-Film.

This situation imposes new researches to lead to solution for protecting the crack willow cultures against the complex attacks specific to pests and diseases.

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