RESEARCHES CONCERNING THE STEROIDAL GLYCOSIDE USE WHEN CULTIVATING ROOTSTOCK OF VINE

Fiodor GUDUMAC, Olga GUDUMAC

State Agrarian University of Moldova, 48 Mircesti Street, 2049, Chisinau, Republic of Moldova, tgudumac@uasm.md

Keywords: vine rootstock, steroidal glycosid, Riparia x Rupestris 101-14, Moldstim, Ecostim

SUMMARY

The vine culture foresees the use of rootstock of whose quality depend the vine plantations productivity and longevity.

One of the agrotechnical measures that can considerably influence the rootstock vine growth and productivity, cord quality amelioration, regeneration activity, calluse genesis and concrescence of grafting components is the administration of steroidal glycosides.

The investigations made were directed to elucidate the steroidal glycosides Moldstim and Ecostim over the rootstock vine growth of Riparia x Rupestris 101-14 variety and to use the optimal application concentration that contribute to the increase of their productivity.

It was studied the action of Moldstim and Ecostim steroidal glycosides in the following doses: 10, 25, 50 and 100 mg/l. The plants' sprinkling was made when they were at the beginning of the phonological phase – intensive growth, when the shoots reached the length of 60-75cm only once. The plants of the variant control were watered.

As a result of the investigations made, it came out that the plant's reaction on the action of both the steroidal glycosides applied was similar, with non-significant derivations and is manifested by activating the shoot vigor of growth at the beginning and middle period of vegetation, depending also on the type of preparation, its dose of administration, the average length of shoots at the end of the period of vegetation had increased with 8,02...10,27 % (Moldstim) and 5,91...13,97 % (Ecostim) in comparison with the control variant, it was established an increase of the maturation of cords used for grafting, of the plants productivity – 12,3 % (Moldstim) and 19,2 % (Ecosatim). The optimal concentration of the solution for sprinkling the plants for both the preparations it varies between 10 and 25 mg/l. when increasing the dose of administration of the studied glycosides, it is emphasized a diminution of their action efficiency.