CONTEMPORARY METHODS OF GROWING INTENSIFICATION OF PLANTING MATERIAL OF SCOTS PINE (*PINUS SILVESTRIS L.)*

G.O. Boyko, *PhD student*

N. V. Puzrina Ph.D. *PhD in Agricultural Science*

Different ways to intensify the cultivation of planting material of Scots pine (*Pinus silvestris L.*) using plant growth regulators are researched. Determined the positive impact on the growth and biometric indicators of Scots pine seedlings are devoted.

In developing the technology for reforestation and afforestation emerging trend that provides intensive methods of cultivation of plant material conifers. He must ensure that quality planting material, increasing its survival rate and safety, increased growth in silvicultural areas.

The system of measures to intensify cultivation of planting material by one of the most important techniques is directed nutrient management and production processes in the cultivation of seedlings using the regular use of organic and mineral fertilizers. However, the sources of information indicate that the essential elements of the new technologies produce seed trees, becoming more and more plant growth regulators. Their use contributes to more fully realize the potential of plants to full growth processes.

Purpose of the research was to improve the different ways of intensification of cultivation of planting material of Scots pine (Pinus silvestris L.).

The most important element of technology growing plant material is pre-seed cultivation, which helps it accelerate biochemical and physiological processes, improve seed germination, reduction of germination, vigor and increase the production of standard planting material.

We used Trichoderma and growth regulators - Nematofagin, Fumar, Emistim in processing the seeds of Scots pine.

According to our research pre-plant treatment Trichoderma and growth regulators had a positive impact on the growth of seedlings and biometric

indicators, has increased germination energy and get seedlings in open ground for 2-3 days before.

Increases of the linear indexes by 20 - 30% in the first year of growing seedlings are revealed. The use of these drugs, in addition to the biological effect increases the output of standard seedlings per unit area by an average of 10 - 15%. In this case, there is a equable growth of aerial parts and roots. This determines the feasibility of using drugs while growing softwood planting material in nurseries.