

EVALUATION OF INDIVIDUAL AND COMBINED USE OF PLANT CONDITIONERS WITH PHOTOSYNTHETIC AND GROWTH PARAMETERS

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Due to the continuous subtraction of pesticide active ingredients, the focus of producers are increasingly shifting to the efficient use of yield-enhancing and conditioning agents. In our experiment, we are investigating the effects of plant conditioners and yield-enhancers in production of nursery-gardens and reference plantations, which are based on photosynthetic and growth parameters of saplings and productive stocks. The one-years old apple sapling was UEB 3177/1 variety, usually called Sirius. In addition to the growth parameters (such as size of shoot and trunk), the total chlorophyll and carotenoid content which are determines photosynthetic activity were also examined in both nursery-gardens and reference plantations. The individual and combined application of yield-enhancing and conditioning agents are involved a total of six treatments. The application of iron and humic acid alone or in combination resulted a significant difference in total chlorophyll content compared to the control stock. In the case of the studied growth parameters, the combination of the flavonoid and humic acid containing preparations and the sole use of flavonoid agent proved to be the most effective in the longitudinal growth of the sapling. In the terms of trunk size, the combination of the same formulation proved to be the best treatment compared to the control stock.

Project no. TKP2021-NKTA-32 has been implemented with the support provided from the National Research, Development and Innovation Fund of Hungary, financed under the TKP2021-NKTA funding scheme and from New National Program of Excellence 21-2.