

EFFECTS OF FERTILIZATION ON THE EVOLUTION OF MACRONUTRIENTS CONCENTRATION IN *MALUS DOMESTICA* LEAVES, IDARED VARIETY, UNDER AGROECOPEDOLOGICAL CONDITIONS OF "V. ADAMACHI" FARM, IAȘI

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Abstract

Confirming or infirming disorders of nutrition and correcting fertilization systems through foliar diagnosis is the central objective of the study undertaken in *Malus domestica* Borkh experience, Idared variety. The paper presents changes of indices: total nitrogen (Nt%), total phosphorus (Pt%) and total potassium (Kt%) of apple leaves, knowing that fertilization significantly influence their chemical composition. Outcomes show that in addition to the basic fertilization foliar fertilizers increase the insurance status of apple for nitrogen, phosphorus and potassium in the optimum area. It is noted that nitrogen and phosphorus in the range of records to ensure optimal high potassium values recorded against the best but fell outside the lower limit.

On the basis of determining the total forms of nitrogen, phosphorus and potassium are established the following indicators: global nutrition and nutritional balance. Share of nitrogen and phosphorus in the global nutrition indicator, varied for both years of experimentation, and recorded values falling into a state of optimal supply, while potassium showed values lower than normal. Best values were obtained for root supplemented with foliar fertilization. Nutrient balance shows a slightly poor nutrition for potassium. It can be seen that the trend in 2011 compared to 2010 is to the optimal rebalancing.

Key words: fertilization, macronutrients , apple, orchard

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