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CHLOROPHYLL CONTENT IN LEAVES OF THE SPRING RAPE PLANTS AND PHOTOSYNTHESIS PRODUCTIVITY

Research was carried out at Drohobych Ivan Franko State Pedagogical University in typical for Precarpathians sod-podzolic medium clay soil at research field of farm enterprise "Svitanok" Drohobych district, Lviv region. The influence of nitrogen fertilization and processing of spring rape with herbicides on chlorophyll content in leaves of spring rape plants and photosynthesis productivity were studied. The scheme of the experiment included three factors: factor A – varieties (Oksamyt and Mariia); factor B – norms of nitrogen fertilizer ($P_{60}K_{90}$ - background - K, background + N_{30}, background + N_{60} and background + N_{90}); factor C - herbicides (butizan and comand).

The highest of total chlorophyll on average for three years (2,41–2,45 mg/g, which is 18,1–19,5 % higher compared to variants without nitrogen fertilizer) in leaves of spring rape variety Oksamyt contained on plots with the introduction of nitrogen fertilizers for rate of N_{60} on the phosphorus-potassium background of $P_{60}K_{90}$.

The variety Mariia the highest level of total chlorophyll and chlorophyll "a" in plants leaves were contained at plots with the introduction of N_{90} on the $P_{60}K_{90}$ background.

The highest of leaf surface area, the highest photosynthetic capacity and photosynthesis productivity for the plants of spring rape were formed at plots fertilized with N_{60} on the $P_{60}K_{90}$ background.