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THE IMPORTANCE OF SOIL SUPPLY WITH PHOSPHORUS AND DIFFERENT FORMS OF NITROGEN FERTILIZERS IN INCREASING THE EFFICIENCY OF ENERGY EXCHANGE OF THE LEAVES OF THE ARTICHOKE PRICKLY

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ABSTRACT

As a result of the studies carried out, it was found that the development of the artichoke prickly is in direct and inverse correlation with certain phases of plant development, with a change in the respiratory systems. For example, the developmental phases of 3-4 true leaves and seed maturation in artichoke prickly and respiration are in direct correlation with the pentose phosphate cycle, and in the phases of budding, flowering and seed maturation, respiration is in direct correlation with the glycolytic cycle. Productivity during photosynthesis and the glycolytic respiration cycle is in direct relationship, and in inverse relationship with the pentose phosphate cycle. The experimental results also indicate that there are positive interactions between the uncoupling of the oxidation and phosphorylation process, the activity and efficiency of respiration.The above interactions, in particular correlations, can be used as criteria for studying the productivity (leaf biomass) of artichoke prickly, as well as increasing the biosynthesis of biologically active substances (rutin, lutelin, etc.).

KEYWORDS: *Oxidation, Phosphorylation, Nitrogen Fertilizers, Photosynthetic Productivity, Rutin, Luteolin, Glycolytic, Pentose Phosphate, Biosynthesis, Biomass.*

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