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STUDY OF PHOTOPERIOD EFFECT ON MICROELEMENTS CONTENT IN CABBAGE PLANTS OF *BRASSICA RAPA* L.

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Cabbage (*Brassicaceae*) is a family that unites many widely cultivated agricultural crops with a valuable biochemical composition. The important components of cabbage biochemical composition are microelements - substances that are present in relatively small quantities, but necessary for the normal development of plants and healthy human nutrition.

The aim of this work was to study the photoperiod effect on the content of essential microelements (copper, iron, manganese and zinc) in cabbage crops. On the example of two mapping populations of *Brassica rapa* L. doubled haploids grown in a regulated agroecosystem, it was found that the content of microelements is a highly variable parameter, influenced by both genotype and environmental factors. The obtained results can be used in genetic selection work, including the creation of new genotypes, lines and varieties with a valuable biochemical composition and adapted to growing under specific photoperiodic conditions.

Key words: cabbage, *Brassica rapa* L., mapping populations of doubled haploids, controlled conditions, photoperiod, microelement composition.