

**THE QUANTITATIVE CONTENT
OF PHOTOSYNTHETIC PIGMENTS IN THE NODES
OF THE SHOOT *TRITICUM AESTIVUM* L.**

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The object of the study was seedlings of spring soft wheat *Triticum aestivum* L. of the Saratovskaya 29 variety. Information is presented on the quantitative content of photosynthesis pigments (chlorophylls and carotenoids) in the nodes of the upper vegetative metamers of spring soft wheat. The content of pigments was determined by the spectrophotometric method. It was established that in the period of flowering of plants the content of photosynthetic pigments is maximum and amounts to 4.79 mg/g in the tissues of the seventh node, and sixth – 9.39 mg/g. The ratio of chlorophylls a and chlorophyll b in the tissues of the sixth node was 0.76, and the seventh was 1.82. The quantitative content of carotenoids at the time of flowering of plants in the tissues of the seventh node is 1.7 times higher than in the tissues of the sixth. A change in the content of photosynthesizing pigments in the tissues of the wheat shoot nodes before flowering, during the flowering period, the formation of the endosperm and the germ of the weevil has been revealed. A comparative analysis of the dynamics of the pigment content showed that during the period of formation of the endosperm and the embryo, the ratio of chlorophylls a/b is 1.9 – 2.9 in the tissues of the sixth node, 1.2 – 1.8 in the tissues of the seventh node. It was established that the quantitative ratio of carotenoids and chlorophylls is maximal in the phase of wax ripeness.

Key words: stem nodes, soft wheat, chlorophyll, carotenoids, pigments.

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