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**STATE AND PHOTOSYNTHETIC PIGMENT SYSTEM OF SUNFLOWER
FOR THE ACTIONS OF HERBICIDES FYUZILAD FORTE 150 DUAL
GOLD 960 AND PLANT GROWTH REGULATOR RADOSTIM**

In the article presents an analysis of the main indicators of photosynthetic leaf surface and sunflower chlorophyll contents sum (a + b) it in phase six pairs of true leaves, depending on the influence of different chemical classes of herbicides applied in various norms. The results obtained during the study years 2012 – 2014. By action of herbicides in crops of sunflower hybrid Canyon grown in conditions of unstable wetting Right-Bank steppes of Ukraine.

In embodiments of the minimum standards of herbicides of different chemical classes increase photosynthetic surface held less active. Accordingly, the amount of chlorophyll content was lower against variants where optimal rules applied herbicides. However, when use the maximum norm herbicide Fyuzylad forte 150 normal 1.0 l / ha leaf area and the amount of content they significantly decreased chlorophyll. In 2012 growing season was wet low-income, thereby reducing the growth of sunflower leaf surface as in the control of I, and all versions of the experiment.

2013 was sufficiently provided with moisture, which contributed to the rise of more active leaf surface and chlorophyll in leaves. The most active growth of photosynthetic surface held in the case of Dual Gold 960 normal 1.6 l / ha and 150 Fyuzylad forte normal 0.75 l / ha. On average over three years of research highest rates puff device formed by making compatible Fyuzylad forte 150 standards in 0.5; 0.75; 1.0 l / ha of Radostymom normal 20 ml / ha against the background of pre-processing oilseeds Radostymom (250 ml / t), representing 14; 20 and 11% respectively to control I.

This indicates a weakening of the negative impact of herbicide agent for plants, improvement of their growth and development through anti-stress properties and biological product herbicide weed destruction.

On average over three years of research the amount of chlorophyll (a + b) was the highest in the options against the backdrop of treated seeds before sowing of growth regulators and joy by making compatible Fyuzylad forte 150 normal 0.75 l / ha of Radostymom normal 20 ml / ha, that were relatively more control I by 13%.

Summary results of the research showed improve the application of herbicides in sunflower crops in case making them compatible in tank mixtures with plant growth regulator, against the backdrop of recent seed treatment before sowing.

Key words: photosynthetic surface area, the amount of chlorophyll (a + b), herbicides, plant growth regulator, sunflower.