

**EFFECT OF GROWTH REGULATOR ON ACN PIGMENT
COMPLEX AND PHOTOSYNTHETIC EFFICIENCY OF TOMATO
PLANTS.**

V.V. Kalytka, Doctor of Agricultural Sciences

K.M. Karpenko Assistant

Taurian State Agrotechnical University

The results of the impact of the drug on Acme photosynthetic activity during tomato cultivation in the open ground. It is shown that growth regulator AKM stimulates accumulation in chloroplasts chlorophyll a and b and carotenoids. Established increase photosynthetic activity, resulting in an increase of net photosynthesis and productivity Fund plastic pigments.

Tomato, pigment, growth regulator, AKM.

Increase in biomass per plant growth regulator for the actions of the AKM is mainly due to the biosynthetic processes in the leaves. Thus, the dry matter content of the plants treated with a growth regulator was 0,73-1,22% (Klondike) and 0,62-1,01% (Eleanor) more depending on the stage of development. The biggest difference in this indicator was observed in the flowering stage, regardless of grade.

The greatest influence on the AKM leaf area of plants PDMI Dora both varieties was in the flowering stage (27%). But in the early-maturing varieties Eleanor positive effect of growth regulators on leaf area in the phase-term PLO became unreliable.

Biometrics seedlings were determined by conventional methods. Pigment content was determined by the phases of plant development spectrofotometric method, extraction of pigments was carried out with acetone. Optical density measurements were performed on SF-46 spectrophotometer at wavelengths of 440.5, 644 and 662 nm. Concentration of pigments Ras hovuvaly for Hill-Wettstein. Calculation of the pigment content, whether the wires on the

dry matter. Experiments were performed five times again. For the analysis of selected active functional leaves, completed growth.

Pre-sowing seed soaking in solutions AKM [3] pro- conducted for 18 hours. The embodiment in control seeds were soaked in water. Three days before transplanting in the open ground plants were sprayed with ro-way growth regulator.

References

1. Бондаренко Г. Л. Методика дослідної справи в овочівництві і баштанництві / Г. Л. Бондаренко, К. І. Яковенко. – Х. : Основа. 2001. – 118 с.
2. Біологічно активні речовини в рослинництві / [Грицаєнко З. М., Пономаренко С. П., Карпенко В.П., Монтю І.Б.] – С. : ЗАТ “Нічлава”, 2008. – 352 с.
3. Перелік пестицидів і агрохімікатів, дозволених до використання в Україні. ДР №3890 від 03.06.09. РП Б 02040.
4. Дерендовская А. С. Хлорофильные показатели и их связь с продуктивностью растений озимого ячменя / А. С. Дерендовская, С. Жосан // Stiinta Agricola. – 2008. – № 1. – 3–7 с.
5. Каталог сортів рослин, придатних для поширення в Україні у 2007 р. – К. : Алефа, 2007. – 348 с.
6. Косаківська І. В. Фізіолого-біохімічні основи адаптації рослин до стресів / І. В. Косаківська. – С. : Сталь, 2003. – 192 с.
7. Мусієнко М. М. Фізіологія рослин : практикум / М. М. Мусієнко. – К., 1995. – 191 с.
8. Таврический И. А. Хлорофил и продуктивность растений / И. А. Таврический, Ю. Е. Андрианова. – М. : Наука, 2000. – 135 с.
9. Технологія вирощування. Загальні вимоги: ДСТУ 6008:2008 – [Чинний від 22.12.2008]. – К. : Держспоживстандарт України, 2010. – 18 с.
10. Scheer H. Chlorophylls and carotenoids / H. Scheer // Encyclopedia of Biological Chemistry. – 2004. – P. 430–437.

