THE SUGAR PEPPER YIELD ACCORDING TO DIFFERENT YEARS-LIFE OF SEEDING

O. P. Naklyoka, A. G. Ternavskiy

Results the optimal age of sweet pepper seedlings in Right-Bank Forest-Steppe of Ukraine. The highest early and total yield obtained by transplanting of sweet pepper under 70 days.

Bell pepper, age of seedling, early harvest, plant productivity.

An important element of sweet pepper cultivation technologies, which gives a high yield of fruits per unit area is full of high quality seedlings growing, which is very important for this crop seeds which even under favorable conditions germinates slowly. Pepper is grown mainly seedling method, where the growing season of plants much longer. In terms of area Right-Bank Forest-Steppe of Ukraine due to the long growing season sweet pepper seedlings are grown solely because that makes it possible to obtain high yield. From the length of the period of plant seedlings depend their performance fruiting period, expected delivery earlier production and its quality.

Materials and methods. During the years 2011-2012 in that area were Influence of age on productivity seedlings of sweet pepper. The aim - to establish the optimal age of sweet pepper in terms of right-bank steppes of Ukraine. Schemes in the experiment chosen so that they satisfy the necessary requirements and feasibility of their application. Research has provided for growing seedlings to open ground of all ages (70, 60, 50 and 40 days) in order to study the impact of this factor on yield. For the experiment used a sort of sweet pepper Swallow, in the open ground for further research seedlings planted in the second decade of May the scheme 70x20 cm.

The soil experimental field represented ashed vazhkosuhlynkovym humus in loess. A characteristic feature of the soil - deep washing carbonates 50-70 cm below the humus horizon. The thickness of the soil profile, skyline including P (h) k, is 140-160 cm. The relief experienced field - aligned with sloping plateau (1-20) slopes southeastern and southwestern exposures. The black soil ashed research field has

reduced humus (3,2-3,5% in the upper horizon) and a relatively sharp decrease in the number of its depth.

Performance parameters of seedling plants of different ages indicate that obtained at the time vysad¬zhuvannya seedlings in open ground data differ. The difference biometric parameters observed depending on the length of growing seedlings.

Using the obtained data, biometric indicators seedlings differed significantly on variations of the experiment. Thus, the maximum height of a small seedlings that were grown under 70 days (27.2 cm), which is 9 cm higher than the control variant. In smaller seedling age slightly lower - in plants aged 50 days (control) respectively height was 18.2 cm .

With decreasing age of seedlings tended to reduce the diameter of the stem. The greatest thickness of the stem was recorded in seedlings grown under 70 days (6.0 mm). Plants grown shorter period had lower this figure - in seedling age 50 days (control) it was 4.4 mm, and in no time growing seedlings - 2.9 mm. On the period of landing in the field розсада of pepper sweet different age had the determined amount of buds, that increased with age of plants. Yes, розсади had most of buds age a 70 twenty-four (5,0 шт.) hours. Розсада grown by age a 40 twenty-four hours did not have buds in a time of landing. As marks Г.С. Hiccuped age of розсади must not exceed a 60 twenty-four hours - the plants of senior age badly get accustomed and can lose the first ovary. And after researches of Н.П. Куракси, conducted in a forest-steppe zone, the productivity of pepper sweet depends not only on a sort but also from age of розсади. For the receipt of the assured harvest of sorts of pepper there are a 45-50 twenty-four hours in this zone of growing of розсади optimal age.

The largest volume of roots found in seedlings grown for 70 days - 2.2 cm3, 0.8 cm3 of more control options, and in seedlings grown under 40 days - 0.9 cm3. It follows that longer stays in plant seedling age contributes to the formation of more branching root system, resulting in increasing its volume.

When growing plants observed depending on the age of seedlings of some physiological parameters. The largest number of seedlings had leaves aged 70 days -

17.9 pc., While the 60-day contain less than 20.1%, and the 40-day - by 43.6% relative leaves 70-day seedlings. Using the obtained data can be argued that the number of leaves in plants affects the length of growing seedlings. These conditions also affected the leaf surface. The largest it has been in seedling age 70 days - 385.0 cm2 in plants aged 60 days - 264.6 cm2, which exceeds the control variant respectively 2.5 and 1.7 times.

Weight aboveground plant parts and root system reflects the general state of seedlings at the time of planting it in the open ground, which varies considerably depending on plant age (Table. 2). The difference compared with the control options ranged from 9.2 g upwards of 70-day-old seedlings to 2.4 g downward difference in 40-day. The smallest mass aerial parts of seedlings were grown for 40 days - 3.9 hours

The weight of the root system increased with increasing plant age. It was the most advanced in plants grown seedling age 70 days - 2.5 g, dominated by mass of the root system version control by 52%, whereas in plants grown within the shortest period, the figure was 0.9 g, due period for the plants in the seedling period. According to the ratio of the mass of aerial parts and root system and depending on the length of growing seedlings kept similar pattern relative to the total weight of the plant. The largest it has been in seedling age 70 days - 18.0 g and 7.5 g under control

Inversely proportional relationship observed in the ratio of the mass of the root system and the total weight of the plant. This figure was highest in seedlings grown for the shortest period - 40 days - 18.8%. The remaining options have a lower average. By growing plants during 70 days weight ratio of aboveground parts and root system was lower - 13.9%. Past observations show that with increasing age of seedling weight ratio of aerial parts and root system decreases.

Accounting every ten days of receipt of product showed that the largest share of the total harvest on the first decade of the collection obtained in the form of growing seedling age 70 days. During this period the plants observed yield the highest return relative to these meetings. Found a tendency to decrease in the percentage of early production in relation to the overall decrease in age of seedlings. Intensive impact crop plants for all variants of the experiment began with the first decade of August

and ranged from 19.8 to 21.3% (on total crop) depending on the variant and ended early October.

Depending on the age of seedling decreased yields on variations of the experiment. Reducing the age of seedlings to 40 days of cultivation led to lower yields by 8.4% compared with a control option. Control characterized average yield - 19.1 t / ha. High result was in the form of seedling age 70 days, where growth yield was 2.2 t / ha or 11.5%. The overall yield for the years of research in the form of growing seedlings of 60 days exceeded the control by 3.7%.

Conclusions. The results showed that among the different variants of the term growing seedlings of sweet pepper for the most efficient use of biometric indicators are growing seedlings longer term. However, seedlings aged 40 - 50 days was suitable for planting in open ground, had optimum parameters and better pryzhyvalasya.

It is proved that seedlings growing longer period contributed to a faster flow yield relative to other methods of cultivation for 2 - 8 days or longer fruiting period and with decreasing age of seedlings decreased length of this period in plants.

It is established that the highest yield of sweet pepper was in the form of seedlings under 70 days, where crop growth was 2.2 t / ha, or 11.5%. Reducing the age of seedlings to 40 days resulted in lower yields of 8.4% compared with the control.