INTERNATIONAL MULTIDISCIPLINARY JOURNAL FOR RESEARCH & DEVELOPMENT
SJIF 2019: 5.222 2020: 5.552 2021: 5.637 2022:5.479 2023:6.563 2024: 7,805
eISSN :2394-6334 https://www.ijmrd.in/index.php/imjrd Volume 11, issue 03 (2024)

IMPACT OF SEED PLANTING ON SOIL POROSITY IN VARIOUS METHODS AND SYSTEMS

Janibekov Dilyorbek Abdumannobovich[1]

senior lecturer, Andijan Institute of Agriculture and Agrotechnology[1]

Mahamadaliyev Muhammadsadiq Iqboljan ugli[2]

student of Andijan Institute of Agriculture and Agrotechnology[2]

Annotation: The methods of planting seeds of the Andijan-37 variety of acorns in the conditions of hungry oxen soils of the Andijan region, the norm, the influence of seedling thicknesses on soil agrophysiology are presented.

Keywords: Seed planting methods, scheme, seedling thickness, agrophysical properties of the soil, volume mass of the soil, porosity.

Cotton producing countries in the world produce an average of 26-27 million tons of cotton per year, and more than 60% of this crop corresponds to the contribution of the states of three states, China, Indochina, the United States. In particular, 6.5 million tons of cotton were grown in China, 6.3 million tons in India, and 3.5 million tons in the United States. Another agrophysic property of the soil is its porosity, which varies depending on the mass of the soil. The total volumetric sum of soil cavities, the natural location of which is not disturbed, is called soil porosity. Soil porosity varies depending on its structural state, mechanical composition and the order in which they settle in the soil layers [2; 53-70 p.].Tuproq g‘ovakligi asosan uning mexanik tarkibiga, strukturasiga, tuproqdagi mikroorganizmlarni faoliyatiga va organik moddalar bilan ta’minlanganlik darajasiga bog‘liqdir [1; 157 p].

As can be seen from the above reviews, the porosity of the soil changes depending on the level of its supply with food elements, as well as the structure of the soil.

In the years of scientific research, it was determined the methods and systems of planting seeds and the effect of Applied agrotechnical measures on soil porosity. The result obtained in the first year of the experiment shows that in Option 1, where the seeds are planted in an open area in a 90x10-1 system, the soil porosity was 47,444% in a 0-30 cm layer, while it was found that the soil porosity decreased by 6.0% compared to the beginning of the porosity in the 30-50 cm layer showed 45.333%, and soil porosity decreased by 5.630 % compared to the beginning of the amal period (Figure 1).

When soil porosity was studied in 3-4 variants planted in seeds 90 x (60 x 30) X 12-1 and 90 x (60 x 30) x 15-1 systems over an open area, it was found that the average of 47,593-47,519 % in a 0-30 sm layer was 5,851-5,925 % lower than soil porosity per period, while the seeds were porosity was observed to be 0.149-0.075 % higher. Soil porosity in the 30-50 sm layer was on average 45,593-45,481 % when detected, while soil depletion in the early amal period showed 5,370-5,482 %, porosity in the 30-50 sm layer of soil was 0,260-0,148 % higher in the 30-50 sm layer compared to Option 1 planted in the open area 90 x 10-1 system.

Seeds are added to the open field by adding (76 x 38) x 8, 8-1; (76 x 38) x 9,7-1; (76 x 38) X11, planted in 4-1 systems 9-10-11 variants average in a layer of 0-

30 CM when soil porosity is determined 47,852 - 48,0 - 47,741 %, while in a layer of 30-50 sm 45,778 - 45,889 - 45,704 the porosity of the soil in a layer of 0-30 CM relative to the beginning of the period of action is % 5,592-5,444-5,703 % by, while in a layer of 30-50 sm 5,185 - 5,074 - 5,259% although reduced by, the soil porosity is in a layer of 0-30 cm compared to Option 1, in which the seeds are planted in an open area in a 90x10-1 system 0,408 - 0,556 - 0,297 % by, while in a layer of 30-50 sm 0,445 - 0,556 - 0,371% was higher by.

When soil porosity was studied in Option 2, which was planted in a 90 x 10-1 system by laying a film on the soil, single rows of seeds, an average of 48.185% in a 0-30 sm layer of soil, and an average of 46.0% in a 30-50 sm layer of soil. Porosity relative to the beginning of the period was found to have decreased by 5.259 % in the 0-30 sm layer of soil, and 4.963% in the 30-50 sm layer.

A tile bed is planted on the plot, and the seeds are planted as a additive in systems 90 x (60x30)X12-1 and 90x(60x30)x15-1. When soil porosity was found in variants 5-6, the soil averaged 48,481-48,333% in the 0-30 cm layer, 46,111-46,037% in the 30-50 cm layer, while soil decreased by 4,963-5,111% in the 0-30 sm layer, and 4,852-4,926% in the 30-50 cm layer soil porosity was observed to be 0.296-0.148% in a 0-30 sm layer compared to option 2 planted in a single row 90x10-1 system, and 0.111-0.037% higher in a 30-50 sm layer.

A tile is laid on the canvas and the seeds are added (76x38) x8,8-1; (76x38)x9, 7-1; (76x38) in 12-13-14 variants planted in X11, 4-1 systems, the porosity of the soil is average in a layer of 0-30 CM 49,259-49,074-48,926%, while in a layer of 30-50 sm 46,741-46,593-46,444 the porosity of the soil in relation to the porosity indicator of the soil at the beginning of the period of action is 0-30 CM in layer 4,185-4,370-4,518% by, and in a layer of 30-50 sm, respectively 4,222-4,370-4,519 although reduced by%, soil porosity in a layer of 0-30 sm compared to Option 2, which is planted in a 90x10-1 system in single rows of seeds 1,074-0,889-0,741% by, in a layer of 30-50 sm 0,741-0,593-0,444 % it turned out to be higher by.

When studying the porosity properties of 7-8 variants soils planted in 90x(60x30)X12-1 and 90x(60x30)x15-1 systems with a film bed on the cover, the seeds are added to the Pushta, an average of 48,778-48,630% in the 0-30 cm layer of the soil, and an average of 46,296-46,222% in the 30-50 cm layer although increased by 4,666-4,814% in a layer of 0-30 CM, and by 4,667-4,741% in a layer of 30-50 cm, respectively, soil porosity compared to Option 2 planted in a system of 90x10-1 in a single row of seeds is 0,593-0,445% in a layer of 0-30 CM, In the 30-50 cm layer, however, it was found to be 0.296-0.222% higher.

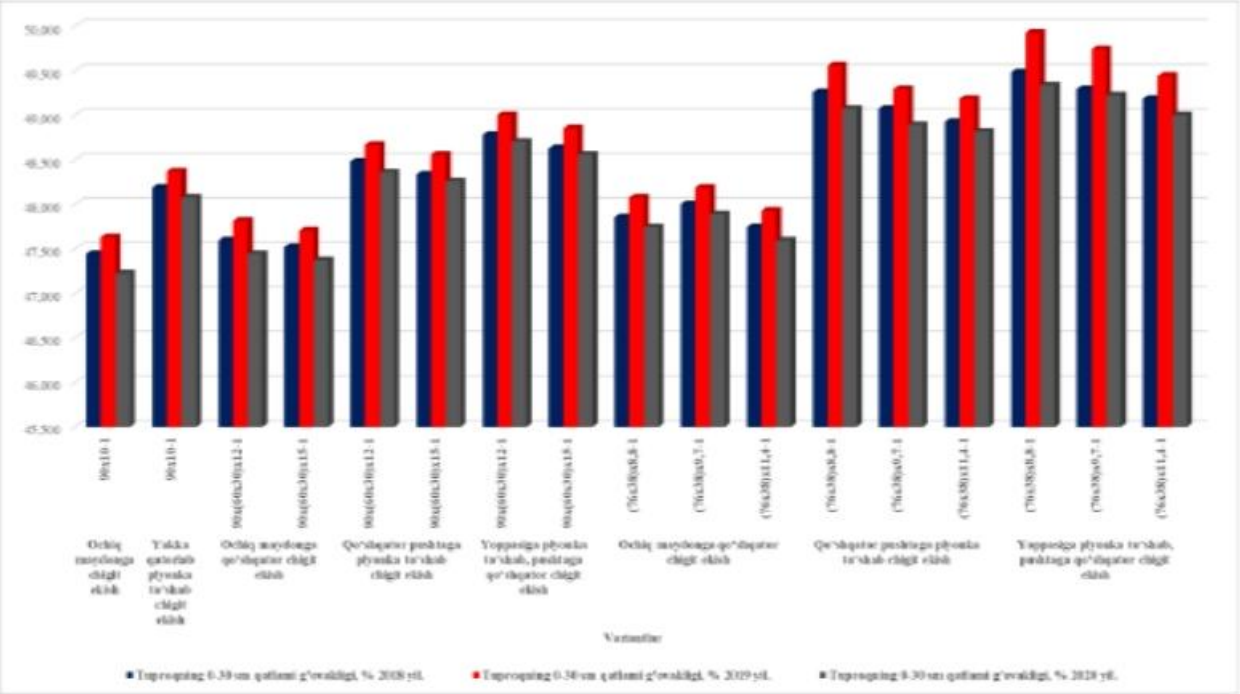

Figure 1. Soil porosity in the Amal period trench, %

To cover the tile, the seeds are added to the pink (76 x 38) x 8,8-1; (76 x 38) x 9,7-1; (76 x 38) the porosity index of 15-16-17 variants soils planted in X11, 4-1 systems is average in 0-30 sm layer of soil when analyzed 49,481 - 49,296 -49,185 %, and in a layer of 30-50 sm on average 46,963 - 46,815 - 46,667% is equal to, the soil porosity in a layer of 0-30 CM relative to the beginning of the period of action 3,963 - 4,148 - 4,259% by, in a layer of 30-50 sm 4,0 - 4,148 - 4,296% although a decrease in is observed, the decrease in soil porosity compared to Option 2, which is planted in a 90 x 10-1 system in single rows of seeds, is in a layer of 0-30 CM 1,296 - 1,111 - 1,0 % to, In a layer of 30-50 sm 0,963 - 0,815 - 0,667% it turned out to be less than.

From the results obtained from experimental options on soil porosity, it can be seen that the impact of seed planting methods and systems on soil porosity is significant, compared to the option in which seeds are planted in the open field in a 90x10-1 system, the decrease in porosity in the soil by the end of the period of; (76 x 38) X11,0.07 5 % to 0.556 % in variants planted in 4-1 systems, seeds tile bed in single row compared to the variant planted in 90 x 10-1 system by the end of the period of validity, the decrease in porosity in soil seeds under the tile 90 x (60 x 30)X12-1; 90 x (60 x 30) x 15-1; (76 x 38) x 8,8-1; (76 x 38)X9,7-1; (76 x 38)X11.4-1 was found to be 0.148% to 1.296% higher in variants planted in systems.

Agrotechnical activities led to a decrease in porosity as a result of compaction of soil layers. Improved the agrophysical properties of the soil due to the optimal temperature and air regime due to the decrease in the density of the increase in granularity in the upper layers in the pink-derived variants.

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