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EFFECTIVE USE OF TECHNIQUES IN VEGETABLE GROWING

Khalilov R.D., Omonov D.S

The article provides information on the possibility of creating favorable conditions for increasing the productivity of onion and garlic onion crops in order to improve the technology of growing vegetables.
Key words: Plug, measurer, seeder, technology, vegetable, garlic, onion, aggregate, fertilizer, bulb.

Introduction

It is well known that the soil and climate conditions of our country are very favorable for the cultivation of agricultural products. Therefore, in order to increase the cultivation of vegetable products and to further improve the supply of food to the population and industry with raw materials, various methods of management, including the organization of clusters, are being implemented in our republic. However, due to the fact that the amount of vegetable products grown in our republic is not enough to satisfy the growing demand of the population, our scientists working in this field face the issues of developing new technologies for growing vegetables, developing selection works to create high-yielding varieties of vegetables, as well as sharply reducing the share of manual labor in growing the product, and mechanization. issues such as greater use of tools are waiting for their solution.

The quality of land preparation for the cultivation of agricultural crops is the basis for the good performance of all subsequent agrotechnical processes. if vegetable crops are planted after alfalfa or on newly developed land, the preparation of the land for planting begins after autumn plowing, if it is planted after grain crops, it begins with clearing of plant residues and plowing the land.

Plowing of the land is done using tiered plows such as PD-4-35, PYa-3-35. It is recommended to apply organic and mineral fertilizers to the land before plowing. ROU-6, RUM-8, RMU-0.5, RMU-0.75, RMU-1.0 and similar machines can be used for this work.

Before planting vegetable crops in early periods, the soil layer plowed in autumn is softened with the help of ChKU-4A chisel-cultivators and plowed with heavy toothed harrows or disc harrows to preserve the moisture accumulated in the soil due to winter and early spring rains and to reduce weeds. Before planting the seeds, the field is treated with the MV-6, VP-8 levelers, the field surface is leveled, the soil layer is compacted, and favorable conditions are created for the germination of the planted seeds.

Planting schemes that ensure sufficient food areas have been developed by the staff of the Scientific Research Institute of Vegetables, Potatoes and Potatoes of Uzbekistan, as well as

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leading scientists of the republic. If the crop is planted too densely or sparsely, the land will not be used wisely, resulting in a decrease in yield per unit area and per hectare. The optimal conditions are the planting density and the boundary of the feeding area, which ensures the highest yield per unit area.

Research Methodology

Vegetable seeds can be sown in any kind of seeders, provided they are suitable for their physical and mechanical properties. Onion seeds SO-4.2 are planted in SLN-8A seed drills. SLN-8A type seeder manufactured at the Kirovograd Agricultural Machinery Plant is recommended for planting onion and garlic onion seeds in our republic. Despite the fact that the planting process is one of the most labor-intensive operations in the technology of growing and harvesting this crop, in most farms, this work is done by hand, spending a large amount of labor and money.

The SLN-8A seeder is intended for row sowing of onion and garlic onion seeds in a flat field or in pre-furrowed fields. Due to economic conditions, this planter can be used for planting tulips, gladiolus flower bulbs and similar planting materials. The SLN-8A seeder is mounted on MTZ-80, MTZ-82, TTZ-80 and similar 1.4 class tractors with three-point hitches.

Seed materials prepared for planting in this seeder should be divided into fractions according to size according to agrotechnical requirements.

Т.р.	Номи	Кўндаланг ўлчами, мм
1	Майда экиш материаллари	7..14
2	Биринчи синф	15...22
3	Иккинчи синф	23...30
4	Йирик экиш материаллари	30...35

With this seeder, it is necessary to re-adjust the seeder for this seed (sowing scheme, seed consumption, etc.) in order to sow seeds with the size and shape of the seed material close to the above-mentioned standards for planting.

The seeder consists of the following main parts (picture): 1- frame with a tractor, 2- chain transmission mechanism, 3- seed material, 4- seed box, 5- seed mixer, 6- measuring device (planting device), 7- seed conveyor, 8- disc coulter (planter), 9- compaction roller, 10- auxiliary 11- base moving wheel. The seeding process is carried out as follows. The seed is placed in the hopper so that the seed material fills the receiving chamber of the roller seeder and occupies the working part. The sowing rollers are driven by a chain drive from the main driving wheel of the seeder. When the seeder starts to move forward, the reels rotate and start to pass the seed over the reel with its ribs. The seed from the reel falls into the funnel of the seed conveyor and from there to the seed conveyor. Since the seed conveyor is connected to the two-disc coulter, the seed begins to fall into the groove formed by the discs. As soon as the discs drop the seed into the furrow, soil falls on the seed lying in the furrow and the seed is buried. The compacting wheel coming from the track of the plow compacts the soil that falls on the seed, forming a slope on both sides.

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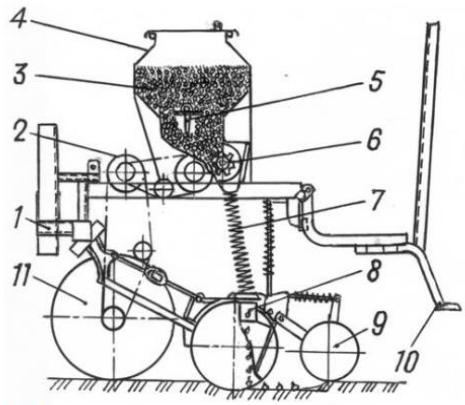

СЛН-8А сеялкасининг технологик схемаси

The marker installed on the frame of the seeder is lowered into the working position as soon as the unit starts working, and it makes a ditch on the unsown side of the field with the help of a disc and leaves a mark. The unit is controlled by placing the front right wheel of the tractor on the track drawn by the marker to return after planting the seed to the end, so that the distances of the main and adjacent row islands resulting from the operation of the planting unit in opposite directions are equal to each other.

The main frame of the seeder consists of a four-sided square tube, on the front side of which the trailer lock is welded.

From its back, frames are welded from twine to install the seed box and other parts. The trailer is mounted on the tractor's three-point mounting mechanism, and is locked by means of a hook when it is connected to the lock located on the frame of the seeder. As a result, the seeder is prevented from falling off from the tractor during movement.

Technological scheme of the SLN-8A seeder

To stop the unit and disconnect the seeder from the tractor, it is necessary to move the hook back with its special puller, opening the way for the trailer to be released. The hook returns to its original position due to the force of the spring installed on it.

a counter gear is installed in the delivery mechanism, which cuts off the mechanical movement to the reels when the planter is in transport mode or when it is stationary.

Installing the seeder on the tractor. The seeder is 1.4 t.k. It is recommended to aggregate with tractors belonging to the class. If the seeder is 0.9 t.k. if it has to be used in addition to tractors of the class, then it is necessary to put a load on the front axle of the tractor with the help of a special bracket. In this way, the longitudinal balance of the tractor can be improved. The mounting device on the back of the tractor is mounted using three-point hitches. It is necessary to ensure that the lower two pulls are located on one horizontal surface. To install the seeder on the tractor, align the two parts of the tractor together, the tractor moves back, when it is right, it stops the tractor and raises the installation device with the help of the hydraulic system. When the mounting frame enters the box, it pushes the hook of the lock, and when it reaches its place, the hook falls to the special bottom of the lock due to the force of the spring and is locked. If you continue to raise the hydraulic system, the seeder starts to rise. After the seeder

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is installed on the tractor, it is splinted to prevent the hook from coming out, and the seeder is considered ready for work.

To disconnect the seeder from the tractor, after placing the seeder in its place, pull the hook on the lock to the front side, so that when the hook comes out of the slot, it puts the tractor's hydraulic system lever in the "floating" state. The frame of the lock comes out of the lock under the influence of its own weight and the seeder is separated from the tractor.

Research Results

With this seeder, it is necessary to re-adjust the seeder for this seed (sowing pattern, seed consumption, etc.) in order to sow seeds with sizes and shapes close to those mentioned above according to the seed material planting norm.

Operational indicators of the seeder

т/р	Номи	Ўлчов бирлиги	Қиймати
1	Хисобланган иш унуми, тоза иш вақти учун, харакат тезлиги 9,5 км/соат бўлганда	га/соат	2,57...2,67
2	Ишлаш кенглиги (экиш схемасига мос холда)	м	2,8
3	Лентасимон икки қаторли экишда Қаторлар сони Қатор оралиғи	дона мм	8 200+500
4	Сошникларнинг уруғни кўмиш чукурлиги	мм	30,40,50,60
5	Уруғ қутисининг хажми	$дм^3$	550
6	Экиш аппаратлари-миқдорлагичлар-ғалтакли.	дона	8

Crop care. Before the sprouts turn green, they are harrowed with a light harrow to remove the clumps, the harrow teeth are hinged so it moves in accordance with the ground level. MVX-2.8 and MVX-5.4 rotary harrows are towed to four-wheel tillage tractors to cultivate the surface without the appearance of grass.

During the growing season, the KRN-2.8 or KON-2.8 brand hanging cultivator is used to clean the soil from weeds. The first cultivation is carried out after the seedlings are fully formed, and the second cultivation is carried out after the crops have been mowed, fed and given the first water. Before mowing, the plant is fed with mineral fertilizers and irrigation egates are taken with okuchniks

Conclusion

When analyzing the results of using the proposed seeder in farm conditions, it was found that due to the machine sowing of onion seeds, it is possible to plant seeds in a short agrotechnical period, and to drastically reduce labor and capital expenditure.

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