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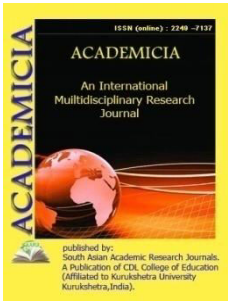

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COTTON PRODUCTIVITY ON PLANNED SANDS

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ABSTRACT

In the first decade of October, after harvesting sorghum in the aisles, without plowing, wheat was sown at the rate of 170 kg / ha with simultaneous loosening of sandy soils with a cultivator to a depth of 10-12 cm. After sowing, light watering was given. The area of the accounting plot is 96 m2. The plots of the experiment were located in four tiers with a strip width of 10 m between the tiers. At the same time, incoming and outflow ditches were cut for each tier. With 2-4 true leaves, feeding was carried out on the side of the row by 15-18 cm at the beginning of budding and at budding by 20-22 cm at the beginning of flowering, at flowering and at the beginning of fruit formation in the middle of the row.

KEYWORDS: *Harvesting, Cultivator, Ditches*

INTRODUCTION

To study the comparative effectiveness of various norms of nutrients for cotton, in order to increase its productivity in the conditions of the planned hilly-sandy sands of Central Fergana, on the territory of the virgin farm "Salizhanabad" of the Kushtepa fog of the Fergana region, we carried out vegetation, field and production experiments and carried out the accompanying phenological observations and agrochemical research. All experiments were carried out in compliance with the agricultural techniques recommended by the Ministry of Agriculture and Agriculture of Uzbekistan and the methodological instructions of the UzNIIH for conducting field and vegetation experiments with cotton (Methodology of field and vegetation experiments with cotton, Tashkent, 1973. B.A. Dospekhov, K. Mirzazhonov, V.P. .Kondratyuk.

The field experiment was carried out in four replicates. The shape of the plots is elongated, their width was two runs of a four-row seeder, which, with a row spacing of 60 cm, is 4.8 m. The total size of the plots was 240 m2 (4.8x50 m). The area of the accounting plot is 96 m2. The plots of the experiment were located in four tiers with a strip width of 10 m between the tiers. At the

same time, incoming and outflow ditches were cut for each tier. Fertilizers were applied according to the experimental scheme for the main processing by spreading, manure and lignin using an organic fertilizer spreader ROU-5, phosphorus and potassium fertilizers with a cultivator-fertilizer of the NKU-2.4 brand, followed by embedding them with a two-tier plow of the PN-3-35 brand to a depth of 35 -40 cm. For pre-sowing treatment, simultaneously with sowing and in top dressing, fertilizers were applied using a cultivator-fertilizer NKU-2.4. During sowing, fertilizers were embedded to a depth of 10-12 cm, at a distance of 5-7 cm to the side of the seeding line. With 2-4 true leaves, feeding was carried out on the side of the row by 15-18 cm at the beginning of budding and at budding by 20-22 cm at the beginning of flowering, at flowering and at the beginning of fruit formation in the middle of the row. During the growing season, at all the periods indicated above, fertilizers were applied to a depth of 3-4 cm below the bottom of the irrigation furrow. The experiment was carried out on cotton varieties S-6524. Sowing was carried out against the background of anti-deflation protection in the bottom of the furrow, leaving winter rye 14-15 cm high on the crest of stubble. The depth of the furrow is 8-10 cm.

The planting of the vegetation experiment was carried out according to the method of A.V. Sokolov. The experiment was repeated six times. Fertilizers were applied according to the scheme of the experiment, part of the nitrogen, all phosphorus, potash, organic fertilizers (manure, lignin, rye, like green manure) - when filling the vessels, mixing the entire sample of fertilizers with the soil; the remaining nitrogen fertilizers were fed with 2-4 true leaves, at the beginning and massive budding, at the beginning and at the height of flowering. The sowing of cotton was carried out with the C-6524 variety. Plants were grown at 70% moisture content of the total capillary moisture capacity (CWR). For the general characteristics of the sand of the test plots, before laying the experiments, sand samples were taken from the arable (0-30 cm) and subsurface (30-50 cm) horizons to determine the content of humus, gross and mobile forms of nitrogen, phosphorus and potassium. In order to study the dynamics of mobile forms of nitrogen, phosphorus and potassium during the growing season, according to the phases of cotton development, sand samples were taken from the horizons 0-30, 30-50, 50-75, 75-100 cm. Plant samples for analysis were taken at 2-4 true leaves, in budding, in flowering and at the end of the growing season. Phenological observations of the growth and development of cotton were carried out according to the methodology of the UzNIIKH, set out in the books "Methodology of field and vegetation experiments with cotton" (1973) and "Methodology of field experiments with cotton" B.A. Dospekhov, K. Mirzazhonov, V.P. .Kondratyuk.

According to the variants of experiments, the height of the main stem was measured by developmental phases, the number of true leaves, sympodia, buds and bolls formed on the plants was taken into account, and the average weight of raw cotton of one boll was determined.

In all the years of research, before the harvesting of raw cotton, the actual density of the standing of the cotton was determined by means of a complete counting of all plants on the counting rows of the plots.

The harvest of raw cotton was counted manually on the registration rows of the experimental plots. In order to assess the accuracy and reliability of the results obtained, the data on the yields of field and production experiments were subjected to mathematical processing according to the method described by V.P. Peregudov, and the vegetation experiment - by A.V. Sokolov.

In the first decade of October, after harvesting sorghum in the aisles, without plowing, wheat was sown at the rate of 170 kg / ha with simultaneous loosening of sandy soils with a cultivator to a depth of 10-12 cm. After sowing, light watering was given. At the end of February, in the snow and at the beginning of booting, the wheat was fed with ammonium nitrate at the rate of 160 kg / ha. Phosphate fertilizers (ammophos) at the rate of 105 kg / ha, they were applied with sowing. Wheat was watered 6-7 times at the rate of 700-800 m3 / ha.

Experiments on the cultivation of wheat on these lands were carried out from 1998 to 2000. wheat variety "Polovchanka". In the first decade of October, after harvesting sorghum, wheat was sown in between rows, without plowing, at the rate of 170 kg / ha with simultaneous loosening of sandy soils with a cultivator to a depth of 10-12 cm. After sowing, light watering was applied. At the end of February, in the snow at the beginning of the demand, the wheat was fed with ammonium nitrate according to the norm. Phosphate fertilizers according to the scheme were introduced at the rate of 105 kg / ha with sowing.

They used: ammonium nitrate (34% N), ammophos (11% N, 46% P2O5), potassium chloride (56% K2O). Potash and part of phosphorus fertilizers were introduced for plowing, the rest with sowing. Phenological observations were carried out according to the “Methodology of the State Variety Testing of Agricultural Crops” Moscow.

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