



HIGH AND HIGH QUALITY HARVEST FROM PET FOOD CROPS BY LASER LEVELING ON DESERT SLOPES

Jurayev A. K.

Bukhara Institute of Natural Resources Management of the National Research
University of TIIAME - 32, Gazli shokh ave., Bukhara, 105009, Uzbekistan

Sobirov K. S.

Bukhara Institute of Natural Resources Management of the National Research
University of TIIAME - 32, Gazli shokh ave., Bukhara, 105009, Uzbekistan

Najmuddinov M. M.

Bukhara Institute of Natural Resources Management of the National Research
University of TIIAME - 32, Gazli shokh ave., Bukhara, 105009, Uzbekistan

Annotation

The article quotes about the high yield obtained by planting the Beda EMILIANO variety as a cattle-fed crop, flattening the lands by laser leveling works of uneven lands.

Аннотация: В статье рассказывается о том, как высокие урожаи были получены путем выравнивания земли с помощью лазерного выравнивания неровной земли и посадки сорта люцерны Эмилиано в качестве кормовой культуры для скота.

Keywords: laser leveling, alfalfa, Desert slope, feed.

Ключевые слова: лазерное выпрямление, люцерна, Степное пастбище, корма.

Introduction

In the social life of our country mitigate the frustration of the population's food production provision employment one of the main factors in improving the well-being of the population can be solved by mastering the lands of the forest land fund and new lands from the steppe-yaylov regions, as well as the cultivation of agricultural crops. Effective resurstejamkor way of cultivation of products from desert spring lands leveling of the land area on the basis of intensive technology i.e. reduction of water consumption by 30-35 percent by providing a plane along the contour with a laser leveler mineral large - scale work has been carried out to obtain the yield of high-quality feed crops from each hectare of the Earth by increasing the efficiency of fertilizers by 25-30 percent, increasing the land use coefficient by 98 percent from the account of the Prevention of secondary salinity of the soil by preventing wind erosion and preventing soil degradation from year to

The main purpose of our scientific research work: In the newly mastered steppes, open the landfields in the nolivoy plane, in which the most current laser Leveler is located, in which the surface



of the Earth is in the same flat position along the contouririb economy of the water being watered in it prevent the presence of a salt piece erishish prevent the complete use of mineral fertilizers to the plant to determine the natural fertility and fertility of assimilated soils in scientific research.

Level of study of the problem: In the conditions of Bukhara region, agricultural work is carried out mainly on land plots irrigated from old ones. The available irrigated area is 405 thousand hectares in the Oasis, so the main part is 278 thousand hectares of the main crops i.e. cotton 105 thousand hectares of grain 66 thousand hectares and alfalfa corn vegetable melons garden-herds soil plantations greenhouses and more than 40 thousand hectares of the population are vascular lands.

In our region Varakhsha Kutchi mid-desert Guard-market Massif Olot and other massifs in the territory of each district there are fields of Steppe-yaylov at present, each district is planned to master 10 thousand hectares and to cultivate the agricultural products in them by mastering 278 thousand hectares of land based on the conceptions drawn up until 2030.

In the current year, if more than 10 thousand hectares of new lands are mastered in all districts of our region, it is planned to own 110 thousand hectares of new lands in the region.

On the basis of the above-mentioned points, the modernization of the water economy of Agriculture under the influence of the effects of the economic crisis in our country until now, although the possibility of obtaining products by mastering the fields of Forestry of desert slopes was limited, the possibility of carrying out these activities was limited.

Ground levers with agitators serve for soil tillage before planting; the working body consists of one or more flat or arc-shaped agitators, which are slightly inclined in relation to the direction of movement. These are divided into 3 groups: land leveler-trowel, soil leveler-spreader before planting and land leveler with dragratma (volokusha) for rice planting irregularities in the water-repressed fields should be 3 cm, on the irrigated fields 5 cm, on the irrigated fields with artificial rain should be no more than 10 cm. The width of the coverage of the land rollers with rollers is 6-8 m. When the working body of the Earth flattener is pressed against the front of the gidrosilindr Earth, the soil cuts off unevenness, and when pressed back slightly densifies (molalizes) the field bet. The Leveler is used with the addition of a gear rack (boron), it is rolled out from behind, rolling the field bet to a depth of 10 cm. Lazer nivelerida tekislashning afzalliklari:

- * Water spent on irrigation saves 20-25 percent;
- Soil salinity reduction is achieved;
- Reduced watering time, workforce, energy consumption;
- Crops sprout evenly;
- Crops are provided with the same moisture and nutrients;
- Bug'doy-cotton crop increases 4-7 c per hectare;
- Additional income for high-yielding fermers is man'bai.

Today, the effective use of Water Resources in the cultivation of agricultural crops in the irrigation farming system is one of the most important tasks of our hardworking farmers and farmers.

If a single farmer sows a crop on an area of 50 hectares and irrigation his crop 4 times during the



growing season, according to the above calculations, an excess of water will be spent on each hectare by 400-4800 m³, and on a total field by 200000-240000 m³. Therefore, leveling of lands on a laser level is the most urgent issue.

Leveling the lands on the laser level-the difference between the lowest and highest places on the surface of the field is 1+3 cm.at a level that does not exceed, the method of leveling in devices with a special equipment laser level is understood.

Table 1 Impact of soil deep processing and azerli leveled and fertilizer standard (cm)

Option order	Annual norm of mineral fertilizers			2021	
	N	P ₂ O ₅	K ₂ O	1	2
Driving depth 28-30 CM					
1	50	70	50	62,8	98,1
2	75	120	100	72,6	107,5

The depth of soil plowing was 15-20 cm, with a laser straightener straightened to 0,0005 slope, and the height of the bed was 81,7 and 112,5 CM in proportion to the yields in the (2) variant, which was used in the norms N-75, P₂O₅-120, K₂O-100 kg/ha. These indicators were 18,9 and 13,9 cm higher than the control option, while the soil fertilized by the same standards will remain plowed to a depth of 28-30 CM while 9,1 and 5,0 cm higher than the control option.

References

1. Atamurodov, B. N., Sobirov, K. S., & Najmuddinov, M. M. (2022). BASICS OF FARMING ON SALINE AND SALINE-PRONE SOILS. *Oriental renaissance: Innovative, educational, natural and social sciences*, 2(6), 725-730.
2. Xamidova, S. M., Juraev, U. A., & Atamurodov, B. N. (2022). EVALUATION OF THE EFFECTIVENESS OF PHYTOMELIORATIVE MEASURES IN THE TREATMENT OF RECLAMATION OF SALINE SOILS. *Web of Scientist: International Scientific Research Journal*, 3(6), 835-841.
3. Jurayev, A. K., Jurayev, U. A., Atamurodov, B. N., Sobirov, K. S., & Najmuddinov, M. M. (2022). IRRIGATION OF COTTON BY WATER-SAVING METHOD. *Oriental renaissance: Innovative, educational, natural and social sciences*, 2(6), 718-724.
4. Atamurodov, B. N., Sobirov, K. S., & Najmuddinov, M. M. (2022). USE OF RESOURCE-EFFICIENT IRRIGATION TECHNOLOGY IN THE REPUBLIC OF UZBEKISTAN. *Science and innovation*, 1(D2), 96-100.
5. Jurayev, A. K., Jurayev, U. A., Atamurodov, B. N., Najmuddinov, M. M., & Sobirov, K. S. (2022). EFFECTIVE USE OF WATER IN IRRIGATED AREAS. *Oriental renaissance: Innovative, educational, natural and social sciences*, 2(6), 810-815.
6. Jurayev, A. K., Jurayev, U. A., Atamurodov, B. N., Sobirov, K. S., & Najmuddinov, M. M. (2022). GROWING TOMATOES HYDROPONICALLY IN GREENHOUSES. *Science and innovation*, 1(D2), 87-90.



7. Atamurodov, B. N., Murodov, O. U., Najmiddinov, M. M., & Sobirov, K. S. (2022). IN IRRIGATION OF AGRICULTURAL CROPS, IRRIGATION WITH DIFFERENT QUALITY WATER. *Science and innovation*, 1(D2), 91-95.
8. Jurayev, A. K., Jurayev, U. A., Atamurodov, B. N., Sobirov, K. S., & Najmiddinov, M. M. (2022). SOYBEANS ARE TRANSPLANTED INTO SALINE AND SALINE SOILS TO JUSTIFY THE EFFECTIVENESS OF DRIP IRRIGATION.
9. Jurayev, A. K., Jurayev, U. A., Atamurodov, B. N., Sobirov, K. S., & Najmiddinov, M. M. (2022). IRRIGATION OF GOOSE BY WATER-SAVING METHOD.
10. Jurayev, A. K., Jurayev, U. A., Atamurodov, B. N., Sobirov, K. S., & Najmiddinov, M. M. (2022). SCIENTIFIC AND PRACTICAL IMPORTANCE OF EFFICIENT USE OF WATER IN IRRIGATED LAND.
11. Jurayev, A. Q., Jurayev, U. A., Atamurodov, B. N., & Najmiddinov, M. M. (2021). Cultivation of Corn as a Repeated Crop. *European Journal of Life Safety and Stability* (2660-9630), 10, 49-51. Jurayev, A. Q.,
12. Jurayev, U. A., Atamurodov, B. N., & Najmiddinov, M. M. (2021). Scientific Benefits and Efficiency of Drip Irrigation. *Journal of Ethics and Diversity in International Communication*, 1(6), 62-64.
13. Jurayev, A. Q., Jurayev, U. A., Atamurodov, B. N., & Najmiddinov, M. M. (2021). Aphorisms of Farming in the Method of Kidropionics. *International Journal of Discoveries and Innovations in Applied Sciences*, 1(6), 133-135.
14. Jo'rayev, U. A., Jo'rayev, A. Q., & Atamurodov, B. N. (2021). Application of Provided Irrigation Technologies in Irrigated Agriculture. *International Journal of Development and Public Policy*, 1(6), 164-166.
15. Atamurodov, B. N., Ibodov, I. N., Najmiddinov, M. M., & Najimov, D. Q. The Effectiveness of Farming in the Method of Hydroponics. *International Journal of Human Computing Studies*, 3(4), 33-36.
16. Jurayev, A. Q., Jurayev, U. A., Atamurodov, B. N., & Najmiddinov, M. M. (2021). The Main Purpose of Drip Irrigation in Irrigation Farming and Its Propagation. *European Journal of Life Safety and Stability* (2660-9630), 10, 46-48.
17. Fazliev, J., Khaitova, I., Atamurodov, B., Rustamova, K., Ravshanov, U., & Sharipova, M. (2019). EFFICIENCY OF APPLYING THE WATER-SAVING IRRIGATION TECHNOLOGIES IN IRRIGATED FARMING. *Интернаука*, 21 (103 часть 3), 35.
18. Xamidova, S. M., Juraev, U. A., & Murodov, O. U. (2022). EFFECTS OF PHYTOMELIORANT PLANTS ON LAND RECLAMATION CONDITION AND SALT WASHING NORMS. *Oriental renaissance: Innovative, educational, natural and social sciences*, 2(6), 803-809.
19. Ulugbekovich, M. O., Komiljonovna, S. M., Sobirovich, K. B., & Murodovich, M. M. (2021, March). DETERMINATION OF EFFICIENCY OF GROUNDWATER USE IN IRRIGATION OF MILLET PLANTING. In *Euro-Asia Conferences* (Vol. 3, No. 1, pp. 131-134).



20. Murodov, O. U., Teshayev, U. O., Amrulloev, O. I., & Islomov, S. U. (2021). DETERMINING THE EFFICIENCY OF THE USE OF UNDERGROUND WATER IN IRRIGATION OF TARIK. *Экономика и социум*, (3-1), 187-191.

21. Ulugbekovich, M. O., Sobirovich, K. B., & Komiljonovna, S. M. son of the Islamic Charter of Prayer. (2020). Smart irrigation of agricultural crops. *Middle European Scientific Bulletin*, 3, 1-3.

22. Ulugbekovich, M. O., Sobirovich, K. B., Komiljonovna, S. M., & Nizomiy ogli, I. I. (2020). Smart irrigation of agricultural crops. *Middle European Scientific Bulletin*, 3, 1-3.

23. Khamidov, M. K., Balla, D., Hamidov, A. M., & Juraev, U. A. Using collector-drainage water in saline and arid irrigation areas for adaptation to climate change. 2020. In *IOP Conference Series: Earth and Environmental Science* (Vol. 422, No. 1, p. 012121).

24. Dagma, B., Hamidov, A., Muhammadkhon, K., & Jurayev, U. Improvement of drainage water quality through biological methods: a case study in the Bukhara region of Uzbekistan. *European Science Review*. –Austria Vienna. –2016. –№ September-october. (05.00. 00. № 3).

25. Ro'Ziyeva, M. A., & Najmuddinov, M. M. (2022). Sho'rlik darajasi turlicha bo'lgan suvning jamadon tipidagi ko'chma quyosh suv chuchiktgich qurilmasining unumdorligiga ko'rsatadigan ta'siri. *Science and Education*, 3(4), 218-221.

26. Ruziyeva, M. A., Najmuddinov, M. M., & Sobirov, K. S. (2022). COMPARATIVE ANALYSIS OF METHODS FOR MEASURING BURNUP OF SPENT FUEL ASSEMBLIES BETI. *Oriental renaissance: Innovative, educational, natural and social sciences*, 2(5), 385-389.

27. Саксонов, У. С. (2022). АКТУАЛЬНОСТЬ ВОДОСБЕРЕГАЮЩИХ ТЕХНОЛОГИЙ ПОЛИВА. *Scientific progress*, 3(2), 1004-1009.

28. Жураев, А. К., & Саксонов, У. С. (2019). BUG 'DOY O 'SIMLIGINING BIOLOGIYASI HAMDA AGROTEXNIKASI. *ЖУРНАЛ АГРО ПРОЦЕССИНГ*, (6).

29. Жураев, А. К., & Саксонов, У. С. (2019). BUXORO VOHASIDA KUZGI BUG 'DOYNI SUG 'ORISH MUDDATLARI VA ME 'YORLARINI ILMIY ASOSLASH. *ЖУРНАЛ АГРО ПРОЦЕССИНГ*, (6).

30. Фазлиев, Ж. Ш., Хайтова, И. И., Атамуродов, Б. Н., Рустамова, К. Б., & Шарипова, М. С. (2019). ТОМЧИЛАТИБ СУФОРИШ ТЕХНОЛОГИЯСИНИ БОГЛАРДА ЖОРИЙ ҚИЛИШНИНГ САМАРАДОРЛИГИ. *Интернаука*, (21-3), 78-79.

31. Атамуродов, Б. Н., Фазлиев, Ж. Ш., & Рустамова, К. Б. (2020). ИССИҚХОНАЛАРДА ПОЛИЗ ЭКИНЛАРИ УЧУН ГИДРОПОНИКА УСУЛИ САМАРАДОРЛИГИ ВА ФОЙДАЛИ ЖИХАТЛАРИ. *ЖУРНАЛ АГРО ПРОЦЕССИНГ*, 2(3).

32. N., Atamurodov B., et al. "The Effectiveness of Farming in the Method of Hydroponics." *International Journal of Human Computing Studies*, vol. 3, no. 4, 2021, pp. 33-36, doi:10.31149/ijhcs.v3i4.2026.