

## **SUG‘ORILADIGAN TIPIK BO‘Z TUPROQLAR SHAROITIDA KUNGABOQAR NAVLARINING O‘SISHI VA RIVOJLANISHI**

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### **ANNOTATSIYA**

*Mazkur maqolada Toshkent viloyatining sug‘oriladigan tipik bo‘z tuproqlari sharoitida kuzgi bug‘doydan so‘ng takroriy ekin sifatida parvarishlangan kungaboqarning sug‘orish tartiblari va rivojlanish fazalari bo‘yicha ma’lumotlar keltirilgan.*

**Kalit so‘zlar:** Kungaboqar, o‘sish, rivojlanish, takroriy ekin, sug‘orish tartiblari, hosildorlik.

### **ABSTRACT**

*This article provides information on the procedures and stages of development of sunflowers irrigation, which was bred as a repeated crop after autumn wheat in the conditions of irrigated typical peat soils of the Tashkent region.*

**Key words:** Sunflower, growth, development, repeated cultivation, irrigation procedures, productivity.

**KIRISH:** Aholisining sonining ortishi oziq-ovqat jumladan, o‘simlik moyi va oqsilli mahsulotlarga bo‘lgan talab kun sayin ortib bormoqda. O‘simlik moyi ishlab chiqarish sanoatida soya va kungaboqar asosiy xomashyo manbai bo‘lib hisoblanadi. «Bugungi kunda yer yuzida 122,1 mln. hektar maydonda soya va 25,6 mln. hektar maydonda kungaboqar asosiy va takroriy muddatlarda yetishtirilmoqda. Dunyo mamlakatlarida bugungi kunda agrar sohada ekinlarni yetishtirishda suv tanqisligi muammosi kundan kunga ortib bormoqda. Moyli ekinlar yetishtiruvchi mamlakatlarda

hosildorlikni oshirish, sifatini yaxshilashda sug‘orish muddatlari va me’yorlarini to‘g‘ri belgilash muhim hisoblanadi.

Moyli ekinlardan kungaboqar navlarini sug‘orish me’yorlari va muddatlarini tuproq-iqlim sharoitlarini hisobga olgan holda to‘g‘ri belgilash, hosilining sifati va miqdoriga o‘zining ijobiy ta’sirini ko‘rsatadi. Hozirgi paytda dunyo aholisini o‘simplik moyiga bo‘lgan talabini qondirish, oziq-ovqat havfsizligini ta’minlashda takroriy ekiladigan soya va kungaboqarni sug‘orishda maqbul sug‘orish tartibi va suv iste’molini aniqlash bo‘yicha tadqiqotlar olib borish dolzarb hisoblanadi.

**Muammoning o‘rganilganlik darajasi.** Moyli ekinlardan soya va kungaboqarni asosiy va takroriy muddatlarda yetishtirish hamda ularning biologiyasi va yetishtirish agrotexnologiyalarini o‘rganish bo‘yicha xorijda P.Vavilov, A.Babich, G.Poslypanov, L.Vislobokova, O.Ianova, S.Ivanov, L.Gubanov, V.Litvinov., A. Sevost’yanov, M.Miroshnichenko, S.Antonov, Ye.Yefimov, A.Nel, H.Loubser, P.Hammes, mamlakatimizda soya bo‘yicha Q.Mirzajonov, X.Atabaeva, D.Yormatova, U.Norqulov, N.Xalilov, B.Xalikov, S.Isaev, I.Israilov, N.O‘razmatov, F.Namozov, U.Ne’matov, X.Raxmonov, M.Mannopova, M.Sattorov, A.Iminov, A.Duysenov, A.Panjiev, O.Sottorov, moyli kungaboqar bo‘yicha esa I.Anarboev, I.Ernazarov, **M.Lukov**, S.Tog‘aeva kabi olimlar tomonidan keng qamrovli ilmiy ishlar olib borilgan. Shuning uchun kungaboqar o‘simpligini kuzgi bug‘doydan so‘ng takroriy ekin sifatida parvarishlashning maqbul sug‘orish tartibini ishlab chiqish dolzarb vazifa hisoblanadi.

## TADQIQOT NATIJALARI.

Tajriba olib borilgan izlanishlar natijasiga ko‘ra, kungaboqarning “Navruz” navi o‘zini ancha ertapisharligini namoyon etdi. Bunda ushbu navni ChDNSga nisbatan 65–65–60 % namlikda tuproqning 0–50 sm hisobiy qatlami bo‘yicha sug‘orishda eng erta pishar bo‘lib, 85 kunnni, sug‘orish tartibiga mos lekin 0–70 sm hisobiy qatlam o‘yicha 87 kunni tashkil qilganligi tajribada kuzatildi. Sug‘orish tartibi 75–75–65 % namlikda va sug‘orish oldi tuproq namligi mos ravishda amalga oshirilgan varintda o‘simplikning vegetatsiya davri 89 kundan iborat bo‘ldi. Tajribada nazorat sifatida ekilgan kungaboqarning “Jaxongir” navi “Navro‘z” naviga nisbatan kechpishar bo‘lib, vegetatsiya davri 3 yilda o‘rtacha 92 kungacha davom etdi yoki 7 kun kech pishishi kuzatildi. (1-jadvalda keltirilgan).

1-jadval

## Kungaboqarning o'sishi va rivojlanishi dinamikasi sm, 2018 yil

V a r	Navlar	Tuproq sug'orish oldi namlik, ChDNS ga nis.%	Kungaboqarning bo'yi, sm			Barglar soni, dona			Savatcha- ning Diametri, sm., 1.10.
			1.08	1.09	1.10	1.08	1.09	1.10	
1	Jahongir	70-70-60	59,0	172,6	176,6	7,02	19,01	20,7	20,7
2	Navro'z	65-65-60	49,5	165,1	168,9	11,7	21,04	18,6	21,6
3		75-75-65	51,0	168,8	169,1	9,78	18,44	19,0	20,9
4		65-65-60	48,6	164,7	166,7	10,5	18,76	19,6	21,4
5		75-75-65	59,6	165,9	172,7	9,97	19,13	19,4	21,1

Sug'oriladigan tipik bo'z tuproqlarda parvarishlangan kungaboqarning navlarining o'sishi, rivojlanishi mavsum davomida turlicha bo'ldi. O'rtacha o'simlik bo'yi vegetatsiya ohiriga borib, eng yuqori ko'rsatkich "Jaxongir" navida uch yilda o'rtacha 176,6-184,4 sm eng past ko'rsatkich esa "Navruz" navi 65-65-60 % namlikda kuzatilib, o'rtacha 159,6-174 sm bo'ldi. Bu navning ChDNSga nisbatan 75-75-65 % namlik bo'yicha sug'orishda tuproqni 0-70 sm hisobiy qatlamida 172,7-181,6 santimetri tashkil qildi. Fenologik kuzatishda o'lchov natijalariga ko'ra savatchaning diametri bo'yicha eng yuqori ko'rsatkich "Navro'z" navida ChDNSga nisbatan 65-65-60 % sug'orish tartibida va tuproqni namlash hisobiy qatlami 0-50 sm bo'lganda aniqlandi va 21,6-24,5 sm, barglar soni esa 21,4 donani tashkil etdi.

Tajribaning tuproqning 0-70 sm qatlami sug'orish oldi tuproq namligi 65-65-60 % namlik bo'yicha tuproqning hisobiy qatlami 0-70 smda sug'orish amalga oshirilganda kungaboqarning bo'y balandligi oktabr oyinin dastlabki o'n kunligida "Navro'z" navida 166,7 sm bo'ldi va barglar soni 19,6 donani tashkil etdi. Tajribaning 5-variantida 75-75-65 % namlikda tuproq namligiga 0-70 sm bo'lganda o'simlikning bo'y balandligi 176,6 sm bo'lsa, barglar soni esa 20,7 dona bo'lganligi kuzatildi

## FOYDALANILGAN ADABIYOTLAR (REFERENCES)

- [1] Abdalova, G.N.; Eshonkulov, J.S.; Sulaymonov, S.O.; Abdullayeva, F.M. Improvement of Cotton Nutrition Procedure and Irrigation Technologies. *ACADEMICIA Int. Multidiscip. Res. J.* 2021, 11, 720–723. [[Google Scholar](#)] [[CrossRef](#)]
- [2] Nasirov Bakhtiyor Salakhiddinovich Charshanbiyev Umuroq Yuldashevich, Eshankulov Jamoliddin Saporboy ugli. "Efficiency of application of herbicides which are samuray 33% ek, zellek super 10.4% ek and triflurex 48% ek against weeds in cotton fields" *Web of Scientist: International Scientific Research Journal* 2.09 (2021): 136-139.
- [3] Salakhiddinovich, Nasirov Bakhtiyor., Eshankulov Jamoliddin Saporboy ugli 2021 "Development of Irrigation Procedures for Shadow Varieties Planted After Autumn Wheat." *International conference on multidisciplinary research and innovative technologies.* Vol. 1. 2021. [[Google Scholar](#)]
- [4] J Eshonkulov, B Kamilov Effect of irrigation regimes on the fertility of soybean and sunflower cultivars planted in repeated periods To cite this article: January 2023 IOP Conference Series Earth and Environmental Science DOI: 10.1088/1755-1315/1140/1/013006 [[Google Scholar](#)]
- [5] Allanov, K.; Sheraliev, K.; Ulugov, C.; Ahmurzayev, S.; Sottorov, O.; Khaitov, B.; Park, K.W. Integrated Effects of Mulching Treatment and Nitrogen Fertilization on Cotton Performance under Dryland Agriculture. *Commun. Soil Sci. Plant Anal.* 2019, 50, 1907–1918. [[Google Scholar](#)] [[CrossRef](#)]
- [6] Burievich, T. B., Olimovich, A. Eshankulov J.S., Turaevich, M.T 2021 Groundwater consumption and cotton productivity. *Web of Scientist: International Scientific Research Journal*, 2(09), 130-135. [[Google Scholar](#)]
- [7] Norkulov U, Izbasarov B, Tukhtashev B, Eshonkulov J., Volume: 2 Issue: 2 2022 Effects of Sardoba Reservoir Flood on Irrigated Land, International Journal of Innovative Analyses and Emerging Technology e-ISSN: 2792-4025 40-42 p.
- [8] U Norqulov, Sh Axmurzayev, J Eshonqulov, S Raxmatullayev TOSHKENT VILOYATI SHAROITIDASOYA DALASIDAGI ZARPECHAKKA QARSHI ZETA 100 G/L GERBITSIDINI QO 'LLASHNING SAMARADORLIGI 2022/12/31 RESEARCH AND EDUCATION 503-507 [[Google Scholar](#)] [[CrossRef](#)]
- [9] Tukhtashev B, Norkulov U, Izbosarov B Technology of proper use of saline soils in the conditions of Uzbekistan. E3S Web of Conferences 258, 03027 (2021) [[Google Scholar](#)]

- [10] Izbasarov B.E, Norkulov U, Tukhtashev, Hikmatov Sh Influence Of New Types Of Horizontal Ditches On The Growth, Development And Yield Of Winter Wheat In Saline And Groundwater Surface Soils. Influence Of New Types Of Horizontal Ditches On The Growth, Development And Yield Of Winter Wheat In Saline And Groundwater Surface Soils 2021 [Google Scholar](#)]
- [11] Norkulov U, Tukhtashev B, Eshonkulov J., Volume: 2 Issue: 2 2022 Change of Mechanical Composition of Soils after Flood of Sardoba Water Reservoir, International Journal of Innovative Analyses and Emerging Technology e-ISSN: 2792-4025 36-39 p. [Google Scholar](#)]
- [12] Ziyatov Musulman Panjiyevich, Shamsiyev Akmal Sadirdinovich, Kamilov Bakhtiyor Sultanovich, Abdalova Guliston Nuranovna, Abdurakhimov Shavkatjon Olimovich, Eshonkulov Jamoliddin Saporboy ugli. PJAEE, 17(6) 2020 Effective agrotechnology of cotton feeding in different irrigation methods. Palarch's Journal Of Archaeology Of Egypt/Egyptology 17(6). ISSN 1567-214x. 3415-3428 p. <http://www.palarch.nl/index.php/jae/article/view/1335> [Google Scholar](#)]
- [13] Shamsiyev Akmal Sadirdinovich, Eshonkulov Jamoliddin Saporboyugli, Sultanov Umbetali Tazabayevich 2020 Growth and development of soy and sunflower varieties. [ACADEMICIA An International Multidisciplinary Research Journal](#) 10(11):1289-1291
- [14] Shamsiyev Akmal Sadirdinovich, Kamilov Bakhtiyor Sultanovich., Eshonkulov Jamoliddin Saporboyugli, Ashirov Y.R. Agrophysical and agrochemical properties of influence of recycled soya and soil of the field 2020 [ACADEMICIA An International Multidisciplinary Research Journal](#) August – India, 2020. – Vol. 10. – Issue 8. – P. 475-479
- [15] Dusbayev I R, Nasirov B.S, Ashirov Y.R, Eshonkulov J.S, Rashidov Q 2021 Methods of planting fine fluid cotton and effects of Herbicides. 2<sup>nd</sup> International Conference on Science Technology and Educational Practices. Turkey 251-254 p. [Google Scholar](#)]
- [16] Eshonkulov Jamoliddin Saporboy ugli., Shamsiev Akmal Sadirdinovich. Vol.5 NO. 2020 Congress (2020) ChanGES in water-physical properties of soil in repeated crop sunflower care. International congress on modern education and integration congress – India – Volume 5. – P. 89-90. [Google Scholar](#)]
- [17] Chorshanbiyev U.Y., Allanov Kh.K., Safaraliyev L.H., Berdiboev E.Y. The effect of organic fertilizer application in growing amaranth (amaranthus) plant. IOP Conference Series: Earth and Environmental Science. 2022 IOP Conf. Ser.: Earth Environ. Sci. 1140. 011021. 1-8.
- [18] Toshpulatov Ch., Tukhtashev B., Charshanbiev U., Mavlonov B. Effects of soil

salt-leaching terms on growth, development and yield of corn in Uzbekistan. IOP Conference Series: Earth and Environmental Science. 2022 IOP Conf. Ser.: Earth Environ. Sci. 1140. 013005. 1-9.

[19] Charshanbiev U., Shodmanov M., Sultanov U., Dusbaev I. Effects of continuous application of Samurai and Zellek Super herbicides on cotton fields against weeds in the conditions of Uzbekistan. E3S Web of Conferences 258, 04052 (2021). 1-11.

[20] Inagamova N., Rahmonov R.U., Charshanbiev U.Y., Nasirov B.S., Ruziev A.A. Washing the soil through irrigation erosion and measures to combat it. EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal. Volume: 6 | Issue: 12 | December 2020. 496-499.

[21] Nasirov B.S., Charshanbiyev U.Y., Eshankulov J.S., Oblokulova J.B. Efficiency of application of herbicides which are samuray 33% e.k., zellek super 10.4% e.k. and triflurex 48% e.k. against weeds in cotton fields. Web of scientist: Internstional scientific research jurnal ISSN: 2776-0979 (Volume 2, Issue 9, Sep., 2021. 136-139. [Google Scholar](#))

[22] Charshanbiev U.Y., Muminov K.M. Successive Application of Samuray 33% e.c. and Zellek Super 10,4% e.c. Herbicides Against of Weeds in the Fields or Cotton. International Journal of Science and Research (IJSR) ISSN (Online): 2319-7064. 1588-1591.