



## O'simlikxo'r qandalalar sonini cheklashda agrotexnik tadbirlarning axamiyati

**Boboyeva Nodira To'xtamishovna**

Termiz davlat universiteti Botanika kafedrası

katta o'qituvchisi. p.f.f.d. (PhD)

**Annotatsiya:** Ushbu maqolada o'simlikxo'r qandalalar sonini cheklashda agrotexnik tadbirlarning axamiyati haqida ma'lumotlar keltirilgan.

**Kalit so'zlar:** Agrotexnik tadbirlar, beda qandalasi, dala qandalasi, g'o'za qandalasi, g'o'za o'simligi

G'o'zaning shonalash davrida turli ko'chat qalinliklarida qandalalar soni va zararlangan hosil elementlari soni aniqlanganda o'rta tolali “Buxoro-102” g'o'za navida qandalalar soni 11-15 donagacha va gullash-hosil to'plash davrida 16-20 donagacha bo'lib, ko'chat qalinliklari oshib borishi bilan qandalalar soni ham 2-4 donaga oshib borgan. Zararlangan hosil elementlari soni shonalashda 2,0-2,6 va gullash-hosil to'plashda 2,2-2,8 donagacha bo'lib, bunda ham ko'chat qalinliklari oshib borishi bilan hosil elementlarini zararlanishi ortib borgan.

Ingichka tolali g'o'za navida o'rta tolali g'o'za naviga nisbatan qandalalar soni birmuncha kamroq uchrab, shonalash davrida 10-14 dona va gullash-hosil to'plash davrida esa 14-18 donagacha bo'lib, 10-20 ming tupga oshirib borishi bilan qandalalar soni ham 1-4 donagacha oshib borgan. Qandalalar soni oshib borishi bilan esa zararlangan hosil elementlari soni ham ortib borgan (1-jadval).

**G'o'zaning rivojlanish fazalarida turli ko'chat qalinliklarida o'simlikxo'r  
qandalalarning soni va hosil elementlariga ta'siri** **1-jadval**

Variantlar	Shonalash davrida		Gullash -hosil to'plash davrida		
	Qandala soni, dona	Zararlangan hosil elementlar soni, dona	Qandala soni, dona	Zararlangan elementlar dona	hosil soni,
Buxoro – 102					
Nazorat	10	1,7	14	2,1	
90 – 100	12	2,0	15	2,3	
110 – 120	14	2,2	18	2,6	
Surxon – 103					
Nazorat	11	1,7	16	2,0	
120 – 130	12	2,0	16	2,1	
140 – 150	15	2,2	19	2,3	

**Izoh: ishlab chiqarishda o'rta tolali g'o'za navi 90 ming tup/ga, ingichka tolali g'o'za navi 120 ming tup/ga ekilgan.**

Tajribada o'rta tolali g'o'za navi uchun olingan 90-100 ming tup ko'chat qalinligi bilan ishlab chiqarishdagi 90 ming ko'chat qalinligidagi ma'lumotlar o'rtasida sezilarli farq kuzatilmadi. Ingichka tolalilarda ham shu qonuniyat takrorlandi.

Tajribada ko'chat qalinliklari bilan birgalikda chilpish usullarini ham ta'siri kuzatilib, qandalaning sonini aniqlash bo'yicha o'tkazilgan kuzatishlar 2020 yilda 20 iyul, 1 avgust va 11 avgust muddatlarda o'tkazildi. Kuzatuv natijalariga ko'ra nisbatan qandalalar joriy yilning avgust-sentyabr oylarida iyul oyiga nisbatan ko'proq kuzatildi.

Olingan natijalarga ko'ra, o'rta tolali g'o'za navida qandalalar soni 20 iyulda 2-13 dona; 1 avgustda 5-18 dona hamda 11 avgust da 7-24 donagacha bo'lganligi kuzatilib,



qandalalar soniga ko’chat qalinligini ta’siri o’rganildi. O’rta tolali “Buxoro-102” g’o’za navi ikki xil ko’chat qalinligida parvarishlanganda sentyabr oyi holatida qandalalar soni 7-24 donagacha aniqlanib, o’simlik gektariga 90-100 ming tup ko’chat ekilganda 7-22 donagacha qandala aniqlandi. O’simlik gektariga 110-120 ming tup ko’chat bo’lganda qandalalar soni 10-24 donagacha bo’lib, ko’chat soni oshishi bilan 2-3 donaga ko’payganligi kuzatildi (2-jadval).

**Turli ko’chat qalinliklari va chilpish usullarida parvarishlangan g’o’za navlaridagi qandalalar soni (2020 y.)** **2-jadval**

Variantlar	Ko’chat qalinligi, ming tup\ga	Chilpish usullari	Qandalalar soni, har 100 ta o’simlikda		
			20.07	04.08	05.09
<b>“Buxoro-102”</b>					
<b>1-variant</b>	90-100	Chilpish o’tkazilmagan	10	17	22
<b>2-variant</b>		Qo’lda chilpish o’tkazilgan	5	10	15
<b>3-variant</b>		Entojean qo’llangan	2	5	7
<b>4-variant</b>	110-120	Chilpish o’tkazilmagan	13	18	24
<b>5-variant</b>		Qo’lda chilpish o’tkazilgan	7	13	16
<b>6-variant</b>		Entojean qo’llangan	4	7	10

Qandalalar soniga ko’chat qalinligi bilan bir qatorda chilpish usullarining ham ta’siri o’rganilganda g’o’zaning o’rta tolali “Buxoro-102” navi gektariga 90-100 ming tup qalinlikda ekilgan fonda turli chilpish usullarida parvarishlanganda sentyabr oyi holatida qandalalar soni 7-22 dona bo’lib, eng ko’p qandala chilpish o’tkazilmagan nazorat variantida 22 dona borligi aniqlandi. Qo’lda chilpish o’tkazilganda qandala soni biroz kamayib, 15 donani tashkil etdi. Eng kam qandala entojean preparati yordamida kimyoviy chilpish o’tkazilgan variantda 7 dona aniqlanib, nazoratga nisbatan 15 donagacha kam qandala uchradi.

**Foydalanilgan adabiyotlar:**

1. Boboeva N. T. et al. The fight against avena fatua in the middle of a wheat field //International Journal on Integrated Education. – T. 3. – №. 2. – С. 62-64.
2. Суллиева С. Х., Бобоева Н. Т., Зокиров К. Г. ВИДЫ И СОРТА ХРИЗАНТЕМ //Экономика и социум. – 2019. – №. 10 (65). – С. 315-317.
3. Negmatova S., Boboeva N. EFFECT OF AGROTECHNICAL MEASURES ON COTTON YIELD IN CULTIVATION OF MEDIUM-FIBER COTTON VARIETIES //Academic International Conference on Multi-Disciplinary Studies and Education. – 2023. – Т. 1. – №. 6. – С. 147-150.
4. Boboeva N. T. Negmatova ST Effects of Improved Agrotechnical Measures on Harmful Harvesting of Medium-Fiber Cotton Varieties //Texas Journal of Multidisciplinary Studies. SJIF Impact Factor. – 2021. – Т. 5.
5. Boboeva N. et al. THE INFLUENCE OF AGROTECHNICAL MEASURES ON THE DAMAGE OF BOILERS IN THE CULTIVATION OF STRONG COTTON VARIETIES //Journal of Pharmaceutical Negative Results. – 2022. – С. 3170-3175.
6. Boboeva N., Negmatova S. INFLUENCE OF AGROTECHNICAL MEASURES ON BOILER DAMAGE IN GROWING MEDIUM GRADES OF COTTON //Science and innovation. – 2022. – Т. 1. – №. A7. – С. 152-155.
7. Бобоева Н. Т., Негматова С. Т. ЎСИМЛИКХЎР ҚАНДАЛАНИ ҒЎЗА ҲОСИЛ ЭЛЕМЕНТЛАРИГА ЗАРАРИ //SCHOLAR. – 2023. – Т. 1. – №. 9. – С. 105-109.
8. Boboeva N., Negmatova S. INFLUENCE OF AGROTECHNICAL MEASURES ON BOILER DAMAGE IN GROWING MEDIUM GRADES OF COTTON //Science and innovation. – 2022. – Т. 1. – №. A7. – С. 152-155.
9. Tokhtamishovna B. N., Teshayevna N. S. Effects Of Improved Agrotechnical Measures On Harmful Harvesting Of Medium-Fiber Cotton Varieties //Texas Journal of Multidisciplinary Studies. – 2021. – Т. 2. – С. 25-28.
10. Boboyeva N. T., Negmatova S. T. Effects of agrotechnical measures on the number of plant-eating candles and cotton yield.«Agrarnaya nauka» nauchno-teoreticheskiy i proizvodstvenniy jurnal. 11-12. 2020. С.-122-124. – DOI 10.32634/0869-8155.



11. Yaxshiboyeva M., Ramozonova O. NA'MATAK–Rosa (Cynosbatum) O'SIMLIGININ DORIVORLIK XUSUSIYATLARI VA INSONLAR HAYOTIDA TUTGAN O'RNI //Biologiyaning zamonaviy tendensiyalari: muammolar va yechimlar. – 2023. – T. 1. – №. 1. – С. 163-165.
12. Туропова М.Б., Бекмуродов А.С., Яхшибоева М.Х., ЭКОЛОГИЧЕСКИЙ АНАЛИЗ ФИТОНЕМАТОД ПЛОДОВЫХ КУЛЬТУР СУРХАНДАРЬИНСКОЙ ОБЛАСТИ УЗБЕКИСТАНА. “Biologiyada zamonaviy tadqiqotlar: muammo va yechimlar” xalqaro ilmiy-amaliy konferensiyasi. 2022/12/10. 220-223 b.
13. Yaxshiboyeva , M., & Bekmurodov , A. (2023). ЖАРҚЎРҒОН ТУМАНИ ТУТ ПЛАНТАЦИЯЛАРИНИНГ НЕМАТОДАЛАР ФАУНАСИ. Biologiyaning Zamonaviy Tendensiyalari: Muammolar Va Yechimlar, 1(2), 315–319.
14. Yaxshiboyeva , M., & Eshdavlatova, G. (2023). SURXONDARYO VILOYATI SUV HAVZALARIDA TARQALGAN NOYOB BALIQ TURLARI VA ULARNI MUHOFAZA QILISH CHORALARI. “Biologiyada zamonaviy tadqiqotlar: muammo va yechimlar” 1(2), 337–341.
15. Yaxshiboyeva , M., & Abdullayeva , K. (2023). O‘ZBEKISTON HUDUDIDAGI EKOLOGIK MUAMMOLAR VA ULARNI BARTARAF ETISH MASALALARI. “Biologiyada zamonaviy tadqiqotlar: muammo va yechimlar”, 1(4), 670–673.
16. Salima R. Research issues in providing methodical training of biology teachers //International Journal of Philosophical Studies and Social Sciences. – 2021. – T. 1. – №. 3. – С. 102-105.
17. Раҳматова С. Биология фан ўқитувчиларнинг инновацион фаолиятга методик тайёргарлигини таъминлашнинг айрим масалалари //Academic research in educational sciences. – 2021. – T. 2. – №. 11. – С. 648-654.
18. Раҳматова С. Т., Хужаназарова С. Н. Сущностная характеристика понятий информационные технологии, информатизация образования //Ученый XXI века. – 2016. – С. 16.



19. Togaymuradovna R. S. The Role of Immersive Technologies in Improving Professional-Methodical Training of Biology Teachers //Texas Journal of Multidisciplinary Studies. – 2024. – T. 28. – C. 1-3.
20. Raxmatova S. THE SIGNIFICANCE OF RUSSIAN LANGUAGE PROFICIENCY IN THE PROFESSIONAL SPHERE OF THE ENERGY SECTOR //Theoretical aspects in the formation of pedagogical sciences. – 2023. – T. 2. – №. 18. – C. 180-182.
21. Baxriddinovna R. U., Musurmonovich F. S. Soybean-as a source of valuable food //Texas Journal of Multidisciplinary Studies. – 2022. – T. 6. – C. 165-166.
22. Musurmonovich F. S., Komiljonovna X. S., Quدرات o'g'li S. A. Some Photosynthetic Indicators of Soybean Varieties //Texas Journal of Multidisciplinary Studies. – 2022. – T. 5. – C. 255-257.
23. Фозилов Ш. М. Периодичность роста и формирования урожая у внутривидовых форм пшеницы //Интернаука. – 2019. – №. 45-1. – С. 18-20.
24. Baxriddinovna R. U., Musurmonovich F. S. Distance Learning System in Educational System Instead, and Significance //Texas Journal of Multidisciplinary Studies. – 2023. – T. 21. – C. 11-13.
25. Normuminovna Q. D., Musurmonovich F. S. Bioecological Properties of *Salvia Officinalis* L //Texas Journal of Multidisciplinary Studies. – 2022. – T. 6. – C. 249-252.
26. Baxriddinovna R. U. Methodology For Solving Problems of Food Chains and Ecological Pyramids and Its Significance //Texas Journal of Multidisciplinary Studies. – 2024. – T. 28. – C. 19-22.
27. Fozilov S., Ziyodova M. МАКТАБЛАРДА STEAM TEXNOLOGIYASINI JORIY ETISHNING XUSUSIYATLARI VA AFZALLIKLARI //Biologiyaning zamonaviy tendensiyalari: muammolar va yechimlar. – 2023. – T. 1. – №. 5. – C. 819-821.
28. Fozilov S. THE EFFECT OF DROUGHT ON THE WATER REGIME IN THE LEAVES OF SOYBEAN VARIETIES //Science and innovation in the education system. – 2023. – T. 2. – №. 9. – C. 25-28.



29. Fozilov S. EFFECT OF STRESS FACTORS ON SOME PHYSIOLOGICAL PARAMETERS OF SOYBEAN PLANT //Science and innovation in the education system. – 2023. – T. 2. – №. 7. – C. 722-74.
30. Ravshanova U. B. et al. SOYA O'ZBEKISTONDA OZIQ-OVQAT XAVFSIZLIGINI TA'MINLASHNING MUHIM MANBAI SIFATIDA //Экономика и социум. – 2022. – №. 11-1 (102). – C. 81-84.
31. Musurmonovich F. S. et al. PECULIARITIES OF THE INTENSITY OF PHOTOSYNTHESIS AND TRANSPIRATION OF SOY LEAVES //Ann. For. Res. – 2022. – T. 65. – №. 1. – C. 5371-5378.
32. Musurmonovich F. S., Alisherqizi M. A. Photosynthetic Indicators of Different Shade Varieties Growing in Surkhandarya Region. – 2023.
33. Musurmonovich F. S., Baxriddinovna R. U. SOYA BARGLARIDA FOTOSINTEZ VA TRANSPIRATSIYA JADALLIGINING O 'ZIGA XOS XUSUSIYATLARI //NAZARIY VA AMALIY FANLARDAGI USTUVOR ISLOHOTLAR VA ZAMONAVIY TA'LIMNING INNOVATSION YO'NALISHLARI. – 2024. – T. 1. – №. 4. – C. 268-272.
34. Baxriddinovna R. U., Musurmonovich F. S. MAKTABDA TABIIY FANLAR, TEXNOLOGIYA, MUHANDISLIK, SAN'AT VA MATEMATIKA FANLARINI UYG 'UNLIKDA O 'QITISHNING AFZALLIKLARI //NAZARIY VA AMALIY FANLARDAGI USTUVOR ISLOHOTLAR VA ZAMONAVIY TA'LIMNING INNOVATSION YO'NALISHLARI. – 2024. – T. 1. – №. 4. – C. 259-263.
35. Baxriddinovna R. U., Musurmonovich F. S. OZIQ ZANJIRI VA OZIQ TO 'RI TUZISH //NAZARIY VA AMALIY FANLARDAGI USTUVOR ISLOHOTLAR VA ZAMONAVIY TA'LIMNING INNOVATSION YO'NALISHLARI. – 2024. – T. 1. – №. 4. – C. 264-267.
36. Musurmonovich F. S., Baxriddinovna R. U. OQSIL TAQCHILLIGINI TA'MINLASHDA SOYA O 'SIMLIGINING O 'RNI //NAZARIY VA AMALIY FANLARDAGI USTUVOR ISLOHOTLAR VA ZAMONAVIY TA'LIMNING INNOVATSION YO'NALISHLARI. – 2024. – T. 1. – №. 4. – C. 254-258.