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## **ISSIQXONA OQQANOT (TRIALEURODES VAPORARIORUM WETS) NI PUSHTDORLIGIGA HAVO HARORATI VA NAMLIKNING TA'SIRI**

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O'simliklar karantini va himoyasi ilmiy tadqiqot insituti doktoranti.

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### **Annotasiya:**

Poliz ekinlarida bir necha turdag'i zararli hasharotlar rivojlanib, yetishtirilayotgan hosilning miqdori va sifatiga katta salbiy ko'rsatmoqda. Ayniqa issiqxona oqqanoti zarari yuqori bo'lib, uning populyatsiyasi va rivojlanishiga havo harorati va namlikning ta'sirini o'rganish muhim ahamiyatga ega.

**Kalit so'zlar:** Poliz, oqqanot, zararkunanda, harorat, namlik, pushdorlik, qarshi kurash.

Poliz ekinlarining ekilgan urug'lari va ko'chatlari kemiruvchilar va turli xil polifagli tuproq zararkunandalariga zarar yetkazishi mumkin. Kemiruvchi hasharotlardan o'tloq parvonasi- Loxostege stictalis, gamma tunlami- Autographa gamma, shuningdek poliz qo'ng'izlari- Epilachna chrysomelina F., va boshqalar kiradi. So'rvuchi zararkunandalardan esa Poliz shirasi - Aphid gossypii, akatsiya shirasi - A.Craccivora, tamaki tripsi - Thrips tabaci va oddiy o'rgimchakkana, tamaki oqqanoti - Bemisia tabaci issiqxona oqqanoti - Trialeurodes vaporariorum katta zarar yetkazadi.

Issiqxona oqqanoti asosan issiqsevar tur hasharot bo'lib, zararkunanda erta bahordan kech kuzgacha issiqxonalarda doimiy rivojlanadi. U yil davomida 9-10 ta avlod berib hayotiy davomiyligi, tuxum qo'yishi, yashovchanligi harorat va havoning nisbiy namligiga va o'simlik turiga bog'liq ekanligi ilmiy asoslangan [1; 56-61-b.].

Issiqxona oqqanoti - Trialeurodes vaporariorum West. Homoptera turkumi Aleyrodidae oilasiga mansub hashoratdir. Oqqanot yozda issiqxonalardan migratsiya qilib ochiq dalada ko‘payishi natijasida issiqxonalarga yaqin bo‘lgan joylarda poliz va sabzavot boshqa bir qancha ekinlariga kuchli zarar keltirmoqda. Issiqxona oqqanoti o‘simlikni so‘rib, undagi ozuqa moddalarni kamayishiga olib keladi, shuningdek zararkunandaning bilvosita ta’siri ham mavjud: oqqanot oziqlanayotgan vaqtida chiqargan suyuqlikda saprofit zamburug‘lar rivojlanib, barg sathini qoplab qoladi, natijada o‘simlikda normal biokimyoviy jarayon kechishi buziladi, o‘simlik zaiflashadi, hosilga putur yetadi, ayniqsa, vegetatsiya davri boshlaridagi zararlanish tufayli o‘simlik butkul nobud bo‘ladi.

Voyaga yetgan hasharot tanasi sarg‘ish rangli 1-1,5 mm uzunlikda bo‘lib, ikki juft unsimon oqqanotlidir. Tuxumi ovalsimon 0,24 mm uzunlikda bo‘lib, dastlabki bosqichda ular och-sariq tusli bo‘ladi.

Urg‘ochisi oq tuxumlarni ilgak yordamida bargga yopishtiradi, bu orqali tuxum bargdan ozuqa oladi. 1-2 kundan keyin tuxum qorayadi. Tuxumdan chiqqandan so‘ng, lichinka 2-3 soatdan keyin barg bo‘ylab harakatlana oladi. Maql joyni topib, oziqlanishni boshlaydi. Zararkunandalarning qolgan lichinka bosqichlari harakatsizdir. To‘rtinchchi bosqichda lichinka qavariq bo‘lib, yashil rangga ega bo‘lib, uning atrofida mum kamariga ega bo‘ladi. Rivojlanish oxirida lichinkadan katta yoshli imago chiqadi. Lichinka uchinchi yoshida 0,52 mm gacha o‘sadi, ancha xiralashadi, 2-6 kun davomida rivojlanib, yelkasida 7 juft o‘simta paydo bo‘ladi va shu bilan oldingi yoshdagilardan farq qiladi. Lichinka to‘rtinchchi yoshida nimfaga aylanadi, uzunligi 0,8- 0,75 mm gacha yetadi. U 10-16 kun rivojlanadi.

Nimfadan 11-12 kun ichida voyaga yetgan hasharot uchib chiqadi. Bu hashorot asosan bargning yoritilmagan pastki qismiga yopishadi. Yetuk zotlari umuman o‘simliklarni bevosita zararlamaydilar. Ularning voyaga yetganlari 2-3 kun ichida qo‘shiladilar. O‘simlikdan-o‘simlikka uchib o‘tib tuxum qo‘ya boshlaydi. Tuxumlarini yosh bargning pastki qismiga, 10-20 donadan to‘p-to‘p qilib qo‘yadilar olib borilgan tadqiqot natijalariga ko‘ra, muhit 15°C harorat va namlik 30% bo‘lsa, 45 dona tuxum qo‘yilgan bo‘lsa, namlik 45% bo‘lganda va 60% namlikda esa 89 dona tuxum qo‘ygan. Havo haroratini 20 °C ga oshirganda namlik 30, 45 va 60 % bo‘lganda mos ravishda 107, 145 va 214 dona tuxum qo‘ygan bo‘lsa, havo harorati 25 °C ga oshganda tuxum qo‘yish yanada oshganligi aniqlandi. Eng qulay sharoit

havo harorati 25 °C va havoning namligi 60 % bo‘lganda kuzatildi. Havo haroratining yana 5 °C ga oshishi bilan pushtdorligi kamayishi aniqlandi.

### **Oqqanotning pushtdorligiga havo harorati va namlikning ta’siri**

Harorat, °C	Havo namligi %		
	30%	45%	60%
15	45	52	89
20	107	145	214
25	95	210	335
30	43	62	91

Xulosa qilib aytganda, Laboratoriya sharoitida issiqxona oqqanotning pushtdorligiga havo harorati va namlikning ta’siri juda katta ekan. Eng qulay sharoit, havo harorati 25 °C va namlik 60 % bo‘lganda kuzatildi, havo haroratining va namlikning oshishi va kamashishi bilan tuxum qo‘yish jadalligi ham pasayib bordi.

### **Adabiyotlar ro‘yxati**

1. Kimsanbaev X.X., Ulmasbaeva R., Xalilov Q. Umumiylar va qishloq xo‘jalik entomologiyasi - Toshkent: O‘qituvchi, 2002.
2. Samiyev, B., & Nishonov, N. T. (2023). OQQANOTGA QARSHI KIMYOVIY KURASH USULI. Current Issues of Bio Economics and Digitalization in the Sustainable Development of Regions (Germany), 74-78.
3. Sulaymonov, O. A., & Madiev, A. J. (2022). EFFECTIVENESS OF THE CHRYSOPIDAE ENTHOMOPHAGY AGAINST APHID SUPERFAMILY (APHIDIDAE) ON APPLE TREES. Academic research in educational sciences, 3(Speical Issue 1), 134-137.
4. Hasanov, O., & Madiyev, A. (2023). PISTANING KEMIRUVCHI ZARARKUNANDALARI VA ULARGA QARSHI KURASH CHORALARI. Models and methods in modern science, 2(13), 98-107.
5. Madiyev, A. J. (2022). MEVALI BOG‘ SO‘RUVCHI ZARARKUNANDALARI VA ULARGA QARSHI KURASH USULLARI. Academic research in educational sciences, (Conference), 598-602.
6. Haydarov, B. J. O. (2023). BEHINING (CYDONIA OBLONGA MILL.) KELIB CHIQISHI, MORFOLOGIK XUSUSIYATLARI VA QAYTA ISHLASH

ISTIQBOLLARI. Academic research in educational sciences, 4(SamTSAU Conference 1), 475-478.

7. Ro'ziyev, S. (2022). ENKARZIYA PARAZITINI KO'PAYTIRISH VA OQQANOTGA QARSHI QO'LLASH USULINI TAKOMILLASHTIRISH. Academic research in educational sciences, (Conference), 654-658.

8. Maxmatmurodov, A. O., Po'latov, O. A., & O'g'li, R. S. S. (2022). ENKARZIYA (ENCARSIA FORMOSA GAH.) PARAZITINING OQQANOT ZARARKUNANDASIGA QARSHI SAMARADORLIGI. Academic research in educational sciences, (Conference), 625-629.

9. Normaxmatov, R., Gofurov, A. Y., & Haydarov, B. J. (2022). UDK. 634.21.

22.56 FUNKSIONAL OZIQ-OVQAT MAHSULOTLARI ISHLAB CHIQARISHDA MILLIY XOM ASHYOLARDAN FOYDALANISH IMKONIYATLARI.

10. Mashrabov, M. I., Makhmatmurodov, A. U., & Kadirova, G. A. (2022). THE CHANGING OF PHOSPHATE REGIME OF SOILS WITH CARBONMAGNESIA SALTING UNDER THE INFLUENCE OF NEW COMPLEX FERTILIZERS AT COTTON CULTIVATION. Academic research in educational sciences, 3(Special Issue 1), 64-74.

11. Kadirova G.A., Hayitov M.A. "Tuproqning fizik xossalari va ularning ahamiyati" Current issues of bio economics and digitalization in the sustainable development of regions.– 2023. –B. 99-103.

12. Turaboyeva, B., Miyzamov, D., Qodirova, G., & Hayitov, M. (2023). KUZGI BUG 'DOYNI OLINGUGURT SAQLOVCHI O 'G 'ITLAR BILAN O 'G 'ITLAsh. Academic research in educational sciences, 4(SamTSAU Conference 1), 1182-1185.

13. Shoniyofov, B. K., Qozoqboyev, S., Qochqarov, I. R., Komiljonov, O., & Toshtemirova, S. J. (2024). O'SIMLIKLARNI PAST HARORATDAN HIMYOYALASH TEXNOLOGIYASI. B MODELS AND METHODS IN MODERN SCIENCE (T. 3, Выпуск 4, cc. 157–161). Zenodo. <https://doi.org/10.5281/zenodo.10902119>

14. Shoniyofov, B. K., Qozoqboyev, S., Komiljonov, O., Qo'chqarov, I. R., & Toshtemirova, S. J. (2024). INSONIYAT VA TUPROQ MALHAMI. B THEORETICAL ASPECTS IN THE FORMATION OF PEDAGOGICAL



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**Website:** econferenceseries.com

- SCIENCES (T. 3, Выпуск 6, cc. 57–61). Zenodo.  
<https://doi.org/10.5281/zenodo.10902131>
15. Shoniyozi, B. K., Qozoqboyev, S., Qochqarov, I. R., Komiljonov, O., & Toshtemirova, S. J. (2024). UNIVERSAL PRODUCT "AMARANT XXI" O'SIMLIGIDAN YOG` AJRATIB OLISH TEXNOLOGIYASI. In ACADEMIC RESEARCH IN MODERN SCIENCE (T. 3, Выпуск 10, cc. 178–182). Zenodo.  
<https://doi.org/10.5281/zenodo.10902084>
16. Ortikov, T., Shoniyozi, B., Makhmatmurodov, A., & Mashrabov, M. (2023). Influence of mineral and organic fertilizers on the properties of serozem-meadow soils, nutritional dynamics and productivity of amaranth. In E3S Web of Conferences (Vol. 462, p. 02017). EDP Sciences.
17. Шониёзов Бобур, Ортиков Тулкин; ,Внесение удобрений и формирование урожая амаранта,Актуальные проблемы современной науки,2,2,35-39,2022,Самаркандский филиал Ташкентского государственного аграрного университета
18. Shoniyozi, Bobur Kaldarboyevich; Ortikov, To'lqin Qo'chqorovich; Usmonov, Ravshan; ,Mineral va organik o'g'itlarni amarant yetishtirishda oziq moddalar balansiga ta'siri,Academic research in educational sciences,,Conference,659-664,2022,OOO «Academic Research»
19. Shoniyozi Bobur, Ortikov Tulkin; ,INFLUENCE OF DOSES OF NITROGEN FERTILIZERS ON THE CHEMICAL COMPOSITION OF AMARANTH PLANTS,ACADEMIC RESEARCH IN MODERN SCIENCE International scientific-online conference,1,1,136-139, 2023,  
<https://doi.org/10.5281/zenodo.7593488>
20. Shoniyozi Bobur Kaldarboyevich, Turdiyev Umarjon Uchqun son, Ko'chgarov Islam Rustam son, Toshtemirova Sarvinoz Jorabek daughter, Ismoilova Muxlisa Murtoza daughter; ,PROSPECTS OF ORGANIC FERTILIZER PREPARATION FROM URBAN WASTE,EURASIAN JOURNAL OF ACADEMIC RESEARCH Innovative Academy Research Support Center UIF = 8.1 | SJIF = 5.685 [www.in-academy.u3,2,156-158,2023,https://www.doi.org/10.37547/ejar-v03-i02-p3-110](http://www.in-academy.u3,2,156-158,2023,https://www.doi.org/10.37547/ejar-v03-i02-p3-110)
21. Shoniyozi, BK; Ortikov, BK; Usmonov, R; , "INFLUENCE OF MINERAL AND ORGANIC FERTILIZERS ON THE PROPERTIES OF SEROZEM-MEADOW SOILS, NUTRITIONAL DYNAMICS AND YIELD OF AMARANTH

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Jilin Daxue Xuebao (Gongxueban)",Journal of Jilin University (Engineering and Technology Edition) ISSN,,1671-5497,2022,

22. Shoniyozi, Bobur Kaldarboyevich; Hoshimov, Farhod Hakimovich; Ortiqov, To'lqin Qo'chqorovich; Usmonov, Ravshan; ,AMARANT YETISHTIRISHDA OZIQ MODDALAR BALANSIGA AZOTLI O'G'ITLARNING TA'SIRI,Academic research in educational sciences,,Conference,861-867,2022,OOO «Academic Research»  
23. To'lqin Qo'chqorovich Ortiqov, Bobur Kaldarboyevich Shoniyozi, Raxshana Ravshanovna Sultanbekova; ,AZOTLI O'G'ITLAR ME'YORLARINI AMARANT O'SISHI VA RIVOJLANISHI VA HOSILDORLIGIGA TA'SIRI,O'ZBEKISTONDA AQLLI QISHLOQ XO'JALIGINI JORIY ETISHNING NAZARIY VA AMALIY ASOSLARI Xalqaro ilmiy –amaliy konferensiya,1,1,1137-1143,2023,

24. To'lqin Qo'chqorovich Ortiqov, Bobur Kaldarboyevich Shoniyozi, Raxshana Ravshanovna Sultanbekova; , "MINERAL VA ORGANIK O'G'ITLARNI AMARANT O'SISHI, RIVOJLANISHI VA HOSILDORLIGIGA TA'SIRI.", "O'ZBEKISTONDA AQLLI QISHLOQ XO'JALIGINI JORIY ETISHNING NAZARIY VA AMALIY ASOSLARI Xalqaro ilmiy –amaliy konferensiya to'plami 2023-yil, 12-13-may",1,1,1160-1167,2023

25. Sultanbekova, R; Ortiqov, TQ; Shoniyozi, BK; , "Azotli o'g'itlar me'yorlarining tuproqdag'i mineral azot miqdoriga ta'siri. O'zbekistonda agrar sohani innovatsion rivojlantirishning nazariy va amaliy asoslari. Respublika ilmiy-amaliy konferensiyasi. 5-6 oktabr, 2022 yil", Academic research in educational sciences (ARES),3,,665-668

26. Ortikov T.K, Б.К.Шониёзов; , "РОЛЬ УДОБРЕНИЙ В РОСТЕ, РАЗВИТИИ И УРОЖАЙНОСТИ АМАРАНТА",Journal of Agriculture & Horticulture,4,9,14-17,2023,<https://doi.org/10.5281/zenodo.8374760>

27. Shoniyozi, BK; Ortikov, TK; Usmanov, R; , "MINERAL VA ORGANIK O'G'ITLARNI AMARANT YETISHTIRISHDA OZIQ MODDALAR BALANSIGA TA'SIRI. O'zbekistonda agrar sohani innovatsion rivojlantirishning nazariy va amaliy asoslari. Respublika ilmiy-amaliy konferensiyasi. 5-6 oktabr, 2022 yil", Academic research in educational sciences (ARES),3,

28. T. Ortikov, B. Shoniyozi, A. Makhmatmurodov and M. Mashrabov; , "Influence of mineral and organic fertilizers on the properties of serozem-meadow



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soils, nutritional dynamics and productivity of amaranth", "E3S Web of Conf. Volume 462, 2023 International Scientific Conference "Fundamental and Applied Scientific Research in the Development of Agriculture in the Far East" (AFE-2023) Article Number 02017 Advances in Crop and Plant Cultivation", 462,13,1,2023, <https://doi.org/10.1051/e3sconf/202346202017>

29. Toshtemirova Sarvinoz Jorabek qizi, Ismoilova Muxlisa Murtoza qizi, Ko'chgarov Islam Rustam o'g'li, Turdiyev Umarjon Uchqun o'g'li, Ibodlloyeva Sarvinoz Baxtiyor qizi, Shoniyozi Bobur Kaldarboyevich. (2023). PROSPECTS OF CULTIVATION AND PROCESSING OF KOVUL UNIQUE PLANT. ACADEMIC RESEARCH IN MODERN SCIENCE, 2(8), 224–227. <https://doi.org/10.5281/zenodo.7731230>

30. G.Kadirova, & M.Hayitov. (2023). TUPROQNING FIZIKAVIY XOSSALARI VA ULARNING AHAMIYATI. Current Issues of Bio Economics and Digitalization in the Sustainable Development of Regions (Germany), 83–87. Retrieved from

<https://www.openconference.us/index.php/germany/article/view/105>

31. Hursanov Hayrullo Jurakulovich, Umurzakov Elmurod Umurzakovich Influence of Agrotechnical Measures on Reducing the Harmfulness of Cotton Scoop on Agrobiocenosis of Tobacco 2021/2/15 European Journal of Agricultural and Rural Education Том 2 Номер 2 Страницы 1-2 Издатель Scholarzest Описание The article presents data on the influence of agrotechnical measures on the harmfulness of cotton bollworm in tobacco agrobiocenosis in Uzbekistan.

32. Umarova, S., Qodirova, G., & Mashrabov, M. (2023). OQ LYUPIN EKININI TUPROQ UNUMDORLIGIGA TA'SIRI. Академические исследования в современной науке, 2(23), 200-203.

33. O'lmasovich M. A. et al. GERMANIYADA O 'SIMLIKLAR KARANTIN TIZIMI HAQIDA NIMALARNI BILAMIZ? //Current Issues of Bio Economics and Digitalization in the Sustainable Development of Regions (Germany). – 2022. – C. 749-753.

34. Samiyev B., Nishonov N. T. OQQANOTGA QARSHI KIMYOVIY KURASH USULI //Current Issues of Bio Economics and Digitalization in the Sustainable Development of Regions (Germany). – 2023. – C. 74-78.

35. Uzbekistan O'zbekistonda aqlli qishloq xo'jaligini joriy etishning nazariy va amaliy asoslari ISSIQXONA SHAROITIDA OQQANOTGA QARSHI KIMYOVIY VOSITALARNI SAMARADORLIGI Norjigit Turabovich Nishonov Toshkent davlat

agrар universiteti Samarqand filiali Agrokimyo, tuproqshunoslik va o'simliklar himoyasi kafedrasi dotsenti Bobur Samiev Toshkent davlat agrar

36. Sullieva S. et al. Effect of planting time and seedling feeding area on the yield and biochemical composition of leek (*Allium porrum L.*) //BIO Web of Conferences. – EDP Sciences, 2024. – Т. 93. – С. 02006.

37. Nishonov, N., & Jurayev, B. (2024). HASHAROTLARNING AGROBIOSENOZDAGI O'RNI VA UYGUNLASHGAN HIMOYA QILISH. В ACADEMIC RESEARCH IN MODERN SCIENCE (Т. 3, Выпуск 10, сс. 86–89). Zenodo.

38. Қозоқбоев, С., & Машрабов, М. (2024). ТУРЛИ ФОСФОР САҚЛОВЧИ ЎҒИТЛАРНИНГ ТУПРОҚ ФОСФАТ РЕЖИМИ ВА МАККАЖҲОРИ ҲОСИЛДОРЛИГИГА ТАЪСИРИ. В MODELS AND METHODS IN MODERN SCIENCE (Т. 3, Выпуск 4, сс. 128–133). Zenodo. <https://doi.org/10.5281/zenodo.10884974>

39. Po'latov, O., Negmatov, S., Shukurov, A., & Turobova, S. (2024). MAKKAJO'XORI PARVONASIGA QARSHI MIKROBIOLOGIK PREPARATLARNING BIOLOGIK SAMARADORLIGI. В ACADEMIC RESEARCH IN MODERN SCIENCE (Т. 3, Выпуск 10, сс. 136–141). Zenodo. <https://doi.org/10.5281/zenodo.10889302>

40. М.И.Машрабов, О.З.Комилжонов, С.С.Умарова. (2023). СИРДАРЁ ВИЛОЯТИ ТУПРОҚЛАРИНИНГ ШЎРЛАНИШИ ВА УНГА ҚАРШИ КУРАШ. МЕЖДУРОДНАЯ КОНФЕРЕНЦИЯ АКАДЕМИЧЕСКИХ НАУК, 2(2), 120–124. <https://doi.org/10.5281/zenodo.7652306>

41. Shukurov A., Negmatov S., Ko'chmurodov I. KARTOSHKA KUYASI (PHTHORIMAEA OPERCULELLA ZELL) BIOEKOLOGIYASI VA KIMYOVIY QARSHI KURASH CHORALARINI //Development and innovations in science. – 2023. – Т. 2. – №. 10. – С. 114-119.

42. Shukurov A. et al. POMIDORNI FUZARIOZ KASALLIGI VA UNGA QARSHI KIMYOVIY KURASH CHORALARINING SAMARADORLIGI //Development and innovations in science. – 2023. – Т. 2. – №. 11. – С. 56-60.

43. Po'Latov O.A., Turobova SAQ, Muhabbat O. MAKKAJO 'XORI PARVONASI VA UNGA QARSHI BIOLOGIK KURASH USULI //O'quv fanlaridagi akademik tadqiqotlar. – 2023. – Т. 4. – №. SamTSAU konferensiyasi 1. – С. 1144-1148 yillar.



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**ISSN:** 2835-3196

**Website:** econferenceseries.com

44. O'lmasovich, M. A., & Turabovich, N. N. (2022). GERMANIYADA О 'SIMLIKLER KARANTIN TIZIMI HAQIDA NIMALARNI BILAMIZ?. Current Issues of Bio Economics and Digitalization in the Sustainable Development of Regions (Germany), 749-753.
45. Alisher, O., Po'Latov, O. A., & O'G'Li, B. M. J. (2022). OLTINKO 'Z ENTOMOFAGINI BIOLABORATORIYADA ZAMONAVIY USULDA KO 'PAYTIRISH. Academic research in educational sciences, (Conference), 697-700.
46. Махматмурадов, А. У. (2012). Рост, развитие и урожайность кукурузы в зависимости от форм и нормы фосфорных удобрений на эродированных серозёмах. Наука и современность, (17), 164-168.
47. Shukurov, A., Negmatov, S., & Ko'chmurodov, I. (2023). KARTOSHKA KUYASI (PHTHORIMAEA OPERCULELLA ZELL) BIOEKOLOGIYASI VA KIMYOVIY QARSHI KURASH CHORALARI. Development and innovations in science, 2(10), 114-119.
48. Махматмуродов, А., Пўлатов, О., & Содиков, Э. (2023). БОДОМНИНГ СЎРУВЧИ ЗАРАКУНАНДАСИ ОДДИЙ ЎРГИМЧАККАНА (TETRANYCHUS URTICAE KOCH.) ВА УНГА ҚАРШИ КИМЁВИЙ ПРЕПАРАТЛАРНИ БИОЛОГИК САМАРАДОРЛИГИ. Development and innovations in science, 2(10), 108-113.
49. Пўлатов, О., Пўлатов, Ш., Содиков, Э., & Ma'rufjonov, M. (2023). САМАРҚАНД ВИЛОЯТИ ҲУДУДЛАРИДА УЧРАЙДИГАН ЧИГИРТКАЛАР УЛАРГА ҚАРШИ КУРАШ УСУЛ ВА ВОСИТАЛАРИ. Академические исследования в современной науке, 2(24), 12-19.
50. Shukurov, A., Sodiqov, E., Xolmurodova, M., Ko'chmurodov, I., & Xoliboyev, R. (2023). POMIDORNI FUZARIOZ KASALLIGI VA UNGA QARSHI KIMYOVIY KURASH CHORALARINING SAMARADORLIGI. Development and innovations in science, 2(11), 56-60.
51. MASHRABOV, M., & MAXMATMURODOV, A. (2021). Effects of phosphor storage fertilizers on phosphate regime and cabbage yield of typical gray soils. Plant cell biotechnology and molecular biology, 22(55-56), 33-41.
52. Ulmasovich, M. A., & Ibrahimovich, M. M. (2021). Yield of corn grain at various forms and rates of phosphorus fertilizers on the unwashed and washed off typical gray soils. European Journal of Agricultural and Rural Education, 2(2), 3-5.



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**ISSN:** 2835-3196

**Website:** econferenceseries.com

53. Махматмурадов, А. У., & Умурзаков, Э. У. (2017). Рост и развитие корневой системы кукурузы при разных фосфатных режимах. Актуальные проблемы современной науки, (6), 169-173.
54. Aslamov, D., Mashrabov, M. I., & Maxmatmurodov, A. O. (2023). TURLI FOSFORLI OG'ITLARNING OQBOSH VA GULKARAM EKINLARIGA TA'SIR SAMARADORLIGINI ORGANISH. Academic research in educational sciences, 4(SamTSAU Conference 1), 1088-1092.
55. Shukurov, A., Sodiqov, E., Xolmurodova, M., Ko'chmurodov, I., & Xoliboyev, R. (2023). POMIDORNI FUZARIOZ KASALLIGI VA UNGA QARSHI KIMYOVIY KURASH CHORALARINING SAMARADORLIGI. Development and innovations in science, 2(11), 56-60.
56. Shukurov, A., Negmatov, S., & Ko'chmurodov, I. (2023). KARTOSHKA KUYASI (PHTHORIMAEA OPERCULELLA ZELL) BIOEKOLOGIYASI VA KIMYOVIY QARSHI KURASH CHORALARI. Development and innovations in science, 2(10), 114-119.
57. O'lmasovich, M. A., & Turabovich, N. N. (2022). GERMANIYADA O 'SIMLIKLER KARANTIN TIZIMI HAQIDA NIMALARNI BILAMIZ?. Current Issues of Bio Economics and Digitalization in the Sustainable Development of Regions (Germany), 749-753.
58. Alisher, O., Po'Latov, O. A., & O'G'Li, B. M. J. (2022). OLTINKO 'Z ENTOMOFAGINI BIOLABORATORIYADA ZAMONAVIY USULDA KO 'PAYTIRISH. Academic research in educational sciences, (Conference), 697-700.
59. Махматмурадов, А. У. (2012). Рост, развитие и урожайность кукурузы в зависимости от форм и нормы фосфорных удобрений на эродированных серозёмах. Наука и современность, (17), 164-168.
60. Худойкулов, А. М., Аблазова, М. М., & Давронов, Ж. У. (2021). ФАЛЛА ВА ТАКРОРИЙ ЭКИЛГАН КАРТОШКАДА ИЛДИЗ КЕМИРУВЧИ ЗАРАРКУНАДАЛАРГА ҚАРШИ ИНСЕКТИЦИДЛАРНИ САМАРАДОРЛИГИ. Academic research in educational sciences, 2(2), 378-381.
61. Asomiddin, K., Azamjon, H., Shakhnoza, M., & Aliddin, N. (2019). The Role Of Chemical Methods In The Protection Of Newly Planted Legumes And Potatoes From The Root-Bearing Frost. International Journal of Scientific and Technology Research, 8(12), 1906-1908.



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Hosted online from Plano, Texas, USA.**

**Date:** 1<sup>st</sup> April, 2024

**ISSN:** 2835-3196

**Website:** econferenceseries.com

62. Safarovich, B. B., Mirzoqulovich, K. A., Rovshan, K., & Nurillaevna, N. M. (2022). The Effectiveness of a New Type of Light Trap in the Fight Against Harmful Insects. *Texas Journal of Agriculture and Biological Sciences*, 8, 50-53.
63. Safarovich, B. B., Mirzoqulovich, K. A., Rovshan, K., & Nurillaevna, N. M. (2022). The Effectiveness of a New Type of Light Trap in the Fight Against Harmful Insects. *Texas Journal of Agriculture and Biological Sciences*, 8, 50-53.
64. Mirzoqulovich, K. A., Meylivna, S. G., & Nurillaevna, N. M. (2022). Biological Effectiveness of Insecticides in Protecting Potatoes From Root Rodent Tunlams. *Texas Journal of Agriculture and Biological Sciences*, 8, 54-58.
65. Ҳасанов, О. З., Пўлатов, О. А., & Худойқулов, А. М. (2022). ПОЛИЗ ЭКИНЛАРИ СЎРУВЧИ ЗАРАРКУНАНДАЛАРИ БИОЭКОЛОГИК ХУСУСИЯТЛАРИ. *Academic research in educational sciences*, (Conference), 785-788.
66. Худойқулов, А. М., Махмудова, Ш. А., & Иргашева, Н. (2021). МЕВАЛИ БОҒЛАРДА ҚАЛҚОНДОРЛАР ҚАРШИ КИМЁВИЙ ПРЕПАРАТЛАРНИНГ БИОЛОГИК САМАРАДОРЛИГИ. *Academic research in educational sciences*, 2(2), 392-395.
67. ХУДОЙҚУЛОВ, А. нуфузини ҳамда кимёвий препаратларнинг самарадорлиги-ни аниқлаш мақсадида кузатувлар олиб борилди. Ҳисобга олиш майдонининг катталиги 1 м<sup>2</sup> ни ташкил қилиб, улар 0, 1 га дала бўйлаб, диагонал йўналишда 5 тадан олинди. **ХОНАДОНЛАРДА**
68. Po'Latov, O. A., Turobova, S. A. Q., & Muhabbat, O. (2023). MAKKAJO 'XORI PARVONASI VA UNGA QARSHI BIOLOGIK KURASH USULI. *Academic research in educational sciences*, 4(SamTSAU Conference 1), 1144-1148.