



ACHCHIQ QALAMPIR O‘SIMLIGIDA UCHRAYDIGAN KASALLIKLARINI ANIQLASH

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Annotatsiya. Maqolada 2018-2020 yillarda O‘zbekiston sharoitida 8 ta kasallik turi aniqlandi: fuzarioz – *Fusarium oxysporum*, alternarioz – *Alternaria alternata*, fitoftoroz – *Phytophthora capsici*, kulrang chirish – *Botrytis cinerea*, un shudring – *Leveillula taurica*, antraknoz – *Colletotrichum capsici*, kladosporioz – *Cladosporium fulvum* va rizaktoniya - *Rhizoctonia solani*. Ushbu 4 ta kasalliklar fuzarioz – *Fusarium oxysporum*, alternarioz – *Alternaria alternata*, fitoftoroz – *Phytophthora capsici* va kulrang chirish – *Botrytis cinerea* achchiq qalampir o‘simliklarida vegetatsiya davrida keng tarqalishi va kuchli darajada zarar yetkazishi (20-70%) kuzatildi.

Kalit so‘zlar: Zamburug‘, kasallik, *Fusarium oxysporum*, *Alternaria alternata*, *Phytophthora capsici*, *Botrytis cinerea*, *Leveillula taurica*, *Colletotrichum capsici*, *Cladosporium fulvum*, *Rhizoctonia solani*, ildiz, meva, barg.

Kirish. Qalampir butun dunyoda yetishtiriladigan muhim sabzavot va ziravor ekinidir. Achchiq qalampirning yetishtiruvchilarning asosiy qismi Osiyo, Lotin Amerikasi, Afrika, Yevropa va Shimoliy Amerika mamlakatlari hisoblanadi. Asl vatani Meksika hisoblangan qalampir XVI asrdan boshlab dori-xonalarda dori-darmon sifatida sotila boshlagan. Osiyo mamlakatlari olimlari qalampirni muntazam ravishda iste‘mol qilib kelayotgan mamlakatlar xalqlari nisbatan uzoq umr ko‘rishlarini, ularda yurak qon-tomir kasalliklari va insultdan keladigan o‘lim darajasi 13 foizga kam ekanligini aniqlashdi. Achchiq qalampir dori-darmon sifatida, quruq maydalangan xolda, maxsus marinovka qilishda, sabzavot ekinlarini tuzlash va konservalashda qo‘llaniladi [1]. Xalq tabobatida qalampir preparatlari revmatik kasalliklar, faringit, astma, yo‘tal, anoreksiya, gemorroy uchun ishlatiladi.

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Yashil chili qalampirida sitrus mevalariga nisbatan S vitamini ko‘proq, qizil chili qalampirida sabziga nisbatan A vitamini ko‘proq miqdorda bor. Chili (achchiq) qalampiri qondagi trombotsitlar yig‘ilishini kamaytiradi, ular qon aylanishini ham yaxshilaydi. Chili qalampiri kanserogenlarning DNK bilan bog‘lanishining oldini olish orqali saraton xavfini kamaytiradi. Ularda og‘riq qoldiruvchi salitsiklik birikmalar mavjud. Bundan tashqari, qalampirni iste‘mol qilish organizmdagi endorfinlarni chiqaradi, bu esa og‘riqni yengillashtiradi [4,5].

Qalampir o‘simligiga turli xildagi patogenlar zarar keltiradi. Achchiq qalampirning asosiy zamburug‘li kasalliklardan, barg dog‘lanishi (*Alternaria alternata*), fuzarioz (*Fusarium*, *Phoma capsici*), nixollarda fitoftoroz (*Phytophthora capsici*) va boshqa kasalliklar uchraydi [3,6,8].

Chili (achchiq) qalampirida eng keng tarqalgan kasallik – ildiz chirish kasalligi bo‘lib, ushbu kasallik keng tarqalgan yillarda 100% gacha hosil yo‘qolishiga olib keladi [2,7].

2018-2020 yillarda Respublikamizning Toshkent, Qashqadaryo, Farg‘ona va Qoraqalpog‘iston respublikasi viloyatlarining turli iqlim sharoitlarida achchiq qalampirida uchraydigan kasalliklarning tur tarkibini aniqlash maqsadida monitoring (kuzatuv) ishlari olib borildi.



A

B

1-rasm. A) Fuzarioz kasalligi,

B) Meva uchki chirish kasalligi



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Kuzatuvlar jarayonida kasallangan achchiq qalampir o'simliklari a'zolaridan namunalar olinib, laboratoriyasida o'rganildi. O'simlik qismlaridan (barg, novda, ildiz va meva) kasallik qo'zg'atuvchi zamburug'larni ajratib olish maqsadida nam (vlajniy) kameralarga qo'yildi. So'ngra 25-26 oC xaroratga termostatga qo'yilib, 3, 5, 7 kunlar oralig'ida zamburug'larni o'sishi nazorat qilib borildi. Nam kamerada o'sgan kasallik qo'zg'atuvchi zamburug'lar mikroskopda ko'rib, ularning turi aniqlandi.

Tadqiqotlar natijalariga ko'ra, O'zbekiston sharoitida 8 ta kasallik turi aniqlandi: fuzarioz – *Fusarium oxysporum*, alternarioz – *Alternaria alternata*, fitoftoroz – *Phytophthora capsici*, kulrang chirish – *Botrytis cinerea*, un shudring – *Leveillula taurica*, antraknoz – *Colletotrichum capsici*, kladosporioz – *Cladosporium fulvum* va rizaktoniya - *Rhizoctonia solani*.

Ushbu kasalliklardan to'rttasi, un shudring – *Leveillula taurica*, antraknoz – *Colletotrichum capsici*, kladosporioz – *Cladosporium fulvum* va rizaktoniya - *Rhizoctonia solani* kasalliklari kam miqdorda uchrashi va qalampirga zarari (2-3%) past darajada ekanligi aniqlandi.

Qolgan kasalliklar fuzarioz – *Fusarium oxysporum*, alternarioz – *Alternaria alternata*, fitoftoroz – *Phytophthora capsici* va kulrang chirish – *Botrytis cinerea* kasalliklari O'zbekiston xududida achchiq qalampir o'simliklarida vegetatsiya davrida keng tarqalishi va kuchli darajada zarar yetkazishi (20-70%) kuzatildi. Olib borilgan tadqiqotlarda ushbu kasalliklar qalampir o'simligiga kuchli darajada zarar yetkazishi, yetishtiriladigan hosilni sifati va miqdorini keskin darajada pasayishiga olib kelishi kuzatildi (jadvalga qarang).

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Jadval Achchiq qalampirda aniqlangan zamburug‘li kasalliklarning tur tarkibi
Toshkent, Farg‘ona, Qashqadaryo viloyatlari va Qoraqalpog‘iston Respublikasi,
2018-2020 yillar.

№	Kasallik nomi	Kasallik qo‘zg‘atuvchi zamburug‘ turi	Sinfi	Oilasi	O‘zbekiston sharoitida
1.	Fuzarioz	Fusarium oxysporum Schlecht	Dothideomycetes	Nectriaceae	+++
2.	Fitoftoroz	Phytophthora capsici Leonian	Oomycetes	Peronosporaceae	+++
3.	Kulrang chirish	Botrytis cinerea Persoon	Leotiomycetes	Sclerotiniaceae	++
4.	Alternarioz	Alternaria alternata (Fr.) Keissl.	Dothideomycetes	Pleosporaceae	++
5.	Un shudring	Leveillula taurica (Lév.) G. Arnaud	Leotiomycetes	Erysiphaceae	+
6.	Antraknoz	Colletotrichum capsici (Syd.) Ye.J. Butler & Bisby	Sordariomycetes	Glomerellaceae	+
7.	Kladosporioz	Cladosporium fulvum Cooke	Dothideomycetes	Davidiellaceae	+
8.	Rizaktonioz	Rhizoctonia solani J.G. Kühn	Agaricomycetes	Ceratobasidiaceae	+

Shartli belgilar:– kasallik kuzatilmadi; + -kuchsiz darajada (5,0% gacha); ++ - o‘rtacha darajada (20-30% gacha); +++ -kuchli darajada (30% dan yuqori).



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Foydalanilgan adabiyotlar

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