

O'RIK VA BEDA AGROSENOZIDA TARQALGAN KOLLEMBOLALARNING UCHRASH SONI

Atoyeva Dilsora Odil qizi

*Buxoro davlat tibbiyot institutining
tibbiy biologiya kafedrası asistenti*

Annotatsiya. Dunyoda aholi sonining progressiv ortishi bilan, qishloq xo'jaligi mahsulotlariga bo'lgan talabning ham ortishiga olib keldi. Qishloq xo'jaligi mahsulotlari yetishtiriladigan agrosenoz tuproq unumdorligining pasayishi 30-50% ni tashkil etishi kutilmoqda¹. Bugungi kunda tuproq unumdorligini oshirish, texnogen ifloslanishini bioindikatsiya qilish hamda bioxavfsizligini ta'minlash muhim ilmiy-amaliy ahamiyat kasb etadi.

Kalit so'zlar. Kollembola, tuproq, agrosenoz, mikroartropoda, biogeotsenoz.

Kollembolalar, boshqa tuproq mikroartropodlari kabi, turli xil mintaqalarda va sharoitlarida yashaydi hamda tuproq sharoitlarda uchrovchi kollembolalar, asosan o'tloq biogeotsenozlarida ko'p miqdorda uchrashi o'rganilgan [1]. Ammo, tabiiy va antropogen ta'sirlar natijasida buzilgan biotoplarda, kollembolalarning uchrash chastotasi kam miqdorni tashkil etadi. Shuningdek, biogeotsenozlarda olib borilgan turli xil agrotexnik tadbirlar kollembolalarining taksonomik guruh tuzilishining o'zgarishiga olib keladi [2].

Umuman olganda, o'rim-yig'im chuqur tuproq faunasiga ta'sir qilmasada, ammo tuproqning yuqori va yuza qatlamlarida yashovchi tirik organizmlarga salbiy ta'sir etadi. Kollembolalar asosan saprofag organizmlar bo'lib, ular sonining ortishi yaylovlar biomassasining miqdoriga to'g'ri proporsionaldir. Kollembola turlar sonining o'zgarishi doimiy kuzatiladigan migratsiyaga ham bog'liqdir.

2022-2024 yillar davomida O'zbekiston Milliy Universiteti Botanika bog'ining o'rik bog'i va beda agrosenozining turli (0-10 sm, 10-20 sm, 20-30 sm) tuproq qatlamlarida olib borilgan tadqiqot ishlari natijasida, ilk marotaba Isotomidae oilasiga mansub 6 avlod va 23 ta turlar soni aniqlanib, tadqiqot natijalari 1 - jadvalda yoritilgan.

¹ [https:// www.fermermaktab.uz/uz](https://www.fermermaktab.uz/uz).

1-jadval

O'rik va beda agrosenozida tarqalgan kollembolalarning uchrash soni

Avlodlar	Turlar	O'rik bog'i			Beda agrosenoz		
		0-10	10-20	20-30	0-10	10-20	20-30
Tetracanthella	Tetracanthella arctica	20			44	45	
	Tetracanthella Fjellbergi	42			85	15	
	Tetracanthella Wahlgreni	33			52	44	
	Tetracanthella brachyura	72			89		
	Tetracanthella strenzkei	32	33	30	53	35	34
	Tetracanthella pilosa				48		
Pseudanuroforus	Pseudanuroforus altikola			79			94
	Pseudanuroforus psammophilus		38	44		47	48
Anurophorus	Anuroforus atlanticus		74			92	
	Anurophorus laricis	33	42		48	49	
Micranurophorus	Micranurophorus musci			16			35
Folsomides	Folsomides minor	35	38	13	42	45	17
	Folsomia bisetosella			25			37
	Folsomia litsteri			41			53
	Folsomia inoculata	38	45		41	46	
	Folsomia quadrioculata	26			47		
	Folsomia manolachei		47			56	
	Folsomia palaeartica		33	36		42	43
	Folsomia agrelli		26			73	
	Penicula folsomiyasi	48			55		
	Folsomia spinosa	35			52		
	Folsomia sexoculata	24	21		35	30	
Archisotoma	Archisotoma megalops				46	41	

Tadqiqot natijalariga ko'ra, O'zbekiston Milliy Universiteti Botanika bog'ining o'rik va beda agrosenozida olib borilgan tadqiqot ishlari natijasida Tetracanthella avlodiga oid 6 tur (T.arctica, T.Fjellbergi, T.Wahlgreni, T.brachyura, T.strenzkei, T.pilosa) Pseudanuroforus avlodidan ikkita tur (P.altikola, P.psammophilus) Anurophorus avlodiga oid 2 ta tur vakillari (A.atlanticus, A.laricis) Micranurophorus avlodidan yagona tur (M.musci) Folsomides avlodidan 11 ta tur (F.minor,

F.bisetosella, F.litsteri, F.inoculata, F.quadrioculata, F.manolachei, F.palaeartica, F.agrelli, Penicula folsomiyasi, F.spinosa, F.sexoculata) hamda Archisotoma avlodidan yagona tur (A.megalops) mavjudligi ilk marotoba aniqlandi.

Turli tuproq qatlamlarida o'rik bog'i va beda agrosenozida uchrovchi tularning har bir qatlam bo'yicha tarqalishi ochib berilgan. Dastlab namunalari o'rik bog'i hududi tuproqning 0-10 sm qatlamida tarqalgan turlar: T.arctica, T.Fjellbergi, T.brachyuran, F. quadrioculata, Penicula folsomiyasi, F.spinosa. Tuproqning 0-10 sm, 10-20 sm qatlamlarida tarqalgan turlar: A.laricis, F.sexoculata, F.inoculate. Tuproqning 10-20 sm qatlamida tarqalgan turlar: A.atlanticus, F.manolachei, F.agrelli. Tuproqning 10-20 sm 20-30 sm qatlamlarida tarqalgan turlar: P.psammophilus, F.palaeartica. Tuproqning 20-30 sm qatlamida tarqalgan turlar: P.altikola, M.musci, F.bisetosella, F.litsteri. Tuproqning 0-10 sm, 10-20 sm, 20-30 sm qatlamlarida dominant turlar T.strenzkei, F.minor uchrashi aniqlandi.

Beda agrosenozi hududi tuproqning 0-10 sm qatlamida tarqalgan turlar: T.brachyuran, T.pilosa, F.quadrioculata, Penicula folsomiyasi, F.spinosa. Tuproqning 0-10 sm, 10-20 sm qatlamlarida tarqalgan turlar: T.arctica, T.Fjellbergi, T.Wahlgreni, A.laricis, F.sexoculata, F.inoculate. Tuproqning 10-20 sm qatlamida tarqalgan turlar: A.atlanticus, F.manolachei, F.agrelli. Tuproqning 10-20 sm 20-30 sm qatlamlarida tarqalgan turlar: P.psammophilus, F.palaeartica, A.megalops. Tuproqning 20-30 sm qatlamida tarqalgan turlar: P.altikola, M.musci, F.bisetosella, F.litsteri. Tuproqning 0-10 sm, 10-20 sm, 20-30 sm qatlamlarida tarqalgan turlar: T.strenzkei va F.minor uchrashi aniqlandi.

Demak, tuproq kollembolalarining o'rik bog'i va beda agrosenozlarida tarqalishi, tur tarkibi bo'yicha tadqiqot ishlari olib borilganda, o'rik bo'gida bir oila (Isotomidae)ga mansub, 5 ta avlod (Tetracanthella, Pseudanuroforus, Anuroforus, Micranurophorus, Folsomides) va 21 ta tur (T.arctica, T.Fjellbergi, T.Wahlgreni, Tetracanthella brachyura, T.strenzkei, P.altikola, P.psammophilus, A.atlanticus, A.laricis, Micranurophorus musci, F.minor, F.bisetosella, Folsomia litsteri, Folsomia inoculata, F.quadrioculata, F.manolachei, F.palaeartica, F.agrelli, Penicula folsomiyasi, F.spinosa, F.sexoculata) hamda beda agrosenozida mazkur oila (Isotomidae)ga mansub 6 ta avlod (Tetracanthella, Pseudanuroforus, Anuroforus, Micranurophorus, Folsomides, Archisotoma) va 23 ta tur (T.arctica, T.Fjellbergi, T.Wahlgreni, Tetracanthella brachyura, T.strenzkei, T.pilosa, P.altikola, P.psammophilus, A.atlanticus, A.laricis, Micranurophorus musci, F.minor, F.bisetosella, Folsomia litsteri, Folsomia inoculata, F.quadrioculata, F.manolachei, F.palaeartica, F.agrelli, Penicula folsomiyasi, F.spinosa, F.sexoculata, A.megalops) borligi aniqlandi.

Foydalanilgan adabiyotlar ro'yxati:

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