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About the Nematodafaunas of Birds in the Pidmountary - Mountain Zone in the South of Uzbekistan

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Annotation: The article examines nematodes of wild and dommant birds in the foothill – mountain zone in the south of Uzbekistan. The results of the study show that 14 species of nematodes were noted in the wild and domestic birds surveyed in the foothill – mountain zone in sothern Uzbekistan. Of these, 5 species of nematodes are pathogens of serous helminthiases of domestic and wild birds.

Keywords: extensiveness of invasion, intensity of infestation, helminthofaun, nematodofaun, capillarial disease, ascariasis, heterokeridosis, dyspharynxose.

INTRODUCTION: The helminth fauna of individual bird regions of Uzbekistan is presented in the works of domestic and foreign authors [1-5]. However, the helminth fauna and bird ecology in the south of the republic have been poorly studied. Based on this, from 2010-2022. We examined 46 domestic chickens and 149 wild birds. (46 hens, 80 mayins, 27 black crows, 9 blackbirds, 7 rollers, 7 tree sparrows and Spanish sparrows, 5 starlings, 5 larks, 4 goldfinches, 3 grass doves, 2 great doves), belonging to the 4th order (Galliformes, Passeriformes, Caraciiformes, Colubiformes), methods of K.I. Scriabin [3] and M.N. Dubinin [2]. As a result of the study, it was established that the above mentioned bird species were significantly infected with various types of avian nematodes in the southern part of Uzbekistan.

MATERIALS AND WORKING METHODS

We provide data on the infestation of birds in the southern part of Uzbekistan, Surkhandarya and Kashkadarya regions. Nematodes were found in 9 species of birds. Of 46 chickens, 32 (69%) were infested by them, of 80 mynas, 43 (67.5%), of 27 black crows - 24 (88.8%), of 9 blackbirds - 7, of 7 rollers - 7, of 7 field and Spanish sparrows - 6, from 5 starlings - 3, from 2 great doves - 1; in 5 larks, 4 goldfinches and 3 grasses, nematodes were not detected. These nematodes belong to 14 species belonging to family 6. We present a list of them in a systematic order, indicating the hosts, extensiveness (ee), intensity of their invasions, (ii) and habitat.

Squad. Trichocephalida (Surjabin et Schulz, 1928)

Family. Carillaridae (Neveu Jemaire, 1936)

Genus. Sarillaria (Zeder, 1800)

View. Carillaria obsignata (Madsen, 1945)

Hosts: Chicken, turkey, guinea fowl, chukar. gray partridge, common pheasant. Of those opened, 2 (4.3%) and 1-2 specimens were infected.

Habitat: Jarkurgan and Baysun districts of Surkhandarya region.

Squad. Ascaridida (Surjabin et, Schulz 1940).

Family. Ascaridia (Dujardin, 1845)

Genus. Ascaridia (Dujardin, 1845)

View. Ascaridia galli (Schrank, 1788)

Hosts: Chicken, turkey, guinea fowl, common pheasant, chukar, quail.

Habitat: Jarkurgan, Termiz, Sherabad districts of Surkhandarya region.

Genus. Roggosaecum (Railliet et Heppy, 1912)

View. Roggosaecum ensicaudatum (Zeder,1800)

Hosts: thrush warbler, crimson plover, golden plover, rook, jay, starling, blackbird. The species in question was noted by M.A. Sultonov [4] in moorhens, jackdaws, and thrushes. Of the 9 opened

blackbirds infected 3 (33.3%), out of 80 main-7 (8.7%), out of 27 black crows-1 (3.7%). II-2-7 specimens.

Place of residence: Dzharkurgan district, Surkhandarya region.

Suborder. Oxyurata (Skrjabin, 1923)

Family. Heterakidae (Railliet et Henry, 1914)

Genus. Heterakis (Dijardin, 1845)

View. Heterakis gallinae (Gmelin, 1790)

Hosts: chicken, guinea fowl, turkey, partridge, chukar, pheasant, quail. This species was recorded in chicken in Central Asia, by O. Linstvov [3], in Uzbekistan, by M.A. Sultonov [5]. Of the 46 opened chickens, 8 (17.3%) were infected, and 7 specimens were infected.

Habitat: Sherabad and Baysun districts of Surkhandarya region.

Family: Asuariidae (Seurat, 1913)

Genus: Asuaria (Bremser, 1811)

Species: Asuaria anthuris (Rudolphi,1819)

Hosts: hooded crow, raven, rook, black crow, magpie, roller, starling, mynah. Of 5 starlings, ei amounted to 2 40%, of 27 carrion crows - 3 (4.7%), of 8 main - 2 (2.5%), and - 2-9 specimens.

Habitat: Yakkabag and Shakhrisabz districts of Kashkadarya region.

Species: Acuaria hamilosa (Diesing, 1851)

Hosts: chukar, quail, pheasant, domestic chicken, guinea fowl, turkey, large turtle dove. Of the 2 large doves, 1 and 5 specimens are infected.

Habitat: Sherabad and Jarkurgan districts of Surkhandarya region.

Species: Acuaria skrjabini (Crezraja, 1926)

Owners: Spanish sparrow. Of the 7 sparrows that were opened, 2 and 4-5 were infected.

Habitat: Dzharkurgan and Angora districts of Surkhandarya region.

Genus: Dispharynx (Railliet, Henry et , Sisoff, 1912)

Species: Dispharynx nasuta (Rudolphi, 1819)

Hosts: golden pheasant, chicken, guinea fowl, rock pigeon, house pigeon, house sparrow, starling, roller, noted by M. A. Sultanov [4] in 1 rook in the Toshkent region. We identified it in the black crow. Of the dissected black crows, 5(18.5) and 2-7 specimens were infected.

Habitat: Jarkurgan district, Surkhandarya region.

Genus: Stellobronema (Gilbert, 1930)

Species: Stellobronema acnariana (Guschanskaja, 1937)

Owners: roller, hoopoe. The helminth in Uzbekistan was first identified by the 9th SGE in the European Roller in 1923 in Bukhara, as well as by M.A. Sultanov [5] and us. Of the 7 autopsied birds, 1 and 2 specimens were infected.

Habitat: Dzharkurgan district of Surkhandarya region.

Suborder: Filariata (Skrjabin, 1915)

Family: Diplotriaenidae (Skrjabin, 1915)

Genus: Diploriaena (Henry et Oroux, 1900)

Species: Diploriaena lenryi (Blank)

Hosts: turtledove, bee-eater, roller. Of the 7 rollers, 3 and 1-2 specimens are infected.

Habitat: Angora and Sherabad districts of Surkhandarya region.

Species: Diplotriaena Sokolovi (Skrjabin, 1916)

Hosts: tree sparrow. This species is registered for the first time in Uzbekistan. Of the dissected sparrows, 1 and 8 specimens are infected.

Genus: Squamofilaria (Sehmerling, 1925)

Species: Squamofilaria caraeiae (Cmelin, 1790)

Owners: roller. We discovered nematodes in Uzbekistan for the first time.

Of the 7 opened rollers, 2 and 7-5 specimens were infected.

Habitat: Dzharkurgan district of Surkhandarya region.

Species: Cyrnea sp.

Hosts: black crow, roller, chicken. We detected it in black crow. Of the 27 birds opened, 1 (3.7%) and 4 specimens were infected.

Habitat: Dzharkurgan and Kumkurgan districts of Surkhandarya region.

Species: Amidostomum filicae (Rudolphi, 1819)

Hosts: Pulica atra – coot

Habitat: Dzharkurgan district of Surkhandarya region.

Species: Cotracaecum spiculigerun (Rudolphi, 1809)

Hosts: Phalacrocorax carbo – great cormorant

Habitat: Dzharkurgan and Kumkurgan districts of Surkhandarya region.

Species: Porrocaecum crissum (Deslongchamps, 1824)

Hosts: Acridotheres tristis – Indian starling

Habitat: Kitab and Dekhkanabad districts of Kashkadarya region.

Species: Cyrnea capitellata (Schneider, 1866)

Hosts: Coracias garrulous – roller

Habitat: Dzharkurgan and Kumkurgan districts of Surkhandarya region.

Species: Hadjelia truncata (Creplin, 1825)

Hosts: Ianius excubitor, Upupa epops – gray and long-tailed shrikes, hoopoe.

Habitat: Kitab and Dekhkanabad districts of Kashkadarya region.

Species: Tetmeres fissispina (Diesing, 1861)

Owners: Anas crecca – teal - whistler

Habitat: Noted in Surkhandarya region

Species: Acuaria cordata (Meuller, 1897)

Hosts: Ianius excubitor, Ianius schach – long-tailed and gray shrikes.

Habitat: Noted in Baysun district of Surkhandarya region

Species: Echinuria uncinata (Rudolphi, 1819)

Owners: Anas crecca – teal

Habitat: Noted Surkhandarya region

Species: Diplotriaena sokolovi Skrjabin, 1916

Hosts: Passer montanus – tree sparrow

Habitat: Kitab and Dekhkanabad districts of Kashkadarya region.

Species: Diplotriaena tricuspis (Fedtschenko, 1874)

Owners: Corvus corone – black crow

Habitat: Kitab and Dekhkanabad districts of Kashkadarya region.

Species: Mediorhynchus armenicus (Petrotschenko,1958)

Hosts: Coracias garrulous, Upupa epops – roller, hoopoe

Habitat: Noted in Baysun district of Surkhandarya region

Species: Sicarius dipterun (Popova, 1927)

Owners: Upupa epops - hoopoe

Habitat: Kitab and Dekhkanabad districts of Kashkadarya region.

Species: Viguiera euryoptera (Rudolphi, 1819)

Hosts: Ianius schius – long-tailed and gray shrikes

Habitat: Noted in Baysun district of Surkhandarya region

Species: Desmidocercella skrjabini (Guschanskaja, 1949)

Hosts: Phalacrocorax carbo – great cormorant.

Habitat: Noted Surkhandarya region

Species: Squamofilaria coraciae (Gmelin, 1790)

Hosts: Coracias garrulous - roller

Habitat: Kitab and Dekhkanabad districts of Kashkadarya region.

Species: Diplotriaena tricuspis (Fedtschenko, 1874)

Owners: Corvus corone – black crow

Habitat: Dzharkurgan and Kumkurgan districts of Surkhandarya region.

Wild and domestic birds are significantly infested with helminths (55.4%) with a diverse fauna of parasitic worms (83 species). The highest invasion was observed in the Indian starling, domestic chicken and common starling (54.0 - 56.7%). The main carriers of parasitic worms among birds are 12 representatives of the orders Lamelidae and Gallini.

Faunistic analysis of helminths of individual bird species shows their significant importance as carriers and distributors of invasions in various ecosystems.

Summarizing the composition of helminths of common species of wild and domestic birds, we note that cestodes (35 species) predominated among them, constituting 42.1% of the total number of identified parasitic worms. The species composition of nematodes (24 species) was 28.9%.

The results of the study show that 14 species of nematodes were observed in the examined wild and domestic birds in the foothills of the Kashkadarya and Surkhandarya regions. Of these, 3 (Acuaria skrjabini, Diplotraena sokolovi, S.caraciae); tree sparrow - A. skriabini, D. sokolovi, Spanish sparrow - A. skriabini; Diplotraena sokolovi, S. caraciae); black crow - A. anthuris, P. ensicaudatus, D. nasuta, Cornea sp, blackbird - P. ensicaudatum.

The species composition of nematodes is more diverse in wild birds (species than in domestic chickens [3]. Among the identified nematodes, 5 species are causative agents of serous helminthiasis (capillariasis, ascariasis, heteracidosis, dyspharynxosis) in domestic and hunting birds. Most often, nematodes are observed in birds caught on the banks of the Surkhandarya rivers near poultry farms with open walking areas, etc. A significant concentration of wild birds (black crow, mynah, tree sparrow, etc.) on the outskirts of mountain towns and villages contributes to the exchange of helminths between domestic chickens and wild birds and an increase in the extent of their infection. These data serve as a scientific basis for the development of measures to prevent many helminthiasis of chicken birds in the conditions of Uzbekistan.

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