

DIVERSITY OF PARASITIC FAUNA IN WILD BOARS FROM THE “PĂDUREA DOMNEASCĂ” NATURAL FOREST RESERVE, REPUBLIC OF MOLDOVA

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Abstract. The aim of the research was to study the parasitic fauna diversity in the wild boars from the “Pădurea Domnească” natural forest reserve of the Republic of Moldova. The wild boar (*Sus scrofa*) lives in band, in forests and nearby agricultural fields. The taxonomic composition of parasitic fauna includes various parasitic agents: 2 species of Trematoda (*Fasciola hepatica*) with extensity of invasion (EI) 18.4% and intensity of invasion (II) of 3.2 individuals, *Dicrocoelium lanceolatum* – 7.7% and II 3.1 individuals); the class Secernentea included 9 species (*Trichocephalus suis* – in 24.4% of cases, II – 3.4 individuals, *Strongyloides ransomi* identified in 82.2% cases, II – 10.4 individuals, *Metastrongylus elongatus* – in 52.4% cases, II – 6.6 individuals, *Oesophagostomum dentatum* – in 16.8% cases, II – 3.2 individuals, *Physocephalus sexalatus* – in 5.8% cases, II – 1.2 individuals, *Ascaris suum* – in 44.6% cases, II – 4.2 individuals, *Hyoststrongylus rubidus* – in 22.6% cases, II – 3.0 individuals, *Gongylonema pulchrum* – 3.2% cases, II – 1.6 individuals, *Globocephalus urosubulatus* – in 42.2% cases, II – 4.6 individuals), the *Acanthocephala* class was represented by one species (*Macracanthorhynchus hirudinaceus* – in 2.8% cases, II – 1.6 individuals) and the *Isospora* class was represented by 2 species (*Eimeria deblickei* – in 64.5% cases with II – 9.2 individuals and *Eimeria scabra* – in 32.6% cases with II – 4.6 individuals). Out of those 14 species identified in boars, two species (21.4%) are specific for boar only (*Gongylonema pulchrum*; *Eimeria deblickei*; *Eimeria scabra*), eight species (57.2%, *Trichocephalus suis*, *Strongyloides ransomi*, *Metastrongylus elongatus*, *Oesophagostomum dentatum*, *Physocephalus sexalatus*, *Ascaris suum*, *Hyoststrongylus rubidus*, *Macracanthorhynchus hirudinaceus*) are common for other wild and domestic animals, and three species (21.4%) (*Fasciola hepatica*, *Dicrocoelium lanceolatum* and *Globocephalus urosubulatus*) are common for animals and humans.

Keywords: species of parasites, wild animals, boars.

Rezumat. Diversitatea parazitofaunei la mistreți din Rezervația Naturală „Pădurea Domnească”, Republica Moldova.

Lucrarea vizează studiul diversității parazitofaunei la mistreți din Rezervația Naturală „Pădurea Domnească”, Republica Moldova. Mistrețul (*Sus scrofa*) fiind o specie silvicolă se întâlnește în turmă, în păduri și diverse culturi agricole, de la marginea acestora. Diversitatea taxonomică a parazitofaunei, este constituită din diverși agenți parazitari din clasele: Trematoda - 2 specii (*Fasciola hepatica* - cu EI de 18,4% din cazuri și II de 3,2 ind., *Dicrocoelium lanceolatum* - 7,7% din cazuri, II - 3,1 ind.); Secernentea - 9 specii (*Trichocephalus suis* - 24,4% din cazuri, II - 3,4 ind., *Strongyloides ransomi* - 82,2%, II - 10,4 ind., *Metastrongylus elongatus* - 52,4%, II - 6,6 ind., *Oesophagostomum dentatum* - 16,8%, II - 3,2 ind., *Physocephalus sexalatus* - 5,8%, II-1,2 ind., *Ascaris suum* - 44,6%, II-4,2 ind., *Hyoststrongylus rubidus* - 22,6%, II-3,0 ind., *Gongylonema pulchrum* - 3,2%, II-1,6 ind., *Globocephalus urosubulatus* - 42,2%, II - 4,6 ind.); Acantocéphala o specie (*Macracanthorhynchus hirudinaceus* - 2,8% din cazuri, II-1,6 ind.) și Isospora cu 2 specii (*Eimeria deblickei* - 64,5 % din cazuri, II- 9,2 ind. și *Eimeria scabra* - 32,6% din cazuri și II- 4,6 ind.). Totalul de specii parazitare identificate la mistreți din Rezervația Naturală „Pădurea Domnească” (14 specii) pot fi divizate în: 3 specii (21,4%) sunt specifice doar pentru mistreți (*Gongylonema pulchrum*; *Eimeria deblickei*), 8 specii (57,2%) (*Trichocephalus suis*, *Strongyloides ransomi*, *Metastrongylus elongatus*, *Oesophagostomum dentatum*, *Physocephalus sexalatus*, *Ascaris suum*, *Hyoststrongylus rubidus*, *Macracanthorhynchus hirudinaceus*) sunt comune și altor specii de animale sălbatice și domestice, iar 3 specii (21,4%) (*Fasciola hepatica*, *Dicrocoelium lanceolatum* și *Globocephalus urosubulatus*), sunt comune atât la animale, cât și la om.

Cuvinte cheie: specii de parazit, animale sălbatice, mistreți.

INTRODUCTION

During the last years the livestock of boars from the Republic of Moldova has been continuously growing and represents over 65% of the ecological norm, with annual grow approximately 40% yet this ensures the annual livestock grow with only 16% (TODERAȘ et al., 2019).

The study of the process of wild animals' infestation with ecto - and endoparasites and elaboration of innovative measures for its control remains an important, fundamental but also practical issue since some species serve as definitive hosts in their life cycles but also as vectors, being dangerous for wild animals as well as for humans. Parasitosis is the most frequent animal disease of cynegetic fauna which causes substantial economic losses (SCHEGGI, 1999; CABANAU, 2001; ERHAN et al., 2001; NESTEROV, 2010).

During the last years, the human factor has become more prominent but has also brought along essential changes in biological cenosis that finally caused infestation of wild animals with various species of ecto- and endoparasites. The changes occurring during the last two decades in the zootechnic sector linked with the assignment of land to the small farmers, reorganization of zootechnic units, establishment of multiple small farms and dislocation of high number of animals from collective farms to private households resulted in radical changes in the parasitic fauna. The animals from the households also enter the natural reservations where they can transfer the pathogenic agents to the wild animals. Wild mammals essentially contribute to establishing and maintaining the natural locus of parasitic agents common to the domestic animals and humans. The agglomeration of animals on limited territories, the grazing of various species of different ages facilitates the elimination and accumulation of the huge number of various parasitic agents forming and maintaining the common parasites for

domestic/wild animals and humans (DEMIDOV, 1987; NESTEROV, 1991; BEREJNOY, 1995; HUDSON, 1996; KUZIMIN, 2003; SAFIULIN, 2005).

Parasitic zoonoses are spread in the livestock of wild and domestic animals but also a considerable number is attributed to human population where children are mostly affected. Some parasitic zoonosis appear in childhood but clinical symptoms appear after many years with grave health consequences (NESTEROV, 1992; LIPNITSKY, 1995; DIDĂ & DUCA, 2002; EFREMOV, 2017).

The evolution of zoonoses in humans and animals provoke immense losses through deaths or loss of health of considerable number of people. These diseases determine considerable losses through mortality and morbidity. This is also seen in the loss of body weight, animal productivity, reduced fecundation as well as confiscation of meat and infested organs (DIDĂ & DUCA, 2002; MARSAN, 2013; ANISIMOVA, 2016).

The parasitic diseases, besides the fact that they hamper the development and growing of animals, provoke death directly through diseases or indirectly by weakening and exhausting the organism and increasing the probability of being captured by predators. The multiple measures applied in order to increase the number of wild animals of cynegetic fauna are not sufficient until the measures of parasitic control are not adopted (SENNER, 1983; GOVORKA, 1988; LIPNITSKY, 2007; KRASKOV, 2008; TODERAȘ, 2019).

The hunting fauna is a part of the cynegetic national fund. The livestock, as well as the whole spectrum of main and complimentary species define the values of this fund. In this regard, the study of parasitic fauna in wild animals belonging to cynegetic fauna is of paramount importance (GOVORKA, 1988; ERHAN et al., 2001; ANISIMOVA, 2016; TODERAȘ, 2019).

The aim of this research is to study the diversity of parasitic fauna in boars from the “Pădurea Domnească” natural reserve of the Republic of Moldova.

MATERIALS AND METHODS

The parasitological research was organized in the Laboratory of Parasitology and Helminthology of the Institute of Zoology on 124 biological samples collected from the boars of the “Pădurea Domnească” natural forest reserve in the period 2015–2018. The concerned ecosystem is characterized by the dense forests of oaks, hornbeam, ash, hazel, and dense vegetation of hygrophite and prairie plants.

In order to accomplish the target objectives, such methods as coproovoscopy (*Fulleborn, Darling*), coprolarvoscopy (*Popov, Baermann*) and successive wash-out method were applied. The II with nematodes was determined in 5 g of samples, and oocytes of *Eimeria* spp., eggs of *Fasciola hepatica*, *Dicrocoelium lanceolatum* etc. in 10 visualized microscopic fields (10x40).

The systematic identification of parasitic species was performed according to the European fauna (KONTRIMAVICHUS V.). The parasitological evaluation is based on establishing the EI (%) and II (individuals per animal) in the researched animals. The obtained results were processed statistically in the *Excel* software.

RESULTS AND DISCUSSIONS

The study of parasitic invasions in boars from the forest ecosystem of the “Pădurea Domnească” natural reserve of the Republica Moldova revealed the parasitic species of various localization, systematically belonging to 4 classes (Trematoda, Secernentea, Acantocephala, Isospora), 13 families (*Fasciolidae*, *Dicrocoeliidae*, *Trichuridae*, *Strongyloidae*, *Metastrongylidae*, *Strongyloidae*, *Spirocercidae*, *Ascarididae*, *Trichostrongylidae*, *Gongylonematidae*, *Ancylostomatidae* *Oligacanthorhynchidae* și *Eimeriidae*) and 13 genera (*Fasciola*, *Dicrocoelium*, *Gongylonema*, *Oesophagostomum*, *Ascaris*, *Strongyloides*, *Metastrongylus*, *Hyostrongylus*, *Globocephalus*, *Physocephalus*, *Trichocephalus*, *Macracanthorhynchus* and *Eimeria*).

The analysis of the examined biological samples allowed to establish a high level of infestation of boars in the “Pădurea Domnească” natural reserve with various parasitic agents: 2 species of Trematoda (*Fasciola hepatica* with EI of 18.4 % cases and II of 3.2 ind., *Dicrocoelium lanceolatum* - 7.7% of cases, II - 3.1 ind.); 9 species of Secernentea (*Trichocephalus suis* -24.4 % of cases, II - 3.4 ind., *Strongyloides ransomi*- 82.2 %, II - 10.4 ind., *Metastrongylus elongatus*- 52.4 %, II - 6.6 ind., *Oesophagostomum dentatum* -16.8%, II - 3.2 ind., *Physocephalus sexalatus* - 5.8%, II- 1.2 ind., *Ascaris suum* - 44.6%, II-4.2 ind., *Hyostrongylus rubidus* - 22.6%, II- 3,0 ind., *Gongylonema pulchrum* - 3.2%, II- 1.6 ind., *Globocephalus urosubulatus* - 42.2%, II - 4.6 ind.); one species of Acantocephala (*Macracanthorhynchus hirudinaceus* - 2.8% of cases, II-1.6 ind.) and 2 species of Isospora (*Eimeria deblickei* - 64.5 % of cases, II- 9.2 ind. and *Eimeria scabra* - 32.6% of cases and II- 4.6 ind. (Table 1)).

The parasitological investigation covered 124 coprology samples collected from the boars from “Pădurea Domnească” natural forest reserve revealed that 115 samples (92.7% cases) were tested with parasitic agents. The parasitic invasion by a single parasitic species was present in 22 samples (19.1% cases). Out of the total number of the samples identified with the parasites, the most frequently established polyparasitic associations were those of 2 species- 42 samples (36.5%): *Strongyloides ransomi* + *Eimeria deblickei* – 12 samples (28.6%); *Strongyloides ransomi* + *Ascaris suum*– 10 samples (23.8%); *Strongyloides ransomi* + *Metastrongylus elongatus* - 8 samples (19.0%); *Ascaris suum* + *Eimeria scabra* -7 samples (16.6%); *Strongyloides ransomi* + *Globocephalus urosubulatus* - 5 samples (12.0%).

Table 1. Diversity of parasitofauna in boars from the “Pădurea Domnească” natural forest reserve.

Class	Family	Species	EI, %	II, ind.
Trematodae	Fasciolidae	<i>Fasciola hepatica</i> (Linnaeus, 1758)	18.4	3.2
	Dicrocoeliidae	<i>Dicrocoelium lanceolatum</i> (Rudolphi, 1819)	7.7	3.1
	Trichuridae	<i>Trichocephalus suis</i> (Schrank, 1788)	24.4	3.4
	Strongyloidiidae	<i>Strongyloides ransomi</i> (Wedl, 1856)	82.2	10.4
Secernentea	Metastrongylidae	<i>Metastrongylus elongatus</i> (Dujardin, 1845)	52.4	6.6
	Strongyloidae	<i>Oesophagostomum dentatum</i> (Railliet, 1905)	16.8	3.2
	<u>Spirocercidae</u>	<i>Physocephalus sexalatus</i> (Raffaele Molin, 1860)	5.8	1.2
	Ascaridiidae	<i>Ascaris suum</i> (Goeze 1782)	44.6	4.2
	Trichostrongylidae	<i>Hyostrongylus rubidus</i> (Hassalland and Stiles, 1892)	22.6	3.0
	Gongylonematidae	<i>Gongylonema pulchrum</i> (Joseph Leidy, 1850)	3.2	1.6
	Ancylostomatidae	<i>Globocephalus urosubulatus</i> (Alessandrini, 1909)	42.2	4.6
Acantocephalae	Oligacanthorhynchidae	<i>Macracanthorhynchus hirudinaceus</i> (Travassos, 1916)	2.8	1.6
Conoideosidae	Eimeriidae	<i>Eimeria deblickei</i> (Douwes, 1921)	64.5	9.2
		<i>Eimeria scabra</i> (Thelohan, 1893)	32.6	4.6

In those 27 studied samples (23.5% of cases), the following parasitic associations of 3 parasites were established: *Strongyloides ransomi* + *Ascaris suum* + *Eimeria deblickei* – 13 samples (48.2%); *Strongyloides ransomi* + *Metastrongylus elongatus* + *Eimeria scabra* – 8 samples (29.6%); *Strongyloides ransomi* + *Globocephalus urosubulatus* + *Eimeria deblickei* – 5 samples (18.5%) and one sample (3.7%) - *Strongyloides ransomi* + *Fasciola hepatica* + *Eimeria deblickei*.

The polyparasitic associations formed by 4 species of parasites were identified in 14 samples (12.2%), i.e.: *Strongyloides ransomi* + *Metastrongylus elongatus* + *Ascaris suum* + *Eimeria deblickei* – 7 samples (50.0%); *Strongyloides ransomi* + *Metastrongylus elongatus* + *Globocephalus urosubulatus* + *Eimeria deblickei* – 4 samples (28.6%); *Strongyloides ransomi* + *Globocephalus urosubulatus* + *Ascaris suum* + *Eimeria deblickei* – 2 samples (14.3%); *Strongyloides ransomi* + *Trichocephalus suis* + *Oesophagostomum dentatum* + *Eimeria scabra* – in one sample (7.1%).

The parasitological laboratory investigation allowed the identification in 6 samples (5.2%) of parasitic associations consisting of 5 species: *Strongyloides ransomi* + *Ascaris suum* + *Metastrongylus elongatus* + *Dicrocoelium lanceolatum* + *Eimeria deblickei* – 2 samples (33.3%); *Strongyloides ransomi* + *Ascaris suum* + *Metastrongylus elongatus* + *Hyostrongylus rubidus* + *Eimeria deblickei* – 2 samples (33.3%); *Strongyloides ransomi* + *Ascaris suum* + *Metastrongylus elongatus* + *Trichocephalus suis* + *Eimeria deblickei* – one sample (16.6%); *Strongyloides ransomi* + *Ascaris suum* + *Metastrongylus elongatus* + *Trichocephalus suis* + *Eimeria scabra* – one sample (16.7%) and one sample (16.7%) - *Strongyloides ransomi* + *Ascaris suum* + *Metastrongylus elongatus* + *Dicrocoelium lanceolatum* + *Eimeria deblickei*. The polyparasitic associations formed of 6 species of parasites were identified in 4 samples (3.5%) and formed of: *Strongyloides ransomi* + *Metastrongylus elongatus* + *Ascaris suum* + *Trichocephalus suis* + *Fasciola hepatica* + *Eimeria deblickei* – 2 samples (50.0%); *Fasciola hepatica* + *Strongyloides ransomi* + *Ascaris suum* + *Metastrongylus elongatus* + *Oesophagostomum dentatum* + *Globocephalus urosubulatus* – one sample (25.0%) and *Strongyloides ransomi* + *Metastrongylus elongatus* + *Ascaris suum* + *Oesophagostomum dentatum* + *Dicrocoelium lanceolatum* + *Eimeria scabra* – one sample (25.0%) (Figs. 1, 2).

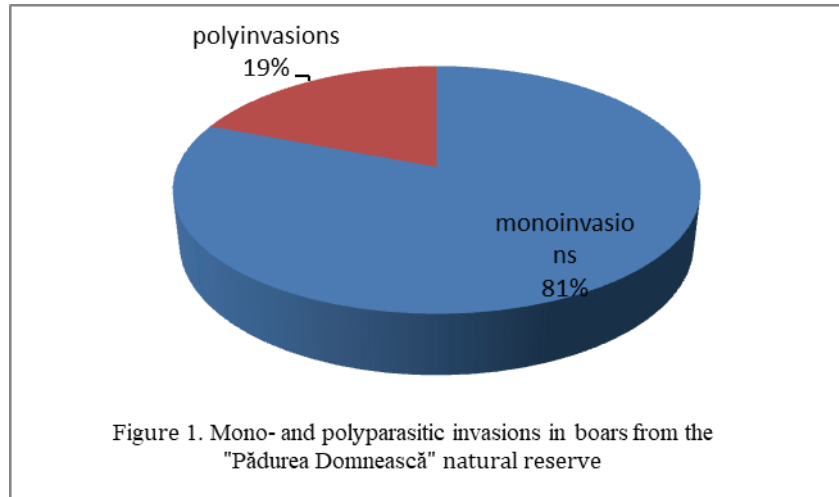


Figure 1. Mono- and polyparasitic invasions in boars from the "Pădurea Domnească" natural reserve

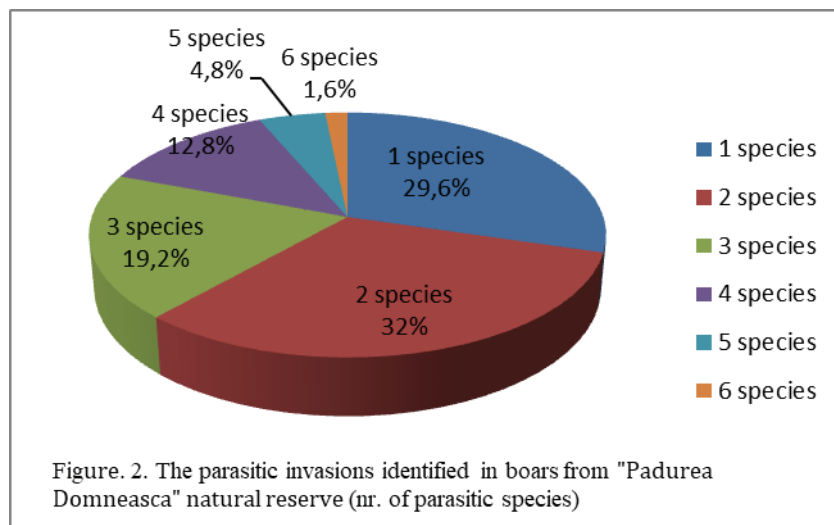


Figure. 2. The parasitic invasions identified in boars from "Padurea Domneasca" natural reserve (nr. of parasitic species)

Depending on the life development cycles, the identified parasites species in the boars from the "Pădurea Domnească" natural reserve are divided into: biohelminths (50,0 %) – parasitic species which have intermediary and complimentary hosts in their life development cycles, and geohelminths (50,0%) – parasitic species which do not have intermediary and complementary hosts in their life development cycle (Fig. 3).

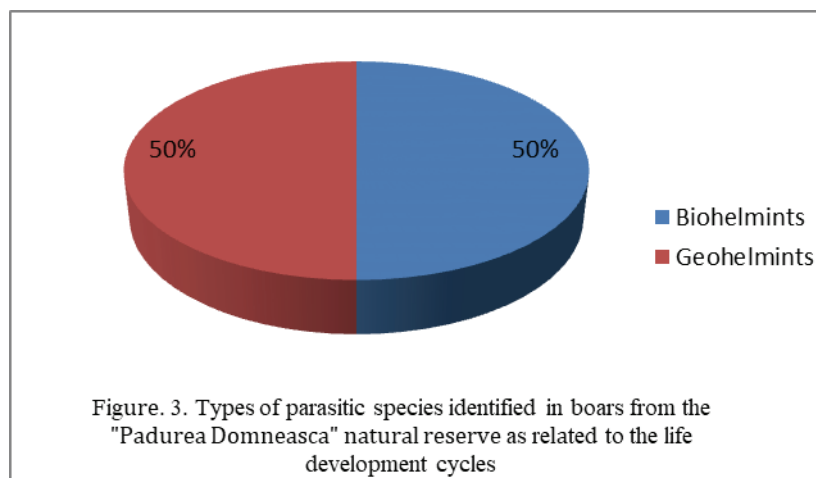
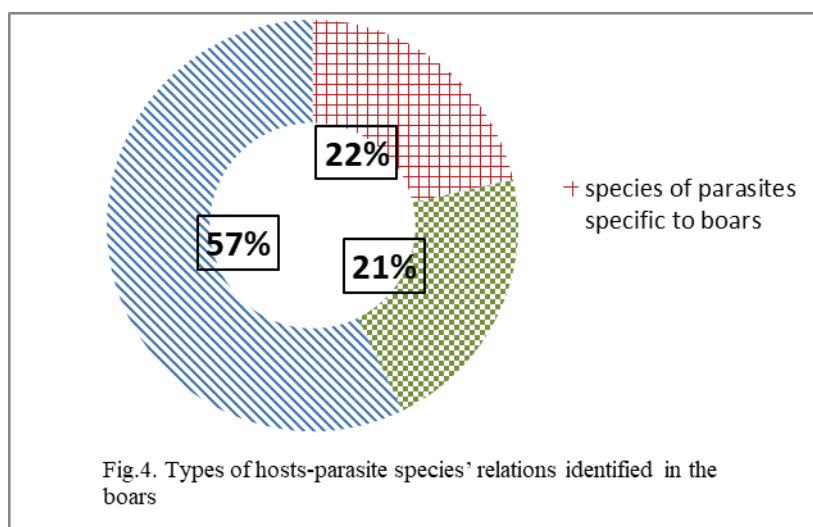


Figure. 3. Types of parasitic species identified in boars from the "Padurea Domneasca" natural reserve as related to the life development cycles

The parasitological research revealed that the boars from the forestry ecosystem in the "Pădurea Domnească" natural reserve of the Republic of Moldova were largely infested, often with polyparasite invasions. Out of the total number of parasitic species identified in boars (14 species): 2 species (14.3%) are only specific to boars (*Eimeria deblickei*, *Eimeria scabra*), 9 species (64.2%) (*Trichocephalus suis*, *Strongyloides ransomi*, *Metastrongylus elongatus*,

Oesophagostomum dentatum, *Physocephalus sexalatus*, *Ascaris suum*, *Hyostrongylus rubidus*, *Macracanthorhynchus hirudinaceus*; *Gongylonema pulchrum*) are common for other species of domestic and wild animals, and 3 species (21.4%) (*Fasciola hepatica*, *Dicrocoelium lanceolatum* and *Globocephalus urosubulatus*) are common for both animals and humans (Fig. 4).



Some parasitic species identified in the boars from the “Pădurea Domnească” natural reserve of the Republic of Moldova are common for the wild and domestic animals and also for humans. This could be explained by the fact that boars are wild omnivore mammals that prefer forestry biotopes with a rich vegetation (open forestry spaces, edges of the forest, bushes and humid biotopes) that facilitate reciprocal contamination between various terrestrial and aquatic species of parasites' hosts (definitive, intermediate and complementary).

CONCLUSIONS

1. It is necessary to establish the status of the parasitic fauna in the natural ecosystem as a component part of biota.
2. The parasitological research with the use of 124 biological samples collected from boars of the forestry ecosystem of the “Pădurea Domnească” natural forest reserve allowed to identify the parasitic species with various localization belonging to 4 classes (Trematoda, Secernentea, Acantocephala, Isospora), 13 families (*Fasciolidae*, *Dicrocoeliidae*, *Trichuridae*, *Strongyloidae*, *Metastrongylidae*, *Strongyloidae*, *Spirocercidae*, *Ascarididae*, *Trichostrongylidae*, *Gongylonematidae*, *Ancylostomatidae* *Eimeriidae*, *Oligacanthorhynchidae*) and 13 genera (*Fasciola*, *Dicrocoelium*, *Gongylonema*, *Oesophagostomum*, *Ascaris*, *Strongyloides*, *Metastrongylus*, *Hyostrongylus*, *Globocephalus*, *Physocephalus*, *Trichocephalus*, *Macracanthorhynchus*, *Eimeria*).
3. The coprolarvaesopic studies conducted in boars from the “Pădurea Domnească” natural reserve revealed a high level of infestation with various parasitic agents: 2 species of the Trematoda class (*Fasciola hepatica* with EI in 18.4% of cases and II of 3.2 ind., *Dicrocoelium lanceolatum* – in 7.7% of cases, II - 3.1 ind.); Secernentea - 9 species (*Trichocephalus suis* – in 24.4% of cases, II - 3.4 ind., *Strongyloides ransomi*- 82.2%, II - 10.4 ind., *Metastrongylus elongatus* - 52.4%, II - 6.6 ind., *Oesophagostomum dentatum* -16.8%, II - 3.2 ind., *Physocephalus sexalatus* - 5.8%, II-1.2 ind., *Ascaris suum*-44.6%, II-4.2 ind., *Hyostrongylus rubidus* - 22.6%, II-3,0 ind., *Gongylonema pulchrum* - 3.2%, II-1.6 ind., *Globocephalus urosubulatus* - 42.2%, II - 4.6 ind.); one species of *Acantocephala* (*Macracanthorhynchus hirudinaceus* – in 2.8% of cases, II-1.6 ind.) and 2 species of Isospora (*Eimeria deblickei* – in 64.5 % of cases, II- 9.2 ind. and *Eimeria scabra* – in 32.6% of cases and II- 4.6 ind.).
4. It was established that the boars from the “Pădurea Domnească” natural reserve are infested in the form of monoinvasions in 19.1% of cases and in the form of polyinvasions in 80.9% of cases.
5. It was revealed that out of the total number of samples with identified parasites (92.7% of all samples) collected from the boars from the “Pădurea Domnească” natural reserve, the polyparasitic associations formed from **2 parasitic species** were identified in 42 samples (36.5%): *Strongyloides ransomi* + *Eimeria deblickei* – 12 samples (28.6%); *Strongyloides ransomi* + *Ascaris suum*– 10 samples (23.8%); *Strongyloides ransomi* + *Metastrongylus elongatus* - 8 samples (19,0%); *Ascaris suum* + *Eimeria scabra* -7 samples (16.6%); *Strongyloides ransomi* + *Globocephalus urosubulatus* - 5 samples (12.0%). In 27 studied samples (23.5% of cases) the polyparasitic invasions were formed from **3 parasitic species**: *Strongyloides ransomi* + *Ascaris suum* + *Eimeria deblickei* – 13 samples (48.2%); *Strongyloides ransomi* + *Metastrongylus elongatus* + *Eimeria scabra* – 8 samples (29.6%); *Strongyloides ransomi* + *Globocephalus urosubulatus* + *Eimeria deblickei* – 5 samples (18.5%) and one sample (3.7%) - *Strongyloides ransomi* + *Fasciola hepatica* + *Eimeria deblickei*. The polyparasitic association formed

- from **4 parasitic species** have been identified in 14 samples (12.2%) and were formed from: *Strongyloides ransomi* + *Metastrongylus elongatus* + *Ascaris suum* + *Eimeria deblickei* – 7 samples (50,0%); *Strongyloides ransomi* + *Metastrongylus elongatus* + *Globocephalus urosubulatus* + *Eimeria deblickei* – 4 samples (28.6%); *Strongyloides ransomi* + *Globocephalus urosubulatus* + *Ascaris suum* + *Eimeria deblickei* – 2 samples (14.3%); *Strongyloides ransomi* + *Trichocephalus suis* + *Oesophagostomum dentatum* + *Eimeria scabra* – one sample (7.1%). The parasitological study in laboratory condition allowed establishing in 6 samples (5.2%) the parasitic associations formed from **5 parasitic species**: *Strongyloides ransomi* + *Ascaris suum* + *Metastrongylus elongatus* + *Dicrocoelium lanceolatum* + *Eimeria deblickei* – 2 samples (33.3%); *Strongyloides ransomi* + *Ascaris suum* + *Metastrongylus elongatus* + *Hyostromylus rubidus* + *Eimeria deblickei* – 2 samples (33.3%); *Strongyloides ransomi* + *Ascaris suum* + *Metastrongylus elongatus* + *Trichocephalus suis* + *Eimeria deblickei* – one sample (16.6%); *Strongyloides ransomi* + *Ascaris suum* + *Metastrongylus elongatus* + *Trichocephalus suis* + *Eimeria scabra* – one sample (16.7%) and one sample (16.7%) - *Strongyloides ransomi* + *Ascaris suum* + *Metastrongylus elongatus* + *Dicrocoelium lanceolatum* + *Eimeria deblickei*. The polyparasitic associations formed from **6 parasitic species** have been identified in 4 samples (3.5%) being formed from: *Strongyloides ransomi* + *Metastrongylus elongatus* + *Ascaris suum* + *Trichocephalus suis* + *Fasciola hepatica* + *Eimeria deblickei* – 2 samples (50,0%); *Fasciola hepatica* + *Strongyloides ransomi* + *Ascaris suum* + *Metastrongylus elongatus* + *Oesophagostomum dentatum* + *Globocephalus urosubulatus* – one sample (25.0%) and *Strongyloides ransomi* + *Metastrongylus elongatus* + *Ascaris suum* + *Oesophagostomum dentatum* + *Dicrocoelium lanceolatum* + *Eimeria scabra* – one sample (25.0%);
6. It was established that out of the total number of parasitic species identified in the boars from the “Pădurea Domnească” natural reserve (14 species), 3 species (21.4%) were specific only for boars (*Gongylonema pulchrum*; *Eimeria deblickei*), 8 species (57.2%) (*Trichocephalus suis*, *Strongyloides ransomi*, *Metastrongylus elongatus*, *Oesophagostomum dentatum*, *Physocephalus sexalatus*, *Ascaris suum*, *Hyostromylus rubidus*, *Macracanthorhynchus hirudinaceus*) are common for wild and domestic animals but also for humans, and 3 species (21.4%) (*Fasciola hepatica*, *Dicrocoelium lanceolatum* și *Globocephalus urosubulatus*) are common both for wild/domestic animals and for humans.
 7. The high level of infestation of the boars from the natural reservation „Pădurea Domnească” indicates that the identified parasitoses had an impact on the regulation of the population of these boars.
 8. The complex disinfection measures as well as extra nutrition supply measures are recommended to be applied to the boars during the winter season.

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