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A Checklist of the Herpetofauna in the Bulgarian Part of Hadzhidimovo Gorge (South-Western Bulgaria)

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Abstract. The Bulgarian part of Hadzhidimovo Gorge (the Mesta River basin, south-western Bulgaria) was studied in March-October 2018 in order to collect data about the local herpetofauna. A preliminary checklist of the amphibians and reptiles is presented, based on bibliographic records and the field research. The list includes 25 species. The representatives of the class Amphibia are 8 (the half of them are new for the area), and the reptiles are 17 (5 of them are reported for the first time). The field records for all new species (except *Pelophylax ridibundus* complex) as well as for the most of the known species interesting from zoogeographic point of view are specified. It is of particular interest the discovery of *Triturus ivanbureschi, Podarcis muralis, Ablepharus kitaibelii,* and *Platyceps najadum* in the gorge.

Key words: Amphibia, Reptilia, checklist, Hadzhidimovo Gorge, Bulgaria.

Introduction

The territory of Bulgaria has been studied to a very different extent as regards the herpetofauna. In one of his publications BESHKOV (1993) points to the less studied areas in the country. Although the Bulgarian part of Hadzhidimovo Gorge is not mentioned, it can be assigned to these areas. During all the years of herpetological research in Bulgaria (since 1890), the gorge remains "in the shade" and practically has so far not been the subject of purposeful herpetological studies. The available information on the amphibians and reptiles in this territory is published in a small number of literary sources. A total of 16 species (4 amphibians and 12 reptiles) have been reported so far, but the data gathered are scarce and represent only the site and the date of registration from several observations. All the amphibians reported till now belong to the order Anura (BURESCH & ZONKOV, 1942; PETROV *et al.*, 2006; NATURA 2000, 2013). The reptilians are representatives of the order Testudines – 2 species (DOMOZETSKI, 2013; NATURA 2000, 2013), the suborder Sauria – 5 species (PETROV *et al.*, 2006; DOMOZETSKI, 2013; PULEV *et al.*, 2014), and the suborder Serpentes – 5 species (PETROV *et al.*, 2006; DOMOZETSKI, 2013; PULEV *et al.*, 2018).

The study aims to ascertain the taxonomic composition and distribution of the herpetofauna in the Bulgarian part of Hadzhidimovo Gorge.

Materials and Methods

The Bulgarian part of Hadzhidimovo Gorge was studied in March-October 2018 and this was the beginning (the first stage) of a

three-year research (2018-2020) of the local herpetofauna. Hadzhidimovo Gorge is located in the basin of Mesta River, south-western Bulgaria and northern Greece. Up to now the Bulgarian part of the gorge has not been described geographically in details and its boundaries are rather unclear. It includes a part of the Mesta River valley (SE from the village of Blatska to the state border with Greece) and the slopes of the surrounding mountains. According to us on the left valley slope of the river, a part of the territory of the Rhodopes, up to the villages of Ablanitsa, Bogolin, Valkosel, Slashten, Tuhovishta and Godeshevo, is included in the gorge. On the right valley slope of the river, the gorge covers a part of Bozdag (Falakro) Mountains, up to the villages Teplen and Beslen.

Measured by us the length of Mesta River from the beginning of the gorge to the state border with Greece is 23.1 km. The lowest point in the area (Mesta River, at the mouth of Dupelski Dol Stream) is 406 m, and the highest one (on the slopes of the surrounding mountains) is 800-820 m. The highest elevation above the river level is about 390 m.

The Bulgarian part of Hadzhidimovo Gorge has been visited 17 times (3 of which in the night). The species were determined visually after SPEYBROECK *et al.* (2016). The specimens killed on the road (or dead) less than 48 hours prior to the registration are marked in the text as "fresh" in order to use the data in studying their seasonal activity. The geographic coordinates of the spot localities have been determined with GPS Garmin Dakota 20. The distributional data of some species have been imported into ArcGIS and marked on maps.

The preliminary checklist of the amphibians and reptiles is based on bibliographic records and the field research.

Results and Discussion

Till now the herpetofauna in the Bulgarian part of Hadzhidimovo Gorge includes 25 species, 9 of which (4 amphibians and 5 reptiles) are reported for the first time. The presence of 3 species (reptiles) has not been confirmed during the fild surveys in 2018. The total number of the amphibian species is 8. They belong to 7 genera, 4 families and 2 orders. The reptiles registered in the area are 17 (3 species of order Testudines, 7 species of suborder Sauria, and 7 species of suborder Serpentes).

It is possible other taxa to be found during the upcoming surveys, including *Lissotriton vulgaris* complex, *Pelobates syriacus* Boettger, 1889, *Hyla arborea* complex, *Mauremys rivulata* (Valenciennes, 1833), *Lacerta trilineata* Bedriaga, 1886, *Zamenis situla* (Linnaeus, 1758), *Zamenis longissimus* (Laurenti, 1768), *Telescopus fallax* (Fleischmann, 1831) and others.

Class Amphibia Linnaeus, 1758
Order Caudata Fischer von Waldheim, 1813
Family Salamandridae Goldfuss, 1820

Genus *Triturus* Rafinesque, 1815

Triturus ivanbureschi Arntzen & Wielstra *in* Wielstra, Litvinchuk, Naumov, Tzankov, & Arntzen, 2013 – Buresch`s Crested Newt

Subspecies. Monotypic species.

Report. A new species for Hadzhidimovo Gorge. It was found only once in a small marsh E of Teplen (N41°29'08" E23°56'56", 675 m, 2 ad., 19.05.2018) (Fig. 1).

Remarks. We prefer using the English name Buresch`s Crested Newt from the two names proposed by WIELSTRA *et al.* (2013). The other name – Balkan-Anatolian Crested Newt is not appropriate after dividing the species and describing a new one by WIELSTRA & ARNTZEN (2016) – Anatolian Crested Newt *T. anatolicus* Wielstra & Arntzen, 2016.

Genus *Salamandra* Garsault, 1764

Salamandra salamandra (Linnaeus, 1758) – Fire Salamander

Subspecies. *Salamandra salamandra salamandra*.

Report. A new species for the area. It was registered twice – on the road W of Teplen (N41°29'07" E23°54'54", 774 m, 1 ad. road-killed, 17.03.2018) and in a stream E of Beslen (N41°28'20" E23°59'00", 449 m, 1 larva, 13.05.2018).

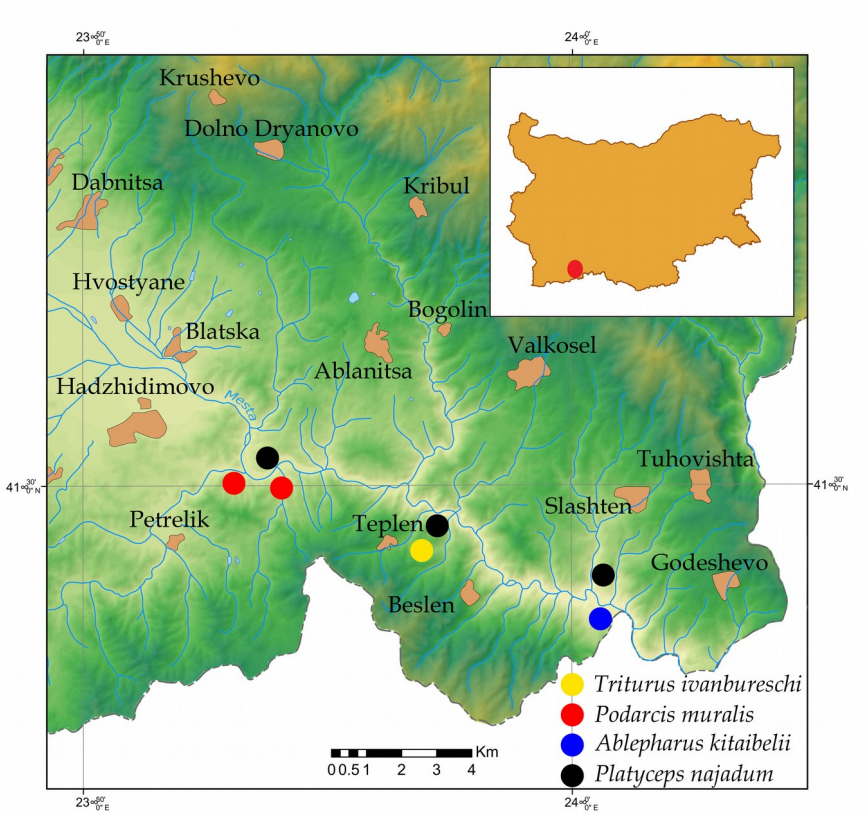

Fig. 1. Distribution of *Triturus ivanbureschi*, *Podarcis muralis, Ablepharus kitaibelii* and *Platyceps najadum* in the Bulgarian part of Hadzhidimovo Gorge.

Order Anura Fischer von Waldheim, 1813

Family Bombinatoridae Gray, 1825

Genus *Bombina* Oken, 1816

Bombina variegata (Linnaeus, 1758) – Yellow-bellied Toad

Subspecies. *Bombina variegata scabra* (Küster, 1843).

Report. Published data: "Dospat Rodopes near the village of Slashten, 02.06.1936" (BURESCH & ZONKOV, 1942); three locations SW of Valkosel (NATURA 2000, 2013).

New data: The species has been registered many times in various parts of Hadzhidimovo Gorge.

Remarks. The subspecies is a Balkan endemic.

Family Bufonidae Gray, 1825

Genus *Bufo* Garsault, 1764

Bufo bufo (Linnaeus, 1758) – Common Toad

Subspecies. *Bufo bufo bufo*.

Report. Published data: "near the village of Slashten, 02.05.1936", "the village of Tuhovishta, 02.06.1936" (BURESCH & ZONKOV, 1942).

New data: The species has been registered many times in various parts of the area.

Genus *Bufotes* Rafinesque, 1815

Bufotes viridis complex – Green Toad

Report. Published data: "on the road between Ablanitsa and Blatska, alt. 450 m, 10.03.1998" (PETROV *et al.*, 2006).

New data: The species has been registered many times in various parts of the gorge.

Remarks. Due to the unclear taxonomy of the Green Toad on the territory of Bulgaria, it is accepted to use the concept of the species complex. It includes two potential species – *B. viridis* (Laurenti, 1768) and *B. variabilis* (Pallas, 1769) (TZANKOV *et al.*, 2014; TZANKOV, 2016). Judging by the

work of DUFRESNES *et al.* (2018) it can be assumed that only the taxon *B. variabilis* occurs in the territory of the gorge (and all over Bulgaria).

Family Ranidae Batsch, 1796

Genus *Rana* Linnaeus, 1758

Rana dalmatina Fitzinger *in* Bonaparte, 1838 – Agile Frog.

Subspecies. Monotypic species.

Report. A new species for Hadzhidimovo Gorge. The species has been registered several times in various parts of the study area – near Mesta River (right bank) E of Beslen (N41°28'06" E24°00'37", 422 m), 1 ad., 15.04.2018; S of Godeshevo (N41°28'07" E24°03'07", 709 m), 1 ad., 22.04.2018; E/NE of Teplen (N41°29'13" E23°57'33", 538 m), 1 ad., 19.05.2018; near Mesta River (right bank) E/SE of Hadzhidimovo (N41°30'19" E23°54'13", 466 m), 1 ad., (N41°30'17" E23°54'02", 459 m), 1 ad., 02.06.2018; near Mesta River (left bank) E of Hadzhidimovo (N41°31'10" E23°53'17", 468 m), 1 ad., (N41°31'04" E23°53'24", 472 m), 1 ad., 1 subad., (N41°31'01" E23°53'28", 472 m), 1 subad., 13.06.2018; near Mesta River (right bank) E of Hadzhidimovo (N41°31'17" E23°53'02", 479 m), 1 subad., 13.06.2018; W of Godeshevo (N41°28'28" E24°01'57", 626 m), 2 subad., 07.10.2018.

Rana graeca Boulenger, 1891 – Balkan Stream Frog

Subspecies. Monotypic species.

Report. Published data: "Bistritsa (Slashtenska Reka) River, near the village of Slashten, alt. 500 m, 04.06.1936, 26.04.1936", "tributaries of Mesta River, near the village of Tuhovishta, 02.06.1936" (BURESCH & ZONKOV, 1942).

New data: near Mesta River (left bank) NE of Teplen (N41°29'39" E23°57'22", 464 m), 1 subad., 31.03.2018; S of Godeshevo (N41°27'24" E24°03'10", 481 m), 1 ad., 22.04.2018; E/NE of Teplen (N41°29'29" E23°57'33", 466 m), 1 ad., 19.05.2018; SE of Beslen (N41°27'43" E23°58'37", 733 m), 1 juv., 14.06.2018.

Remarks. The species is a Balkan endemic. Its distribution in Bulgaria is of interest because it is limited only in some southern parts of the country. The species is more widespread in the gorge in comparison to the avilable till now data presented by PULEV *et al.* (2015). We prefer to use the English name of the species, proposed by ARNOLD (2002) – Balkan Stream Frog, as it more accurately reflects its current range, unlike the name Greek Stream Frog used by SPEYBROECK *et al.* (2016).

Genus *Pelophylax* Fitzinger, 1843

Pelophylax ridibundus complex – Marsh Frog

Report. A new taxon for Hadzhidimovo Gorge. It is widespread in the area. Listing the spot localities is pointless.

Class Reptilia Linnaeus, 1758

Order Testudines Batsch, 1788

Family Testudinidae Batsch, 1788

Genus *Testudo* Linnaeus, 1758

Testudo hermanni Gmelin, 1789 – Hermann's Tortoise

Subspecies. *Testudo hermanni boettgeri* Mojsisovics, 1889.

Report. Published data: "right shore of Mesta River, northeastern direction from the village of Beslen, N41°28'25.76", E23°58'45.29", an altitude of 443 m (in radius of 500 m of the locality), 07.09.2012" (DOMOZETSKI, 2013); one location SW of Valkosel (NATURA 2000, 2013).

New data: The species has been found in different localities in the gorge – near Mesta River S/SW of Slashten (N41°28'25" E24°00'31", 450 m), 1 juv., 15.04.2018; near Mesta River (left bank) S of Godeshevo (N41°27'06" E24°02'50", 413 m), 1 ad. ♂, 22.04.2018; NE of Teplen (N41°29'18" E23°56'59", 662 m), 1 subad. ♂, 19.05.2018; SW of Valkosel (N41°30'18" E23°57'58", 597 m), 1 ad. ♀, 20.05.2018; E/NE of Beslen (N41°28'25" E23°58'32", 464 m), 1 ad. ♀, shells of 2 eggs, 14.06.2018; near Mesta River E/SE of Hadzhidimovo (N41°30'23" E23°53'55", 510 m), 1 subad. ♂, 24.06.2018; on the road NW of Slashten (N41°30'10" E24°00'28", 632 m), 1 ad. ♂, 01.07.2018; near Mesta River N/NE of Beslen (N41°28'54" E23°58'08", 500 m), shells of 3 eggs, 09.09.2018.

Remarks. The subspecies is a Balkan subendemic.

Testudo graeca Linnaeus, 1758 – Spur-thighed Tortoise

Subspecies. *Testudo graeca ibera* Pallas, 1814

Report. A new species for the area. There is only one record on the road between the villages Bogolin and Valkosel (N41°32'05" E23°58'04", 738 m, 1 ad. ♂, 22.04.2018).

Remarks. In other places in south-western Bulgaria, *T. graeca* is also registered in a significantly smaller number of localities and with fewer specimens than the similar to it species *T. hermanni*. Such information is available for the territories of Blagoevgrad municipality (PULEV & SAKELARIEVA, 2011), Belasitsa Nature Park (POPGEORGIEV *et al.*, 2016), and the Natura 2000 site "Oranovski Prolom-Leshko" (MALAKOVA *et al.*, 2018).

Family Emydidae Rafinesque, 1815

Genus *Emys* Duméril, 1805

Emys orbicularis (Linnaeus, 1758) – European Pond Terrapin

Subspecies. *Emys orbicularis orbicularis*.

Report. Published data: "right shore of Mesta River, northeastern direction from the village of Beslen, N41°28′25.76″, E23°58′45.29″, an altitude of 443 m (in radius of 500 m of the locality), 07.09.2012" (DOMOZETSKI, 2013).

New data: It was found only once in a small pool E of the town of Hadzhidimovo (N41°30'45" E23°53'44", 519 m, 1 ad., 24.06.2018).

Order Squamata Oppel, 1811

Suborder Sauria Mccarthney, 1822

Family Gekkonidae Oppel, 1811

Genus *Mediodactylus* Szczerbak & Golubev, 1977

Mediodactylus kotschyi (Steindachner, 1870) – Kotschy`s Gecko

Subspecies. *Mediodactylus kotschyi bibroni* (Beutler & Gruber, 1977).

Report. "on the walls of a single building (villa), situated at 1100 m south-east of the town of Hadzhidimovo, by the road (N41°30′22″ E23°52′15″, alt. 499 m)", "on the walls of St. George chapel near the Matnitsa River mouth (N41°30′20″ E23°53′10″, alt. 502 m)" (PULEV *et al.*, 2014).

Remarks. The subspecies is a Balkan subendemic. The species was searched for in all the villages located in the gorge, but was not registered. Recent phylogenetic studies of the species show the need to raise the taxon *M. kotschyi danilewskii* (Strauch, 1887) to a species rank – *M. danilewskii* (KOTSAKIOZI *et al.*, 2018). In this situation, *M. kotschyi* remains a taxon with very limited distribution in Bulgaria – in Plovdiv and its surroundings, in the basins of Struma and Mesta Rivers, and in Sofia (STOJANOV *et al.*, 2011; PULEV *et al.*, 2014; TZANKOV *et al.*, 2015).

Family Lacertidae Batsch, 1788

Genus *Lacerta* Linnaeus, 1758

Lacerta viridis (Laurenti, 1768) – Eastern Green Lizard

Subspecies. *Lacerta viridis viridis*.

Report. Published data: "right shore of Mesta River, northeastern direction from the village of Beslen, N41°28′25.76″, E23°58′45.29″, an altitude of 443 m (in radius of 500 m of the locality), 07.09.2012" (DOMOZETSKI, 2013).

New data: The species is widespread in Hadzhidimovo Gorge. There are many records from different localities.

Genus *Podarcis* Wagler, 1830

Podarcis erhardii (Bedriaga, 1882) – Erhard`s Wall Lizard

Subspecies. *Podarcis erhardii riveti* (Chabanaud, 1919).

Report. Published data: "Ablanitsa, alt. 600 m, 08.08.2001", "Slashten, alt. 600 m, 09.08.2001", "between Teplen and Beslen, along Mesta River at the Rhodopean bank, alt. 450 m, 20.10.2004" (PETROV *et al.*, 2006); "right shore of Mesta River, northeastern direction from the village of Beslen, N41°28′25.76″, E23°58′45.29″, an altitude of 443 m (in radius of 500 m of the locality), 07.09.2012" (DOMOZETSKI, 2013).

New data: The species has been registered many times in various parts of Hadzhidimovo Gorge. Its populations are with high densities.

Remarks. The subspecies is a Balkan endemic.

Podarcis taurica (Pallas, 1814) – Balkan Wall Lizard

Subspecies. Monotypic species.

Report. Published data: "between Teplen and Beslen, along Mesta River at the Rhodopean bank, alt. 450 m, 20.10.2004", "S of Ablanitsa, alt. 500 m, 08.08.2001", "S from Slashten, alt. 500 m, 09.08.2001" (PETROV *et al.*, 2006).

New data: There are several records from different parts of the study area – near Mesta River (left bank) NE of Teplen (N41°29'34" E23°57'43", 454 m), 31.03.2018; N of Beslen (N41°29'04" E23°57'40", 625 m), (N41°28'53" E23°57'46", 665 m), 29.04.2018, (N41°29'06" E23°57'48", 614 m), 19.05.2018; near Mesta River (right bank) E of Hadzhidimovo (N41°30'44" E23°53'19", 467 m), 20.05.2018; near Mesta River (right bank), E/SE of Hadzhidimovo (N41°30'18" E23°54'03", 458 m), (N41°30'06" E23°53'33", 470 m), 02.06.2018; W/SW of Godeshevo (N41°28'10" E24°02'05", 665 m), 07.10.2018; E of Beslen (N41°28'24" E23°58'58", 433 m), 27.10.2018.

Remarks. The species is a Balkan subendemic.

Podarcis muralis (Laurenti, 1768) – Common Wall Lizard

Subspecies. *Podarcis muralis muralis*.

Report. A new species for the area. The species has been registered only in two localities in the beginning (northern part) of the gorge – near Mesta River (right bank) E/SE of Hadzhidimovo (N41°30'26" E23°53'14", 467 m, 1 subad., 20.05.2018 and N41°30'07" E23°53'46", 478 m, 2 ad., 02.06.2018) (Fig. 1).

Remarks. The two petrophilic species *P. muralis* and *P. erhardii* have allopatric distribution in Bulgaria, including in the Bulgarian part of Hadzhidimovo Gorge – *P. muralis* occurs only in the less favorable for *P. erhardii* habitats (in this case, in the outskirts of sparse deciduous forests).

Family Scincidae Oppel, 1811

Genus *Ablepharus* Fitzinger *in* Eversmann, 1823

Ablepharus kitaibelii (Bibron & Bory de Saint-Vincent, 1833) – Snake-eyed Skink

Subspecies. Unclear.

Report. A new species for the area. It was registered only once near Mesta River (right bank) E of Beslen (N41°28'05" E24°00'48", 418 m, 1 ad., 27.05.2018) (Fig. 1).

Remarks. Although the taxon *A. kitaibelii stepaneki* Fuhn, 1970 is widespread in Bulgaria, the occurence of the nominate subspecies – *A. kitaibelii kitaibelii* in the gorge is possible.

Family Anguidae Gray, 1825

Genus *Anguis* Linnaeus, 1758

Anguis fragilis Linnaeus, 1758 – Slow Worm

Subspecies. Monotypic species.

Report. Published data: "between Slashten and Tuhovishta, alt. 700 m, 06.06.1986" (PETROV *et al.*, 2006).

Suborder Serpentes Linnaeus, 1758

Family Typhlopidae Merrem, 1820

Genus *Xerotyphlops* Hedges, Marion, Lipp, Marin, & Vidal, 2014

Xerotyphlops vermicularis (Merrem, 1820) – Eurasian Blind Snake

Subspecies. Monotypic species.

Report. Published data: "Hadzhidimovo Gorge, near the mouth of Dzhambazki Dol stream (right tributary of Mesta River), N 41°28′27″ E 23°58′35″, 447 m a.s.l., 04.05.2013" (PULEV *et al.*, 2018).

Family Psammophiidae Boie, 1827

Genus *Malpolon* Fitzinger, 1826

Malpolon insignitus (Geoffroy Saint-Hilaire, 1827) – Eastern Montpellier Snake

Subspecies. *Malpolon insignitus fuscus* (Fleischmann, 1831).

Report. Published data: The species has been registered recently by DOMOZETSKI (2013) in three neighbouring locations: "right shore of Mesta River, northeastern direction from the village of Beslen, N 41°28′25.76″, E 23°58′45.29″, an altitude of 443 m, 07.09.2012", "Beslen Village, N 41°28′19.80″, E 23°57′53.55″, an altitude of 704 m, 08.09.2012", "Beslen Village, N 41°28′20.21″, E 23°58′11.37″, an altitude of 642 m, 08.09.2012".

New data: There are several records from different parts of the area – near Mesta River (right bank) E/NE of Teplen (N41°29'33" E23°57'35", 446 m), 1 juv., 19.05.2018, 1:20 pm; W/NW of Valkosel (N41°32'03" E23°58'12", 750 m), 1 subad. road-killed, 20.05.2018; NW of Slashten (N41°30'22" E24°00'37", 673 m), 1 subad. road-killed

(fresh), 27.05.2018, 10:05 am; near Mesta River (right bank) S of Slashten (N41°28'05" E24°00'52", 414 m), 1 shed skin (ad.), 27.05.2018; S of Bogolin (N41°31'55" E23°57'19", 654 m), 1 ad. road-killed (fresh), 01.06.2018, 9:35 pm; N of Godeshevo (N41°29'13" E24°03'05", 794 m), 1 ad. road-killed (fresh), 01.06.2018, 10:05 pm; near Mesta River (right bank) E/NE of Beslen (N41°28'26" E23°58'41", 440 m), 1 ad., 14.06.2018, 12:15 pm; on the road SE of Bogolin (N41°32'05" E23°57'44", 696 m), 1 ad., 15.07.2018, 15:45 pm; N of Beslen (N41°28'53" E23°57'55", 598 m), 1 shed skin (ad.), 09.09.2018; on the road SE outskirts of Beslen (N41°28'13" E23°58'05", 665 m), 1 dead subad. (fresh), 27.10.2018, 12:15 pm (Fig. 2).

Remarks. The wide spread of the species in the gorge can be explained by the favorable climatic characteristics of the environment. The good living conditions allow the species to reach higher altitudes. One of the localities, at an elevation of 794 m, is the second highest registered on the territory of Bulgaria. According to PULEV *et al.* (2018), *Malpolon insignitus fuscus* is one of the reptile taxa which ranges delineate very well the boundaries of the Mediterranean subregion in Bulgaria. As an *indicator* taxon, its distribution confirms the boundaries of the Mediterranean area in the Mesta River basin proposed by PULEV *et al.* (2018), which confined only to the territory of Hadzhidimovo Gorge.

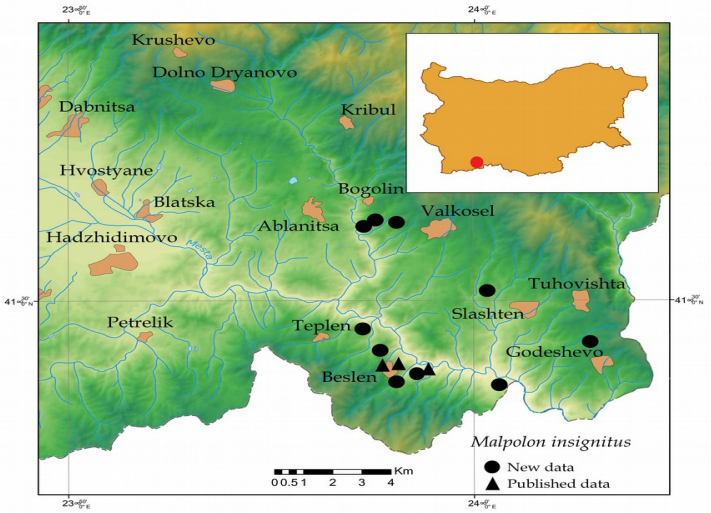

Fig. 2. Distribution of *Malpolon insignitus* in the Bulgarian part of Hadzhidimovo Gorge.

Family Natricidae Bonaparte, 1840

Genus *Natrix* Laurenti, 1768

Natrix natrix (Linnaeus, 1758) – Grass Snake

Subspecies. *Natrix natrix persa* (Pallas, 1814) – Balkan Grass Snake.

Report. A new species for the area. The species has been registered several times in different localities – NW of Beslen (N41°28'30" E23°57'28", 726 m), 1 subad. road-killed, 19.05.2018; in a small pool SW of Valkosel (N41°30'42" E23°58'18", 643 m), 2 ad., 20.05.2018; in a brooklet near Mesta River (right bank), E/SE of Hadzhidimovo (N41°30'17" E23°54'02", 459 m), 1 subad., 02.06.2018; in a small pool E/SE of Hadzhidimovo (N41°30'29" E23°53'39", 528 m), 1 ad., 24.06.2018.

Natrix tessellata (Laurenti, 1768) – Dice Snake

Subspecies. Monotypic species.

Report. Published data: "right shore of Mesta River, northeastern direction from the village of Beslen, N41°28'25.76", E23°58'45.29", an altitude of 443 m (in radius of 500 m of the locality), 07.09.2012" (DOMOZETSKI, 2013).

New data: near Mesta River (right bank) E of Hadzhidimovo (N41°30'58" E23°53'25",

466 m), 1 juv., (N41°31'14" E23°53'10", 471 m), 1 juv., 20.05.2018.

Remarks. As an entirely aquatic species, it is only recorded along Mesta River. Besides there it can be found only in the largest and deepest river tributaries.

Family Colubridae Oppel, 1811

Genus *Dolichophis* Gistel, 1868

Dolichophis caspius (Gmelin, 1789) – Caspian Whip Snake

Subspecies**.** *Dolichophis caspius caspius*.

Report. Published data: "S of Ablanitsa, alt. 550 m, 30.04.2001" (PETROV *et al.*, 2006); "right shore of Mesta River, northeastern direction from the village of Beslen, N41°28′25.76″, E23°58′45.29″, an altitude of 443 m (in radius of 500 m of the locality), 07.09.2012" (DOMOZETSKI, 2013).

New data: There are many records from different parts of the area – SW outskirts of Bogolin (N41°32'19" E23°57'13", 610 m), 1 ad. road-killed (fresh), 22.04.2018, 6:00 pm; E outskirts of Beslen (N41°28'20" E23°58'13", 639 m), 1 ad., 13.05.2018, 10:35 am; near Mesta River (right bank) E of Hadzhidimovo (N41°31'12" E23°53'09", 484 m), 1 juv., 20.05.2018, 11:15 am; near Mesta River (right bank) E/SE of Hadzhidimovo (N41°30'22" E23°54'17", 457 m), 1 ad., 02.06.2018, 11:55 am; on the road W outskirts of Slashten (N41°29'55" E24°00'41", 608 m), 1 subad., 01.07.2018, 5:25 pm; on the road in Valkosel (N41°31'49" E23°59'32", 770 m), 1 juv., 19.09.2018, 4:30 pm; on the road NW of Slashten (N41°30'06" E24°00'34", 612 m), 1 subad., 19.09.2018, 3:45 pm; N of Godeshevo (N41°29'00" E24°03'03", 788 m), 1 juv. road-killed (fresh), 19.09.2018, 4:05 pm; on the road N of Godeshevo (N41°29'06" E24°03'07", 791 m), 1 ad., 13.10.2018, 1:50 pm.

Remarks. The species inhabits successfully anthropogenic habitats on the territory of the gorge - half of the observed specimens are from settlements or their outskirts. There are data about the successful coexistence of the species with the man from other much larger settlements in the country – for example Russe (KOVATSCHEFF, 1912), Plovdiv (MOLLOV & VELCHEVA, 2010), and Blagoevgrad (PULEV & SAKELARIEVA, 2013).

Genus *Platyceps* Blyth, 1860

Platyceps najadum (Eichwald, 1831) – Dahl`s Whip Snake

Subspecies. *Platyceps najadum dahlii* (Fitzinger, 1826).

Report. A new species for Hadzhidimovo Gorge. It has been registered several times in the area – S/SW of Slashten (N41°28'33" E24°00'31", 473 m), 2 ad., 15.04.2018; near Mesta River (right bank) NE/E of Teplen (N41°29'32" E23°57'38", 445 m), 1 ad., 19.05.2018; near Mesta River (left bank) E/SE of Hadzhidimovo (N41°30'12" E23°53'44", 473 m), 1 shed skin (ad.), 24.06.2018 (Fig. 1).

Remarks. The subspecies is a Balkan endemic. The species has been registered in the Bulgarian part of the Mesta River valley not long ago by I. Pashaliiski and the locality was published by BESHKOV & NANEV (2002) and PETROV *et al.* (2006) as "Mesta, Mesta River Valley, alt. 650 m, 25.07.1994". The exact place has been specified by the discoverer (PASHALIISKI, 2004, Gotse Delchev, pers. comm.). It is located to the north of the village of Mesta near the Mesta River Bridge to the village of Gostun (N41°46'52" E23°40'32", 686 m). This locality is the most northern one in the Mesta River valley and the only one published for this area till the current research. The new data from Hadzhidimovo Gorge contribute to specify the species range in this part of Bulgaria.

Family Viperidae Oppel, 1811

Genus *Vipera* Garsault, 1764

Vipera ammodytes (Linnaeus, 1758) – Nose-horned Viper

Subspecies. *Vipera ammodytes montandoni* Boulenger, 1904 – Bulgarian Viper.

Report. Published data: "right shore of Mesta River, northeastern direction from the village of Beslen, N41°28′25.76″, E23°58′45.29″, an altitude of 443 m (in radius of 500 m of the locality), 07.09.2012" (DOMOZETSKI, 2013).

New data: near Mesta River (left bank) NE of Teplen (N41°29'41" E23°57'38", 514 m), 1 ad., 31.03.2018; S of Godeshevo (N41°27'06" E24°02'50", 413 m), 1 ad., 22.04.2018.

Remarks. The subspecies is a Balkan endemic. WROBEL (2004) named it Bulgarian Viper and this name completely corresponds to the location of the main part of its range.

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