

## AN ANNOTATED TYPE CATALOGUE OF AMPHIBIANS AND REPTILES IN THE MUSEUM OF NATURE AT V. N. KARAZIN KHARKIV NATIONAL UNIVERSITY (KHARKIV, UKRAINE)

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This publication provides a critical review of the amphibian and reptilian type specimens presented in the collection of the Museum of Nature at V. N. Karazin Kharkiv National University (Kharkiv, Ukraine), as of May 2008. The collection contains type specimens of twenty taxa. Eleven of them are valid species or subspecies. Lectotypes of *Hyla arborea schelkownikowi*, *Rana dentex*, *Eryx miliaris nogaiorum*, *Coluber schmidti*, and *Ancistodon halys caucasicus* are designated. Information about lost type materials is provided.

**Keywords:** Museum of Nature at V. N. Karazin Kharkiv National University, systematic collection, reptiles, amphibians, type specimens, type catalogue.

### INTRODUCTION

This paper has been prepared to provide information on the type material of amphibians and reptiles presented in the collection of the Museum of Nature at V. N. Karazin Kharkiv National University (hereinafter — Museum of Nature or MNKNU) as of May 2008. Unfortunately, due to the lack of information some authors have ignored this collection or provided incorrect data about MNKNU types.

The Museum of Nature was founded in 1807 as the Nature Cabinet at the Physical and Mathematical Faculty of Kharkiv Imperial University, which was established in 1805 (Systematical catalogue, 1854; Redikortsev, 1908; Stepanov, 1908; Grubant and Rudayeva, 1955). The collection was primarily acquired by the Italian collector Chetty in St. Petersburg. There is very little information about the amphibian and reptile specimens stored in the Cabinet during the first years of its existence. The first specimens were obtained during the period of Prof. Igor Krynický's superintendence in 1825–1938 (Systematical catalogue, 1854; Redikortsev, 1908; Stepanov, 1908). Krynický gathered these specimens by

himself during his expeditions to the South provinces of the Russian Empire: Southern Ukraine, the Crimea, and Northern Caucasus. Several new species were described based on these specimens (Krynický, 1837), which have been preserved in the Museum of Nature until now.

Numerous and very valuable contributions of amphibians and reptiles were made in 1903–1912, when Aleksandr Nikolsky, the outstanding Russian herpetologist, was a director of the Zoological Cabinet, later renamed as the Zoological Museum. About 190 specimens of snakes, 100 specimens of lizards and 50 specimens of amphibians from different areas of the Russian Empire (see numerous Nikolsky's papers) are part of the collections received during this period, including the majority of type specimens, which are stored in the Museum of Nature today.

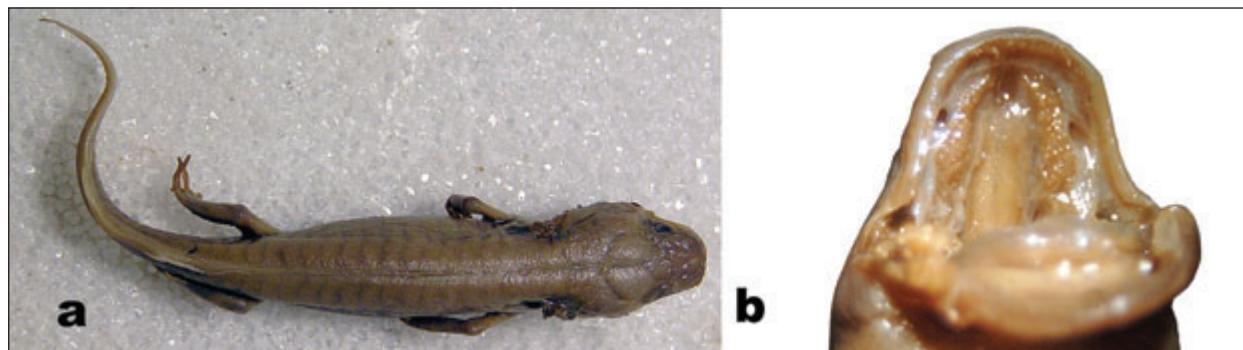
The main part of the collection of amphibians and reptiles of the former Soviet Union was received in the 1970s to the 1990s. Many species are represented by a series of specimens, but type specimens of this period are not numerous.

Today, about 10,000 specimens of more than 130 species of amphibians and 390 species of reptiles are stored in the herpetological collection of the Museum of Nature.

At present, 20 taxa are represented by type materials (Caudata — 1, Anura — 5, Sauria — 6, Serpentes — 8) in the MNKNU collections, eleven of them are valid species or subspecies. There are 37 type specimens,

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**Fig. 1.** The lectotype of *Turanomolge mensbieri*, MNKNU 8713; *a*, dorsal view; *b*, view of palate.

which may be summarized as follows: 4 holotypes, 7 lectotypes, 6 syntypes, 8 paralectotypes, and 12 paratypes.

The following accounts are arranged alphabetically by generic and specific names applied by the author in the original type descriptions. Accounts of taxa for which the MNKNU type material has been lost or destroyed, or for which the MNKNU collections have been erroneously cited as the repository, follow the list of types. Localities and collection data are provided from MNKNU jar labels, catalogues, or from descriptions. In the case of the big syntype series we designated lectotypes in accordance with Article 74 of the International Code of Zoological Nomenclature (ICZN, 2000; hereinafter Code). Lectotypes were not designated in the case when the majority of the syntype series are located at another institution. Remarks include comments on other type material, nomenclature problems, difficulties of establishing species identity, history of the specimens or taxa, etc.

The specimens' data are presented in the following order: original name; author; citation of publication in which the name was first presented; MNKNU catalog number(s); old catalog number(s); number of specimens, their age and sex, if possible to determine; locality (with present name and country in parenthesis); collector (as Leg) and the date of collection as in original label (without changing in new style); present status of taxon. Additional information about types is provided in *Remarks*.

The following abbreviations are used in the article: HDCAS, Herpetological Department of California Academy of Science, Berkeley, USA; MHNG, Museum d'Histoire Naturelle de Geneve, Switzerland; MNKNU, Museum of Nature, V. N. Karazin Kharkiv National University, Kharkiv, Ukraine; ZCIKU, Zoological Cabinet of Imperial Kharkiv University (from old labels), now MNKNU; ZISP, Zoological Institute, Russian

Academy of Sciences, St. Petersburg, Russia; ZMMU, Zoological Museum, M. V. Lomonosov Moscow State University, Moscow, Russia.

#### TYPE SPECIMENS

##### AMPHIBIA CAUDATA SALAMANDRIDAE

###### *Turanomolge mensbieri* Nikolsky (1918:257)

**Lectotype.** MNKNU 8713, 1 larva, "Turkestan." Leg.: V. Nikolsky, 1909 (Fig. 1).

**Present name.** *Triturus cristatus* (Laurenti, 1768) (Kuzmin et al., 1995).

##### ANURA BUFONIDAE

###### *Bufo vulgaris* var. *sachalinensis* Nikolsky (1905:389)

**Syntype.** MNKNU 26290, ZCIKU 104, 1 ad. ♂, "Sakhalin." Leg. P. I. Suprunenko, 1890.

**Present name.** *Bufo gargarizans* *gargarizans* Cantor, 1842.

**Remarks.** Additional three syntypes are in ZISP (ZISP 1935, ZISP 1936-1 and ZISP 1936-2). Together with collection date 1890, there is another date "1911" on the old label, obviously indicated the date of transmission to the MNKNU from the Zoological Museum of the Imperial Academy of Sciences (now ZISP).

#### HYLIDAE

###### *Hyla arborea ussuriensis* Nikolsky (1918:147)

**Holotype.** MNKNU 26232, ZCIKU 147, 1 ad, "Chernigovka, Primorskaya oblast'" [= Chernigovka railway station, Primorskaya oblast', Russia]. Leg.: A. A. Emelianov, 1915 (Fig. 2).



**Fig. 2.** The holotype of *Hyla arborea ussuriensis*, MNKNU 26232 (dorsal and ventral views).

**Present name.** *Hyla japonica* Günther, 1859.

***Hyla arborea schelkownikowi Chernov (1926:70)***

**Lectotype (here designated).** MNKNU 26237, ZCIKU 116, 1 ad., “Kutais” [= Kutaisi, Georgia]. Leg.: A. M. Shugurov, 21.V.1908 (Fig. 3).

**Present name.** *Hyla arborea arborea* (Linnaeus, 1758) (Litvinchuk et al., 2006).

**Remarks.** Description of this species was based on more than one specimen, but the place of deposition of the other syntypes is unknown.

## RANIDAE

***Rana dentex Krynicki (1837:63)***

**Lectotype (here designated).** MNKNU 2269(1), 1 ad., “Caucasus” [the Podkumok River ( $44^{\circ}14' N$   $43^{\circ}36' E$ ) near “Kaleniczenkow,” vicinities of Pyatigorsk, Stavropol’ kray, Russia, or reed-covered lake “Vshivoe ozero” near Stavropol ( $45^{\circ}02' N$   $41^{\circ}59' E$ ), after original description (Krinicky, 1837)]. Leg.: I. A. Krynicki, 1837.

**Paralectotype.** MNKNU 2269(2), 1 ad., other data as for the lectotype.



**Fig. 3.** The lectotype of *Hyla arborea schelkownikowi*, MNKNU 26237 (right lateral view).

**Present name.** *Rana (Pelophylax) ridibunda* (Pallas, 1771)

**Remarks.** Both specimens are in bad condition. Type locality was restricted to the Podkumok River by Mertens and Wermuth (1960). The exact locality of the specimens is unknown.

*Rana semiplicata* Nikolsky (1918:85)

**Syntype.** MNKNU 26971, ZCIKU 114, 1 ad., “Chinese Eastern Railway, Il’yampo station” [= Yimianpo, Shangzhi County, Heilongjiang Province, China]. Leg.: A. A. Emelianov, 1911.

**Present name.** *Rana dybowskii* Günther, 1876.

**Remarks.** Description of this species was based on two specimens. The second syntype is now stored in the ZISP collection (ZISP 2668).

## REPTILIA

## SAURIA

## AGAMIDAE

*Phrynocephalus caudivolvulus* var. *moltchanovi*

Nikolsky (1913:34)

**Paralectotypes.** MNKNU 26543, 1 ad. and 1 juv., “Bel-Tau mountain, near the Amu-Daria River mouth” [Uzbekistan]. Leg.: L. Molchanov, 1911.

**Present name.** *Phrynocephalus guttatus guttatus* (Gmelin, 1789) after Barabanov and Ananjeva (2007).

**Remarks.** Lectotype was designated by Semenov and Shenbrot (1982) and stored in the ZISP collections (ZISP 19585).

*Phrynocephalus strauchi* Nikolsky (1899:21)

**Paralectotype.** MNKNU 26555, ZCIKU 360, 1 specimen. “steppe between Kokan and Namangan” [= between Quqon and Namangan, Uzbekistan]. Leg.: Middendorf, IV.1878.

**Present name.** *Phrynocephalus strauchi* Nikolsky, 1899.

**Remarks.** Lectotype was designated by Dunayev (1995) and stored in the ZMMU collections (ZMMU Re-2116). Additional paralectotypes are stored in ZISP. Near the collection date the date “1911” on the old label is probably indicated the time of transmission to the MNKNU.

*Phrynocephalus alpherakii* Bedriaga in Nikolsky (1905:470)

**Syntype.** MNKNU 26561, ZCIKU 362, 1 specimen. “Chargos” [= the Korgas River, tributary of the upper Ili River, western Xinjiang Uygur Autonomous Region, China]. Leg.: Alpheraki, 1881.

**Present name.** *Phrynocephalus guttatus alpherakii* Bedriaga in Nikolsky, 1905 after Barabanov and Ananjeva (2007).

**Remarks.** Received in 1911.

## SCINCIDAE

*Ablepharus saposhnikovi* Kaščenko (1909:126)

**Syntypes.** MNKNU 26685, 2 specimens, “right bank of the Sarydzhas River” [Kyrgyzstan]. Leg.: Kaščenko, VII.1902.

**Present name.** *Asymblepharus alaicus kucenkoi* (Nikolsky, 1903).

**Remarks.** The original description refers to five specimens: two of them are from “right bank of the Sarydzhas River, in the Przhevalski uezd, near the mouth of the Kuelju [Kujlyu]” (Tien-shan), and three, from “the Karagaite River, a tributary of the Sarydzhas River, Przhevalski Uezd” collected 1.VII.1902. Only two syntypes from the first locality can be traced at present.

## LACERTIDAE

*Lacerta caucasica* var. *tenuis* Nikolsky (1910c:496)

**Syntype.** MNKNU 27252, ZCIKU 244, 1 ad., “Khan-Bulak, eastern part of Transcaucasia” [= Khān Bolāghī, Azerbaijan], 1906. Caucasus Museum.

**Present name.** *Darevskia raddei* (Boettger, 1892).

**Remarks.** Second syntype is in ZISP (ZISP 4701).

*Scapteira bilkewitschi* Nikolsky (1905:486)

**Holotype.** MNKNU 26919, 1 ad., “Zakaspiyskaya oblast.” Leg.: “received from the Ashkhabad Museum, 1904.”

**Present name.** *Eremias (Rhabderemias) scripta lasdini* (Tzarewsky, 1917).

## OPHIDIA

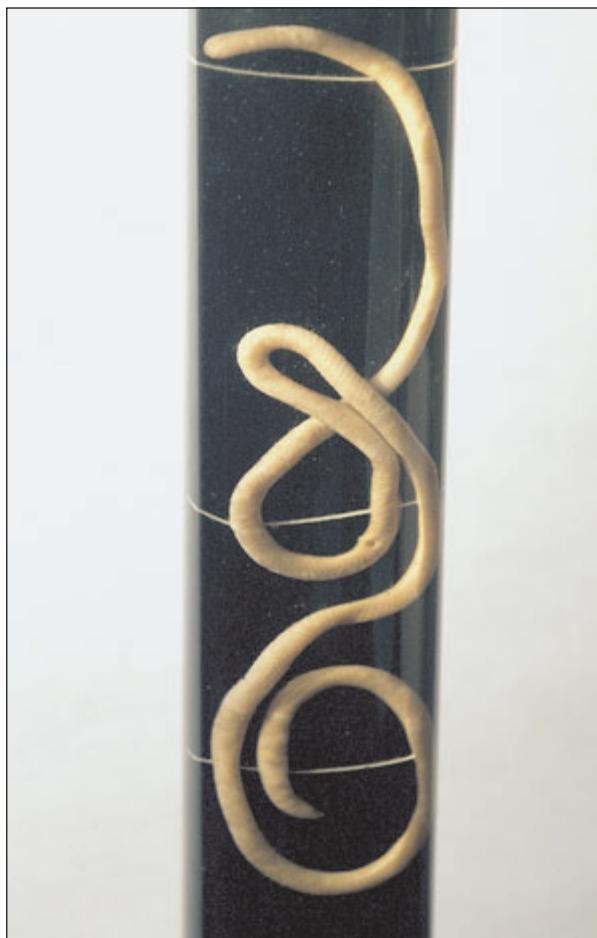
## LEPTOTYPHOLOPIDAE

*Glauconia hamulirostris* Nikolsky (1907:286)

**Paralectotypes.** MNKNU 1875, 2 ad., and MNKNU 8841, 1 ad., “Persia” [Iran]. “Academy of Sciences” [= Zoological Museum of the Impire Academy of Sciences], 1904 (Fig. 4).

**Present name.** *Leptotyphlops macrorhynchus* (Jan, 1860).

**Remarks.** Although there is no collector name and exact localities on the labels, the date and region “Persia” indicate that specimens come from the type series, collected by N. A. Zarudny. The species description was based on more than one specimen. Paralectotypes CAS 99737 and CAS 99738 are stored in HDCAS and Lectotype MHNG 1326.72 (ex ZISP 10299) is stored in MHNG. Exact locality can not be identified, type series originate from several places in the territory of present Iran and Iraq: “Nasrie” [An Nasiriyah, Iraq], 26.II.1904; “Dizful in Arabistano” [Dezful, Iran], 17.III.1904;



**Fig. 4.** The paralectotype of *Glauconia hamulirostris*, MNKNU 1875 (general view).

“Gurschir” [?], 26.III.1904; “Bidezar” [Bid Zard, Iran], 27.III.1904; “Agulyaschker” [?], 28.III.1904; “Damde-li” [?], 29.III.1904; “Alchorschir” [?], 30.III.1904 (Nikolsky, 1904; Bobrinsky, 1940).

## BOIDAE

### *Eryx miliaris nogaiorum* Nikolsky (1910b:90)

**Lectotype (here designated).** MNKNU 27350, ZCIKU 299, 1 ad., “Karanogayskaya Steppe” [Daghestan]. Leg.: A. N. Kaznakov and A. B. Shelkovnikov, V.1906 (Figs. 5 and 6).

**Present name.** *Eryx miliaris nogaiorum* Nikolsky, 1910.

**Remarks.** The species description was based on more than one specimen, but the other syntypes can not be located at present. After the description, the specimen



**Fig. 5.** The lectotype of *Eryx miliaris nogaiorum*, MNKNU 27350 (dorsal view).



**Fig. 6.** The lectotype of *Eryx miliaris nogaiorum*, MNKNU 27350, head (dorsal and lateral views).

from Karanogayskaya Steppe was collected between “Bakylzan and Daiangyš.”

## COLUBRIDAE

### *Coluber czerskii* Nikolsky (1914:88)

**Holotype.** MNKNU 28697, ZCIKU 441, 1 ad., “Russian-Korean boundary, the Tumen-Ula River.” Leg.: A. I. Chersky, 1913 (Fig. 7).



**Fig. 7.** The holotype of *Coluber czerskii*, MNKNU 28697, head (dorsal view).

**Present name.** *Elaphe dione czerskii* (Nikolsky, 1914).

#### *Coluber schmidti* Nikolsky (1909c:303)

**Lectotype (here designated).** MNKNU 14935, ZCIKU 268, 1 juv., “Mugan centr.” [“in salsis Adži” after the original description, Mugan’ Steppe, Azerbaijan]. Leg.: Caucasus Museum [R. G. Schmidt and A. B. Schelkovnikov after the original description], 1907 [29.III.1907 after the original description] (Fig. 8).

**Paralectotype.** MNKNU 14934, ZCIKU 269, 1 juv., “pag. Ešakči, distr. Lenkoran” [= Eshakchi, Azerbaijan]. Leg.: Caucasus Museum [A. N. Kaznakov & A. B. Schelkovnikov after description], 1907 [29.III.1907 after the original description].

**Present name.** *Dolichophis schmidti* (Nikolsky, 1909).

**Remarks.** Paralectotype MNKNU 14934 does not have a head. A. M. Nikolsky described juvenile specimens as a new species, but adult male specimen *D. schmidti*, collected by the same collectors and from the same locality (MNKNU 14933, “Mugan’ Steppe, the Bolgar-chay River.” Leg.: Caucasus Museum, 1907) was identified by him as “*Zamenis gemonensis*” and was not included in the type series. Later, he disclaimed existence of *Coluber schmidti* as a valid species and consider it as juveniles of *Zamenis gemonensis* (Nikolsky, 1913).

## VIPERIDAE

#### *Vipera berus dinnikii* Nikolsky (1913:176)

**Lectotype** (designated by Vedmederya et al., 1986:58). MNKNU 26044, 1 ad. ♀, “upper stream of the



**Fig. 8.** The lectotype of *Coluber schmidti*, MNKNU 14935, head (dorso-lateral view).

Laba River, 8000 feet above sea level, Caucasus” [Krasnodarskiy kray, Russia]. Leg.: N. Ya. Dinnik, 1908.

**Present name.** *Vipera dinnikii* Nikolsky, 1913.

#### *Vipera kaznakovi* Nikolsky (1909b:173)

**Paralectotype.** MNKNU 14702, 1 ad. ♀, “Yur’evskoje village, Tsebelda, Sukhumski Okrug” [= Tsebelda, Abkhazia, Georgia]. Leg.: Ju. N. Voronov, summer, 1907.

**Present name.** *Vipera kaznakovi* Nikolsky, 1909.

#### *Vipera nikolskii* Vedmederja, Grubant et Rudayeva (1986:84)

**Holotype.** MNKNU 14703.1, ♀ ad., “between Bezlyudovka and Vasishchevo, Kharkov Province” [“near the Udy River between Bezlyudovka and Vasishchevo in Kharkov vicinities” after description, Kharkiv Province, Ukraine]. Leg.: K. Pengo, August 1867 (Fig. 9).

**Paratypes.** MNKNU 14703.2 – 14703.13, 12 juv., other data as in the holotype.

**Present name.** *Vipera berus nikolskii* Vedmederja, Grubant et Rudayeva, 1986 (Miltio, Zinenko, 2005).

**Remarks.** 16 paratypes were the brood of the adult female (Pengo, 1870; Vedmederja et al., 1986). Two paratypes are in ZISP (22012), another two juvenile specimens (ZISP 3376) from the same brood, stored in St.-Petersburg (Vedmederja et al., 1986), probably have been lost.

#### *Ancistrodon halys caucasicus* Nikolsky (1916:274)

**Lectotype (here designated).** MNKNU 14942, “Dzhi vill., Arussk. obshch., Lenkoran uezd” [Dzhi village, Lenkoran district, Azerbaijan]. Leg.: 18.VII.1906 [A. N. Kaznakov and A. B. Shelkovnikov after original description]. Caucasus Museum (Fig. 10).

**Present name.** *Gloydius halys caucasicus* (Nikolsky, 1916).

**Remarks.** The species description was based on several examples, although only one syntype can be traced at present. Therefore, we hereby designate MNKNU 14942 as the lectotype of *Ancistrodon halys caucasicus* Nikolsky, 1916 and restrict the type locality to Dzhi village, Lenkoran District, Azerbaijan. Orlov and Barabanov (1999, 2000, 2001) incorrectly stated that the all original types were lost and designated ZISP 19017.1 (from Azerbaijan, Lenkoran District, vicinity of the Kirovsk town) as the neotype for this taxon. Recently we have rediscovered one specimen from the Nikolsky's original series and therefore, neotype should be suppressed (Code, 2000).

## LOST AND DESTROYED TYPE SPECIMENS

### *Phrynocephalus alpherakii* Bedriaga in Nikolsky (1905:470)

**Syntype.** MNKNU 26562, ZCIKU 432, 1 specimen. "Khorgos" [=the Korgas River, tributary of the upper Ili River, western Xinjiang Uygur Autonomous Region, China]. Leg.: Alpheraki.

**Present name.** *Phrynocephalus guttatus alpherakii* Bedriaga in Nikolsky, 1905 after Barabanov and Ananjeva (2007).

**Remarks.** Received in 1911. Specimen is destroyed.

### *Lacerta clarkorum* Darevsky et Vedmederja (1977:50)

**Paratypes.** MNKNU 28942 [number 459 after original description], 2 specimens. "Adzharskaya ASSR, Khelvachauri District, Goniyskiy sel'sovet, gorge of the Charnali River and Charnigeli brook in the vicinity of the Charnali village" [Ajaria, Georgia]. Leg.: V. I. Vedmederja, 27.VII.1975.

**Present name.** As Darevsky and Tuniyev (1997) pointed out, MNKNU specimens belongs to *Darevskia dryada* (Darevsky et Tuniyev, 1997).

**Remarks.** This specimens are also paratypes of *Lacerta dryada* Darevsky et Tuniyev, 1997. Specimens are destroyed.

### *Lacerta dryada* Darevsky et Tuniyev (1997:1)

**Paratypes.** MNKNU 28942 [number 459 after original description], 2 specimens. See *L. clarkorum*.

**Present name.** *Darevskia dryada* (Darevsky et Tuniyev, 1997).

**Remarks.** This specimens are also paratypes of *Lacerta clarkorum* Darevsky et Vedmederja, 1977.

Besides these type specimens, other type specimens were stored in the Museum collection, but, apparently, they were lost. These are type specimens of *Anguis in-*



Fig. 9. The holotype of *Vipera nikolskii*, MNKNU 14703.1, head in dorsal (above) and left lateral views (below).

*certa* Krynicki, 1837, *Mabuia transcaucasica* Chernov, 1926, *Elaphe dione plumbea* Chernov, 1926, holotypes of *Lacerta colchica* Nikolsky, 1915, and *Phrynocephalus rossikowi relictus* Nikolsky, 1915.

The main problem, arising during identification of type material of the collection, is a long period of inadequate conditions for maintenance of the type collection. Many type specimens were not labeled as types and were stored with other collections and could be used for studying by students of the Kharkiv University in the first half of the 20<sup>th</sup> century. When type materials were received from other museums and collections, they were re-labeled, and original labels were usually lost together with catalogue inventory numbers, cited in the descriptions. Furthermore, catalogue numbers were changed at least twice in the Museum during the 20<sup>th</sup> century, and each time old catalogue numbers were not maintained. Apart from that, original labels or their copies could have been lost when other institutions loaned specimens. Therefore, we realize that this list of type material in the Museum's collection is probably not complete, but the possibility of locating and identifying other type specimens is not likely.



**Fig. 10.** The lectotype of *Ancistrodon halys caucasicus*, MNKNU 14942; *a*, dorsal view; *b*, head, left lateral view.

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