



Type specimens of fish taxa described by Vadim Vladykov from Subcarpathian Ukraine in the collection of the Charles University in Prague, Czech Republic

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ABSTRACT. Vladykov's collection of fishes from Subcarpathian Ukraine in the Department of Zoology of the Charles University in Prague contains twelve specimens of nine species from Subcarpathian Ukraine. They are deposited under the catalogue numbers CUP 41462-41473 and include one syntype of *Gobio frici* Vladykov, 1925, two syntypes of *Cobitis montana* Vladykov, 1925, one syntype of *Gobio uranoscopus carpathorossicus* Vladykov, 1925 and two paralectotypes of *Cottus gobio pellegrini* Bacescu & Bacescu-Mester, 1964.

KEYWORDS. Fishes, type material, Vadim Vladykov, Subcarpathian Ukraine

INTRODUCTION

Vadim Vladykov (1898-1980) was a famous ichthyologist, known especially as an expert in taxonomy of lampreys. At the beginning of his scientific carrier, he focused on the ichthyofauna of Subcarpathian Ukraine. He published several papers on the fishes of this region and described several new taxa (Vladykov 1925a,b, 1926, 1927a,b, 1928, 1930, 1931). However, the whereabouts of his collection of fishes from Subcarpathian Ukraine, including the type material, has remained unknown until now. The exception was several specimens found in the Muséum National d'Histoire Naturelle in Paris (Bertin & Estève 1948). Subsequently a part of Vladykov's material from this area was discovered in the National Museum in Prague (Šanda & Vukić 2006). In this paper we provide information on Vladykov's type specimens recently found in the Department of Zoology, Charles University in Prague.

MATERIALS AND METHODS

Vladykov's collection of fishes from Subcarpathian Ukraine in the Department of Zoology, Charles University in Prague, contains twelve specimens of nine species, all pre-

served in ethanol or formaldehyde. They are deposited under the catalogue numbers CUP 41462–41473. We use the contemporary name of this area, Subcarpathian Ukraine. Its older name, used by Vladykov, was Subcarpathian Russia. It was a part of the Czechoslovak Republic during 1918–1938.

For the type material the following data are provided: type status, catalogue number, sex (if determinable without dissection), locality, date of capture, and total length in mm (TL).

Nomenclatural issues follow the International Code of Zoological Nomenclature (ICZN 1999; hereafter the Code).

Museum acronyms

CMNO = Canadian Museum of Nature, Ottawa, Quebec, Canada

CUP = Charles University, Prague, Czech Republic (ichthyologic collection)

NMP = National Museum, Prague, Czech Republic (ichthyologic collection)

MNHN = Muséum National d'Histoire Naturelle, Paris, France (ichthyologic collection)

ROM = Royal Ontario Museum, Toronto, Ontario, Canada

Gazetteer

The names of the localities in this paper were taken from the original publications, if available, and from the labels attached on the specimens or jars. However, Vladykov's original labels were only rarely preserved. The geographic coordinates were determined using the JRC Fuzzy Gazetteer (<http://dma.jrc.it/services/fuzzyG>) and the Google Earth 5.0. We used currently valid names of the localities throughout this paper. The names were transliterated from the Cyrillic script using official Ukrainian transliteration system (see Pedersen 2010). Alternative names and spellings used by Vladykov are given in parentheses below. Geographic coordinates of rivers refer to their mouths (but see below for Uzh).

Apshitsia (Apšica), river; 48.00°N, 23.75°E.

Bushtyno (Buštino), village; 48.03°N, 23.48°E.

Luzhanka (Lužanka), river; 48.12°N, 23.77°E.

Pidplesha (Podpleša), village; 48.13°N, 23.80°E.

Solotvyno (Akna-Slatina), village; 47.94°N, 23.85°E.

Tereblia (Terebla), river; 48.04°N, 23.48°E.

Tereshul (Terešulka), river; 48.13°N, 23.82°E.

Teresva (Teresovka), river; 47.99°N, 23.66°E.

Uzh (Ouge, Uh, Už), river; 48.62°N, 22.28°E (in Uzhgorod).

Velykyi Bychkiv (Velký Byčkov), village; 47.97°, 24.01°E.

Volosianka (Vološanka), village; 48.98°N, 22.82°E.

SYSTEMATIC LIST

***Gobio frici* Vladykov**

Gobio frici Vladykov, 1925: 249.

Now: *Gobio uranoscopus* (Agassiz, 1828). See Kottelat (1997).

SYNTYPE: CUP 41462; "Teresovka" [= Teresva] River at "Podpleša" [= Pidplesha]; 4 September 1924; TL 93 mm.

REMARKS: Vladykov (1925a) based this form on three specimens without designating the holotype; they are thus syntypes. He gave the locality exactly as Teresovka River at Podpleša village. The specimens were collected in 1923-1924, “mostly in the summer semester of 1924”. One specimen of *G. uranoscopus*, labelled as *Gobio uranoscopus natio frici*, (the name used for *Gobio frici* in Vladykov 1931), is deposited in CUP. We consider this specimen the syntype of *Gobio frici* Vladykov, 1925, because of agreement in date and locality.

***Gobio uranoscopus carpathorossicus* Vladykov**

Gobio uranoscopus carpathorossicus Vladykov, 1925: 250.

Now: *Gobio kessleri* Dybowski, 1862. See Kottelat (1997).

SYNTYPE: CUP 41463; Tisza River at “Velký Byčkov” [= Velykyi Bychkiv]; 21 October 1924; TL 88 mm.

REMARKS: Vladykov (1925a) based this form on ten specimens without designating the holotype; they are thus syntypes. He gave the locality exactly stated as Tisza River between the villages of Bushtyno and Velykyi Bychkiv. The material was collected in the years 1923-1924, “mostly in the summer semester of 1924”. One specimen of *Gobio kessleri*, labelled as *Gobio persa carpathorossicus* (the name used for *G. uranoscopus carpathorossicus* in Vladykov 1931), is deposited in CUP. We consider this specimen the syntype of *Gobio uranoscopus carpathorossicus* Vladykov, 1925, because of agreement in date and locality.

There is one specimen of *Gobio kessleri* deposited in MNHN (1930-0197), marked as a paratype of *Gobio persa carpathorossicus*. However, although the capture locality corresponds with the type locality given by Vladykov (1925a), this specimen should be excluded from type series of *Gobio uranoscopus carpathorossicus* Vladykov, 1925, because its date of capture is unknown. The only available date is 13 November 1930, the date when the MNHN acquired the material from Vladykov (P. Pruvost, pers. comm.). In his later work on the fishes of Subcarpathian Ukraine, Vladykov used altogether 22 specimens of *Gobio kessleri* (Vladykov 1931). Thus, it cannot be excluded that the MNHN specimen was collected after the description of the form.

***Cobitis montana* Vladykov**

Cobitis montana Vladykov, 1925: 320.

Now: *Sabanejewia balcanica* (Karaman, 1922). See Kottelat (1997), Kottelat & Freyhof (2007).

SYNTYPE: CUP 41464; female; “Terešulka” [= Tereshul] River at “Podpleša” [= Pidplesha]; 10 June 1924; TL 74 mm.

SYNTYPE: CUP 41465; male; “Terešulka” [= Tereshul] River at “Podpleša” [= Pidplesha]; 10 June 1924; TL 80 mm.

REMARKS: Vladykov (1925b) did not designate the holotype. Thus, all specimens he used for the description are syntypes. The type series includes 236 specimens, not 219 specimens as stated by Kottelat (1997). In 1923, Vladykov collected 17 specimens (15 males and two females) and in 1924 he collected 219 specimens (89 males, 80 females and 50 juveniles). He gave the locality exactly as Tisza River between the villages Solotvyno and Bushtyno, and the following inflows of the Tisza River: Apshitsia, Teresva, Tereshul, Luzhanka and Tereblia. The material was collected in 1923 and 1924.

We have found two specimens in CUP, which we consider syntypes because of agreement in date and locality.

There are some ambiguous notes regarding the period of material collection in the description of *C. montana*. Vladykov (1925b) stated in the footnote that “the material was collected in summer of 1924”, while he stated in the text that he collected 17 specimens in 1923. Vladykov (1925b) further wrote that he found the latter material insufficient and that he waited until next year to collect more specimens to describe this, obviously, new species. We concluded that the material collected in 1923 was used for the description, as well, and that it is thus part of the type series. Furthermore, Vladykov (1925b) wrote that he collected the material during his second study travel to the Subcarpathian Ukraine in July–October 1924. However, Vladykov (1925a) mentioned that he was in the Subcarpathian Ukraine in 1923–1924 and that he collected “most of the material in the summer semester of 1924”. According to this information, we concluded that specimens collected in 1924 were caught most probably during the whole year, and not only between July and October, and, thus, specimens collected before July were also included in the type series.

***Cottus gobio natio pellegrini* Vladykov**

Cottus gobio natio pellegrini Vladykov, 1931: 353. [Infrasubspecific name.]

Cottus gobio pellegrini Bacescu & Bacescu-Mester, 1964: 442.

NOW: *Cottus gobio* Linnaeus, 1758. See Freyhof et al. (2005).

PARALECTOTYPE: CUP 41466; Tisza River at “Velký Byčkov” [= Velykyj Bychkiv]; 21 September 1924; TL 110 mm.

PARALECTOTYPE: CUP 41467; “Uh” [= Uzh] River at “Vološanka” [= Volosianka]; 19 September 1925; TL 100 mm.

REMARKS: Vladykov (1931) described this taxon as a *natio*. This name is thus infrasubspecific and unavailable for the purposes of zoological nomenclature. However, the use of the name as *Cottus gobio pellegrini* by Bacescu & Bacescu-Mester (1964) makes the name available as *Cottus gobio pellegrini* Bacescu & Bacescu-Mester, 1964 (Art. 45.5.1. of the Code), with Vladykov specimens being the types. The total number of types is 203 specimens, including 16 juveniles. The adults measured 60–106 mm. Vladykov (1931) did not exactly state the locality. However, the paper where the original description appeared focused on fishes from Subcarpathian Ukraine (Vladykov 1931), thus the specimens were collected in Subcarpathian Ukraine. Vladykov (1931) also did not state when the specimens were collected, but we assume that this happened during 1923–1931, most probably during 1923–1928 (see Vladykov 1931). Freyhof et al. (2005) designated specimen MNHN 1930-222 as the lectotype of *C. g. pellegrini*. Herewith, the type locality of this taxon was restricted to the Teresva River, and the remaining specimens from the type series became paralectotypes.

We have found two paralectotypes in the CUP. Three other paralectotypes are deposited in MNHN (MNHN 1930-0220, 0221 and 0223; Freyhof et al. 2005) and 26 paralectotypes are in the NMP (P6V-8904, 8969-8978, 31802-31811 and 80803-80806; Šanda & Vukić 2006).

[*Acerina cernua natio danubica* Vladykov

Acerina cernua natio danubica Vladykov, 1931: 345. [Infrasubspecific name.]

Now: *Gymnocephalus baloni* Holčík & Hensel, 1974. See Holčík & Hensel (1974), Kottelat (1997).

REMARKS: Vladykov (1931) described this taxon as a natio. This name is thus infrasubspecific and unavailable for the purposes of zoological nomenclature. There is one specimen deposited in CUP, which belongs to the material used by Vladykov for the description of *Acerina cernua natio danubica*. This specimen was listed also by Holčík & Hensel (1974).]

DISCUSSION

In his final work about the fishes of Subcarpathian Ukraine Vladykov (1931) stated that he collected overall 3,395 specimens in the region. This number includes several hundreds of type specimens, perhaps about 1,000. Thus far, nine type specimens were located in the MNHN (Bertin & Estève 1948, P. Pruvost, pers. comm.) and 55 type specimens were found in the NMP (Šanda & Vukić 2006). Another six type specimens are deposited in the CUP (this paper). Further material is deposited in the ROM and CMNO, but the exact number of types in these two collections is not known (Renaud & Coad 1997).

ACKNOWLEDGEMENT

The work on this paper was supported by project DE06P04OMG008 of the Czech Ministry of Culture. We are thankful to Patrice Pruvost for the information on the material deposited in MNHN.

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