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Crayfish species (Crustacea: Decapoda) from the border area Romania – Republic of Moldova

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Abstract. Identification of Romanian crayfish species is usually a facile job but sometimes there can appear errors and confusions. This short note is an erratum and addendum to the paper "Conservation status of protected or rare invertebrates from the border area Romania – Republic of Moldova" (Popescu & Davideanu 2009).

Key Words: Astacus leptodactylus, crayfish, Prut River.

Zusammenfassung. Die Bestimmung der rumänischen Krebsarten ist einfach, aber manchmal können Missverständnisse auftreten. Diese wissenschaftliche Publikation ist eine Redaktion und ein Addendum an die Arbeit "Conservation status of protected or rare invertebrates from the border area Romania – Republic of Moldova" (Popescu & Davideanu 2009). **Stichwort**: *Astacus leptodactylus*, Krebs, Prut Fluss.

Rezumat. Identificarea speciilor de raci din Romania este facilă însă uneori pot apărea confuzii. Această scurtă comunicare este o erată și o addendă la lucrarea "Conservation status of protected or rare invertebrates from the border area Romania – Republic of Moldova" (Popescu & Davideanu 2009). **Cuvinte cheie**: *Astacus leptodactylus*, rac, Râul Prut.

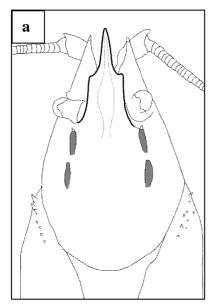
Letter. Three indigenous crayfish species (ICS) reside in the Romanian freshwater ecosystems: the noble crayfish *Astacus astacus* (Linnaeus, 1758), the stone crayfish *Austropotamobius torrentium* (Schrank, 1803) and the narrow-clawed crayfish *Astacus leptodactylus* Eschscholtz 1823 (Pârvulescu 2010). Until now one non-indigenous crayfish species (NICS) invaded Romanian waters, i.e. the spiny-cheek crayfish *Orconectes limosus* (Rafinesque 1817) (Pârvulescu et al 2009). The habitats of noble crayfish and stone crayfish are the running waters from mountain and sub mountain areas with minimal anthropogenic impact, the stone crayfish being more conditioned by the quality of pristine waters (Pârvulescu et al 2010). The narrow-clawed crayfish lives in slow flowing water or lakes, ponds and even channels, from the plain to the hill area (Băcescu 1967, Souty-Grosset et al 2006). For additional date regarding the distribution of these two species in Romania we recommend visiting this site: http://crayfish.ro.

The paper "Conservation status of protected or rare invertebrates from the border area Romania – Republic of Moldova" (Popescu & Davideanu, 2009) presented the conservation status for some protected or rare invertebrate species located on the border area Romania – Republic of Moldova. The area of the investigations in the paper was Botoşani, Iaşi, Vaslui and Galaţi counties. The habitat of these zones is characteristic for narrow-clawed crayfish and not for the noble crayfish. It's possible for the noble crayfish to be present in the western part of the considered area, in the hilly area; however investigations have to be carried out. Unfortunately, by a regrettable mistake, in the figure 2 was presented an adult exemplar of noble crayfish that in reality was a narrowclawed crayfish.

In the following we present the important morphologic characters for the identifications of the two species.

The noble crayfish is a robust, medium-sized crayfish, the adults often exceeding 10 cm in length. The dorsal colour varies from olive-brown to dark-brown. The ventral side is reddish. The rostrum has less convergent margins and has a denticulated median ridge and a sharp apex. From a post-orbital view, there are two ridges, the first one ends with a spine and the second is blunt (Figure 1-a). Behind the cervical groove there are some spines. The claws are strong and characteristically red underneath (Figure 2-a).

The narrow-clawed crayfish is a large-sized crayfish, adult specimens often exceed 14 cm in length. The colour can range from olive green to yellowish brown to dark brown. The ventral side is lighter in colour and tends to be a dirty white. The rostrum is strong with denticulated parallel edges, with a clear median carina. The apex is long and sharp. From a post-orbital view, there are two crests each ending with one spine (Figure 1-b). The cervical groove and the cephalothorax edges have some spines. The fingers of the claws are characteristically longer only in males, shorter in females. The ventral coloration is whitish (Figure 2-b).



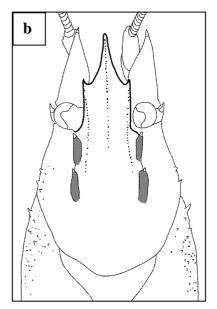


Figure 1. Dorsal view of the cephalothorax in noble crayfish (*a*) and narrow-clawed crayfish (*b*).





Figure 2. Ventral colour of the chelae in noble crayfish (*a*) and narrow-clawed crayfish (*b*).

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