

PRESENCE OF THE ASIATIC CYPRINID *PSEUDORASBORA PARVA* (SCHLEGEL, 1842) IN NORTH AFRICA

A. PERDICES & I. DOADRIO

Pseudorasbora parva (Schlegel, 1842), a cyprinid of the subfamily Gobioninae, originally had an eastern Asiatic distribution including Japan, Korea, northern and central China and SE of former part of USSR (BANARESCU & NALBANT, 1963; BERG, 1964).

Since the 1960 *Pseudorasbora parva* spread in Europe and western Asia. Among several introduced exotic taxa, this species seems to be one of the few which found suitable conditions for a successful establishment in European waters (BANARESCU, 1990).

According to BANARESCU (1990), *Pseudorasbora parva* was first accidentally introduced in Europe on 1961, in fish-farms at Nucet in the basin of a tributary of Dîmbovitză River (Donau System, Rumania) mixed with Chinese carps from the Changjiang River in Wuchang (China). In 1962, *Pseudorasbora parva* was also introduced in fish-farms at Cefă, western Rumania.

Since then, it became established in other European countries in the rivers of the Donau and other systems. In 1961, *Pseudorasbora parva* was introduced in the Republic of Uzbekistan (former part of USSR) (BANARESCU, 1990).

Some years later, in 1967, the species was collected in the Donau River in Hungary (ZITNAN & HOLCIK, 1976). Later on 1972, *Pseudorasbora parva* was found in Dniester River (Moldavia) (KOZLOV, 1974). *Pseudorasbora parva* was also collected in the Skadar Lake in Montenegro region (Yugoslavia) (KNEZEVIC, 1981).

Meanwhile, the presence of *Pseudorasbora parva* continues to be reported in other localities in the Donau System: in the Tisza River (ZITNAN & HOLCIK, 1976) and in the confluence of Ipeľ River with the Donau (ENENKL, 1977) in Czechoslovakia.

In 1982, it was found in the March, big Tulln and Pinka Rivers from Austria (WEBER, 1984). In 1985 it was collected in East Germany (ARNOLD, 1985) and one year later in West Germany (STEIN & HERL, 1986).

Outside the Donau System, it was recorded in the Ohrid, Prespa and Microprespa Lakes (Greece, Albania and Yugoslavia), and in the Aliakmon River in Greece (BIANCO, 1988). *Pseudorasbora parva* was found also in France in the Vègre River (Rhône basin), and in some ponds of the River Doubs (Upper Rhein) (ALLARDI & CHANCEREL, 1988), and recently in the Po River system in Italy (SALA & SPAMPANATO, 1990).

In this paper, a sample of *Pseudorasbora parva* collected in North Africa in the Kebir River, El Kala (Algeria), 16 X 1990, A. Perdices, I. Doadrio & J. Cubo leg. is described (fig. 1). Counts and measurements of specimens are shown in table 1. Specimens are preserved in the Museo Nacional de Ciencias Naturales of Madrid (MNCN), collection numbers are MNCN 72301-72328.

In alive specimens the body colouration was violet, with the back darker than the sides, ventral side was silvery. Lateral line

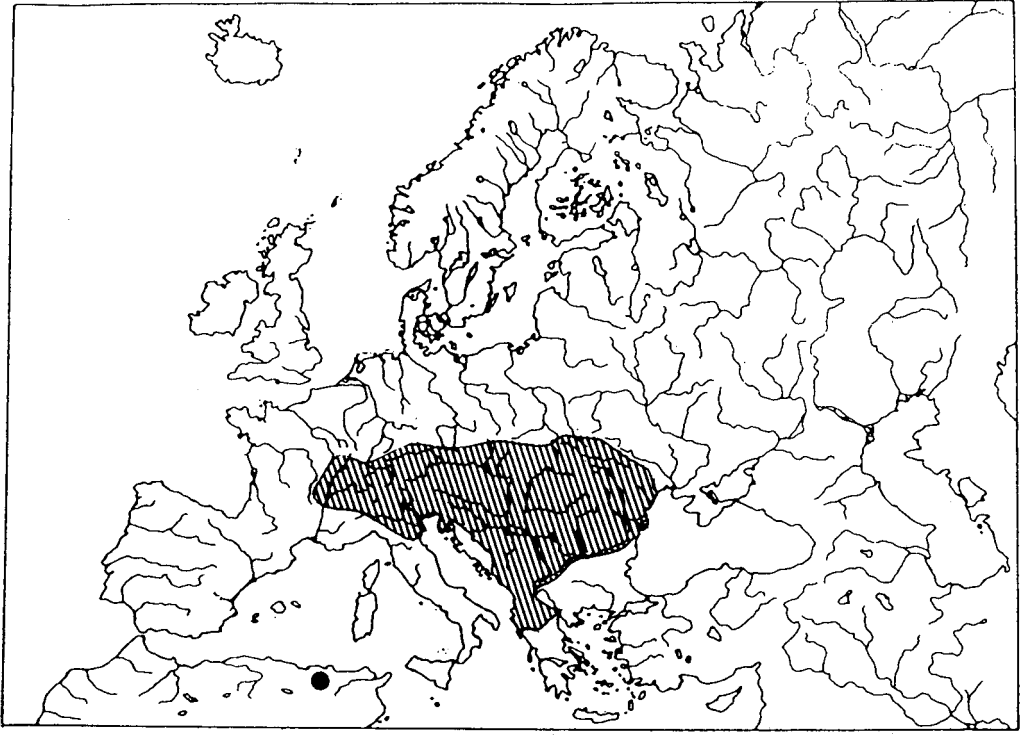


Fig. 1. Locality where specimens of *Pseudorasbora parva* from El Kebir River, El Kala (Algeria) were collected. (●).

Table 1. Morphometric (in mm) and meristic data of specimens studied from El Kebir River, El Kala (Algeria), n= 28: \bar{X} . Mean; SD. Standard deviation.

Measures	\bar{X}	SD	Range
Total length	70.6	11.9	43.4-98.2
Standard length	58.5	10.1	35.8-82.9
Head length	4.1	2.4	8.8-18.8
Predorsal distance	29.4	1.0	18.5-41.4
Preventral distance	28.8	5.1	18.5-41.2
Preanal distance	40.2	1.4	25.2-58.5
Body depth	15.5	5.1	8.6-30.6
Body min. depth	8.0	2.7	4.0-15.5
Lateral line scales	33.7	0.9	32-35
Rays dorsal fin	7.0	0.2	7-8
Rays anal fin	6.0	0.0	6

complete, with 32-35 scales. The posterior edge of each scale of the body is dark (fig. 2).

Throughout the sides, all the specimens have a dark longitudinal band originating

from the posterior margin of the orbit and ending at the origin of caudal fin.

The colouration of living fish from the north of Algeria is similar to the colouration described by BIANCO (1988)

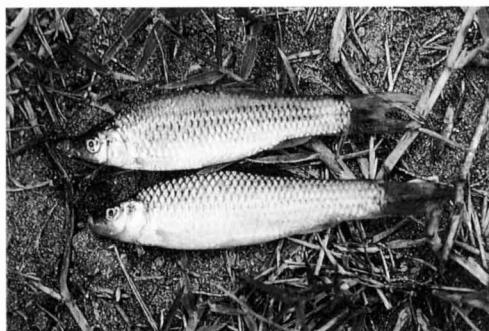


Fig. 2. Specimens of *Pseudorasbora parva* collected

for specimens living in western Balkans.

The presence of *Pseudorasbora parva* in Algeria, is probably associated with the introduction of *Cyprinus carpio*. It was probably not introduced as food for predatory species, as it seems to be in the Ohrid, Prespa and Microprespa Lakes (BIANCO, 1988).

La Calle Lake near The Kebir River (El Kala-Algeria), is the type locality of three cyprinids: *Barbus callensis* Valenciennes, 1842, *Pseudophoxinus callensis* (Guichenot, 1850) and *Pseudophoxinus guichenoti* (Pellegrin, 1920), the last one is endemic of this lake, and its taxonomic position is still unclear (LEVEQUE & DAGET, 1984).

The Kebir River forms small pools connected by small streams, *Barbus callensis* and *Pseudophoxinus callensis* inhabit the pools while *Pseudorasbora parva* is more frequent in the places where the current is more evident (inlet and outlet of streams of the pools).

Food competition of *Pseudorasbora parva* with other species is still not clear, but it appears not to be important (AHNELT 1989; BANARESCU, 1990).

In spite of the wide tolerance of *Pseudorasbora parva* in temperature range and water quality, the natural colonization of

other river systems is apparently limited (AHNELT, 1989). Its occurrence in other areas, especially in northern Africa, is in direct relationship with human introductions.

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ABSTRACT

Presence of the asiatic cyprinid Pseudorasbora parva (Schlegel, 1842) in North Africa.— A short history of the diffusion of the cyprinid *Pseudorasbora parva* outside its original range is presented and the first record of the species in North Africa (River Kebir, El Kala, Algeria) is described.

Key words: Cyprinidae, *Pseudorasbora parva*, Zoogeography.

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A. Perdices & I. Doadrio, Museo Nacional de Ciencias Naturales, c/José Gutiérrez Abascal 2, 28006 Madrid, España (Spain).

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