

Ichthyootoxism in *Barbus luteus* from Iran (Actinopterygii: Cyprinidae)

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Abstract: A case of egg poisoning or ichthyootoxism is reported for the first time in the cyprinid fish species *Barbus luteus* from southern Iran. Symptoms appeared shortly after ingestion and, in one case, required stomach pumping to remove the toxic eggs. Victims suffered abdominal pain, vomiting for 6 hours, diarrhoea, intense thirst, cyanosis, and faintness, among milder symptoms.

Kurzfassung: Für die Barbe *Barbus luteus* wurde im südlichen Iran erstmals ein Fall von Ichthyotoxismus oder Fischvergiftung festgestellt. Bei den Patienten traten die Symptome kurz nach dem Verzehr auf und erforderten in einem Fall das Auspumpen des Magens, um die toxischen Eier zu entfernen. Die Patienten litten an abdominalen Schmerzen, sich über 6 Stunden hinziehendes Erbrechen, Diarrhoe, starkem Durst, Zyanose (Blausucht), und einer allgemeinen Schwäche.

Key words: *Barbus luteus*, Cyprinidae, ichthyootoxism, eggs, poisoning, Iran, Middle East

Ichthyootoxic fishes are a public health hazard in fresh waters of Europe and Asia (HALSTEAD 1967). The incidence, mortality and species involved are not well reported. COAD (1979) reported four species of cyprinid fish found in Iran that have been demonstrated as ichthyootoxic, namely *Abramis brama*, *Cyprinus carpio*, *Schizothorax zarudnyi* and *Tinca tinca*, while noting that other species may be discovered. In this note we report, for the first time, ichthyootoxism in *Barbus luteus*.

The cyprinid fish *Barbus luteus* (Heckel, 1843), known as himri or hemri in Iran, has a wide distribution in Southwest Asia from the Orontes and Quwayq rivers, throughout the Tigris-Euphrates basin and from Persian Gulf tributaries in southern Iran. It attains 38 cm in length and about 500 g. It is an important food fish in southern Iran and in Iraq (AL-DAHAM & BHATTI 1979, AHMED 1982, pers. observations). SHARMA (1980) reports that himri were the fourth most important fish species at Basrah fish market. In southern Iran and Iraq, spawning of *Barbus luteus* occurs from April to July. Eggs are yellow to orange in colour, up to 1.86 mm in diameter and number up to 38,433 for the oldest fish (BHATTI & AL-DAHAM 1978, AL-DAHAM & BHATTI 1979, EPLER et al. 1996).

One of us (N.N.) collected material of this species in the Karun River near Arab Hasan village, 25 km from Shushtar, Khuzestan Province, Iran at 31°52'N, 48°53'E in December 1994. Water temperature at noon was 15.4°C, substrate was mud-sand, conductivity was 1.16, total dissolved solids were 0.58, depth was 6.6 m, air temperature was 19°C, humidity was 85%, and skies were cloudy. The largest fish sampled averaged 301 mm total length and