Comparison of herbicide Atrazine toxicity in four native fish of Khouzestan province: *Mesopotamichthys sharpeyi*, *Torgrypus*, *Luciobarbus esocinus* and *Luciobarbus xanthopterus*

Abstract
In this study the acute toxicity of herbicide, Atrazine, in four native fish of Khouzestan province including: *Mesopotamichthys sharpeyi*, *Torgrypus*, *Luciobarbus esocinus* and *Luciobarbus xanthopterus* were evaluated. For this purpose the "Organization for Economic Cooperation and Development" OECD method were used. Briefly each fish species were exposed to eight serial concentration of atrazine in triplicates (total of 24 aquariums) for 94 hours. Fish mortality were recorded daily in each concentration and data analysed with Probit software. Results showed that atrazine is toxic for all treated fish and its toxicity increased along with atrazine concentration as well as extension of exposure duration. The sensitivity of four tested fish to atrazine were significantly different (P<0.05). The lowest toxicity of atrazine, were seen in *L. esocinus* (96h LC50= 142±21mg l⁻¹) which means this species possess the highest resistance to atrazine toxicity. *M. sharpeyi* and *T.grypus* showed similar and moderate resistance to atrazine toxicity with 96h LC50 equal to 60±11 and 65±14 mg l⁻¹ respectively. *L. esocinus* showed the highest resistance to atrazine toxicity (96h LC50= 9±3 mg l⁻¹). According to these results it can be concluded that atrazine toxicity were significantly different in four native fish in spite of their systematically very near relation. As *L. esocinus* showed the highest resistance to atrazine toxicity, this species has priority over other native species of Khouzestan province in restocking and artificial reproduction programs.

Keyword: Atrazine, Native fish, Khouzestan province, Acute toxicity.

Mojtaba Alishahi¹*
Esmaeil Abdy²
Takavar Mohammadian³

1. 3. Department of Clinical Sciences, Faculty of Veterinary, ShahidChamran University of Ahvaz, Iran
2. Ph.D student of Aquatic Animal Health, Faculty of Veterinary Medicine, Tehran University, Tehran, Iran

*Corresponding author
alishahimoj@gmail.com

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