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## **Study on the biological characteristics and ecological challenges of convict cichlid (*Amatitlania nigrofasciata* Günther, 1867) in inland waters of Iran**

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### **Abstract**

The introduction of exotic fish has become a major threat to native species in freshwater environments. Convict cichlid (*Amatitlania nigrofasciata*) is one of the exotic and invasive species that reported from Hormoz and Namak Lake basins in Iran. So far, numerous studies and experiences have been documented on the negative effects of convict cichlid fish on freshwater ecosystems in different countries. Therefore, due to the invasive nature of this species and its distribution in inland waters of Iran, it is necessary to conduct a comprehensive study on biological characteristics and its ecological challenges in Iran. A review of studies showed that due to specific biological characteristics of convict cichlid (*A. nigrofasciata*) such as tolerance to a wide range of environmental conditions, opportunism, aggression, ability to capture disturbed habitats and rapid growth, it has become an invasive species in aquatic ecosystems. It can have negative impacts on fish populations, especially native species, such as *Capoeta* populations, through competition, spread of pathogens and hybridization. The negative effects of this species are also often justified by competing with other species for food supplies and ecological niches. The information presented in this study can be used by managers and experts to protect native species and to make future management decisions in the fisheries and environmental sectors.

**Keywords:** *Amatitlania nigrofasciata*, Competition, Exotic species, Invasive, Namak Lake basin