

Extraction, study and determination of LD50 and protein percentage of Persian Gulf black spot stone fish venom– Khuzestan

Abouzar Fathi^{1*}

Alireza Forouzan²

Hedyeh Jafari³

1, 2. *Experts of Razi Vaccine and Serum Research Institute, Southwest Branch of the country – Ahvaz, Ahvaz, Iran*

3. *Member of the Scientific board of Razi Vaccine and Serum Research Institute, Southwest Branch of the country – Ahvaz, Ahvaz, Iran*

***Corresponding author:**

Abouzar_fathi@yahoo.com

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Abstract

There are many practical motivations for studying Scorpaenidae, which are among the world's most dangerous venomous fish in tropical waters, especially in the Persian Gulf, because they are biologically very active and therefore researchable. They are useful for biomedical medicines or the drugs and biological products. Second, such biotoxins have significant negative or repulsive effects on living organisms in marine communities. A large number of marine organisms with such biotoxins pose a serious threat to humans. To conduct this study, which was carried out from May to March 2019, 200 *black spotted fish* (Faryaleh) (*Synanceia*) were caught from the *Persian Gulf* and in the laboratory, after extracting the toxin, purification, protein measurement and LD50 determination were performed as the most basic information for the initial examination of the venom of this species of fish (as the aim of this study). The results of these studies showed that *Persian Gulf black spot stone fish* (*Synanceia*) poison is one of the most dangerous poisons for human health and hygiene with LD50 equal to 185 and protein percentage is 2.272 mg/ml.

Keywords: *Scorpion fish, Black spotted stone fish, Synanceia, Persian Gulf, LD50, Protein percentage.*