



## PUFFERFISH-TETRADOTOXIN AND FARMACOLOGY

Yasemin Bircan Yıldırım

Iskenderun Technical University, Faculty of Marine Sciences and Technology, Dept. of Aquaculture. 31200,  
Iskenderun, Hatay / TURKEY

Corresponding author: yasemin.bircanyildirim@iste.edu.tr

### Abstract

The pufferfish, *Lagocephalus sceleratus* (Gmelin, 1789), is known to carry tetrodotoxin (TTX) which is known a non-protein organic compound (aminoperhy-droquinazoline) and one of the strongest marine paralytic toxins. TTX has a unique chemical structure. Researchers advocate the idea that toxins are produced by bacteria and that they reach the balloon fishes via food chains and are deposited in the bodies of the balloon fishes. It may be toxicity level and its correlation with the biological activity of the fish. There is no known antidote to TTX which is a powerful sodium channel inhibitor. TX can be found in the liver, gonads, intestines, and skin of these fish and can cause death in approximately 60% of persons who ingest it. The toxin has only occasionally been detected in the muscles of these fishes. In recent years, studies on the use of tetrodotoxin in the pharmaceutical industry cancer treatment in humans and pesticide in agriculture have been gaining importance. In this study, we will try to bring new perspectives by presenting studies that can be done and possibilities of using tetrodotoxin in pharmacology will be discussed.

**Keywords:** Pufferfish, tetrodotoxin, pharmacology, treatment

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