## LIONFISH INVASION AND ITS MANAGEMENT IN THE MEDITERRANEAN SEA

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© Turkish Marine Research Foundation ISBN: 978-975-8825-41-7

Citation: Hüseyinoğlu, M.F., Öztürk, B. (Eds.) 2018. Lionfish Invasion and Its Management in the Mediterranean Sea. Turkish Marine Research Foundation (TUDAV) Publication number: 49, Istanbul, Turkey, 121 pages.

Cover photo: Pterois miles © Bayram Öztürk (TUDAV)

Available from: Turkish Marine Research Foundation (TUDAV)

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Printed: MetinCopyPlus / Artı Dijital & Baskı Merkezi Türkocağı Cad. 3/A Türkiye Gazeteciler Cemiyeti Altı İran Konsolosluğu Karşısı Cağaloğlu/Fatih/İstanbul

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#### PREFACE

Lionfish is a common name for several species from the teleost fish family of Scorpaenidae. It is a very attractive fish with wing-like patterns of beautiful fin structures; it is very hardy and tolerant to various water parameters and environmental conditions; and it is marvelously colorful, therefore it is one of the most popular aquarium fish among the hobbyists of the world. However, these mentioned properties have as well make this fish a very dangerous one: (i) Color and pattern scheme is a warning that it is highly venomous, to an extent that it can kill a human with a weak immune system; (ii) Its hardiness and tolerance make it a very persistent species which can withstand various and even/ever changing conditions in different ecosystem types, announcing it as a real survivor; (iii) Having a high reproduction and feeding rate, it can sweep ecosystems easily without the presence of a frequent natural predator or a successful scavenger which feeds on its eggs, larvae or juveniles.

A single specimen of a Mediterranean *Pterois miles* was recorded in 1992 almost synchronously with a few individuals *P. volitans* in Florida, USA, however past two decades showed no other repeated occurrences while West Atlantic is almost completely invaded with dire consequences.

Starting from 2012, lionfish sightings increased with the anticlockwise order of main Eastern Mediterranean currents. With a bitter example in the hand, scientists have a common concern regarding this fish to be a problem child for the rest of the Mediterranean, so a load of science and public awareness campaigns are directed in the Levantine countries.

This is the first book trying to cover the various aspects of the invasion of the lionfish *P. miles* in the Mediterranean Sea as well as suggestions for its population control – including recipes since it found its way to restaurant tables already. Different approaches of the papers in this book show that the problem has many faces: genetic, ecological, social, comparative biological, touristic and even gastronomic.

Finally, we thank all authors who contributed to this book with their effort, namely their time and extent knowledge, as well as their continuous passion for the protection of the Mediterranean biodiversity.

M. Fatih HÜSEYİNOĞLU Bayram ÖZTÜRK December, 2018