Influence of Global Climate Change on Aquatic Invasive Species Pınar YILDIRIM^{1*}, Nedim ÖZDEMİR²

^{1*}Department of Fisheries Technology, Çanakkale Faculty of Applied Sciences, Canakkale Onsekiz Mart University, Canakkale, Turkey, 17100

²Department of Basic Sciences, Faculty of Fisheries, Mugla Sıtkı Kocman University, Mugla, Turkey, 48000

Corresponding Author: pinaryildirim@comu.edu.tr

ABSTRACT

Climate change and invasive species, which lead to biological losses and changes in ecosystem services, are the very significant threats to biodiversity. Based on the increase of globalization, the movements and places of living things have become simpler. There are many geographic barriers that permit the world to progress through natural processes. Species are displaced from the corridors created because of damage to these barriers, causing biodiversity to be affected. Due to the absence of predators and diseases in their new habitats, invasive species that grow very rapidly and spread very rapidly cause national and international problems in aquatic environments. Based on the increase in the rate of climate change, invasive species disrupt the health of the ecosystem and negatively affect human health and quality of life. As with climate change, invasive species also have negative impacts on many sectors such as tourism, energy, and insurance. Since the spread of invasive species is mostly in water resources, the greatest impact is experienced in the fishing sector. In this study, the effects of aquatic invasive species on populations were evaluated to make responsible and sustainable fishing of water resources. In addition, recommendations have been made on the control of climate change and aquatic invasive species.

Keywords: Climate change, Invasive species, Biodiversity, Ecosystem