ISSN 2348-3156 (Print)
International Journal of Social Science and Humanities Research ISSN 2348-3164 (online)
Vol. 12, Issue 4, pp: (142-143), Month: October - December 2024, Available at: www.researchpublish.com

Comprehensive Review of the negative impact of blackchin tilapia on the environment

Pittayaporn Wangchom[1], Siriyakorn Nopparat[2]

Nawamintharachinuthid Horwang Nonthaburi School, Nonthaburi, 11120, Thailand

DOI: https://doi.org/10.5281/zenodo.14011637

Published Date: 30-October-2024

***Abstract*: Currently, the alien species known as black chin tilapia is spreading. Alien species are organisms that did not originate in the area. The majority of them were introduced by humans, either purposefully or unintentionally. Aliens have had a wide-ranging impact on the ecosystem, including effects on the food chain and wildlife genetics in terms of original genetic material survival. This review paper provides an overview of the negative impact of blackchin tilapia on the environment and its consequences, with citations from trustworthy studies.**

***Keywords:* blackchin tilapia, Alien Species, trustworthy studies.**

1. INTRODUCTION

Blackchin tilapia is an alien species that is spreading and has created a wide impact on the environment, both in terms of ecosystem and economy. For example, it has disturbed the ecosystem and eaten animals in farmers' breeding ponds, causing farmers to lose their benefits. This review paper provides an overview of the negative impact of blackchin tilapia on the environment, with citations from trustworthy studies.

[*https://en.wikipedia.org/wiki/Blackchin_tilapia*]

How the Black Chin Tilapia came to be

Blackchin tilapia is a type of fish that looks similar to the Indian tilapia or cichlid, except that the area under the chin is black. Its scientific name is Sarotherodon melanotheron Ruppell and it is in the Cichlidae family. Blackchin tilapia is native to Africa. It prefers to live in brackish waters. When it was mistakenly released into the country's coastal waterways, it led them to proliferate quickly and attack the native species. This has serious consequences in many ways, such as disrupting the ecology and impacting the food chain, as well as affecting the economy because the black chin tilapia has spread swiftly and eaten animals in breeding ponds, causing farmers to lose income.

Negative impacts of black chin tilapia breeding in invasive areas

The ecological impact is that the diversity of juvenile aquatic animals will decrease, and the ecological balance will be harmed because it alters the structure of the food chain in the water. And, because the blackchin tilapia has a diverse feeding pattern and can adapt to diet, it competes with other local fish, causing a considerable drop in the local fish population. The next consideration is the economic impact, since the spread of black chin tilapia in natural water sources can cause local fish to decline or become extinct, resulting in economic losses for local fisheries and causing the government to lose a significant amount of money in budget control and management.

Protection

To prevent the spread of blackchin tilapia from one location to another, initial prevention should include controls on fish import and export, as well as measures to keep fish from fleeing from the pond, such as the installation of safe drainage systems. In the long run, we should support and educate local people on the effects of black chin tilapia and how to prevent its spread, as well as assist law enforcement in preventing the intentional or unintentional discharge of blackchin tilapia into natural water sources.

2. CONCLUSION

In conclusion, the blackchin tilapia is an invasive species that has spread over the world and had a wide-ranging ecological and economic influence. As a result, we should help regulate and prevent the spread of blackchin tilapia, as well as support tight measures to limit inadvertent release into water sources.

REFERENCES

[1] sarawit@nstda.or.th. (2024). Black-chinned tilapia: lessons from invasive fish for the aquaculture business. Retrieved from https://www.nstda.or.th/sci2pub/sarotherodon-melanotheron-ruppell/

[2] ThawiSungsong, J. (2024). “Alien Species” Impacts and Threats That May Lead to Extinction. Retrieved from https://www.thaipbs.or.th/now/content/1403

[3] The Editorial Board. (2024). Listen to Thailand: Threats to the Black-chinned Tilapia. Citizenthaipbs. Retrieved from https://thecitizen.plus/node/92755

[4] HaRDstories. (2024). How Thailand's Fish Farms Battle an Alien Invasion. Retrieved from https://hardstories.org/stories/natural-resources/how-thailands-fish-farms-battle-an-alien-invasion

[5] National News Bureau of Thailand (NNT). (2024). Southern Thailand prepares for potential heavy flooding. NBT World. Retrieved October 23, 2024, from https://thainews.prd.go.th/nbtworld/news/view/443607/?bid=