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Volume Page

Keyword: [TOP](#) > [Available Issues](#) > [Table of Contents](#) > [Abstract](#)

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Tolerance and adaptation of the mosquito-fish *Gambusia affinis* (Baird & Girard) to the increase in water salinity in tanks

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Abstract

The salinity tolerance of the mosquito-fish *Gambusia affinis* that is nated to Japan was investigated in tanks. The salinity of water in the tanks was raised to various levels, and the percentage of fish that survived the increase in salinity was investigated. When the salinity was raised to the sea water concentration (35 psu) within a 24-h period, almost all individuals (more than 90%) died. However, when the salinity was gradually raised over a period of three days or more, almost all survived. Thus, it was shown that the mosquito-fish can survive in sea water. We also considered the possibility of a migration of the mosquito-fish to other geographical areas via the sea.

Key Words: [adaptation](#), [Gambusia affinis](#), [mosquito-fish](#), [native fish](#), [salinity](#), [tolerance](#)[\[PDF \(398K\)\]](#) [\[References\]](#)Download Meta of Article [\[Help\]](#)[RIS](#)[BibTeX](#)

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