

**EXAMINATION OF DIFFERENT PRESERVATIVES FOR *TODARODES PACIFICUS*
PARALARVAE FIXED WITH BORAX-BUFFERED FORMALIN-SEAWATER SOLUTION**

Tsuneo Goto

*Japan Sea National Fisheries Research Institute, Fisheries Research Agency
1-5939-22, Suido-cho, Niigata, 951-8121 Japan*

ABSTRACT: The effects of different preservatives on 36 *Todarodes pacificus* paralarvae were examined. After fixation in a solution of borax-buffered 2–4% formaldehyde in seawater, each dorsal mantle length was measured and dorsal chromatophores were photographed. The paralarvae were divided into the following six different preservatives; 1) 5% phosphate-buffered formalin, 2) 5% borax-buffered formalin, 3) 5% hexamine-buffered formalin, 4) 99% ethanol, 5) 70% ethanol, and 6) 40% isopropanol. After 3, 6, 9 and 12 months, each specimen was measured and photographed. In preservatives 3 to 6, pigment in the chromatophores remained for almost 12 months. However, specimens in preservatives 1 and 2 had considerably translucent mantles after 3 months. In addition, specimens in group 5 were remarkably shrunk (20%) after 3 months and in 6 were slightly shrunk after 12 months. In groups 1 to 4, certain changes in mantle length were undetected as the month elapsed. The results show that 5% hexamine-buffered formalin and 99% ethanol may be good preservatives.
