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## Improving Production of Zebra Fish Embryos in the Lab

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### ABSTRACT

The utilization of fish embryos in toxicity testing of hazardous chemicals has recently been adopted in order to satisfy stricter rules and regulations related to using adult animals in toxicity testing. This paper presents optimising steps towards improving zebra fish embryo production in the laboratory. Culture conditions were maintained in the aquaria as stipulated in the OECD draft proposal for a new guideline on fish embryo tests. Furthermore, a sequence of steps were adopted and followed to improve upon previous work done in the lab in 2006. About 200 eggs were produced in one spawn trap within an hour of onset of light, an improvement over the 50 - 60 eggs produced in the previous work. This result demonstrates that with the right culture conditions and proper optimisation of procedure the required number of embryos needed for toxicity testing can be obtained.

### KEYWORDS

Hazardous Chemicals, Zebra Fish Embryo, Toxicity Testing, Spawn Trap, Culture Conditions

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