Hand stripping of Male Clarias gariepinus Treated with Ovaprim at Varying Levels

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Abstract

Matured African catfish (Clarias gariepinus), size ranging from 200-1600g total body weight (TBW) were

procured from a private fish farm and transported in perforated 50 litre water holding capacity jerry can to

Federal University of Technology, (F.U.T.) Minna, Bosso campus indoor fish hatchery and maintained for 2

weeks. They were fed with 40 % crude protein commercial diet with good water quality management before

being used for breeding. The male breeders were hand stripped after application of (Ovaprim Overdose

Inducement (OOI) at 1 ml, 1.25 ml and 1.5 ml to obtain milt to fertilize eggs. Fecundity increased with body

weight and hence larger fish had higher fecundity and differed significantly (P<0.05) from each other. Mean

fecundity was (280744±302). The hatchlings bred from Conventional Method (CM) and OOI were

maintained for 12 weeks to determine survival and mortality rates. Percentage hatching and volume of milt

extracted differed significantly (P<0.05) between CM and OOI with highest volume of milt extracted from

CM (0.86±0.006a). CM gave the highest percentage survival (75.20 %) though not significantly different

(P>0.05), and with $\pm SEM$ (2.232) and SD (2.923) of the bred fingerlings that were managed for 12 weeks. The male species of Clarias gariepinus could be re-used for further genetic studies after milt stripping. Milt

can be stripped without killing the male but proper and adequate feeding is necessary to hasten recovery

and development of the gonads. The inducement by application of Ovaprim at 1.25 ml was most effective at

10 h latency period and temperature of 25-290 C. This treatment or dosage is hence recommended for hand

stripping of male breeders of Clarias gariepinus for breeding.

Key words: Hand stripping, milt, Clarias gariepinus, Ovaprim, breeding.

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