Reproductive biology of vermiculated sail fin catfish *Pterygoplichthys disjunctivus* in the Kalaweva reservoir in Sri Lanka

I.U. Wickramaratne,[1] H.K. Wijenayake,[2] and D.S. Jayakody[2]

[1]*Uva Wellassa University of Sri Lanka*
[2]*Wayamba University of Sri Lanka*

Introduction of alien species into ecosystems has become a serious threat. These introductions can be accidental or intentional. For example,*Pterygoplichthys disjunctivus* had been accidentally introduced to Sri Lankan freshwater bodies,very likely through the ornamental fish trade. *P. disjunctivus,* which is native to South America, has established populations in many water bodies in Sri Lanka, including the Kalaweva reservoir. Study of its reproductive biology is essential in controlling it. Live specimens of *Pterygoplichthys disjunctivus* were obtained from commercial catches from January to October 2016. The total length(TL) and standard length(SL)were measured to the nearest 0.1cm and the weight to the nearest 0.1g, and they were dissected *in situ* in order to obtain the gonads, which were preserved in 5% buffered formalin. A maturity scale was developed based on the macroscopic characteristics of gonads for both males and females, by examining transparency, overall color, vascularization, visibility of oocytes and size of gonads. The gonadosomatic (GSI) index, total fecundity (TF) and relative fecundity (RF) were also studied. The mean GSI for females and males was 3.891 ± 5.117 and 0.2357 ± 0.1696, respectively. The mean RF and mean fecundity of females was 6.101 ±2.785 and 1842 ± 810, respectively. *Pterygoplichthys disjunctivus* shows an extended reproductive period from April to October. Exploiting this species during their spawning season may help in controlling the population of *Pterygoplichthy sdisjunctivus.*

Key words: invasive, *Pterygoplichthys disjunctivus*, reproductive biology, controlling.

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