

**SHORT COMMUNICATION****Biofloc-based reproductive performance of Nile tilapia *Oreochromis niloticus* L. broodstock**

Julie Ekasari<sup>1,2</sup>, Muhammad Zairin Jr<sup>1</sup>, Dian Utami Putri<sup>1</sup>, Nora Putri Sari<sup>1</sup>,  
Enang Harris Surawidjaja<sup>1</sup> & Peter Bossier<sup>2</sup>

<sup>1</sup>Department of Aquaculture, Faculty of Fisheries and Marine Science, Bogor Agricultural University, Bogor, Indonesia

<sup>2</sup>Laboratory of Aquaculture and Artemia Reference Center, Faculty of Bioscience Engineering, Ghent University, Ghent, Belgium

**Correspondence:** P Bossier, Laboratory of Aquaculture & Artemia Reference Center, Faculty of Bioscience Engineering-Department of Animal Production, Ghent University Rozier 44, B-9000 Ghent, Belgium. E-mail: Peter.Bossier@UGent.be

Intensive aquaculture, applying high density of animals per unit of area needs to be supported by adequate production inputs including seeds and feed. Intensive aquaculture at the same time also needs good management, in particular water quality, to ensure that environmental conditions remain conducive for optimal growth. Various water quality management strategies for intensive aquaculture system have been proposed and applied, including biofloc technology (Crab, Avnimelech, Defoirdt, Bossier & Verstraete 2007).

outdoor concrete tanks with a dimension of 3 m × 2 m × 0.7 m were filled with 3 m<sup>3</sup> of water and randomly assigned for control and BFT treatment (four replicates). Nile tilapia at respective average body length (ABL) and weight (ABW) of 16.7 ± 0.5 cm and 85 ± 5 g, were acclimatized for 7 days, and stocked at a density of 20 fish.m<sup>-3</sup> at a male:female ratio of 1:4. Molasses (44% C) was added in BFT treatment tanks as an external carbon source at an estimated C:N ratio of 15 (Avnimelech 2007). Commercial feed (30% crude