



ChemTech

International Journal of ChemTech Research

CODEN (USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555
Vol.10 No.4, pp 657-663, 2017

The Influence of Fertilization Media pH towards *P.hypophthalmus* Eggs (*Pangasionodon hypophthalmus*) Fertilization

Yudho Adhitomo*, Maheno Sri Widodo, Agoes Soeprijanto

Faculty of Science and Marine Science, Brawijaya University, *Jalan Veteran*, Malang
65145, East Java, Indonesia

Abstract : The purpose of the study was to find out the most suitable pH for *P.hypophthalmus* eggs (*Pangasionodon hypophthalmus*) fertilization. The setting of the study was the Freshwater Aquaculture Center or *Balai Perikanan Budidaya Air Tawar* of which location was Jambi, Sumatera in August 2016. The weight of the male fish was between 1.45 – 1.91 kilograms while that of the female fish was 4.5 kilograms. The study used complete random design with four different pH treatments namely pH 7 (control), pH 6, pH 8, pH9 and pH10; each of the pH treatments were repeated three times. The parameters being observed were degree of fertilization and hatching. The supported parameters were sperm density, motility, oocyte diameter and Testicle/Gonadal Somatic Index. The findings of the study were the highest percentage of fertilization was during pH8 treatment or 98.99 ± 1.75 and the lowest percentage of fertilization was during pH 6 treatment or 81.21 ± 9.23 . In addition, the highest percentage of hatching was during pH 8 treatment or 47.75 ± 15.13 and the lowest percentage of hatching was during pH 10 treatment or 29.14 ± 8.50 . The average sperm density was 3.07×10^9 and the sperm motility was $>86.66\%$. oocyte diameter in final gonad maturation stadium was 0.80-1.00 millimeter and 84.84%. Finally, the average Testicle/Gonadal Somatic Index (GSI) was 4.72.

Keywords : *Pangasionodon hypophthalmus*, pH, Fertility.

Yudho Adhitomo *et al* /International Journal of ChemTech Research, 2017,10(4): 657-663.
