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PENGARUH SUHU DAN OKSIGEN TERLARUT TERHADAP TINGKAT METABOLISME DAN KELANGSUNGAN HIDUP LARVA IKAN BAUNG (*Mystus nemurus* Cuv. & Val.)

(Effect of temperature and dissolved oxygen on metabolic rate and survival rate of larvae green catfish (*Mystus nemurus* Cuv. & Val.)

Usman Muhammad Tang [1], Ridwan Affandi [2], R. Widjajakusuma[3], Heru Setijanto[3] dan M.F. Rahardjo[2]

[1] Fak. Perikanan dan Ilmu Kelautan Universitas Riau,
Jl. Raya Bangkinang KM 12,5 Telp. 0761-63275 Pekanbaru.
[2] Fak. Perikanan dan Ilmu Kelautan IPB Bogor.
[3] Fak. Kedokteran Hewan IPB Bogor.

ABSTRACT

The rearing technology of green catfish larvae has not yet establihed. Hight mortality occurred in the early larval stages. This experiment was conducted to study the effect of temperature and dissolved oxygen on metabolic rate and survival rate of green catfish larvae. 3600 green catfish larvae with initial individual mean weights of 1.24 ±0.19 mg and lengths of 5.85 ± 0.71 mm (one day after hatching) were reared in the aquaria of 30cm x 30cm x 40cm dimension. Treatments were done at 3 levels of temperature 27 oC, 30 oC and 33 oC; and 3 levels of dissolved oxygen 6.47 mg/L, 1.05 mg/L and 0.78 mg/L and 3 replications. The result showed that temperature and dissolved oxygen was significant to the oxygen consumption. Oxygen consumption of 0.67±0.25 mg O2/h/g and 0.86± 0.005 mg O2/h/g was highest in larval reared at 33 oC and dissolved oxygen 6.47 mg/L for 3 weeks. The higher water temperature the greater the oxygen consumption. The oxygen consumption declined with decreasing dissolved oxygen in the water, indicating an oxyconformer type. The temperature was not significant to the survival rate and growth of the larvae. However the effect of dissolved oxygen was significant to the growth rate (P<0.05). Growth rate of 25.69 ± 0.55% was highest in larval reared at 6.47 mg/L for 3 weeks.

Key words**: Temperature, dissolved oxygen, metabolic rate, **Mystus nemurus

PENGANTAR

Usaha reproduksi ikan baung *(Mystus nemurus)* sudah lama dirintis, yaitu sejak tahun 1983 dan upaya penelitian telah dilakukan, baik reproduksi secara alami di kolam maupun reproduksi buatan dengan metode *stripping* yang menggunakan hormon perangsang seperti *human corionic gonadotropin* (hCG), ovaprim dan ekstrak kelenjar

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