

Yutthana Savangarrom 2006: The Study of Rice Straw Supplement in Snakeskin Gourami, *Trichogaster pectoralis*, Regan Culture. Master of Science (Aquaculture), Major Field: Aquaculture, Department of Aquaculture. Thesis Advisor: Mr. Ruangvit Yoonpundh, D.Tech.Sc. 85 pages.
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The experiment on culturing of the snakeskin gourami (*Trichogaster pectoralis* Regan), 2.20 g. of an initial average body weight and 5.5 cm. in total length, at 5 fish/m² in a 400 m² earthen pond was conducted by supplementing rice straw to dried chicken manure at the three different ratios of 1: 1, 2: 1 and 3: 1 (by dry weight), respectively. Dried chicken manure was only fertilized a pond for the control at 40 kg/pond. Rice straw and dried chicken manure were added to ponds following those ratios at once a month throughout the culture period of 168 days. Results indicated significant differences on the fish growth performance amongst those ratios and the control ($p < 0.05$). The best growth performance was exhibited at 1: 1 with 32.7 g, 13.2 cm, 43.6 kg/pond, 0.18 g/day, 1.61 %/day and 81.5 % for the final average body weight, total length, net yield, daily weight gain, specific growth rate and survival rate, respectively. Water quality parameters shown statistically significant differences ($p < 0.05$) throughout the culture period amongst those ratios and the control were dissolved oxygen at dawn, pH and temperature at dawn and dusk and Chlorophyll-a, respectively, while dissolved oxygen at dusk, total alkalinity, hardness, orthophosphate and total ammonia-nitrogen were not statistically significant differences ($p > 0.05$). Two major groups of zooplankton, rotifer and copepod, were existed the same quantity between those of supplementing rice straw to dried chicken manure and the control throughout the culture period ranging 27-2,916 cells/ml for rotifer and 0-350 cells/ml for copepod, respectively.

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