Nuttapong Muangsuwan 2007: Effect of Copra Meal and Cassava Pulp on Growth, Digestibility and Feed Utilization in Hybrid Catfish (*Clarias macrocephalus* x *Clarias gariepinus*). Master of Science (Aquaculture), Major Field: Aquaculture, Department of Aquaculture. Thesis Advisor: Assistant Professor Orapint Jintasathaporn, Ph.D. 74 pages.

Effect of copra meal and cassava pulp on growth performance, feed digestibility and diet utilization in hybrid catfish (Clarias macrocephalus x Clarias gariepinus) of 62.33 – 64.67 g. was studied for the feeding period of 2 months. The diet including copra meal or cassava pulp 0, 10, 15 and 20 % were prepared by contained 30 % crude protein and isocaloric diets was 2,800 kcal/kg. The result demonstrated that water stability and gelatinization of treatment diets were not significantly different (p>0.05). The hybrid catfish fed copra meal 15% for 2 months showed highest growth performance, protein efficiency, lowest feed conversion ratio and production cost for 1 kilogram fish (p<0.05). Average daily weight gain was 1.14 gm/fish/day, protein efficiency was 2.31, feed conversion ratio was 1.43 and production cost for 1 kilogram fish was 18.23 baths. Digestibility coefficiency of 0% and 20% copra meal and 20% cassava pulp feed was not significantly difference (p>0.05). There were 81.14%, 80.84 % and 80.29 %, respectively. Hemoglobin, hematocrit and red blood cell of fish fed with copra meal and cassava pulp for 1 and 2 months show no difference (p>0.05). Blood triglyceride of catfish fed with cassava pulp 10-20 % was lower than the control feed (without copra meal and cassava pulp) (p<0.05). Blood glucose in fish fed with cassava pulp 20 % for 1 month was lowest (p<0.05), whereas that of 2 month showed no significant difference (p>0.05). Glycogen in liver of hybrid catfish was not significantly different (p>0.05). The result indicated that hybrid catfish with average size of 60-120 g. can use copra meal or cassava pulp up to 15% and 10%, respectively.