CERRIA INARA. Aquaculture. Study of Rubber Seed Meal (Hevea brasiliensis) As Feed Ingredient for Common Carp Fry (Cyprinus carpio Linn) Diet. Under direction of M. AGUS SUPRAYUDI and NUR BAMBANG PRIYO UTOMO.

This research was conducted to study rubber seed meal (Hevea brasiliensis) as a candidate of plant protein source in diet for common carp fry (Cyprinus carpio Linn). This study were divided into 2 experiments: digestibility and growth. Processed rubber seed meal (pRSM) and unprocessed (upRSM) were subjected to digestibility experiment and Cr₂O₃ at level of 0.05% was used as a tracer. The faeces were daily collected 30-60 minutes after feeding for 14 days. Dry matter, protein, phosphorus and calcium were used as digestibility parameters. Four treatment diets with isoprotein (30%) were used to evaluate growth performance index. Diet P₁ have not contained protein come from pRSM. Diet P₂ and P₃ contained 50 and 75% of protein come from pRSM. Diet P₄ contained 50% of protein come from upRSM. Completely randomized design with 4 treatments and 3 replicates were used to this experiment. Common carp fry 2.19 ± 0.005 g was entered to 18 aquariums at 20/aquarium and feed tested diet at satiation for 40 days of culture period. The evaluated parameter were survival rate, feed consumption, feed efficiency, relative growth, protein and lipid retention, water/lipid/glycogen liver content and hepatosomatic index, histological and haematological blood. The result showed that common carp fry relatively better digested pRSM than upRSM. Moreover, the increasing of protein percentage from pRSM until 50% resulted best growth performance indicator and haemotological blood parameter. It is concluded that pRSM can be used as protein source up to 50% in diet common carp fry.

Key words: common carp fry, Cyprinus carpio L., rubber seed meal, processed, unprocessed.