D-12:RICE FISH INTEGRATION : *Oreochromis niloticus* RECRUITMENT IN A RICE-FISH SYSTEM WITH POULTRY MANURE AS THE ONLY FERTILIZER

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Rice cum fish culture has a gloomy future due to the increased application of insecticides and weedicides. Local requirement of fish fry and fingerlings for aquaculture cannot be obtained from the available pond space. This experiment was performed to determine whether *Oreochromis niloticus* (Nile tilapia) recruits could be obtained when cultured in paddy fields.

Experiments was performed in four rice plots 45 m^2 each, with a pond refuge of 1 m x 0.5 m having a depth of 0.6 m. Fourteen male (25.5 ± 1.0 g) and thirteen female (28.11 ± 1.3 g) Nile tilapia were introduced into each rice plot 14 days after transplanting. Each plot received poultry manure at 1680 kg/ha (DW basis) as a basal application. Supplementary fertilization with poultry litter was applied at 840 kg/ha/week (High fertilizer level) for two plots while the other two plots received at 420 kg/ha/week (Low fertilizer level) for eight weeks. A systemic insecticide was twice applied at the recommended dosage with no effect to fish.

Tilapia recruitment was observed after 86 days in all the four plots. A total of 104 tilapia recruits each with a body weight of 2.01 ± 0.15 g were harvested from the four plots. Body weights of recruits ranged from 7.5-0.1 g. Recruits were of four different sizes. There was no significant effect (p 0.05) on the supplementary fertilizer level on tilapia recruitment.

Results indicate that there is potential for tilapia fry and fingerling culture in rice fields under local farming systems.

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