

NOTICE OF PUBLICATION



Title: Produccion y aspectos economicos del cultivo de tilapia en estanques fertilizados con gallinaza (Production and economic aspects of tilapia cultivation in ponds fertilized with chicken litter)

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Abstract: The production of male tilapia (*Oreochromis niloticus*) (10,000 fish/ha) in 0.1 ha earthen ponds fertilized with layer chicken litter was studied during the rainy and dry seasons at the "El Carao" Aquaculture Experiment Station, Comayagua, Honduras.

Four rates of chicken litter application were tested using a completely randomized design; weekly applications of chicken litter, on a dry matter basis, were: 125, 250, 500, and 1000 kg/ha. After a culture period of 150 days, yields during the rainy season were, respectively, 1159, 1589, 1856, and 2229 kg/ha, while during the dry season the respective yields were 1116, 1399, 1884, and 2295 kg/ha. No seasonal differences in production ($P > 0.05$) were detected at any fertilizer level. Fish production increased significantly ($P < 0.05$) with an increase in manure input, and was described by the equation $Y = 832.693 + 2.813x - 0.0014x^2$, $r^2 = 0.893$.

Income from the sale of fish produced ranged from L. 3674/ha (2 Lempiras = \$ 1US) to L. 7256/ha and total production costs ranged from L. 2364/ha to L. 3856/ha for the low and high fertilization rates, respectively. The cost per kilogram of fish produced was L. 2.13 at the 125 kg/ha/wk rate of chicken litter application and L. 1.75 where chicken litter was applied at 1000 kg/ha/wk. The lowest production cost (L. 1.68/kg) was obtained at the 500 kg/ha/wk fertilization rate.

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