

Evaluation of untreated *Jatropha curcas* Kernel Meal at low inclusion level on Nile tilapia (*Oreochromis niloticus*) performance, feed utilization and body composition.

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Abstract: Objective: The present study was undertaken in order to evaluate untreated *Jatropha curcas* kernel meal at low inclusion level on Nile tilapia (*Oreochromis niloticus*) fingerlings performance, feed utilization and body composition. **Materials and Methods** Feeding trial was conducted for eight weeks. Fish were fed diets formulated with low inclusion level of *Jatropha* (0%, 1.5 and 2.5%). All diets were isonitrogenous (280g protein kg⁻¹) isocaloric (4561.7 kcal kg⁻¹ gross energy). One hundred and thirty five fish were randomly distributed into nine aquaria (each 60×30×40 cm³) to represent three treatments and each treatment was replicated in three aquaria. All aquaria were stocked with fifteen fish (initial weight 11.06g fish⁻¹). All fish fed diets two times daily at 4% feeding level of the total biomass. **Results** All inclusion levels showed decrease in growth performance parameters which reflect on feed utilization parameters. On the other hand, there was slight difference in the carcass body composition. That's may be attributed to presence of toxic compound found in *Jatropha curcas* present in Egypt and anti-nutritional factors too. **Conclusion** this study concluded that we can apply *Jatropha* in fish diet after applying different detoxification treatments including chemical, physical, biological and or combination of these treatments with the emphasis on Egyptian strains.

Keywords: Nile tilapia, *Jatropha*, growth performance, feed Utilization, body composition.

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