

International Conference on

# Aquaculture & Fisheries

July 20-22, 2015 Brisbane, Australia

## Assessment of some plant products for the control of smoked fish pest, *Dermestes maculatus* Degeer (Coleoptera: Dermestidae) in *Clarias gariepinus* Burchell (Pisces: Clariidae)

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Appropriate post-harvest management strategies are critical in sustainable fish production in the tropics. One of such approaches is the control of insect pest infestation, which is a major factor for the economic loss of smoked fishery products in the tropics. The use of synthesized insecticides is hampered by high cost of purchase, health concerns and right application. In this study, the efficacies of the powders of four locally available and inexpensive plant materials, namely: *Dennettia tripetala* Baker, *Eugenia aromatica* Hook, *Monodora myristica* (Dunal) and *Piper guineense* (Schum and Thonn) at 2.5, 5.0, 7.5 and 10.0 g/100 g smoked *Clarias gariepinus* Burchell were evaluated for the control of the dermestid beetle, *Dermestes maculatus*. Each of the four plant powders caused significantly high ( $P < 0.05$ ) mortality in both the adults and larvae of the fish beetle at all concentrations when compared to the control and was effective in inhibiting progeny development in the treated fish. The four plant materials could play a major role in protecting one of the commercially important fish species in the tropics and thereby prevent smoked fish losses, improve income generation, enhance the health and socio-economic status of fish consumers and processors.

### Biography

Felix Olusegun Akinwumi holds a Ph.D in Post-Harvest Fish Technology and is currently an Associate Professor in the Department of Environmental Biology and Fisheries, Adekunle Ajasin University, Akungba-Akoko, Ondo State, Nigeria. He has acquired a considerable experience in research, teaching and administration at the University level. His research activities are concerned mainly with the strategies that will enhance the preservation of the quality and quantity of the fish after its harvest. He has conducted substantial research studies that have elicited interests in the control of smoked fish pests using safe natural insecticides. His research activities also involve the adoption of the appropriate fish processing techniques and storage materials that will enhance the shelf life of the processed fish and thus present an organoleptically acceptable and economically profitable stored fish.

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