## Effects of Five Local Spices on the Mortality and Development of Larvae of Dermestes Maculatusdegeer (Coleoptera: Dermestidae) Reared on Dried Smoked Fish

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**Abstract :** The efficacy of five local spices, namely; Hot pepper (Capsicum annum L.), Black pepper (Piper guinese Schum and Thonn), Sweet basil (Occimum canum Sim), African nut-meg (Monodora myristica Dunal), and Ginger (Zingiber officianale Ross) with conventional insecticide against the D. maculatus was studied under ambient laboratory conditions. The plants were pulverized into powders and applied at the rate of 1.0, 2.0 and 3.0g per 25g of disinfected dried fish. The same amount of fish (25g) was treated with 5ml of 1.0, 2.0 and 3.0 percent solution of conventional insecticide (dichlorvos) and air dried for 2hrs. Ten newly hatched 1st instar larvae (24hrs old) were introduced into each powdered smoked fish in separate beakers. Untreated control was also set up. Observation on the mortality and development were recorded daily until the larvae pupated. Each of the treated smoked fish showed significant (p<0.05) effect on the larval mortality and development when compared with the control. The Piper guinense was as efficacious as dichlorvos in killing all the larvae (100%) at all concentrations before pupation. Ocimum Canunm gave the second best results (50.00, 63.33 and 100%), while the other three spices resulted in less than 50% mortalities at all rate of application. The spice powders were also observed to have extended the larval developmental period. Thus, the spices tested can be recommended for the control of D. maculatus. **Keywords :** development, dermestes maculatus, insecticide, local spices, mortality

**Conference Title :** ICE 2014 : International Conference on Entomology

**Conference Location :** Penang, Malaysia

Conference Dates : December 04-05, 2014