

**DEVELOPMENT OF FOOD MEDIUM FOR REARING *Ephestia cautella*
AND *Corcyra cephalonica* USING LOCALLY AVAILABLE FOOD
MATERIALS**

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Ephestia cautella and *Corcyra cephalonica* are economically-important stored-product pests. Mass culturing is a requirement to have them in sufficient numbers to be used in experiments. While the diet has a direct influence on the development and performance of the larvae and emerging moths, there are limitations associated with the currently used rearing media. The aim of this research was to develop a suitable rearing medium for *E. cautella* and *C. cephalonica* using locally available food materials at the market. The ingredients used were red rice, dog feed, broiler starter and rice flakes in the crushed form; dried grapes, dates, ground nut and soy bean in ground form; and rolled oats and wheat flour. Some of these ingredients were incorporated with honey and glycerol. Ingredients were tested in ten different combinations for *E. cautella* and eleven combinations for *C. cephalonica*. Sixteen fertile eggs of a particular species were introduced into each replicate medium and allowed for incubation. The larvae were weighed 17 and 21 days following egg introduction, and emergence of pupae and adults were also recorded. Weight gained in larvae and emergence rate of adults differed across the media tested. Media comprised of honey and glycerol reported significantly higher levels of weight gain and adult emergence. The highest weight gain in larvae of *E. cautella* and *C. cephalonica* was observed with dog feed, rice flakes, rice flour at 1:1:2 which incorporated honey and glycerol at 1:1 while the highest adult emergence of *E. cautella* was observed in the media comprised of 100% red rice which incorporated honey and glycerol at 1:1 ($p < 0.05$). This study reveals that the development of *E. cautella* and *C. cephalonica* varies with the food medium, and honey-glycerol combination enhances the development of these two species.

Keywords: *Corcyra cephalonica*, Dog feed, *Ephestia cautella*, Honey, Rearing media