

FOOD PREFERENCE OF THE RICE MEAL MOTH *CORCYRA CEPHALONICA* STAINTON (LEPIDOPTERA : PYRALIDAE)

The rice meal moth *Corcyra cephalonica* is a serious pest of stored grains and grain products. Krishna Ayyar (1934) reported that the insect preferred sorghum to groundnut kernels, wheat, and rice. Recently this insect was observed as a serious pest of stored cocoa beans in Trichur district of Kerala state. With a view to study the relative susceptibility of cocoa beans to infestation by the pest, a laboratory experiment was conducted from June to December, 1979.

The stored products tested were cured cocoa beans, husked rice, groundnut kernels, tapioca chips (raw) and cashew kernels with moisture content, $14 + 1.5\%$. There were three replications each of 300 g. These were thoroughly cleaned and fumigated with aluminium phosphide tablets in a metallic drum to eliminate latent infestation. The four host media were transferred to wide mouthed glass bottles of capacity 1 l after aerating for four days. One hundred first instar larvae of *C. cephalonica* were drawn out from nucleus culture maintained on jowar and these were used for inoculating each replicate. Larval and pupal periods, adult emergence and fecundity of F_1 moths were recorded for each food material and the data were analysed by employing the analysis of variance technique. The treatments were compared on the basis of Tucky's multiple range test.

The larval duration ranged from 44 days in rice to 56 days in tapioca chips (Table 1), while the pupal period was the shortest in rice (15 days) and the longest in cashew kernels (28 days), the differences being significant in both cases.

The mean adult emergence was the highest (51.67) in rice followed by groundnut kernels (46.67), tapioca chips (40.00), cashew kernels, (37.33) and cocoa beans (32.67).

The mean fecundity was significantly higher in the case of those female moths emerging from rice (59) as compared to those from cocoa beans (42). Fecundity variations were not observed among groundnut, tapioca and cashew kernels.

Rice is found to be relatively more suitable host medium for the development of *C. cephalonica* in view of the shorter life-cycle, better adult emergence and improved fecundity.

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സംഗ്രഹം

ധാന്യങ്ങളെക്കും ധാന്യമാവുകൾക്കും മറ്റും കേടുവരുത്തുന്ന 'കൊർസിറാ സെഫലോണിക്ക' എന്ന പ്രാണിയെ അരി, കൊക്കോകുരു, കശുവണ്ടിപരിപ്പ്, ഉണക്ക മരച്ചീനി, കപ്പലണ്ടിപരിപ്പ് എന്നീ പദാർത്ഥങ്ങളിൽ പരീക്ഷണാർത്ഥം വളർത്തി നോക്കിയതിൽ ഇവയുടെ വളർച്ചയ്ക്കും, ഉല്പാദനക്ഷമതയ്ക്കും ഏറ്റവും അനുയോജ്യം അറിയാണെന്നു കാണുകയുണ്ടായി.

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Reference

Krishna Ayyar, P. N. 1934 A very destructive pest of stored products in South India, *Corcyra cephalonica* Staint. *Bull. ent. Res.* 25, 155-169.

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