



**RESEARCH ARTICLE :**

## Nutritional indices studies of *Sitophilus oryzae* L. feeding on sorghum and split pulses

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**SUMMARY :** An experiment was carried out at the Entomology Laboratory, Horticultural College and Research Institute for Women, Tamil Nadu Agricultural University, Trichy in February-March 2014 to estimate the nutritional indices in *Sitophilus oryzae* L. under room temperature condition. A completely randomized design (CRD) was used with seven treatments ( $T_1$  = sorghum,  $T_2$  = red gram,  $T_3$  = chick pea,  $T_4$  = black gram,  $T_5$  = green gram,  $T_6$  = fried gram and  $T_7$  = lentil) each replicated four times. The assessed parameters were food consumption, weight gained, relative growth rate (RGR), efficiency of conversion of ingested food (ECI), efficiency of conversion of digested food (ECD), approximate digestibility (AD), consumption index and co-efficient of metabolism. Among the split pulses adult weight gained (18.01), food consumption (27.82), AD (84.86), ECI (79.39) and ECD (90.05) was recorded maximum red gram followed by green gram, chick pea, black gram, fried gram and lentil. RGR was significantly maximum in redgram (50.84) followed by lentil (48.58), chick pea (47.81), black gram (47.27), green gram (47.12) and were on par with each other. Among the split pulses lowest RGR value was recorded in fried gram (45.71). In case of larva, weight gained (17.92 mg), RGR (42.51) and AD (73.75) was recorded maximum in lentil followed by other hosts. Based on the observation was made, the adult weight gained and RGR was maximum in redgram, while larva it was higher in lentil.

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