

Preference of Red Flour Beetle, *Tribolium castaneum* (Herbst) to Dehulled Millet Grains

S V S Gopala Swamy, D Sandeep Raja, V Vasudeva Rao and B John Wesley

Post Harvest Technology Centre, Bapatla - 522 101, Andhra Pradesh, India.

ABSTRACT

Preference of red flour beetle to the processed millet grains *i.e.*, dehulled foxtail millet, little millet, proso millet, kodo millet and barnyard millet was tested under free-choice and found higher numbers of red flour beetles moved into proso millet (16.75) followed by foxtail millet (9.75). Insect population buildup was observed under both free-choice and no-choice conditions, higher populations of *T. castaneum* (90.5 and 125.0 no.s respectively) were noticed after 80 days of insect release in dehulled proso millet indicating that it is the most preferred compared to other millets tested. The total sugars were found at higher levels in foxtail millet (59.21%) followed by proso millet (58.94%) and kodo millet (58.85%). Phenols were at the highest level (36.26 mg GAE/100g) in barnyard millet followed by little millet (32.75 mg GAE/100g). Presence of higher contents of sugars and lower contents of phenols in proso millet and foxtail millet probably make them susceptible to pest attack.

Key words: *Dehulled minor millets, Preference and Red flour beetle.*