

EVALUATION OF CERTAIN ENVIRONMENTAL CONDITIONS AND VARIETIES ON PRODUCTION RATE OF PULSE BEETLE (*CALLOSOBRUCHES CHINENSIS*) ON GREEN GRAM

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Safety of stored products from damage caused by insects largely depends on the proper management of three factors, namely temperature, moisture and oxygen. Also different varieties of a stored product response differently in terms of damage. Some authors (Niranze, Harber 1975) have found the seed size and its effects on (*Callosobruches maculatus* and others (Singh 1976) have studied the relative resistance of pulses to *Callosobruches maculatus*.

The storage of green gram (*Phaseolus auricus*) with small seeded varieties like MI₃ greatly reduced the damage done by the beetle *Callosobruches chinensis* and also at relative humidity 0% showed highly significant reduction in terms of damage at 0.01% level. Different relative humidities gave significant treatment differences than control at 0.01% level. The proportion of 'active' form appearance was greatly reduced in small seeded varieties and increased initial population gave increased production of 'active' females. The loss in terms of damage is minimum with skinned green gram, than the normal green gram at both levels observed.

These results support the theory that skinning the green gram when processing is an ideal method to minimize the damage caused by *Callosobruches chinensis*.

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References :

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