STUDIES ON FOOD PREFERENCE OF RHYZOPERTHA DOMINICA (COL. CURCULIONIDAE)

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Abstract

On 5 different kinds of stored foods (wheat, barley, maiz, paddy and pea) Rhyzopertha dominica was reared under laboratory conditions.

The adult insects were released in a sery of test tubes containing different kinds of grain and put them in desiccator and all set were kept in an incubator running at 30° centigrade. After each 24 hours all insects were collected out from the tubes and counted.

The result of this study shows that R. dominica prefers respectively wheat, barley, paddy, and maiz. Peas were never attacked by R. dominica.

Importance and Distribution

Referring to the different samples of stored food product, collected from the localities of wide range of Iran. It was found that centeral and southern provinces of the country are most suitable for *R. dominica*.

Material and Method

In order to investigate the preference of food materials to R. dominica the following experiments was set up.

First of all we reared R. dominia from the egg batch to have enought adult insects were released in each tube containing 20 grams of food material and experiment replicated 5 times. Tubes (containing insects and food) were placed in two desiccators and the desiccators were put in an incubator running at 30° centigrade. After each 24 hours insects were counted and the flour and waste material weight.

Results

According to average number of the adult insects and the weight of waste materials produced

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by the pest after feeding, it was clear that R. dominica prefers mostly wheat and barley, paddy and maiz come after. Peas never been attacked by R. dominica.

References

- GOLEBIOWSKA, Z., 1969: The feeding and fecundity of S. g. (L.), S. o. (L.) and Rhyzopertha dominica F. in weat grain. J. stored Prod. Res. 5 No. 2, pp. 143 155.
- GUNDU RAS, H. H. R. and D. A. WIBUR, 1972: Loss of weat weight from feeding of lesser grain borer. J. of the Kansas Entomological Society, 45 (2): 238 241. Kansas state University, Manhattan,, Ks 66502, U.S.A.
- KAPOOR, S., 1964: Nutritional studies on *Rhyzopertha dominca* F. (BOSTRYCHIDAE: COLEOPTERA) I,-Effects of various natural foods on larval. 295, 8, Dehli.
- LEPESME, P., 1944: Les Coleoteres des denrees alimantaires et des produits-industeriels entrerosis. Paul Lechevalier (Editor) Paris.
- STRONG, R. G., D. E. SBUR and G. J. PARTIDA, 1967: Rearing stored-product insects for laboratory studies, lesser grain borer, granary Weevil, rice Weevil, sitophilus zeamais and Angoumois moth. J. econ. Ent. 60 No. 4 pp. 1078 1082.