Study on effect of different wheat varieties on sex ratio and reproduction of granary weevil, *Sitophilus granarius* L. (Col: Curculionidae)

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ABSTRACT

Granary weevil, *Sitophilus granarius* L.(Col;Curculionidae), is a cosmopolitan pest that feed on cereal grains and cause heavy damages particularly wheat grains. The highest level of damage occurs during larval period when larvae feed on kernel contents. Females only bore in grains to lay eggs. Larvae and pupal periods are completed inside the grains. Fourteen wheat varieties were used to determine sex ratio, developmental period and F1 generation population under laboratory condition. Results obtained for both sexes were found identical. The highest number of weevil insect in seed kernel was counted for Arvand, Navid and M-70-12, while the lowest was for Falat, Golestan and Hirmand. The minimum developmental period were recorded for Arvand, Khazer and M-70-12, whereas maximum number observed for Hirmand, Ghods and Falat respectivety.

Key words: Sitophilus granarius, Reproduction, Sex ratio, wheat varieties

Reference

- BAGHERI-ZENOUS, E., 1986. Pests stored products and control measures, Vol.1 (Harmful coleopterous) of food and industuries grains. Edition of Sepehre. (Farsi) Tehran, Iran, 309 p.
- DOBIE, P., 1992. The Laboratory assessment of the inherent susceptibility of maize varieties to post harvest infestation by *Sitophilus zeamais* Match. (Col: curculionidae) J. Stored Prod. Res., Vol. 10: 183-197.

- FAVA, A. and SPRINGHETTI, A., 1991. Egg distribution of *Sitophilus granarius* L. in *Triticum aestivum* Journal of Applied Entomology, 111 (4): 406-411.
- KOSSOU, D. K., 1993. Comparison of improved and Loeal Maize varieties in the republic of Benin with emphasis on susceptibility to *Sitophilus zeamais*. J. Stored Prod., Res., Vol. 29, 7: 333-343.
- RODRIGUEZ-COBOS, C., 1993. Susceptibility of grain of several variety of wheat, *Triticum aestivum* L., to the granary weevil, *Sitophilus granarius* L. Reviews of Agricultural Entomology, Vol., 80 (2): 179.
- SINGH, D., 1963. Relationship of some nutritional properties of the corn kernel to weevil infestation. Crop Sci., 3: 259-261.
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