

**The estimation of infestation rate to sunn pest of different wheat and barley varieties
and damages caused by this pest**

M. HEYDARI, V. GHADIRI, A. KASHANI, M. REZABAIG & P. IRANI

Plant Pests and Diseases Research Institute Tehran-Evin, Plant Pests and Diseases and
Research Laboratory-Karadj, Plant Pests and Diseases Research Section-Kermanshah,
Seed and Plant Improvement Research Institute, Karadj

ABSTRACT

To estimate the tolerance of some wheat and barley varieties, they sowed as a complete randomized design pursuing the standards of dry and irrigated farming. Estimation of varieties has been done using the data on population density of different life stages of sunn pest and damages caused to varieties.

While the different varieties sown in irrigated farms of Tehran province in 1990 showed no significant difference regarding pest density (the mean pop. was $1.8-3/m^3$), damages appeared on varieties Ghods and Rhowshan seen as bud, stem and ear drying inflicted by adult female insects and seed damage caused by nymphs and adult of new generation was higher than on others and showed to be significant. The above mentioned results have also been confirmed by repetition of tests in 1991. While the pop. density of sunn pest in wheat varieties Sardari, T. R. S, Omid, Azadi and barley varieties Arivat and Star was very low in 1990 and ranged from $0.5/m^3$ for wheat Azadi and barley Arivat to $0.12/m^3$ for wheat Omid, this density was 1/5 of that of previous year. ANOVA showed no difference between mentioned varieties regarding amount of damage.

Studying number of ear per surface area and weight of 1000 ear it appeared, these factors were not significantly different in experimental field of these test areas, where as the percent of damage to seed coincided the degree of sensitivity of varieties regarding the concentration of different life stages of nymphs and new adults.

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Address of the authors: Eng. M. HAYDARI. Plant pests & Diseases Research Institute,
P. O. Box: 1454-19395, Tehran.

Eng. V. GHADIRI. Plant Pests & Diseases Research Laboratory, P. O. Box:
488, Karadj.

Eng. A. KASHANI, Plant Pests and Diseases Research Section-Kermanshah.

Dr. P. IRANI, Seed and Plant Improvement Research, Institute Karadj.