Determination of Economic Injury Level (EIL) of cereal leaf miner, *Syringopais temperatella* Led. (Lep.: Elachistidae), in Khuzestan province

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ABSTRACT

Cereal leaf miner is one of the most important insect pests in Southern, Eastern and Southeastern parts of Iran. It cause quantitative and qualitative losses to cereal yield via feeding on leaf tissues. In a two year (2000-2001 and 2003-2004) study, using cards to estimate population density, economic injury level of this insect pest was determined. The results showed that there was a regressive relationship between the number of 1st instar larvae per plant and the grain yield weight at harvest time. The regression equation was constructed as follow: Y= (0.922 - 0.15Ln (X))² where Ln= natural Logarithm, x= No. of 1st instar larvae per plant at 3-4 leave stage and Y= yield estimate for each plant. Thus based on costs of chemical control, yield reduction estimation and yield price the EIL in dry farming at plant densities of 100, 150 and 170 plants per m² estimated as 4, 9 and 9 larvae per plant (400, 1350 and 1530 larvae per m²) in 2000-2001 and in 2003-2004 at plant densities of 100, 150 and 170 the EIL, showed to be 4, 8, and 10 larvae per plant (400, 1200 and 1700 larvae per m²) respectively.

Key words: Economic Injury Level, Cereal leaf miner, Wheat, Khuzestan

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