## عنوان مقاله:

Evaluation of resistance to Sunn pest (Eurygaster integriceps Put.) in wheat and triticale genotypes

## محل انتشار:

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## خلاصه مقاله:

Sunn pest (Eurygaster integriceps Put.) is one of the major pests of wheat in Iran. Identification of resistantcultivars is an effective integrated pest management (IPM) strategy. To identify the genetic response of wheat and triticale to Sunn pest, and determine the relationship between resistance and morpho physiological traits, eight bread wheat breeding lines/cultivars, four durum wheat lines, three triticale lines and five synthetic wheat lines were evaluated for resistance to Sunn pest. The response of these genotypes to Sunn pest was evaluated in the field under artificial infestation in cages using a randomized complete block design with three replications. At heading, eight adult insects were released into each cage (۳۰×۴۰×۱۲۰ cm) and ۳۰ nymphs were released at the grain-filling stage. Spike damage (%) and grain damage (%) were recorded. An analysis of variance revealed significant differences among the genotypes for spike injuries caused by adult insects. Cultivar Falat (۱.۸% spike damage) showed the least damage and is considered the most resistant genotype. Durum line D-۸۱-۱۵ and Triticale-۱, each with ۲% spike damage, were more resistant than the other genotypes. Based on grain damage caused by nymphs of Sunn pest, Shiraz, with ۱۳% damage, was the most susceptible genotype. In this study, no significant correlationwas observed between resistance to Sunn pest and the measured morpho-physiological traits. Nymph feeding on grain reduced grain protein content, Zeleny sedimentation .volume, bread volume, flour water absorption rate, gluten index and grain gluten elasticity

## کلمات کلیدی:

Bread quality, Durum wheat, spike damage, grain damage, resistance