

**Project Title** : Investigations on Damage Rate Causes by *Eurygaster integriceps* Put. (Heteroptera: Scutelleridae) on Wheat Grains

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**Supporting Body** : GDAR

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**Summary** : The *Eurygaster integriceps* Put. (Heteroptera: Scutelleridae) which affects the wheat cultivation areas and leads to losses quality and quantity of yields is the most important pest. In this study, the affects of nymphs and adult individuals of *E. integriceps* at the end of the feeding on spikes of wheat; on suction number, thousand grain weight, speed of germination, germination capacity were determined. The variety of wheat Cumhuriyet 75 used in this experiment. The experiments were carried on Cumhuriyet 75 which is the type of bread wheat (*Triticum aestivum* L.). After all the nymph stages and adults individuals of *E. Integriceps* were maintained to be hungry and thirsty for 24 hour, varies number of individuals such as 3, 6, 9 and 12 were kept separately in the cage contains 3 wheat spikes for  $24\pm 1$  hours. In the harvest season, suction number and thousand grain weight were determined on wheat grains obtained from each spike groups harvested separately, and then tested their germinations in conditions of  $20\pm 1$  °C of temperature,  $65\pm 5\%$  of relative humidity in the germination room. As the results of determination of damage causes by *E. integriceps* on wheat grains, the findings indicated that rate of damage caused by the increase of individual number occurred on grain showed an increase from the 3<sup>rd</sup>. nymph period and reached to maximum level at the 5<sup>th</sup> nymph period. As far as biological periods are considered, it is determined that the rate of damage on grains continuously increased from 1<sup>st</sup> nymph period to 5<sup>th</sup> nymph period, however, due to the early beginning of ripen period of wheat, it was observed that adults had difficulty in feeding inside the grains which are in physiological ripen. Because of these reasons, it is thought that preference of early varieties of wheat is important for protection against *E. integriceps*.