

Determination of the Aphid Species Feeding on Wheat and Their Population Growth In The District of Çumra and Karapınar (Konya)

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Aim of the study: This study was conducted to determine the aphid species causing yield loss of wheat and their population growth through the growing season between 2014-2015 and 2015-2016 at two localities in Konya which is including Çumra and Karapınar.

Material and Methods: Studies were conducted in Çumra and Karapınar, to determine aphid species and also population distribution. The observations of aphids were done from the 1st of April till the end of growing season and performed by weekly counting of aphids on randomly selected 20 plants. All counting is monitored during the growing period 2014-2015 and 2015-2016. Collected aphids were examined in laboratory and aphids were preserved in 1.5 ml tubes, containing 70% alcohol, until identification. Aphids were identified by Prof. Dr. Meryem UYSAL from Selcuk University.

Results: During the growing period 2014-2015 only *Rhopalosiphum padi* (L.) and *Sitobion avenae* were found feeding cereal aphids on wheats both Çumra and Karapınar localities. In addition this localities the aphid population exhibited lower densities during to growing period. In 2015-2016 period at Çumra locality *R. padi* (L.), *S. avenae*, *Diuraphis noxia* and *S. elegans* were found on wheats. The first aphids colonized wheat plants in early May, and their abundance was low throughout the early season, began to increase in late May and peaked in early June. In this period *D. noxia* was found as a common harmful insect. Also it was observed that after tillering stage and on the 1th of June 2016, the population reached the peak point by 7.8 aphids/per plant and remained on that level until hard dough stage. In 2015-2016 period at Karapınar locality *R. padi* (L.), *R. maidis*, *S. avenae*, *D. noxia* and *S. elegans* were found feeding cereal aphids on wheats. In this locality all aphids was found less than 2 aphids/per plant on weekly counting and *R. padi* was determined in lower densities on leaves in mix with *R. maidis*.

Keywords: Cereal aphids, wheat, population growth, *D. noxia*.