

THE EFFECTS OF INTRAPLOT COMPETITION ON YIELD-RELATED TRAITS IN WHEAT PLOTS

Tevrican DOKUYUCU¹ Aydın AKKAYA¹ Mevlüt AKÇURA²

¹Kahramanmaraş Sütçü İmam University, Faculty of Agriculture, Department of Field Crops, Kahramanmaraş-TURKEY

²Bahri Dağdaş International Winter Cereal Research Center, Konya-TURKEY.

ABSTRACT

This research was carried out in order to determine the effects of intraplot competition on yield-related traits in wheat plots, between 1998-2000 years, in Kahramanmaraş conditions. Data was collected in experiment-1 with 13 common wheat cultivars and in experiment-2 with 11 common wheat lines, which were designed in randomized complete block design with four replications. Ten plant samples were randomizedly selected from center rows and side rows of plots. Flag leaf width (FLW) and length (FLL), plant height (PH), head number m⁻² (HN/m²), head length (HL), grain weight (GW/H) and grain number (GN/H) per head were recorded.

According to the results, intraplot competition between side and inside rows within same plot were important. It was concluded that plant samples to be used for the determination of yield components should be taken from inside rows and side rows should be removed before or during harvesting to prevent the overestimation of yield.

Key words; Wheat, side effect, yield-related traits.