Effect of tiller number per plant on grain yield and yield components of durum wheat at different planting densities

Abstract

The effect of tiller number per plant on grain yield and yield components of durum wheat was investigated at different planting densities. The results showed that increasing the tiller number per plant significantly increased the grain yield and yield components. The highest grain yield and yield components were obtained at the highest planting density. The study concluded that increasing the tiller number per plant can improve the yield and yield components of durum wheat.

Introduction

Durum wheat is a major crop in many countries, and its yield and yield components are influenced by various factors, including tiller number per plant. The present study aimed to investigate the effect of tiller number per plant on the grain yield and yield components at different planting densities.

Materials and Methods

The experiment was conducted at the Agricultural Research Station of the University of Agriculture, Iran. The study was conducted using a randomized complete block design with four replicates. The treatments consisted of four planting densities (250, 500, 750, and 1000 plants per square meter) and four tiller numbers per plant (1, 2, 3, and 4). The experiment was conducted over two seasons, and the grain yield and yield components were measured.

Results

The results showed that increasing the tiller number per plant increased the grain yield and yield components. The highest grain yield and yield components were obtained at the highest planting density. The study concluded that increasing the tiller number per plant can improve the yield and yield components of durum wheat.

Conclusion

The results of the present study indicate that increasing the tiller number per plant can improve the yield and yield components of durum wheat. Therefore, careful management of tiller number per plant is recommended to achieve the maximum yield and yield components.