Evaluation of Iranian safflower cultivars reaction to different sowing dates and plant densities

Mohammad SHARIF MOGHADDASSI, Mojtaba YUSEFIRAD
Islamic Azad university, Saveh branch, Felestin Esq. 39137-366, Saveh, Iran, (e-mail: Memo1340@yahoo.com)

Abstract

Two experiments were conducted to evaluate reaction of Iranian safflower to different sowing dates and plant density at Saveh region, during 2006-2008. The experimental design was set up as split split plot in a randomized complete block with three replications. Sowing dates and cultivars consider as main and sub plots respectively, under three plant densities as sub sub plots. The effects of sowing dates on some traits including seed and oil yields, flower yield, plant height, Leaf Area Index (LAI), Crop Growth Rate (CGR) and Net Assimilation Rate (NAR), were studied. The results showed that late planting in safflower canopy caused a significant decrease in seed and oil yields. Combined analysis of two years, demonstrated that Padideh cultivar showed the highest grain and oil yields (2850 and 779 kg/ha) at plant density of 40 plant/m² in the first sowing date. Goldasht cultivar with 160 kg/ha produced the highest flower yield at the highest plant density and first planting date (Sep20).

Key words: safflower, sowing date