

The Effect of Nitrogen Fertilizer Rates on Yield and Yield Components of Two Rapeseed Cultivars in Northern Iran

Majid ASHOURI

Islamic Azad University, Lahijan Branch, Lahijan, Iran
(e-mail: mashouri48@yahoo.com)

Abstract

There are 460000 hectares of paddy fields in north of Iran in which rice is planted during the first six months of each year. However, since during the second half of the year no farming activities takes place these paddies turn to barren lands. The cooking oil annual consumption rate in Iran is more than 850000 tons of which the internal production share amounts to only 10% and the remainder must be provided by means of import. After rice harvesting many different crops such as rapeseed can be planted. One way to increase the yield in hectare of rapeseed is by utilization of fertilizers specially nitrogen fertilizer.

This experiment was a factorial design with three replicates and was conducted in an experimental field in Lahijan in 2005-2006. The first factor included of two varieties by the names of Hyola and PF7045/91. The last factor contained 5 different nitrogen fertilizer divisions in four important growth stages of planting time, 1 month after planting time, out of plant from rosette stage and flowering.

The results clearly indicate that in most of studied characteristics two varieties had very significant differences. Considering most of the surveyed characteristics and compared to other divisions, division n2 (1/3 planting time, 1/3 out of plant from rosette stage and 1/3 flowering) has shown superiority. These results confirm the fact that proper timing on nitrogen fertilizer increases the grain yield.

Key words: rapeseed, yield, nitrogen fertilizer divisions, paddy field, Iran

sa2008_a0505