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THE DERMINATION OF NEW PEANUT VARIETIES AND THEIR YIELD AND QUALITY IN OSMANİYE REGION

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Professional paper

Summary

This study was conducted in 2014 as a main crop, between April and September at the research farm of the Oil Seeds Research Institute in the Osmaniye region, in Turkey. In this study, we were compare the yield and product quality of the most cultivated NC-7 peanut variety in Osmaniye region and other 12 different peanut varieties altematives (Halisbey, Anoğlu-2003, Sultan, Ç-1, Osmaniye-2005, Bradley, Wilson, Batem-5025, Batem Cihangir, Georgiya Green, Florispan ve NC-V 11).
The experimental design was Randomized Complete Blok with three replications. Pod number per plant, pod yield per plant, pod yield per ha, 100 pod weight, 100 seed weight, seed/pod ratio, first quality pod weight ratio, first quality pod number ratio, second quality pod weight ratio, second quality pod number ratio, oil content, protein content and fatty acid were analyzed.
In this study, while the lowest pod yield was obtained from Çin-1 varieties (3952.3 kg ha-1) the highest pod yield per hectare was obtained from Halisbey (6293.6 kg ha^{-1}).

Key words: *Peanut, variety, yield and yield components.*

INTRODUCTION

Peanut ***(Arachis hypogaea*** L.) also known as peanut, is an important oil seed, food and feed crop grown. Peanut occupies nearly 28.3% of the cultivated area and contributes 31.7% of the production area of the total oil seed in country. Peanut ***(Arachis hypogaea*** L.) is cultivated in the semi-arid tropical and sub-tropical regions of nearly 100 countries in six continents between 40° N and S of the equator. It is an important legume grown and consumed globally and in particular in sub-Saharan African countries (Okello ***et al.,*** 2010a). According to years 2013, peanut which is 25.5 million hectares of harvest area is production 45.3 million tons and average yield 179.0 da in the world. China, India, USA, Nigeria and Indonesia are the first row peanut production in the World.
For years 2014, harvest area for peanut is 33 thousand hectares in Turkey. Production is 123 thousand tons. Adana is provided the highest yield in Turkey. This city is followed with production 3.4 tons by Osmaniye. In many countries, peanut cake and haulms (foliage, straw/stems) are used as livestock feed. Peanut is also a significant source of cash income in developing countries that contributes significantly to livelihoods and food security. There has been a substantial increase in peanut production as both a food and cash crop because of increased awareness of their value as a source of protein (23-25% content), fat (40-50%), oil (40-52% content) and (10-20%) carbohydrate depending on the variety (Savage and Keenan, 1994).
With the costs of animal protein ever increasing, peanut is becoming an even more important source of protein. A kilogram of peanuts is high in food energy and provides approximately the same energy value as 2 kilograms of beef, 4 liters of milk, or 36 medium-size eggs. Peanut seeds are also a nutritional source of vitamin E, niacin, falacin, calcium, phosphorus, magnesium, zinc, iron, riboflavin, thiamine and potassium. Peanut is consumed raw, roasted, blanched, as peanut butter, crushed and mixed with a cooked paste. Peanut production, marketing and trade provide sources of employment, income and foreign exchange.

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