EFFECT OF DIFFERENT LEVELS OF N-FERTILIZER ON THE YIELD AND QUALITY OF SUNFLOWER

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Application of nitrogen @ 100, 150 and 200 kg ha^{-1} gave the grain yield of 16.8, 22.3, 28.7 and 35.4 q ha^{-1}, and differed statistically. Maximum number of filled seed (1024.1 per head) were found with 200 kg N ha^{-1} compared with no fertilizer (787.4). A gradual increase in number of filled seed, oil and protein contents were obtained with successive doses of nitrogen.

INTRODUCTION

Inspite of high yield potential of sunflower, the average yield in Pakistan is very low. Besides other factors, optimum use of nitrogen is one of the major agronomic factor. In the field trials Jadhav and Jadhav (1980) revealed that the application of N resulted in increased seed yield, head diameter, weight of seed per head and thousand grain weight. Similarly Kamal *et al.* (1980) reported yield increase by 21.8, 37.9 and 55.2% with the application of 36. during fertilization. Moreover, with N, the metabolites translocation form source to sink might be increased resulting in more filled seeds. Karami (1980) also found similar results.

Table 1. Effect of nitrogen on different growth parameters of sunflower cv. Hyson

N Kg ha^{-1}	No. of seeds per head		1000-seed Weight	Grain yield (q ha^{-1})	Oil (%)	Protein (%)
	Filled	Unfilled				

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