

Research Article

DOI: 10.15740/HAS/AJSS/10.2/259-262

Fertilizer optimization for hybrid sunflower under irrigated condition

■ ADITYA KUMAR AND V.V. KRISHNAMURTHI

Received : 21.07.2015; Revised : 30.10.2015; Accepted : 14.11.2015

MEMBERS OF RESEARCH FORUM:

Corresponding author :

ADITYA KUMAR, Department of Soil Science and Agricultural Chemistry, Tamil Nadu Agricultural University, COIMBATORE (T.N.) INDIA
Email: aadi.bhu@gmail.com

Co-authors :

V.V. KRISHNAMURTHI, Department of Soil Science and Agricultural Chemistry, Tamil Nadu Agricultural University, COIMBATORE (T.N.) INDIA

Summary

This study was undertaken to optimize macronutrient requirement of hybrid sunflower for harvesting maximum yield and oil content in irrigated condition. For this purpose a field experiment was conducted at Oilseed Research Station, Tindivanam, Tamil Nadu Agricultural University. Experiment comprised of macronutrient treatments consisted of five levels of nitrogen (0, 30, 60, 90 and 120 kg N ha⁻¹), four levels of phosphorus (0, 30, 60 and 90 kg P₂O₅ ha⁻¹) and four levels of potassium (0, 30, 60 and 90 kg K₂O ha⁻¹). Increasing levels of N, P, K increased yield, yield components and oil content. Maximum seed yield (1170 kg ha⁻¹) and oil content (41.4 %) was recorded with NPK @ 120:90:90 kg ha⁻¹ (T₇). Treatment T₇ proved its superiority by recording 12.5 per cent increased seed yield and 13.1 per cent increased oil yield over recommended dose of fertilizers (T₁₀) i.e. NPK @ 60:90:60 kg ha⁻¹. Hence NPK @ 120:90:90 kg ha⁻¹ (T₇) was observed most suitable to obtain maximum quantitative and qualitative yield of hybrid sunflower under irrigated condition.

Key words : Fertilizer optimization, Hybrid sunflower, Macronutrient management, Nutrient uptake

How to cite this article : Kumar, Aditya and Krishnamurthi, V.V. (2015). Fertilizer optimization for hybrid sunflower under irrigated condition. *Asian J. Soil Sci.*, **10**(2) : 259-262.