



RESEARCH ARTICLE :

Effect of different levels of fertilizer doses on oil content, protein and oil yield of sunflower cultivars

■ V.G. TAKANKHAR, A.V. GUTTE, D. RAJA AND M.U. JOGDAND

ARTICLE CHRONICLE :

Received :

15.07.2017;

Accepted :

30.07.2017

SUMMARY : A field experiment was carried out on effect of fertilizer doses on growth, oil content and oil yield of sunflower cultivars in *Kharif* season at Oilseed Research Station, Latur. The experiment was laid in split plot design with three replications consisting of four fertilizer doses (0, 50, 100 and 150 % RDF) and five sunflower cultivars (DRSF-108, LSF-08, DRSH-01, LSFH-35 and Jwalamukhi). The results of field study indicated that the oil content and oil yield of sunflower were significantly influenced by fertilizer doses and cultivars. Application of 100% RDF (60:30:30 NPK kg ha⁻¹) significantly improved oil content and oil yield of sunflower followed by 90:45:45 kg ha⁻¹. Among the different cultivars of sunflower DRSH-01 was found superior in oil content and oil yield of sunflower followed by Jwalamukhi, DRSF-108, LSF-08 and LSFH-35. With regards to sunflower cultivars, the oil yield was increased by 49 and 46 per cent due to DRSH-01 and Jwalamukhi, respectively over local check (LSF-08). The data further indicated that interaction effect on oil yield (684 kg ha⁻¹) was highest due to C₃ (DRSH-01) x F₃ (150% RDF) treatment but it was at par with C₃ x F₂ (100% RDF). The treatment F₂ (100% RDF) was significantly superior over rest of the treatments in case of protein content (16.99%) and protein yield in seed. The cultivar DRSH-01 recorded significantly higher protein content (17.6%) over rest of the treatments.

KEY WORDS :

Sunflower cultivars, Fertilizer doses, Oil content, Protein content, Oil yield, Protein yield

How to cite this article : Takankhar, V.G., Gutte, A.V., Raja, D. and Jogdand, M.U. (2017). Effect of different levels of fertilizer doses on oil content, protein and oil yield of sunflower cultivars. *Agric. Update*, 12(TECHSEAR-5) : 1222-1225; DOI: 10.15740/HAS/AU/12.TECHSEAR(5)2017/1222-1225.

Author for correspondence :

V.G. TAKANKHAR

Department of Soil
Science and Agricultural
Chemistry, College of
Agriculture
(V.N.M.K.V.), LATUR
(M.S.) INDIA
Email : takankhar@
rediffmail.com

See end of the article for
authors' affiliations