

Yield and quality of the Indian mustard (*Brassica juncea* L.) under the effect of planting dates and nitrogen fertilizer levels in southern Iraq.

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Abstract.

Two field experiments were conducted in winter season 2021-2022 at two different locations namely, Al-Hartha Agricultural Research Station / College of Agriculture, and the second in the Al-Zubair district to study the effect of three planting dates (15th October, 1st November and 15th November) and four levels of nitrogen fertilizer (0, 80, 160, 240 kg N ha⁻¹) on yield and quality of Indian mustard. Factorial experiment according to Randomized complete block design (R.C.B.D) was used with three replicates. The results showed that the date of 15th October was superior and achieved the highest mean of seed yield and oil percentage of 8.851 µg ha⁻¹, 42.26 % for Al-Hartha location and 4.925 µg ha⁻¹, 39.95% for Al-Zubair respectively. The level of 240 kg N ha⁻¹ gave the highest seed yield of 8.308 and 3.850 µg ha⁻¹ for the two locations respectively. Whereas, the control gave the highest percentage of oil, reached 42.42 and 39.956 %, respectively. When planting at 15th October with application of 240 kg N ha⁻¹ level gave the highest seed yield of 11.770 and 6.453 µg ha⁻¹ for the two locations respectively, while planting at 15th October with control had the highest oil percentage of 45.4 and 40.7%, for the two locations respectively.

Keywords: Mustard, Planting date, Nitrogen, Yield. Protein

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