

## **Fresh leaf yield and flowering responses of Brassica juncea varieties to varying nitrogen levels**

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### **Abstract**

An experiment was undertaken to evaluate fresh leaf yield and flowering responses of two Brassica juncea varieties (Paida and ZGS) to varying rates of nitrogen fertilizer ammonium nitrate (0; 100; 200 and 300 kg ha<sup>-1</sup>) during winter of 2007 under irrigation. The experiment was arranged as a 2×4 factorial treatment structure, laid in a randomized complete block design (RCBD) with three replications. Fresh leaf yield and days to 50% flowering were measured during the course of the experiment. There was significant difference ( $p < 0.001$ ) in fresh leaf yield of the varieties. Fresh leaf yield was significantly increased to 37.3 t ha<sup>-1</sup> when 300 kg ha<sup>-1</sup> of NH<sub>4</sub>NO<sub>3</sub> was applied as compared to control plots (0 kg ha<sup>-1</sup>) which gave a yield of 32 t ha<sup>-1</sup>. There was no significant difference ( $p > 0.05$ ) in days to 50% flowering due to different N treatments. There was significant difference ( $p < 0.05$ ) in days to 50% flowering of the two varieties, with Paida flowering 24 days later than the ZGS mustard. N level had significant effect only on fresh leaf yield whilst variety had significant effect on both fresh leaf yield and days to 50% flowering. The N rate of 300 kg NH<sub>4</sub>NO<sub>3</sub> ha<sup>-1</sup> was considered as the optimal dosage and Paida the best variety.