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Pearl Millet Research Station, Junagadh Agricultural University, JAMNAGAR (GUJARAT) INDIA Email: kkdhedhi@rediffmail.com **R**ESEARCH **P**APER

Influence of pinching and foliar application of nutrients on seed yield and quality of Dhaincha (*Sesbania aculeata*)

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ABSTRACT : The field experiment was conducted during rainy season of 2015 to study the influence of pinching and foliar spray of nutrients on seed yield and quality of Dhaincha (Sesbania aculeata) at Pearl Millet Research Station, Junagadh Agricultural University, Jamnagar, Gujarat. Pinching of apical buds was done at 60 DAS and foliar spray was done two times *i.e.* first at initiation of flowering and second at end of flowering period. The results revealed that the plant pinched at 60 DAS recorded the highest values for number of pods per plant (86.00), dry pods yield per plant (19.50 g), dry pods yield (8.70q/ha), seed yield per plant (10.17g) and seed yield (4.81 q/ha) compared to without pinching. The foliar sprays of DAP 2% + micro nutrients (MN) mixture ($ZnSO_4 0.5\%$ + boric acid 0.3%) + NAA 40 ppm produced higher number of pods per plant (91.63), dry pods yield per plant (20.99g), dry pods yield (9.43q/ha), seed yield per plant (11.04g) and seed yield (5.09g/ha). The highest seed yield (5.22g/ha) was recorded with pinching and foliar sprays of DAP 2% + MN mixture (ZnSO₄ 0.5% + boric acid 0.3%) + NAA 40 ppm besides with higher yield attributing parameters. These were closely followed by pinching x spray of MN mixture ($ZnSO_4 0.5\%$ + boric acid 0.3%). The seed quality in terms of germination, seedling length, dry seedling weight and seed vigour index I and II were higher with pinching at 60 DAS followed by sprays of NAA @ 40 ppm at initiation of flowering and at end of flowering period.

KEY WORDS : Dhaincha, Apical bud pinching, Foliar spray of nutrients, Seed yield, Quality

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