



# Retracted: Effect of Irrigation and Nutrient Management Studies on Sesame (*Sesamum indicum* L.)

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## Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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## ABSTRACT

**Aim:** To study the effect of Irrigation and nutrient management studies on Sesame (*Sesamum indicum* L.) in red and laterite soil of Odisha.

**Study Design:** Treatments included three irrigation levels (I<sub>1</sub>: 2 irrigations at 21 and 63 days after sowing, I<sub>2</sub>: 2 irrigations at 21 and 42 days after sowing and I<sub>3</sub>: 3 irrigations at 21, 42 and 63 days after sowing) are treated in main plot and four nutrient management (N<sub>1</sub>: 100% RDF, N<sub>2</sub>: 100% RDF + 2 t/ha FYM, N<sub>3</sub>: 100% RDF + 2 t/ha FYM + Jeevamrut @250 l/ha and N<sub>4</sub>: 75% RDF + 2 t/ha FYM + Jeevamrut @250 l/ha) are treated in sub plot were experimented in split plot design replicate thrice.

**Place and Duration of Study:** A field experiment was conducted during Summer at khujimahal, Chandaka, Faculty of Agricultural Sciences, Siksha 'O' Anusandhan (Deemed to be University), Bhubaneswar Odisha.

**Results:** The results showed that highest seed yield (643.49 kg ha<sup>-1</sup>), haulm yield (1820.13 kg ha<sup>-1</sup>) and harvest index (26.04%) was obtained in I<sub>3</sub>. N<sub>4</sub> (75% RDF + 2 t/ha FYM + Jeevamrut @250 l/ha) showed second highest seed yield (652.21 kg ha<sup>-1</sup>), haulm yield (1882.07 kg ha<sup>-1</sup>) and harvest index (25.74%) which is at par with N<sub>3</sub>. Highest water use efficiency (2.72 kg ha<sup>-1</sup> m<sup>-1</sup>) was calculated in I<sub>2</sub>N<sub>3</sub>.

**Conclusion:** cultivation of sesame under 75% RDF + 2 t/ha FYM + Jeevamrut @250 l/ha with 2

irrigations at 21 and 42 days after sowing proved better in terms of yield, economics and water use efficiency.

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