

**Research Article**

## **Effect of different spacing and mulching on growth and yield of Okra (*Abelmoschus esculentus* L.) in Chitwan, Nepal**

\*Ritesh Kumar Jha, Ram Babu Neupane, Abishkar Khatiwada, Shailesh Pandit and Bishma Raj Dahal

<sup>1</sup>Agriculture and Forestry University, Chitwan, Nepal

\*Correspondance: [ritesh.lord.of.truth@gmail.com](mailto:ritesh.lord.of.truth@gmail.com)

Orcid ID : <https://orcid.org/0000-0003-4837-6392>

Received: September 04; Accepted: December 06; Published: December 09.

© Copyright: Jha et al. (2018).



This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/).

### **ABSTRACT**

Okra (*Abelmoschus esculentus* L.) is one of the most important vegetable crop of Nepal. Its yield and growth parameters are affected by different cultural practices. This study was conducted at Olericulture Farm of Agriculture and Forestry University, Rampur, Chitwan, Nepal during April 29 to July 9 of 2018. The field experiment was carried out in split plot design using three replications. The treatments consisted of three intra row spacing (30, 45 and 60 cm) and four different mulching materials (Silver plastic, *Panicum repens*, *Lantana camara* and bare soil). The objective of this experiment was to assess the effects of various intra-row spacings and mulching materials on growth and yield of okra. The effect of mulching materials on okra yield was found significant. The okra yield was highest (8104 kg/ha) under silver plastic mulch followed by control (5161kg/ha), *Panicum repens* (3901kg/ha) and *Lantana camera* (3701kg/ha), respectively. Silver plastic mulch enhanced the growth parameters like canopy length, plant height, leaf number, leaf length, girth and yield of okra. The spacings provided non significant effect on okra yield, however the yield of okra was highest (7295 kg/ha) under 30×30 cm spacing followed by 45×30 cm (4660 kg/ha) and 60 cm × 30 cm spacing (3703 kg/ha), respectively. Combination of silver plastic mulch along with 30 cm × 30 cm spacing provided the highest okra yield. This study suggests that farmers of the Chitwan should grow okra at spacing of 30 cm × 30 cm and under silver plastic mulch to produce higher yield.

**Keywords:** Mulching, Okra, Spacing

**Correct citation:** Jha, R. K., Neupane, R. B., Khatiwada, A., Pandit, S., & Dahal, B. R. (2018). Effect of different spacing and mulching on growth and yield of okra (*Abelmoschus esculentus* L.) in Chitwan, Nepal. *Journal of Agriculture and Natural Resources*, 1(1), 168-178.

---