

Manuscript ID : 00000-71922

Journal of Agriculture and Natural Resources

Volume 2, Issue 1, October 2019, Pages 180-192, Page Count - 13



Source ID : 00000165

## Effect of scion varieties and wrapping materials on success of tongue grafting in Kiwifruit (*Actinidia deliciosa*) in Dolakha, Nepal

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### Abstract

*This study was conducted at Boch, Bhimeshwor-8, Dolakha, Nepal from January to May, 2019 to study the effect of scion variety and wrapping materials on growth performance of kiwi seedling rootstock. The field experiment was carried out in Factorial Randomized Complete Block Design using four replications. The treatments consisted of four scion varieties (Monty, Bruno, Hayward, Allison) grafted onto one year old kiwi seedling (*Actinidia deliciosa*) and two types of wrapping material (Grafting tape and Polyethylene plastic). The measured traits included sprout length, diameter, number of leaves, and number of sprouted bud per graft, graft success, mortality and survival percentage of grafts. The success rate of kiwi grafting was significantly affected by the scion variety and the wrapping materials. Allison variety showed the minimum days (61.72 days) to first sprouting and the maximum length of sprouts, diameter, number of leaves and number of sprouted bud per graft at the final observation. Monty variety showed the lowest growth performance. The maximum graft success (96.87%) and survival percentage of grafts (93.75%) was observed in Allison variety statistically at par with Bruno and Hayward and the lowest graft success (73.44%) and survivability (64.21%) was observed in Monty due to high mortality of the sprouted grafts. Grafting tape was superior to polyethylene plastic in terms of days to first sprouting (64.08 days), number of sprouted buds per grafts, number of leaves, graft success (92.18%) and survival of the grafts (87.01%) at the final observation. Interactive effect was found non-significant. In a nutshell, Allison is the best scion variety for grafting under the climatic condition of Dolakha and the grafting tape was the suitable tying material.*

### Author Keywords

Kiwifruit, grafting, graft success, variety, wrapping materials

### Acknowledgement

The fund and technical support for carrying out this research was provided by Prime Minister Agriculture Modernization Project and Agriculture and Forestry University, Rampur, Chitwan, Nepal. The authors also acknowledge Temperate Fruits Rootstock Development Centre, Boch, Dolakha for giving access to experimental plot and materials.

ISSN Print: 2661-6270

Source Type: Journals

Publication Language: English

Abbreviated Journal Title: JANR

ISSN Online: 2661-6289

Document Type: Journal Article

DOI: <https://doi.org/10.3126/janr.v2i1.26065>

Access Type: Open Access

**Scope Database Link:** <https://sdbindex.com/documents/00000165/00000-71922>

**Article Link:** <https://www.nepjol.info/index.php/janr/article/view/26065/21699>

**Publisher Name:** Tribhuvan University, Institute of Agriculture  
and Animal Science, Prithu Technical College

**Major Subject:** Life Sciences

**Subject area:** Plant Science

**Resource Licence:** CC BY-NC

**Subject Area classification:** Agricultural and Biological Sciences

**Source:** SCOPEDATABASE