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Multi Bloom Technology in Blackgram (*Vigna mungo*)

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Blackgram is an important pulse crop contributing to nutritional security and soil fertility. However, flower drop and poor pod setting are major constraints affecting its productivity. Multi Bloom Technology is an innovative agronomic approach aimed at enhancing flowering, reducing flower shedding, and increasing pod formation in blackgram. This technology involves timely foliar application of nutrients and growth promoters to induce multiple flowering phases. Adoption of Multi Bloom Technology has shown significant improvement in yield and profitability of blackgram cultivation.



Introduction

Blackgram (*Vigna mungo*) is widely cultivated in India under rainfed and irrigated conditions. Despite its importance, average productivity remains low due to nutrient imbalance, moisture stress, and excessive flower drop. To overcome these issues, Multi Bloom Technology has been introduced as a simple and cost-effective method. This technology helps in improving physiological efficiency of plants by promoting continuous flowering and better pod setting.

Objectives

- To enhance flowering intensity in blackgram.
- To reduce flower drop during critical growth stages.
- To improve pod setting and seed filling.
- To increase overall yield and farmer income.

Methodology

- Multi Bloom Technology mainly involves proper crop management and foliar nutrition.
- First foliar spray is applied at 25–30 days after sowing.
- Second foliar spray is applied at 40–45 days after sowing.
- Foliar nutrients such as boron, zinc, potassium, and phosphorus are applied.
- Plant growth promoters are used to enhance flowering and pod development.



Results and Discussion

The adoption of Multi Bloom Technology resulted in increased number of flowers and pods per plant. Flower retention was improved and pod setting percentage increased significantly. Plants showed uniform growth and better seed filling. Yield improvement of about 15–25% was observed compared to conventional practices.

Conclusion

Multi Bloom Technology is an effective and farmer-friendly approach for improving blackgram productivity. It minimizes flower drop, enhances pod formation, and increases yield with minimal additional cost. Therefore, this technology can be recommended to blackgram growers for sustainable pulse production.

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