



Blackpepper Propagation Method

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Blackpepper is a perennial climbing vine species which is used from ancient times in India and world commonly known as **King of spices**. The inflorescence is a spike type which contains 50 to 150 flowers. Warm and humid climate is preferred for its cultivation. Blackpepper is an important spice crop due to the presence of alkaloid (Piperine), flavonoids, carotenoids, terpenoids, etc. It is used as an antimicrobial, antihypertensive, anti-plasma, anti-inflammatory, and antioxidant. It is known for its pungency and flavour, mostly used for seasoning of food. It is also used in the treatment of digestion, sinus infections, neurodegenerative diseases.

Botanical Name: *Piper nigrum*

Family: Piperaceae

Chromosome No.: $2n=52$

Origin: Western Ghat of South India

Blackpepper has five different types of shoot

1. Main Stem
2. Runner Shoots
3. Fruiting branches (Plagiotropes)
4. Topshoots (Orthotropes)
5. Hanging shoots (Geotropes)

Blackpepper is propagated by seeds and stem cutting but commercially propagated by stem cutting which are collected from runner shoots. Cuttings can also be taken from terminal shoot in the month of Feb-March. Planting material should be high yielding, free from disease, and insect resistant to problematic diseases. Select a stem cutting with 2-3 nodes, then plant in a polybag which is filled with organic matter. Irrigate frequently. In May/June, plant ready for transplant in mainfield.

Another rapid multiplication technique which can also be called traditional method of blackpepper propagation. In this method, make a trench, after that fill the trench with FYM, sand, forest soil, and keep the depth of the trench 45 cm, width 30 cm, and length as per your convenience. Split halves of bamboos with septa with 8 to 10 cm diameter and 1.25 to 1.50 m length are fixed for strong support. Then rooted cuttings are planted in the trench. Vines are irrigated frequently. Base of bamboo filled with coir dust and FYM for rapid growth of vines. Spray urea (1 kg), super phosphate (0.75 kg), Muriate of potash (0.5 kg), and Magnesium Sulphate (0.25 kg) in 250 litres of water. When the vine grows 3-4 months, the terminal bud is removed. The vine is crushed at about three nodes above the base, in order to activate the axillary buds. After about 10 days, each plant is cut at the crushed point and taken out of the rooting medium without damaging the root system at each node.

Then single node cuttings are taken from the plants and planted in polybags filled with potting mixture. Care was taken to keep the auxiliary bud above the soil. The polybags were kept in a cool, humid place. In about 3 weeks, the buds start developing and the polybags were shifted to an open shaded area.

Conclusion

Benefits of this method are:

- Multiplication is rapid
- To get healthy seedling
- A better field establishment and more vigorous growth as a result of better root system.