Geranium Propagation

Raising of Seedlings in Nursery

There is no seed setting in geranium. Vegetative propagation is, therefore, the only alternative. The cuttings are first raised in a nursery and then transplanted in the field. A nursery area of about 80 sq m is sufficient for planting one hectare crop. Nursery beds of about 3 x 15 m are prepared by thoroughly working up the soil and mixing enough sand so that a porous medium for the seedlings is ensured up to depth of about 12.5 cm. Soil with 5.5 pH is most suitable for efficient rooting. About 100 g of superphosphate is also mixed well into the surface soil of each bed.

Fresh terminal cuttings, about 20 cm long and consisting of about 8 nodes, are taken from healthy and well-grown geranium plants. These are transferred to shade immediately and trimmed by removing all leaves except the first 3-4 leaves from the terminal end. A slant cut is made with a sharp knife just below the 6th or 7th node and the cuttings are dipped in 0.3% Dithane M-45 solution. To encourage early rooting Seradix B-2, a rooting hormone is applied to the cut ends. The nursery beds are also drenched with Dithane M-45 and then the cuttings are planted with the help of a suitable dibbler at a spacing of about 5 cm.

The beds are hand-watered immediately. Watering is carried out daily, twice during the first 3-4 days and once in subsequent days. Geranium wilts under hot sun. The cuttings should therefore, be made with great care and the nursery areas should be properly sheltered against hot sun. Bright sun, heavy wind and rains damage the cuttings very fast and result in poor establishment. Considering all these factors, November and December are the best suited months for raising geranium nursery.

About one month after planting of the cuttings, good drench with 0.2% urea may be given 2 or 3 times at weekly intervals. The cuttings will be ready for transplanting in about two months after planting. If propagation is undertaken in a mist chamber with a mist duration of about 10 seconds every 5 minutes, rooting of the cuttings can be accomplished within about 20 days time. The use of mist chamber would also circumvent the climatic hazards in raising nursery.

Raising of cuttings in small (11 x 15cm) polythene bags filled with a mixture of sand + FYM or in sphagnum moss facilitates transplantation without disturbance and damage to roots, which ensures high survival percentage in the field.