

Seed Geraniums

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Modern commercial plant breeders have increased the color range and improved the growth habit of the seed geranium. Tradesmen sell high-quality seed which will perform well if the grower handles the crop correctly. The following techniques and procedures are suggested to ensure success.

Germination

1. Start with fresh, viable seed.
2. Sow seed in a loose, well-drained medium. Most of the commercially available prepared artificial media provide these conditions.
3. Plant seeds in the flat in 1 1/2 - 2 inch rows, 1/8 inch deep and 1/4 inch apart. **Do not sow seed thickly.**
4. Maintain a constant germination medium temperature at 70°-75°F. Low temperature causes more failures than any other factor. Use a calibrated soil thermometer for exact readings.
5. Keep the medium uniformly moist using a mist system, or use a glass or poly cover. Check under such covers several times a day. Remove covers as soon as germination begins.

Transplanting

1. Germination should be complete in 10 days to 2 weeks. Many seedlings will have fully expanded cotyledons at this time with true leaves forming. As with any seedlings, transplant as soon as they can be safely handled—the smaller the better.

2. Supplemental artificial light may be applied from germination until transplanting or until Cycocel is applied, using cool-white fluorescent tubes. Lights are effective at this time, but the cost benefit to be gained must be calculated by each grower. Research has shown that additional lighting, up to 16 hrs./day, can be applied from germination through the first eight(8) leaf stage. This supplemental lighting may reduce time to flower by two weeks or more.

3. Transplant into a loose, well-drained medium which has a pH of 6.0-6.5 (mineral soil mix) or 5.5-6.0 (artificial growing medium). Set seedlings so that the cotyledons are not buried.

4. Maintain growing temperature of 60°-62°F.

5. Start fertilizer applications at 200 ppm N&K, as new root growth is initiated. Starving geranium seedlings will result in a chlorotic, delayed crop.

6. Suggested schedules including types of containers, spacing and ultimate pot size are available from most seed firms.

Growth Regulators

Applications of a growth regulator to reduce height should be made as soon as the seedling is well established, approximately 2-3 weeks after transplanting or when 4-6 true leaves are present. Foliar applications of growth regulators will reduce height 15% to 20% depending on cultivar, induce basal branching, reduce date to flower 3 to 7 days and improve foliage color.

Spray Cycocel at the concentration rate of 1500 ppm when 3-4 true leaves are present (about 2-3 weeks after transplanting). Repeat cycocel application in 1 to 2 weeks if necessary.

Timing

The flowering of seed geraniums is affected by many factors—date of sowing, temperature, light, growth regulators applied and cultivars grown. Suggested growing schedules are available from your seedsman.

Hardening-off

After 6-8 weeks of growth, the night temperature may be lowered gradually to 55°F to improve plant tone, foliage coloration and shelf life. Switching to mostly nitrate forms of nitrogen at this time is desirable.

Retail Maintenance

1. As with any plant material, the grower should provide clean, well-grown plants, including properly conditioned and fertilized medium.
2. Sales aids should be provided to the merchandiser to act as a silent sales person.
3. The longlasting garden attributes of seed geraniums, especially during late summer, should be explained to the sales personnel.
4. If plants are maintained for an extended period of time (2-3 weeks), watering and fertilization techniques should be fully explained.

References

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