

Family:	Violaceae	Seed count:	700-950 seeds/gram (20,000-27,000 seeds/oz) Seed count varies by variety and seed lot
Use:	Outdoor containers, pot and pack, suitable for borders and beds.	Seed form:	Raw
Plant type:	Biennial		
Height in pot:	10-15 cm (4-6 in.)		
Garden height:	20-25 cm (8-10 in.)		

Germination:

Emergence of seeds in 5-8 days at 18-24°C (65-75°F) sow the seeds in a well moistened soil mix with a pH between 5.8-6.0 EC 0.5-0.75.

Seeds may be covered with a medium layer of coarse vermiculite which helps maintain moisture levels. After cracking of the seed coat, start watering and maintain a soil temperature of 18-20°C (65-76°F) soil EC 0.5-0.75. avoid ammonium based fertilizers, these will promote stretching of seedlings and long thin roots. If media conditions are too dry, this may result in non-uniform germination. Light is not necessary for the germination process, however low light conditions will promote stretching of the seedlings.

Plugs:

If roots and stem are developing and the cotyledons have expanded, gradually reduce the soil moisture levels. Just lower media temperature to 17-22°C (62-74°F) lightly fertilizer with 50-75 ppm nitrogen with a calcium based fertilizer. Soil EC 0.5-0.75 when the roots are penetrating and start to fill in the plug cell and the first true leaves have developed, lower the temperature to 15-20°C (59-68°F) increase fertilizer up to 75-100 ppm nitrogen. Soil EC 0,75-1.0 Viola are more sensitive to high salts, therefore it's impotent to avoid EC levels exceeding 1.5. soil pH 5.8-6.0. when the roots are well developed and the shoots have 2-4 sets of true leaves, reduce the night temperatures 13-16°C (55-63°F) to initiate early flowering temperatures of 15°C (59°F) and lower make a hardier plant.

Growing on:

After 4-5 weeks seedlings can be transplanted in a well-drained media with a pH of 5.8-6.0. Allow media to dry slightly between waterings. Do not allow plants to wilt. Plants can be grown at 10-15°C (50-59°F) or as cool as possible during warm weather conditions. Fertilize regularly 100-150 ppm with a calcium-based fertilizer. An application of ammonium nitrate helps to expand the leaves. During cool weather production, ammonium based feeds may encourage root rot problems. A high concentration of nitrogen may promote stretching.

Growth regulators:

Viola responds to: Daminozide, (Dazide, B-nine) Chlormequat (Cycocel) and paclobutrazol (Bonzi).

Pests:

Spider Mites, whitefly, aphids and Thrips use appropriate chemicals.

Diseases:

Wet foliage needs to be avoided to prevent Powdery mildew, Downy mildew, Botrytis and Leafspots.

Crop time:

For autumn sales 6-10 weeks early spring Feb/Mar sales 20-24 weeks