



## PRIMULA PRODUCTION

(acaulis and veris types)

## GRIFFIN GREENHOUSE & NURSERY SUPPLIES Rick Yates, GGSPro Technical Support Manager E-MAIL ggsprotech@griffinmail.com

*Primula acaulis* and *Primula veris* (*polyanthus*) are cool weather crops that yield clusters of brightly colored flowers over a tight rosette of medium green leaves. Primrose acaulis bears flowers on short stems just above the leaves, while Primrose veris bears flowers at the top of a stalk that is typically 3-5" tall. Intensive breeding has yielded a wide range of colors, including bicolor and white-edged flowers.

Soil Medium - a soil-less mix that drains well is needed, with a pH of 5.3 to 5.8.

Pot Size - 4" or 4½" pots are most common, with one plant to a pot. Multiple plant containers, if used, should be potted up from single plants when buds show first color, as they flower over a fairly wide period of time. Extra compact varieties (ex: Lovely Mix) are available and can be grown in 3" pots. These are sometimes included in dish gardens for color.

<u>Temperature</u> - Although the role of temperature in flower initiation is under review, the following temperature schedule has proven successful. From plug or cell pack liner:

Planting through 5 weeks-night: 60-65°F, day: less than 70°F if possible (This allows for adequate foliage to develop before bud set.)

Week 5 to visible bud-night: 50°F, day: 55-60°F if possible

Once the buds are formed, night temperatures can be boosted to 60-62° for a week or so to force bloom for a holiday but are best kept in the 50's.

<u>Timing</u> - Primula are a long-term crop from seed. Growing from plugs or cell pack liners saves time, and avoids the difficulty of germination problems in summer heat. When using the following table, bear in mind that a planting of primula flower over a fairly long period of time. Seed catalogs classify primula as early, mid-season, or late. Primula veris (Pacific Giant Mix) are considered late flowering. The following crop times will be affected by your growing conditions.

	Plug Size		
	288s	195s	70s
Early season	12-14 weeks	10-12 weeks	8-10 weeks
Mid season	14-16 weeks	12-14 weeks	10-12 weeks
Late season	16-18 weeks	14-16 weeks	12-14 weeks

<u>Fertilizer</u> - Higher feed levels are used during the warm period (first 4-5 weeks from planting starters), and then reduced during the cool period. Fertilizers should provide most of the nitrogen in the nitrate form, and should be acid-forming to help hold pH down (5.3-5.8). Griffin can test your water to enable us to make specific recommendations. 20-10-20, rotated with 15-0-15 every 4th time will work for most growers.

## Fertilizer Rates

Planting to 5 weeks--200 ppm constant Week 5 to first color--150 ppm First color to sale--clear water

Primula requires more iron and magnesium than most crops. Iron can be provided by applications of iron chelate (Sprint®138 or 330) as a drench @ 4 oz./100 gal.

Magnesium can be supplied as Epsom salts, by applying 8 oz./100 gal. every 4 weeks, or as needed. An alternative would be to mix 2 oz. of Epsom salts per 100 gallons in with 20-10-20 on a constant basis. (Note: Epsom salts cannot be mixed with 15-0-15.)

## Pest Control-

Botrytis, aphids, thrips and whiteflies are the most common pest problems. The bulletin titled, "Insecticide and Fungicide Options", is available at no charge to Griffin customers.