



Calendula in the Garden

Liz Braithwaite and Dan Drost

Summary

Calendula, also called pot marigold, is an annual herb grown for its medicinal blooms, edible leaves and stems. It grows best in fertile, well drained soils from full sun to part shade. Calendula blooms throughout the season with yellow to orange blossoms that open and close with the sun.

Calendula is easily grown from seed. Sow seeds in the spring planting $\frac{1}{4}$ inch deep and thin seedlings to 8 to 12 inches apart after emergence. Plants grow 8 to 24 inches tall and require regular irrigation for best performance. Harvest flower heads when the plant reaches full bloom and use fresh or dried.

Recommended Varieties

There are 15 species in the *Calendula* genus with *C. officinalis* being the most popular. Cultivars are mostly ornamental selections with single or double blooms that vary in color from pale yellow to deep orange and have uniquely colored centers

'Coronet' and 'Pacific Beauty' exhibit increased heat tolerance. The 'Touch of Red' mixed series features double flowers with red petal edges and the 'Kabouana' series has dark centers. Both 'Resina' and 'Erfurter Orangefarbige' have high resin content in the blooms for medicinal use.

How to Grow

Soils: Calendula prefers well drained, moderately rich soils with a pH of 6-7 but can survive in a wide range of soil types. Most soils in Utah are suited for calendula.

Soil Preparation: Before planting, incorporate 2 to 4 inches of compost and apply 1 to 2 teaspoons per square foot of an all purpose fertilizer (16-16-8). Work compost and fertilizer into the top 6 to 8 inches of soil.

Plants: Calendula can be grown by transplants or by seed. Seeds germinate readily. Plant seeds $\frac{1}{4}$ inch deep when soil temperatures reach about 60°F. Seeds germinate in 8 to 14 days. Transplants are available at many garden centers, often grown as ornamental annuals. Plant transplants after danger of frost has past.

Planting and Spacing: After emergence, thin seedlings to 8 to 12 inches apart in the row. Calendula prefers cooler temperatures (< 85°F) and often stops blooming in extreme heat. Plants will survive temperature down to 25°F. Removal of the old flowers (deadheading) will encourage re-bloom.

Water: Routine watering is advisable, but calendula will also survive in low water conditions. Avoid overwatering, but supply 1 to 1½ inches of water per week in mid-summer for optimal growth.



Fertilization: Calendula needs little additional fertilization. Periodically side dress the plants with a complete soluble fertilizer to insure optimal growth and constant bloom development.

Problems

Weeds: Manage weeds by cultivation or hand pulling. Avoid damaging the plants during

cultivation. Mulches also effectively control weeds. Calendula self-seeds readily if not deadheaded and may become weedy in the garden.

Pests and Disease: Calendula is often planted as a companion plant to tomatoes and potatoes to help deter insect pests.

Insect	Identification	Control
Whiteflies	Small white flies that hide and feed on the underside of leaves.	These insect are easily controlled by a hard stream of water or by regular applications of insecticidal soap.
Aphids	Green or black soft bodies insects that feed on the underside of the leaves. Aphids produce honeydew and cause crinkled or curled leaves.	
Disease	Symptom	Control
Powdery mildew	White fungal patches on leaves that can spread to all the plants. Associated with cool, wet weather conditions.	Insure good air circulation, control irrigation and remove infested plant parts.

Harvesting and Storage

To harvest flowers, pick the complete flower at full bloom. Petals can be removed for culinary use. Blooms can be harvested multiple times in a season. Plants will re-bloom in about 2 weeks. Collect seeds when fully mature and dry.

Drying: Dry the blooms in a well ventilated area, away from sunlight. A food dryer can also work effectively. Flowers should dry in 1 to 5 days.

Storage: Store blooms in a moisture tight container in a cool, dark place.

Productivity

Calendula has a high productivity rate. A 60 foot row of calendula will produce 1 pound of dried flower heads.

Uses

Ornamental uses of calendula include cut flowers and as border annuals. Culinary uses include the use of petals, stems, and leaves. Petals can add color to dessert and salads, and have a slightly salty taste. Calendula is often used as a saffron substitute, but contributes the color more than the flavor. The flower head is bitter and resinous and used more for medicinal purposes. It is reported to be antiseptic, antifungal, anti-inflammatory, and can help aid digestion and skin

ailments. This plant is non-toxic and is safe for any use.

Additional Resources

Mindy Grace. *Calendula*. Keats Publishing, 1998.

Lesly Bremness. *Smithsonian Handbooks: Herbs*. Dorling Kindersly Inc., 2002.

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