Marjoram, Sweet Marjoram, **Knot Marjoram**

Origanum majorana and Majorana hortensis are members of the Lamiaceae (mint) family. Varieties include Sweet Marjoram and Creeping Golden Marjoram.

Marjoram is a tender perennial that grows about 1 foot tall and is treated as an annual in cold-winter areas. It has a dense, shallow root system and bushy habit. Marjoram leaves are pale gray-green, 1/4 inch long, and grow on square stems. Tiny white, pink, or yellow flowers bloom in spikes in August and September. Fruits are very small, light brown nutlets.

Market Information

Use. Marjoram has medicinal, culinary, aromatic, cosmetic, ornamental, and craft uses. It has a spicy odor with a hint of balsam. Both leaves and flowers can be used fresh or dry as a food ingredient or a garnish. Cuisines of France, Italy, and Portugal make extensive use of marjoram.

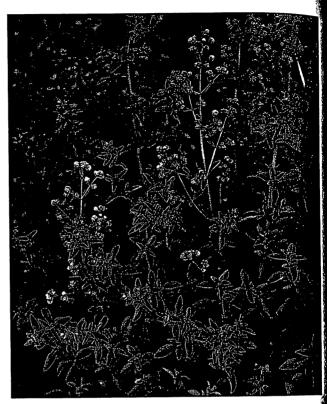
As an aromatic, leaves are added to potpourris and sachets. Marjoram can be used as an ornamental plant in hanging baskets indoors in winter. Its large purple flower heads and furry, small leaves make it an attractive addition to winter bouquets. Fresh or dried sprigs can be added to herb wreaths.

Culture

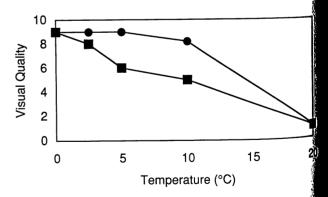
Climatic requirements. Marjoram is hardy to zones 9 and 10. The plant grows best at temperatures ranging from 43° to 82°F.

Propagation and care. Marjoram thrives in full sun in fertile loam soil that is light, dry, and well drained. It grows in soil with pH values of 4.9 to 8.7. Seeds are small and slow to germinate. Seeds started indoors in mid-spring will germinate after 14 days at 60°F. You can sow the seeds directly in the garden after the soil has warmed, but keep the seedbed moist until seedlings have sprouted. Plants can also be propagated from cuttings, layering, or root divisions made in the late spring.

Set plants out when all danger of frost has passed, and space them 8 to 10 inches apart in rows 1 foot apart. Marjoram prefers conditions that are slightly more moist than its hardier relative oregano can tolerate. Mulch the plants to help retain soil moisture and keep weeds down. Cultivation may disturb marjoram's shallow root system. Water sparingly, but more than you would for oregano. Plants mature in 70 days.



Marjoram leaves near Hollister. (Photo: Hunter Johnson)



Effect of holding temperature on the quality of fresh marjoram after 1 (●) and 2 (■) weeks' storage in perforated polyethylene bags. Visual quality was assessed on a 5-point scale (1, 3, 5, 7, 9, where 1 = low quality and = high quality). From Joyce, Reid, and Katz 1986.

Harvest. Harvest marjoram by clipping branches back to the bottom set of leaves. For a sweet and mild fla vor, harvest the foliage before blooms begin to form For a more pronounced flavor, harvest just before

open. Dry the harvested foliage away from mlight to preserve both color and flavor. You can a forced-air dehydrator at temperatures below Once dried, discard the stems and store the risp foliage in airtight and light-tight containers.

Mulched plants can be overwintered in milder areas. In colder areas, dig and divide roots early in the fall, bringing them inside for use in winter and for replanting outdoors in the spring. After 2 or 3 vears, when plants are woody and less productive, divide and replant the root clumps.

Postharvest handling. Use only the highest-quality plant material for the fresh market. Some of the detailed postharvest handling information provided for basil also applies to marjoram and other herbs.

The successful marketing of fresh herbs requires careful postharvest handling. Temperature is the most important factor. The optimum postharvest temperature, 32°F, will allow a shelf life of 3 to 4 weeks; 41°F will allow a minimum

shelf life of 2 to 3 weeks. Appropriate cooling methods for most herbs include cold rooms, forcedair cooling, and vacuum-cooling. Morning harvest minimizes the need for cooling.

Prevention of excess moisture loss is important. Most herbs respond well to high humidity: relative humidity in the packing area, cold rooms, and transport vehicles should be maintained above 95 percent where practical. You can also pack the fresh herbs in bags designed to minimize water loss. Maintain constant temperatures and reduce condensation inside the bags to prevent excess moisture and to avoid fungal or bacterial growth. Bags can be ventilated with perforations or fabricated from a polymer that is permeable to water vapor. Young herb tissue is susceptible to ethylene damage. This can be minimized by maintaining recommended temperatures.

If water is used during handling, chlorinated water can reduce the microbial load. To prevent physical injury to leaves, pack them in rigid clear plastic containers or pillow packs.

Sources

Seeds and plants

Abundant Life Seed Foundation, P.O. Box 772, Port Townsend, WA 98368

W. Atlee Burpee & Co., 300 Park Avenue, Warminster, PA 18974

Bountiful Gardens, 5798 Ridgewood Road, Willits, CA

The Cook's Garden, P.O. Box 65, Londonderry, VT 05148

Gurney's Seed & Nursery Co., Yankton, SD 57079

Henry Field's Seed & Nursery Co., Shenandoah, IA 51602

Johnny's Selected Seeds, 299 Foss Hill Rd., Albion, ME

Nichols Garden Nursery, 1190 North Pacific Hwy., Albany, OR 97321

Park Seed Co., Cokesbury Road, Greenwood, SC 29647-

Shepherd's Garden Seeds, 30 Irene Street, Torrington,

Stokes Seeds Inc., Box 548, Buffalo, NY 14240

Territorial Seed Co., P.O. Box 157, Cottage Grove, OR 97424

More information

Cantwell, M., and M. Reid. 1986. Postharvest handling of fresh culinary herbs. Perishables Handling No. 60:2-4. Vegetable Crops Dept., University of California, Davis, CA.

Joyce, Daryl, Michael Réid, and Philip Katz. 1986. Postharvest handling of fresh culinary herbs. Perishables Handling No. 58:1-4. Vegetable Crops Dept., University of California, Davis, CA.

Kowalchik, Claire, et al., eds. 1987. Rodale's illustrated encyclopedia of herbs. Rodale Press, Emmaus, PA.

Newcomb, Duane, and Karen Newcomb. 1989. The complete vegetable gardener's sourcebook. Prentice Hall Press, West Nyack, NY.

Organic Gardening Magazine staff. 1978. Organic gardening magazine's encyclopedia of organic gardening. Rodale Press, Emmaus, PA.

Simon, James, Alena Chadwick, and Lyle Craker. 1984. Herbs: An indexed bibliography 1971-1980. Archon Books, Hamden, CT.