

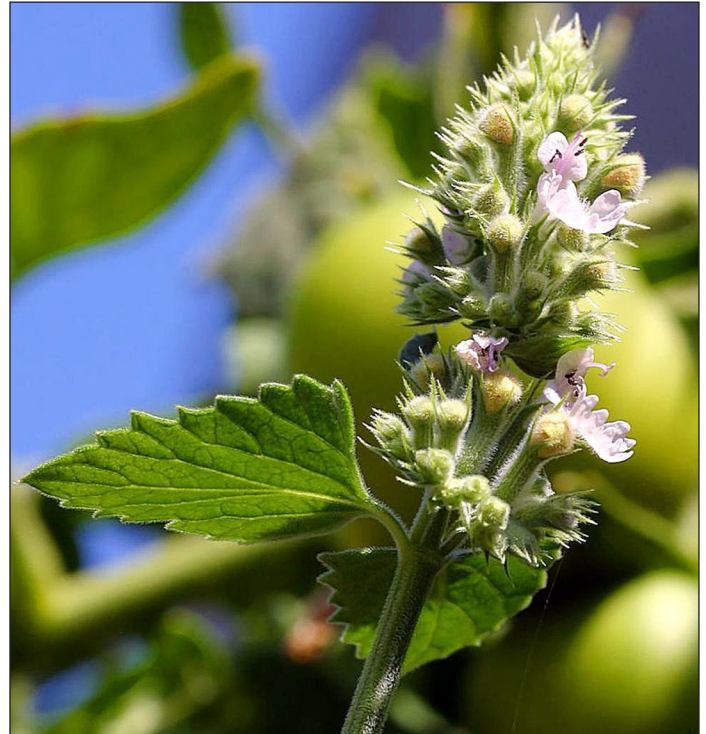


Catnip

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Introduction

Catnip (*Nepeta cataria*), best known as a stimulant for cats, is a perennial herb in the mint family (Labiatae). Cats, both domestic and wild, are attracted to catnip mainly due to a compound known as nepetalactone present in plant tissues. In addition, catnip has several properties beneficial to humans. Once used as a folk remedy for a wide variety of medical problems, today catnip's essential oils are used in a number of pharmaceutical products and dietary supplements. For example, catnip contains thymol, a compound that can be used as antiseptic. Additionally, catnip extract has a mild anti-spasmodic effect that reduces muscle cramps. Leaves and stems are used in herbal tea mixtures and as flavorings in foods. Researchers have also found that catnip contains several chemicals (citronella, citral, carvacrol, and pulegone) that repel insects; thymol has fungicidal properties.



Marketing

Catnip is primarily marketed for cats in stuffed toys, catnip-filled balls, compressed pellets, and in shaker bottles. Marketing possibilities include farmers markets, pet stores, and higher-end retail stores. Growers should have an established market available before beginning production.

Market Outlook

Strong marketing skills are essential for success with a niche product like catnip. Most commercial catnip for toys is of a lower grade, consisting of dried, ground-up stalks, as well as leaves. However, the most aromatic portions of the plant are the blossoms and leaves. Savvy growers may be able to develop a market for a higher-grade product, especially if well-packaged to retain

freshness, and therefore, potency. Organic growers with an existing consumer base that prefers organic goods may also have a distinct marketing advantage. Research published in 2007 by scientists from Rutgers University indicates there are significant agronomic and technical challenges for catnip production for essential oil extraction; these include a lack of improved varieties and development of extraction equipment.

Wholesale herb markets are difficult to break into, with prices fluctuating widely. Potential wholesale producers would need to have a marketing agreement in line before producing large amounts of a thinly traded crop like catnip. Producers with creativity and good marketing skills



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may be able to capture a local or regional niche in the pet supplies market. According to the American Pet Products Association, an industry trade group, pet supplies accounted for more than 20 percent of consumer spending in the \$50 billion U.S. pet industry in 2012.

Production considerations

Cultivars

Catnip appears to be available only as the botanical species (*Nepeta cataria*); as best as could be determined, there have been no organized efforts to breed catnip varieties. However, differences have been reported to exist in yield potential and chemical composition between commercially available seed lines.

Site selection and planting

Catnip prefers sites with full sun, well-drained soil, and adequate moisture. This herb can be propagated by seed, stem cuttings or division. Commercially grown catnip is generally seeded and grown in a greenhouse or hotbed until plants are the proper size for transplanting. Greenhouse float beds and transplanters designed for tobacco production could be used for catnip. Plants are then transplanted to the field mechanically or by hand once all danger of frost has passed. Small seed size, slow germination, and poor competitive ability with weeds makes direct seeding to the field difficult.

Catnip is a moderate nitrogen feeder, so a pre-plant broadcast of nitrogen is recommended. Additional applications can be sidedressed after harvest to speed regrowth.

Pest Management

Weeds are the greatest threat to production because catnip is a poor competitor with other plants. There are no herbicides labeled for this crop; hand weeding and cultivation are the main techniques for weed management. Since catnip oil contains compounds that discourage insect feeding and fungal growth, it has few insect and disease pests.

Harvest and storage

Catnip is ready to harvest at full bloom when aromatic properties are at their peak. Stems are cut a few inches above the crown to allow for plant regrowth. Generally, plantings may be cut twice (mid-summer and fall) during the growing season. Cutting can be

accomplished by hand or with a side bar cutter mower. Some growers gather the crop using a standard baler once stems have dried sufficiently. Harvested plants are dried naturally in the shade or with an artificial dryer. Further drying and processing may be required, depending on the buyer and end use.

Labor requirements

Labor needs per 1/5-acre are approximately 64 hours for production, 52 hours for harvest, and six hours for processing.

Economic considerations

A niche market crop such as catnip can require smaller levels of land and capital than other crops. Less than one-quarter acre of land with operating costs less than \$1,000, plus labor, can result in a harvest. This creates interest in niche crops, like catnip, among smaller farms; however, there is a small wholesale market for catnip, and retail or value-added sales will be dependent on the farm's marketing effort. No amount of any crop should be grown without first having a marketing plan prepared.

Initial investments include land preparation, purchase of seed, transplant production, and plant establishment. Seed purchases will be the most significant cash outlay for the small-scale producer. Two-year production costs for 1/5-acre of catnip in Kentucky would be \$600 to \$1,000, depending on the amount of hand weeding and cultivation required. Hand-harvest and marketing costs are estimated at about \$850 per 1/5-acre, valued at \$15 per hour. Total expenses, including both variable and fixed, would be approximately \$2,100 for 1/5-acre over two years. Returns for herb production will be highly variable, depending on marketing channels. Certified organic production or niche direct marketing of catnip products could generate two to three times the profit but will also require expenses associated with organic certification. A crop such as catnip will benefit by being marketed with other farm products.

Selected Resources

- Selected Internet Resources for Herb Marketing (University of Kentucky, 2011)
<http://www.uky.edu/hort/sites/www.uky.edu/hort/files/documents/herbmarketing.pdf>
- Catnip as a Source of Essential Oils (2007).
<https://hort.purdue.edu/newcrop/ncnu07/pdfs/simon311-315.pdf>

- Herb Production in Organic Systems (ATTRA, 2005) <https://attra.ncat.org/attra-pub/summaries/summary.php?pub=42>
- Production of Catnip in North Carolina (North Carolina State University, 1997) <http://www.hort.purdue.edu/newcrop/proceedings1990/V1-527.html>

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