All cat lovers would concur that catnip is attractive to cats. Though the response of the cat depends upon the breed, the ones that do enjoy catnip the most are sent into a state of kittenish friskiness. Catnip acts as a stimulant for cats, but it can also be relaxing for humans.

Catnip (Nepata cataria) is a member of the mint family (Labiatae). It is a perennial herb that grows up to 3 feet. The root sends up square, erect, and branched stems which are very leafy and are covered with a downy gray hair. The leaves are heart-shaped and toothed and covered with a soft, close down (especially on the undersides). This gives the plant a hoary, grayish-green appearance, as though dust has blown over it. The clusters of white or pale lavender tubular flowers with purplish spots are in bloom from July to September.

The plant secretes an aromatic oil, which bears a resemblance to that of mint, to ward off insects that would otherwise eat its leaves. The odor of this oil has a strange fascination for cats, who would destroy the plant with their ecstatic rolling and rubbing. The response to catnip consists of sniffing, followed by licking and chewing with head shaking, then chin and cheek rubbing, and finally a headover roll and body rubbing.
The flowering tops of the plant are used in medicine. The other names of the plant are catnep, catmint, cat’s-play, catrup, catwort, nip, nep, and field balm.

**Medicinal properties**

The leaves of catnip have traditionally been chewed as a remedy for alleviating toothaches. The inhabitants of Southern Appalachia have used it since the eighteenth century as a remedy for cold. Tea made from catnip has been used to relieve intestinal cramps and gas discomforts. Recent researches show that consumption of teas containing catnip has anti-cholinergic effects.

Catnip has been used for relief of insomnia and prevention of nightmares, and has a mild anti-spasmodic effect and is used to treat cramps. The juice from the leaves was used to stimulate menstrual flow. It has been used in the treatment of children’s ailments, such as colicky pain, flatulence and restlessness. The herb has also been used as a cold remedy, for hives, as a diaphoretic, a refrigerant and an anodyne. (Please refer to the Dictionary of Modern Herbalism by Mills for further information on these terms.)

Poultices made from catnip have commonly been used for toothaches, though they can be applied to any part of the body. They have been applied to sore breasts of nursing mothers and to the neck for tonsillitis.

The flowering tops of catnip yield up to 1.0 % volatile oil, 78 % being nepatalactone, the main attractant to cats. Thymol extracted from catnip has beneficial antiseptic uses on the skin and in the nasal and pharyngeal passages.

It is important that you exercise caution when considering using catnip products for medicinal purposes; seek professional advice before using them.

**Non-medicinal uses**

Catnip oil is used in small quantities as a scent in trapping bobcats and mountain lions. Catnip is also used as stuffing in animal toys for cats, such as bags and ‘mouse’. The dried, crushed leaves can be stuffed into cloth pouches to make these wonderful cat toys.

There are many compounds (other than nepatalactone) present in the catnip oil, namely, citronellal, geraniol, citral, carvacrol, and pulegone. These are all excellent natural insecticides. Thymol extracted from catnip is used as a fungicide.

**Natural habitat**

Catnip is native to Europe and was introduced to North America. It spread across the continent and is found in much of the area. Native Americans did not associate it with the advent of the Europeans and included it in their inventory of useful
plants. Catnip is a common garden plant now on the continent, but the plant is also found growing in hedges, fence rows, roadsides, railroad tracks, stream banks, and water ditches.

**Cultivation**

Catnip is a hardy perennial that can be grown in sandy soil within a pH range of 5.8 to 7.5 and annual precipitation between 16 to 51 inches. It grows well in full sun and within the annual temperature range of 45 °F to 66 °F.

The plant can be propagated by seeds, either in the fall or the spring. The seeds should be frozen and refrozen a couple of times. This stratifies the hard seed coat and enables the seed to germinate more readily. After the seed has been frozen and refrozen, it should be soaked in water. This softens the casing. The seeds should be grown in rows at a spacing of 20 inches. After the seedlings sprout, they should be thinned to about 20 inches apart. The plant can also be propagated from root divisions taken from the parent plant in spring.

**Harvest, storage, and processing**

The flowering tops should be harvested when the plant is in full bloom, by cutting the plant back to few inches above the ground. The climate of most areas allows two cuttings in a year (July and September). It can be cut with a side-bar cutter mower set at a height of about 10 inches. Gathering catnip can be done with a standard baler when the stem contains less than 15 % moisture which can be checked by bending the stem. The bales can be left in the field for a couple of days to further dry the stem. The stem should be broken in several places for faster drying. They should be turned at least once each day.

If the herbs are to be used for oil distillation, they should be sun cured for a couple of days in the temperature range of 85 °F to 120 °F. The herb should dry to about 60 % moisture content.

The herb could be processed into a cut-and-sift form or further to powder, and stored preferably in a heated warehouse. In his book, Miller (1998) also provides a catnip farm plan. He presents in the form of tables a series of schedules for operation and cost per acre that need to be compiled before the start of any small farm venture. For example, the table of estimated production costs for catnip during establishment year outlines field operations by calendar month, sets down the type of machinery and labor used, and the hours used per acre and costs per hour, during the first year of production. Another table provides the same schedule for the second and following years of production.
**Marketing**

Catnip is marketed as an dietary supplement to promote a healthy immune system and general well being during the cold and flu season. It is marketed in the form of tablets, capsules, fluid extracts (glycerin and alcohol extract), tinctures, ointments, powder and sprays.

Catnip-based products are marketed by many manufacturers of herbal products, including Frontier Herbs, Herbs Etc., Nutraceutical Corp. (with the KAL and SOLARAY line of supplements), and Nature’s Way.

A market also exists among mass market tea blenders who use catnip among other herbs as a flavoring. Catnip leaf is also used in the manufacture of animal toys and there exists a big market for that too.

**Conservation and management concerns**

Catnip grows from rootstock and is self-sowing. Harvesting stimulates further growth from the rootstock. Care should be taken that some plants are left in the area being harvested. This would allow reseeding of the area. It should also be remembered that 60% of the rootstock dies when the plant goes to seed. Therefore, some trade-off must be made on how much seed should be left in the area when harvesting. It is better to reseed the area if the rootstock is older.

**References and information resources**

(You may be able to find some of these or other publications in your local library. Another valuable resource is your local cooperative extension office.)


Electronic resources

(This web site can be queried for ethnobotanical information on catnip)

Phytochemical Database, USDA - ARS - NGRL, Beltsville Agricultural Research Center, Beltsville, Maryland
http://www.ars-grin.gov/duke/ethnobot.html

(The following two web sites are for general interest in medicinal plants)

The American Herbal Pharmacopoeia
http://www.herbal-ahp.org/

The National Center for the Preservation of Medicinal Herbs
http://www.ncpmh.org/

(The following are home pages for companies focused on herbal medicines)

Frontier Natural Products Co-op
http://www.frontiercoop.com/

Nutraceutical Corp.
http://www.nutraceutical.com/

Kress. H. Catnip photo.
http://www.ibiblio.org/herbmed/herbpics.html

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This is part of a series of fact sheets on non-timber forest products. The full set of fact sheets is available at the Non-timber Forest Products website: http://www.sfp.forprod.vt.edu/

Please give us your comments on this fact sheet and suggestions for future fact sheets. Direct your comments to Tom Hammett, Department of Wood Science and Forest Products, 210 Cheatham Hall, Virginia Tech, Blacksburg VA 24061-0323. Phone: (540)-231-2716. E-mail: himal@vt.edu.

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