

Be careful-in its early growth, this plant could be mistaken for [Comfrey](#).

THE FLANNEL PLANT

by Ann Day

It has been admired for its tall, yellow-flowered spire and its handsome velvet foliage. Years ago many European gardens contained this popular plant.

In fact, according to Jack Sanders in *The Lives and Lore of North American Wildflowers*, this plant has become so famous over the centuries that it has developed more than 40 folk names and a long list of uses from a torch to a hair color restorer.

Most of us know the great mullein, *Verbascum thapsus*, with its thick, gray-green velvety leaves as a weed. But our European ancestors and peoples of other cultures have given it such names as velvet plant, velvet dock, blanket herb, woolen, felt wort, hare's beard, fluff weed, our lady's flannel, beggar's flannel, and Adam's flannel. This last fanciful name for mullein was coined by U.S. pioneers who used its thick woolly leaves as a substitute for flannel in binding up sore throats.

TORCH PLANT

Because of its tall, tapering growth, it has been called shepherd's club, Aaron's rod, Jacob's staff, candlewick, hedge taper and torch plants. Romans dipped the dried plant in fat and lit it to use in funeral processions thus the name "candelaria" that is used until this day. When dried, the down on the leaves of mullein will ignite easily at a spark.

POPULAR TEA

Mullein has, for centuries, been used to treat diseases of the lungs earning it the name lungwort and ag-leaf. It was believed smoking dried leaves gave relief from coughs due to asthma and consumption.

Many other medicinal and cosmetic uses were attributed to great mullein from "internal bruises" to toothaches to warts. The most popular over the years has been mullein tea. Steeping a teaspoon of dried leaves in a cup of boiling water produces tea or tonic that is a cure for coughs and colds.

TOUGH GREEN LEAVES

A low rosette of woolly leaves that hugs the ground characterizes the first year of the mullein plant. These velvety, yet tough leaves stay green through the fall and winter. The fuzzy leaves hold raindrops and snowflakes like pearls that catch the morning sun.

The following spring a stalk grows quickly into a four to eight foot spike that has large grasping leaves that surround the stalk. The club-like flower head has five-petaled yellow blossoms with only a few opening at one time. The tall stalk lasts through the winter, sticking up above the snow.

SLIGHT IRRITATION

The word mullein itself comes from the Middle English word "moleyne" meaning soft. However, although "velvet" and "flannel" are popular ways to describe mullein leaves, the tiny hairs of the leaves do cause irritation to insects, birds, mammals and humans. It is a way that the mullein protects itself from predators.

The plant has been called "Quaker rouge" after Quaker girls, forbidden to use face make-up, found that mullein leaves rubbed on their cheeks, brought a rosy color to their skin.

Many years ago, people often put mullein leaves in their shoes because they believed that the slight irritation that resulted would improve their blood circulation.

INGENIOUS DESIGN

Jack Sanders writes that mullein's ability to live in inhospitable places—full hot sun and dry, poor soil—is due in part to its ingenious design. The long, hairy leaves wind around the stem in whorls that point upward capturing every drop of rain possible and directing it down the stem to the thirsty roots.

These roots are found both near the surface to catch the sprinklings of showers and deep in the earth to collect the more consistently available bits of moisture far below the heat of the sun.

This summer, with its on and off again showers and its lengthy dry spells has stressed many plants. But the hardy great mullein with its moisture-catching flannel leaves has been doing well.

Excerpt 2

The seed bruised and boiled in wine and laid on any member that has been out of joint, and newly set again, takes away all swelling and pain.

The Great Mullein, more usually known as Aaron's Rod, has large woolly white leaves on a stalk rising four or five feet (1.2 or 1.5 m) high and yellow flowers in a long spike.

Where to find it. Sunny banks and waste places, waysides and lanes.

Flowering time: Midsummer.

Astrology: Under the dominion of Saturn.

Medicinal virtues: A small quantity of the root is commanded against laxes and fluxes of the body. The decoction is profitable for cramps, convulsions and chronic coughs, and used as a gargle it eases toothache. The oil made by infusing the flowers is good for the piles. A decoction of the leaves together with Sage, Marjoram and Chamomile flowers is used to bathe in for colds, stiff sinews and cramps. Three fluid ounces (85 ml) of the distilled water of the flowers drunk morning and evening is a remedy for the gout. The juice expressed from the leaves or flowers or the powder of the dried roots applied to warts will take them away. The dried flowers powdered are taken for bowel complaints or colicky pains. To dissolve swellings, tumours and inflammations of the throat, take the decoction of the root and leaves.

Modern uses: The leaves and flowers are used. A tea, made by using one teaspoonful of powdered leaves to a cup of boiling water, is excellent for most lung complaints, including asthma, bronchitis and croup. A tea made from the powdered flowers is pain-relieving and sedative. The infused oil, which is a good application for piles, is made by pouring olive oil onto fresh Mullein flowers in a jar and allowing them to macerate in a warm place, preferably in the sun for three weeks. The more flowers that are used the stronger the oil will be. The oil is strained before use. It is anti-inflammatory and has been used successfully for ear troubles, two or three drops being introduced into the ear two or three times a day.

After exposure to countless associations between this common, widespread medicinal herb and Native American culture, I mistakenly thought this herb was native. I was astonished when I finally learned that mullein is Eurasian: After its early arrival on these shores, the Indians adapted it. They had discovered the same healing properties that made it a mainstay in European folk medicine for thousands of years.

The name "mullein" has two possible derivations: It either comes from comes from mollis, which means soft in Latin, or the Latin word mulandrum, which comes from melanders and means leprosy—an illness this plant was used to treat. Verbascum means "mullein" in Latin. It derives from the word barbasicum, which means "with beard." Roman men shaved, barbarians didn't, and mullein is certainly as woolly as any barbarian you'll ever encounter. The species name is thapsus because mullein resembles the European genus Thaspia, named after an ancient town in present-day Tunisia.

Excerpt 3

Mullein is a biennial: The first year the leaves form a basal rosette, with strikingly large, flannel-like, velvety-woolly, long-oval, gray-green, leaves nearly two feet long. When I bring this plant to school classes, the children first think it's artificial.

The second year, the basal leaves precede a stout, erect flowerstalk that may reach six feet in height. The stalkless flowers bloom sequentially from mid-spring to early fall, growing in long, tight, spikes. They're yellow, with five radially-symmetrical petals, about 1-1/2" across. The pointed, elongated, globular fruits are five-parted woody capsules, 3/8" long, opening toward the tips. The dead, brown fruitstalks stand out in the winter.

Mullein grows in old fields, roadsides, and disturbed habitats throughout the United States. It does well in dry, sandy conditions, especially in alkaline soil, so it's especially common near the seashore. Archeologists sometimes look for Indian sites where there's lots of mullein, because the lime from the Indian shell piles increases soil alkalinity, encouraging this plant to proliferate.

Mullein tea provides vitamins B-2, B-5, B-12, and D, choline, hesperidin, PABA, sulfur, magnesium, mucilage, saponins, and other active substances.

People use the tea as a beverage, but it's best known as one of the safest, most effective herbal cough remedies. Mullein is an expectorant, and a tonic for the lungs, mucus membranes, and glands. An infusion is good for colds, emphysema, asthma, hay fever, and whooping cough. Strain the infusion through a cloth, or the hairs may get stuck in your throat and make you cough even more. Laboratory tests have shown that it's anti-inflammatory, with antibiotic activity, and that it inhibits the tuberculosis bacillus. The Indians smoked dried mullein and coltsfoot cigarettes for asthma and bronchitis, and indications are that it's effective: I've observed it working for bronchitis.

The tea is also an astringent and demulcent. It's good for diarrhea, and it's been used in compresses for hemorrhoids since it was recommended by Dioscorides centuries ago. It's also supposed to help other herbs get absorbed through the skin. Pliny of ancient Rome, Gerard in sixteenth century England, the Delaware Indians, and country folk in the South used the heated leaves in poultices for arthritis.

A tincture of the flowers is used for migraine headaches. An oil extract of the flowers, which contains a bactericide, is used for ear infections, although you should consult with a competent practitioner first, to avoid the possibility of permanent hearing loss if the herb doesn't work.

Roman ladies used them to dye their hair blonde. Roman soldiers dipped the flowerstalks in tallow to make torches. Women who were forbidden to use make-up for religious reasons rubbed the rough leaves of this rubrifacient on their cheeks, to create a beautiful red flush. People who spend time in the woods are attracted to mullein's large, velvety leaves when they run out of toilet paper, again creating a beautiful red flush on their cheeks.

Mullein was introduced from Europe and has found a nice niche along with man who loves to modify his surroundings. Fallow fields and re-worked roadsides are a favorite place for this plant to pop up. Because Mullein is tolerant of dry, rocky soil it also seems to crop up along railroad tracks a lot too.

The velvety leaves and flower stalks have found many purposes. Dipped in tallow or grease the dried stalks have been used for torches, and the leaves still used as wicks. Reportedly, American Indians lined their moccasins with the leaves to insulate against cold and white colonists used them inside their stockings for the same purpose.

A tea made from the leaves was used to treat colds in Appalachia, and in other places the leaf tea was considered good for dysentery. The leaves were smoked for asthma and sore throat by some American Indians and other groups boiled the roots for a mixture to treat children with croup.

The leaves are soothing for mucous membranes and have been used to soften the skin and protect it.

The flowers contain an oil that has been used for earache.

Excerpt 4

The Herball or Generall Historie of Plantes Gerard's Herbal from the Edition of T.H. Johnson, published in 1636



The Description.

1 The male Mullein or Higtaper hath broad leaves, very soft, whitish and downy; in the midst of which riseth up a stalk, straight, single, and the same also whitish all over, with a hoary down, and covered with the like leaves, but lesser and lesser even to the top; among which taperwise are set a multitude of yellow floures consisting of five leaves apiece: in the places wherof come up little round vessels, in which is contained very small seed. The root is long, a finger thicke, blacke without, and full of strings.

2 The female Mullein hath likewise many white woolly leaves, set upon an hoary cottony upright stalke of the height of foure or five cubits: the top of the stalke resembleth a torch decked with infinite white floures, which is the speciall marke to know it from the male kinde, being like in every other respect.

The Place.

These plants grow of themselves neere the borders of pastures, plowed fields, or causies & dry sandy ditch banks, and in other untilled places. They grow in great plenty neere unto a lyme-kiln upon the end of Blacke heath next to London, as also about the Queenes house at Eltham neere to Dartford in Kent; in the highways about Highgate neere London, and in most countries of England that are of a sandy soile.

The Time.

They are found with their floure from July to September, and bring forth their seed the second yeare after it is sowne.

The Names.

Mullein is called in shops, Tapsus Barbatus: of divers, Candela Regia, Candelaria, and Lanaria: in French, Bouillon: in English, Mullein, or rather Woollen, Higtaper, Torches, Longwort, and Bullocks Longwort; and of some, Hares beard.

The Vertues.

The country people, especially the husbandmen in Kent, do give their cattel the leaves to drink against the cough of the lungs, being an excellent approved medicine for the same, wherupon they call it Bullocks Lungwort.

The report goeth (saith Pliny) that figs do not putrifie at all that are wrapped in the leaves of Mullein.

Excerpt 5

NATIVE RANGE: Europe and Asia

DESCRIPTION: Common mullein, also known as wooly mullein, is a erect herb in the figwort family, or Scrophulariaceae. First year mullein plants are low-growing rosettes of bluish gray-green, feltlike leaves that range from 4-12 inches in length and 1-5 inches in width. Mature flowering plants are produced the second year, and grow to 5 to 10 feet in height, including the conspicuous flowering stalk. The five-petaled yellow flowers are arranged in a leafy spike and bloom a few at a time from June-August. Leaves alternate along the flowering stalks and are much larger toward the base of the plant. The tiny seeds are pitted and rough with wavy ridges and deep grooves and can germinate after lying dormant in the soil for several decades.

ECOLOGICAL THREAT: Common mullein threatens natural meadows and forest openings, where it adapts easily to a wide variety of site conditions. Once established, it grows more vigorously than many native herbs and shrubs, and its growth can overtake a site in fairly short order. Common mullein is a prolific seeder and its seeds last a very long time in the soil. An established population of common mullein can be extremely difficult to eradicate.

DISTRIBUTION IN THE UNITED STATES: Common mullein was first introduced into the U.S. in the mid-1700's, where it was used as a piscicide, or fish poison, in Virginia. It quickly spread throughout the U.S. and is well established throughout the eastern states. Records show that it was first described in Michigan in 1839 and on the Pacific coast in 1876, probably due to multiple introductions as a medicinal herb.

HABITAT IN THE UNITED STATES: Common mullein can be found where mean annual precipitation is greater than 3-6 inches and the growing season lasts for a minimum of 140 days. Intolerant of shade, mullein will grow in almost any open area including natural meadows and forest openings as well as neglected pastures, road cuts, industrial areas. Common mullein prefers, but is not limited to, dry sandy soils.

BACKGROUND: Common mullein is a monocarpic perennial (i.e., takes two or more years to flower and die). Brought over from Europe by settlers, it was used as a medicinal herb, as a remedy for coughs and diarrhea and a respiratory stimulant for the lungs when smoked. A methanol extract from common mullein has been used as an insecticide for mosquito larvae.

METHODS OF REPRODUCTION & DISPERSAL: During the first summer after germination mullein produces a tap root and a rosette of leaves. During this vegetative stage, the rosette increases in size during the growing season until low temperatures arrest growth sometime during the autumn and winter. Beginning the next spring, second year plants bolt into maturity, flower, produce seed during the summer, and then die, completing the plant's normal life cycle. Flowers mature from the base to the tip of the stalk. The length of the flowering period is a function of stalk height; longer stalks can continue to flower into early October. It is estimated that a single plant can produce 100,000-180,000 seeds which may remain viable for more than 100 years. The seeds are dispersed mechanically near the parent plant during the autumn and winter. Seeds at or near the surface are more likely to germinate.

CURRENT MANAGEMENT APPROACHES: Although common mullein can be very difficult to eradicate, there are a variety of management methods available, depending on the particular situation. Because mullein seedling emergence is dependent on the presence of bare ground, sowing sites with early successional native grasses or other plants may decrease seed germination and the chance of successful emergence of mullein seedlings.

Mullein plants are easily hand pulled on loose soils due to relatively shallow tap roots. This is an extremely effective method of reducing populations and seed productivity, especially if plant is pulled before seed set. If blooms or seed capsules are present, reproductive structures should be removed, bagged, and properly disposed of in a sanitary landfill. Care should be taken, however, to minimize soil disturbance since loose soil will facilitate mullein seed germination.

There are two insects that have possible biological control implications for mullein. A European curculionid weevil (*Gymnaetron tetrum*), determined by the U.S. Department of Agriculture to be specific to mullein, has been introduced to North America. The weevil larvae matures in the seed capsules and can destroy up to

50% of the seeds. Another agent, the mullein moth (*Cucullia verbasci*) has been tested in the U.S. and is considered to be a relatively safe control agent because of its consistent feeding and development on mullein species. Although tests showed limited feeding on other native species, the larvae did not survive significantly longer than those individuals tested in the absence of food.

Release of biological controls into natural environments is always experimental and should be entered into only after full and careful consideration of potential non-target species impacts. Once released into nature, biological control agents are difficult if not impossible to control.

For situations where hand-pulling of plants is not practical or safe, for example, on very steep slopes where hand pulling is dangerous or would cause significant soil disturbance, herbicidal control is an effective option. Apply a 2% solution of glyphosate (e.g., Roundup) or triclopyr (Garlon) and water plus a non-ionic surfactant, using a tank or backpack sprayer to thoroughly cover all leaves. Do not apply so heavily that the herbicide drips off the leaf surface. Use caution as glyphosate is a non-selective herbicide that may kill desirable plants even if partially contacted by spray. Triclopyr is selective to broadleaf plants and is a better choice if native or other desirable grasses are present. For some sites, applications can be made during the early spring when most other non-target vegetation is dormant. Refer to the pesticide manufacturers' label for specific information and restrictions regarding herbicide use.

For more information on the management of Common Mullein, please contact:

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SUGGESTED ALTERNATIVE PLANTS: Although not a popular ornamental, there are many excellent native plant alternatives for mullein that thrive in full sun and sandy soils. In the eastern U.S., common milkweed (*Asclepias syriaca*), butterflyweed (*Asclepias tuberosa*), joe-pye weed (*Eupatorium dubium*), black-eyed Susan (*Rudbeckia fulgida*), and Ironweed (*Vernonia noveboracensis*), are just a few of the many selections. You may wish to contact your local native plant society for further suggestions.

Excerpt 6

Folk medicine practitioners have used the flower to treat brown recluse spider bites. The leaves are infused into water to fight upper respiratory infections and congestion. Mullein leaf tea is a favorite treatment of colds and coughs by Indians and Mexican people.

Mullein ([photo](#)) is often seen growing in vacant lots. A close up looks and behold, the velcro of the bush. I use these hairy leaves to rub out the pain of stinging nettle. Native Americans lined their moccasins with the warm wooly leaf. A tea from the leaves and flowers of mullein has been used to treat coughs, colds and bronchitis.

Young mullein plant, early spring, second year growth, will provide flower spike. **The plant is said to have many uses. The velvety leaves were used by Indians and settlers as insulation for their Moccasins and stockings. The leaves are still used for wicks in some areas. A tea made from the leaves is used to treat colds, and leaves are sometimes applied to sunburn's and other inflammations. The flowers and roots have been said to cure croup earaches and other ailments.**

Other Common Names

- Adam's Flannel
- Beggar's Blanket
- Candlewick Plant
- Common Mullein
- Flannel Mullein
- Hag's Taper
- Velvet Dock
- Woolly Mullein

Great Mullein (*Verbascum thapsus*) is alien, naturalized, biennial herb. Widely distributed plant, being found all over Europe and in temperate Asia, as far as the Himalayas and in North America it is exceedingly abundant.

Great Mullein is found growing on hedge-banks, by roadsides and on waste ground, more especially on gravel, sand or chalk. Sunny positions in uncultivated fields and especially on dry soils. The leaves (first season) at the base of the stem form a rosette of numerous, large, 6 to 15 inches long and up to 5 inches broad, but become smaller as they ascend the stem, on which they are arranged on alternate sides. They are whitish with a soft, dense mass of hairs on both sides, which make them feel very furry and thick.

The root is a long taproot with a fibrous outer cover and fleshy inside. The flower-spike (second season) has been known to attain a height of 7 or 8 feet, covered with densely crowded, sulfur-yellow, flowers about an inch across with five rounded petals. Blooming during July and August.

Cultivation

Great Mullein is an easily grown plant, it succeeds in most well drained soils, including dry ones, and prefers a sunny position. Dislikes shade and wet soils.

Medicinal Uses and Active Constituents

Great Mullein has been used as a medicinal herb for centuries, and in many countries throughout the world, the value of Great Mullein as a proven medicinal herb is now backed by scientific evidence. The leaves, root, and the flowers are anodyne, anti-inflammatory, antiseptic, antispasmodic, astringent, demulcent, diuretic, emollient, expectorant, nervine, and vulnerary.

Some valuable constituents contained in Mullein are Coumarin and Hesperidin, they exhibit many healing abilities. Research indicates some of the uses as analgesic, antihistaminic, anti-inflammatory, anticancer, antioxidant, antiviral, bacteristat, cardio depressant, estrogenic, fungicide, hypnotic, sedative and pesticide are valid.

An infusion is taken internally in the treatment of a wide range of chest complaints and also to treat diarrhea and bleeding of the lungs and bowels. Great Mullein oil is a very medicinal and valuable destroyer of disease germs. An infusion of the flowers in olive oil is used as earache drops, or as a local application in the treatment of piles and other mucous membrane inflammations. This infusion is a strong antibacterial. The oil being used to treat gum and mouth ulcers is very effective. A decoction of the roots is used to alleviate toothache and also relieve cramps and convulsions. It is also used in the treatment of migraine headaches accompanied with oppression of the ear.

The whole plant has slightly sedative and narcotic properties. The seeds are mostly used as a narcotic and also contain saponins. The dried leaves are sometimes smoked to relieve the irritation of the respiratory mucus membranes, and the hacking cough of consumption. They can be employed with equal benefit when made into cigarettes, for asthma and spasmodic coughs in general. Externally, a medicinal poultice of the leaves is applied to sunburn, ulcers, tumors and piles. A decoction of the seeds is used to soothe chillblains and chapped skin.

An old superstition existed that witches used lamps and candles provided with wicks of Mullein in their incantations, and another of the plant's many names, 'Hag's Taper', refers to this. Both in Europe and Asia the power of driving away evil spirits was ascribed to the Mullein. Being a sure safeguard against evil spirits and magic, and from the ancient classics, it was this plant which Ulysses took to protect himself against the wiles of Circe.

Other Uses

Dye, Insecticide, Insulation, Lighting, Tinder, and Wick. A yellow dye is made from the flowers by boiling them in water. When used with dilute sulphuric acid they produce a rather permanent green dye, this becomes brown with the addition of alkalis. An infusion of the flowers is sometimes used to dye the hair a golden color. The leaves contain rotenone, which is used as an insecticide. The dried leaves are highly flammable and can be used to ignite a fire quickly, or as wick for candles.

Photos

