

*Tussilago farfara* [简体中文](#) [正體中文](#)

**System:** Terrestrial

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Magnoliopsida	Asterales	Asteraceae

**Common name** clayweed (English), gowan (English), Foalfoot (English), sowfoot (English), dummyweed (English), kuan dong (English), coltsfoot (English), dove-dock (English), horsehoof (English), horsefoot (English), hoofs (English), cleats (English), ginger (English), bull's-foot (English), colt-herb (English), pas- d'âne (French, Canada), tussilage pas-d'âne (French, Canada), coughwort (English), assfoot (English), British tobacco (English), gingerroot (English), tussilage (English, Canada)

## Synonym

**Similar species** *Taraxacum officinale*, *Arctium lappa*

**Summary** *Tussilago farfara* is a perennial herb which spreads mainly through underground rhizomes. During the summer, food is stored in the rhizomes for the following year's early spring growth. *Tussilago farfara* thrives on gravelly soil and along roadsides. There are management strategies available to combat *Tussilago farfara*, but if left unchecked it can take over an entire field. It is best to stop *Tussilago farfara* before it spreads as controlling it once it has become established is difficult. It is believed that *Tussilago farfara* has some medical benefits.



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## Species Description

Harvey Wright (1997) states that *Tussilago farfara* "is a low growing perennial plant. It has large, deep green leaves, somewhat similar in size and shape when fully grown to those of velvetleaf or cocklebur. The plant has no main stem, however. The leaf petiole holds the leaves 10 to 20cm above the soil, often forming a complete canopy covering the soil. The top leaf surface has a smooth, almost waxy appearance, while the underside of the leaf is covered with white wool-like hairs. Usually leaf stems and larger leaf veins are distinctly purple in colour."

## Notes

Namura-Ochalska-Anna (1993) reports that the success of *Tussilago farfara* L. in colonizing disturbed environments, after its seeds reach the site and germinate, is a function of several of the important traits of this species: 1) tolerance of seedlings and juveniles to a wide range of changeable external conditions, 2) fast growth and development of individuals, 3) a high degree of adaptability in reaching successive stages of development, 4) guerilla type growth, 5) intense spreading and renewal of individuals of generative and vegetative origin, 6) high effectiveness of vegetative reproduction, 7) adaptable allocation of resources to above-, and underground shoots.

## Lifecycle Stages

Wright (1997) states that, "As the seed on earlier flowers of *Tussilago farfara* ripens, the *Tussilago farfara* leaves finally begin to emerge above ground. Leaves will continue to grow in number and size for several weeks, so that the canopy does not reach full density until late June to mid-July. During the summer, food is stored in the rhizomes for the following year's early spring growth."

## Uses

Reed (2002) states that *T. farfara* "has been used since pre history to relieve coughs and other respiratory problems. It is made into herbal teas (un-opened flowers and leaves) and is found in commercial cough preparations. It is an ingredient in concoctions used to treat diarrhea. The leaves are sometimes smoked for relief of congestion. The crushed leaves or a leaf decoction is used externally where it may be applied to sores, injuries, rashes and painful joints. The large mucilage content accounts for most of the medical benefit derived from the plant."

## Habitat Description

Wright (1997) states that *T. farfara* "has the ability to thrive on gravelly soils, and is a common weed in gravel pits." Sievers (1930) goes on to state that *T. farfara* "is found along brooks and in wet places and moist clayey soil along roadsides from eastern Quebec to Pennsylvania, Ohio, and Minnesota." The species also occurs in urban areas, agricultural areas often on roadsides and pastures and in open forests, in its natural range, (Elven, 1994).

## Reproduction

Wright (1997) states that *T. farfara* "spreads by underground rhizomes, which develop mainly in the plow layer (5 to 20cm deep). These rhizomes produce quite dense stands of above-ground foliage. It is common to find only 2 or 3 patches of *T. farfara* in a field, with patches gradually expanding outward due to rhizome growth. These patches usually range from 3 to 6 metres in diameter. *T. farfara* has a very unique flowering characteristic. The bright yellow flowers, similar to dandelions but slightly smaller, appear early in the spring, before any leaves emerge. In Southern Ontario, *T. farfara* flowers in April, often before the last of the snow banks have melted. Flower heads have even been known to push through snow. The white, fluffy seed heads also resemble those of dandelions. However, *T. farfara* seed will mature by the time the very first dandelions are coming into bloom. *T. farfara* is not a prolific seed producer compared to many annual weeds". Each flower head produces only a few hundred seeds, (Skarpaas, O., pers.comm, 2004)

## General Impacts

Wright (1997) states that, "when gravel from infested pits is used in roadbed maintenance, some rhizomes of *Tussilago farfara* survive, and start up new *Tussilago farfara* patches. *Tussilago farfara* seems to compete strongly with the roadside grasses and is not controlled by commonly used roadside herbicides. Eventually the patch may expand to creep under the fence and into an adjoining cultivated field. Tillage operations can then spread the weed throughout the field. Seed blown by the wind may also start new patches, depending on the herbicide programme being used on the field where the seed germinates. In field crops, *Tussilago farfara* has been reported in corn, soybeans, winter wheat, spring grain and alfalfa stands. Once well-established, *Tussilago farfara* appears to hold its own against competition from these crops. If not controlled, *Tussilago farfara* can, in time, take over a field."

## Management Info

**Chemical:** Wright (1997) states that for *Tussilago farfara*, "roundup has been used for the non-selective control of *T. farfara* and has often given good control. Poor control has usually been due to herbicide application too early in the season. *T. farfara* foliage is slow to develop in the spring, particularly if the field has been worked and planted to a crop. Leaves may not be fully developed until late June or mid-July. Application of Roundup at an earlier stage will kill all foliage, but not eradicate the rhizomes. Any affected forage in the treated spots cannot be harvested until treated plants turn brown. To date, most *T. farfara* occurs in only a few patches in a field. If the weed has been well distributed in a field by tillage operations, it may be necessary to apply an overall spray in a non-crop situation. The best approach to *T. farfara* control is to stop its spread when only a few patches are present and before it becomes a serious problem throughout the field or farm."

**Principal source:** [Title: \*Tussilago farfara\* Wright, 1997. Coltsfoot: \*Tussilago farfara\*. \(Sievers, 1930\).](#)

**Compiler:** National Biological Information Infrastructure (NBII) & IUCN/SSC Invasive Species Specialist Group (ISSG)

**Review:** Olav Skarpaas Postdoc scholar, Department of Biology The Pennsylvania State University. USA.

**Publication date:** 2005-11-16

## ALIEN RANGE

[8] CANADA

[1] NEW ZEALAND

[26] UNITED STATES

## BIBLIOGRAPHY

13 references found for *Tussilago farfara*

### Managment information

Namura-Ochalska, A. Expansion of *Tussilago farfara* L. in disturbed environments. III. Successful colonization and the properties of individuals. Acta-Societatis-Botanicorum-Poloniae. 1993, 62: 1-2, 91-99; 71 ref.

**Summary:** Invasive characteristics of *Tussilago farfara*  
[National Pest Plant Accord, 2001. Biosecurity New Zealand.](#)

**Summary:** The National Pest Plant Accord is a cooperative agreement between regional councils and government departments with biosecurity responsibilities. Under the accord, regional councils will undertake surveillance to prevent the commercial sale and/or distribution of an agreed list of pest plants.

Available from: <http://www.biosecurity.govt.nz/pests-diseases/plants/accord.htm> [Accessed 11 August 2005]

[Royal New Zealand Institute of Horticulture \(RNZIH\), 2005. Colts foot \*Tussilago farfara\*](#)

**Summary:** Available from: [http://www.rnzih.org.nz/pages/nppa\\_031.pdf](http://www.rnzih.org.nz/pages/nppa_031.pdf) [Accessed 1 October 2005]

[Wright, H. 1997. Title: \*Tussilago farfara\*. Ontario Ministry of Agriculture and Food: Government of Ontario, Canada.](#)

**Summary:** Information regarding the description, growth characteristics, competition, and control of species.

Available from: <http://www.gov.on.ca/OMAFRA/english/crops/facts/87-019.htm> [Accessed 14 October 2003]

### General information

Elven, R. 1994. Johannes Lid & Dagny Tande Lid. Norsk flora. 6. utgave ved Reidar Elven. (Lid's Norwegian flora. 6. ed. by Reidar Elven.) Det Norske Samlaget, Oslo.

**Summary:** Habitat notes.

Hultine, E., and M. Fries 1986. Atlas of North European vascular plants north of the tropic of Cancer. Koeltz Scientific Books, Koenigstein.

**Summary:** Information on geographic range and distribution.

[ITIS \(Integrated Taxonomic Information System\), 2005. Online Database \*Tussilago farfara\*](#)

**Summary:** An online database that provides taxonomic information, common names, synonyms and geographical jurisdiction of a species. In addition links are provided to retrieve biological records and collection information from the Global Biodiversity Information Facility (GBIF) Data Portal and bioscience articles from BioOne journals.

Available from:

[http://www.cbif.gc.ca/pls/itisc/taxastep?king=every&p\\_action=containing&taxa=Tussilago+farfara&p\\_format=&p\\_ifx=plgt&p\\_lang=](http://www.cbif.gc.ca/pls/itisc/taxastep?king=every&p_action=containing&taxa=Tussilago+farfara&p_format=&p_ifx=plgt&p_lang=) [Accessed March 2005]

[NatureServe, 2003. NatureServe Explorer: An online encyclopedia of life \[web application\]. Version 1.8. NatureServe, Arlington, Virginia.](#)

**Summary:** Distribution.

Available from: <http://www.natureserve.org/explorer>. [Accessed: February 20, 2004].

Reed, D. 2002. Coltsfoot: *Tussilago farfara*. [www.2bnTheWild.com](http://www.2bnTheWild.com): Wildflowers of the Southeastern United States.

**Summary:** Information on plant type, leaves, flowers, habitat, range, and medicinal uses of species.

Available from: <http://2bnthewild.com/plants/H321.htm> [Accessed 14 October 2003].

Sievers, A.F. 1930. Coltsfoot: *Tussilago farfara*. The Herb Hunters Guide. Misc. Publ. No. 77. USDA, Washington DC.

**Summary:** Information on other common names, habitat and range, and a general description of species.

Available from: <http://www.hort.purdue.edu/newcrop/herbhunters/coltsfoot.html> [Accessed 14 October 2003].

USDA-ARS IDS (Invaders Database System) UNDATED. *Tussilago farfara* USDA Agricultural Research Service [Online Database]

**Summary:** Information on distribution in the United States and Canada of species.

Available from:

[http://invader.dbs.umt.edu/scripts/esrimap.dll?name=Noxious\\_map&Plant\\_Name=Tussilago+farfara&submit1=Submit&Choice=1&CMD=Map](http://invader.dbs.umt.edu/scripts/esrimap.dll?name=Noxious_map&Plant_Name=Tussilago+farfara&submit1=Submit&Choice=1&CMD=Map) [Accessed 14 October 2003].

USDA-GRIN (Germplasm Resources Information Network) 2003. Taxon: *Tussilago farfara*. National Genetic Resources Program [Online Database] National Germplasm Resources Laboratory, Beltsville, Maryland.

**Summary:** Information on common names, synonyms, and the distributional range of species.

Available from: <http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?40789> [Accessed 14 October 2003].

USDA-NRCS (Natural Resource Conservation Service) 2002. *Tussilago farfara*. The PLANTS Database Version 3.5 [Online Database] National Plant Data Center, Baton Rouge, LA

**Summary:** Available from: <http://plants.usda.gov/java/nameSearch?keywordquery=Tussilago+farfara&mode=sciname> [Accessed 24 March 2006].