

## *Trifolium dubium*

**System:** Terrestrial

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Magnoliopsida	Fabales	Fabaceae

**Common name** smallhop clover (English), lesser trefoil (English), hop clover (English), suckling clover (English), yellow clover (English), low hop clover (English), shamrock (English)

**Synonym** *Chrysaspis dubia* , (Sibth.) Desv.  
*Trifolium filiforme* , var. *dubium* (Sibth.) Fiori  
*Trifolium parviflorum* , Bunge ex Nyman  
*Trifolium minus* , Sm.

## Similar species

**Summary** *Trifolium dubium* is an annual legume that naturally occurs over most of Europe. *T. dubium* prefers higher altitude biomes, such as the areas it is found in both Australia and New Zealand. It has been introduced world-wide as a soil improver and forage crop.



[view this species on IUCN Red List](#)

## Species Description

*Trifolium dubium* has been described as having 5-15 flowered heads, leaflets that are 0.5cm long, and marginally hairy stipules (Swenson *et al*, 1997). This description was made in its occurrence on the Juan Fernandez Islands, so may not hold true elsewhere. In Taiwan *T. dubium* is described as reaching heights of 0.3m, having 1 seed per pod, and was introduced as a forage species (Wu *et al*, 2003).

## Lifecycle Stages

*Trifolium dubium* is an annual legume (Caradus, 1994).

## Uses

*Trifolium dubium* has been reported as being used as a bee crop, a revegetator, and soil improver and a forage species (USDA-ARS, 2010).

## Habitat Description

In Australia *Trifolium dubium* is found in only small quantities in the sub-alpine and montane regions of Kosciuszko National Park in the Snowy Mountains where it is described as "widespread but rarely common" (MacDougall *et al*, 2005). This habitat preference is also reflected in its abundance in New Zealand, where it occurs in high-altitude swards in the South Island (Caradus, 1994). Caradus further described *T. dubium* as preferring "dry, infertile regions". *T. dubium* has also been found to occur though in the coastal regions near Wanganui (Champion & Reeves, 2009). In the Falkland Islands *T. dubium* occurs in built up areas and gardens, improved grassland and dwarf shrub heath (Broughton & McAdam, 2002). *T. dubium* was found to be one of the most frost tolerant *Trifolium* species in a study by Caradus (1994), shown to have a frost-tolerance down to -13.8 degrees Celcius. *T. dubium* dominate the deep-soil seed bank and can increase threefold following disturbance (MacDougall *et al*, 2006).

## Management Info

**Preventative Measures:** *Trifolium dubium* is listed as an agricultural weed in Japan (Miyawaki & Washitani, 2004).

## Principal source:

**Compiler:** IUCN SSC Invasive Species Specialist Group (ISSG) with support from the Overseas Territories Environmental Programme (OTEP) project XOT603, a joint project with the Cayman Islands Government - Department of Environment

## Review:

**Publication date:** 2010-06-08

## ALIEN RANGE

[1] ARGENTINA

[1] CANADA

[1] FALKLAND ISLANDS (MALVINAS)

[1] JAPAN

[1] TAIWAN

[2] AUSTRALIA

[3] CHILE

[1] FRENCH SOUTHERN TERRITORIES

[1] NEW ZEALAND

[1] UNITED STATES

## BIBLIOGRAPHY

18 references found for *Trifolium dubium*

### Management information

Auld, Bruce; Hirohiko Morita; Tomoko Nishida; Misako Ito and Peter Michael, 2003. Shared exotica: Plant invasions of Japan and south eastern Australia. *Cunninghamia* (2003) 8(1): 147-152

**Summary:** Available from: [http://www.rbgsyd.nsw.gov.au/\\_data/assets/pdf\\_file/0008/58904/Cun8Aul147.pdf](http://www.rbgsyd.nsw.gov.au/_data/assets/pdf_file/0008/58904/Cun8Aul147.pdf) [Accessed 28 June 2010]  
Champion, P. D. and P. N. Reeves, 2009. Factors causing dune ephemeral wetlands to be vulnerable to weed invasion. *DOC Research & Development Series* 310

**Summary:** Available from: <http://conservation.govt.nz/upload/documents/science-and-technical/drds310entire.pdf> [Accessed 28 June 2010]  
IUCN/SSC Invasive Species Specialist Group (ISSG), 2010. *A Compilation of Information Sources for Conservation Managers*.

**Summary:** This compilation of information sources can be sorted on keywords for example: Baits & Lures, Non Target Species, Eradication, Monitoring, Risk Assessment, Weeds, Herbicides etc. This compilation is at present in Excel format, this will be web-enabled as a searchable database shortly. This version of the database has been developed by the IUCN SSC ISSG as part of an Overseas Territories Environmental Programme funded project XOT603 in partnership with the Cayman Islands Government - Department of Environment. The compilation is a work under progress, the ISSG will manage, maintain and enhance the database with current and newly published information, reports, journal articles etc.

Mito, Toshikazu and Tetsuro Uesugi, 2004. Invasive Alien Species in Japan: The Status Quo and the New Regulation for Prevention of their Adverse Effects. *Global Environmental Research* 8(2)/2004: 171-191

**Summary:** Available from: <http://www.airies.or.jp/publication/ger/pdf/08-02-08.pdf> [Accessed 28 June 2010]

### General information

Anderson, Christopher B.; Clayton R. Griffith; Amy D. Rosemond; Ricardo Rozzi and Orlando Dollenz, 2006. The effects of invasive North American beavers on riparian plant communities in Cape Horn, Chile Do exotic beavers engineer differently in sub-Antarctic ecosystems? *Biological Conservation* 128 (2006) 467-474

**Summary:** Available from: [http://www.ieb-chile.cl/focus/people\\_focus5/pdf/Anderson%20et%20al%202006%20Biological%20Cons.pdf](http://www.ieb-chile.cl/focus/people_focus5/pdf/Anderson%20et%20al%202006%20Biological%20Cons.pdf) [Accessed 28 June 2010]

Bear, Roxana; Hill, Wendy; Pickering, Catherine M., 2007. Distribution and diversity of exotic plant species in montane to alpine areas of Kosciuszko National Park. *Cunninghamia*. 9(4). 2006. 559-570.

**Summary:** Available from: [http://www98.griffith.edu.au/dspace/bitstream/10072/14448/1/39639\\_1.pdf](http://www98.griffith.edu.au/dspace/bitstream/10072/14448/1/39639_1.pdf) [Accessed 28 June 2010]

Broughton, D. A. & McAdam, J. H. 2002. The Non-native Vascular Flora of the Falkland Islands. *Botanical Journal of Scotland*, 2002, Vol. 54 Issue 2, p153, 38p; (AN 9063913)

Caradus, J. R., 1994. Frost tolerance of *Trifolium* species. *New Zealand Journal of Agricultural Research*, 1994, Vol. 38: 157-162

Hull, Maurice; Evelyne Turpeau; Sylvie Hudaverdian; Bernard Chaubet; Yannick Outreman and Marc Lebouvier, 2010. Aphids and associated natural enemies on Ile Amsterdam and Ile Saint-Paul, Southern Indian Ocean. *Antarctic Science*

*Integrated Taxonomic Information System (ITIS)*, 2010. *Trifolium dubium* Sibthorp

**Summary:** Available from: [http://www.itis.gov/servlet/SingleRpt/SingleRpt?search\\_topic=TSN&search\\_value=26205](http://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=26205) [Accessed 28 June 2010]

Johnston FM, Pickering CM. 2001. Exotic plants in the Australian Alps. *Mountain Research and Development* 21:284-291.

Global Invasive Species Database (GISD) 2025. Species profile *Trifolium dubium*. Available from:

<https://iucngisd.org/gisd/species.php?sc=1607> [Accessed 02 July 2025]

- MacDougall, A.S.; Boucher, J.; Turkington, R. & Bradfield G.E., 2006. Patterns of plant invasion along an environmental stress gradient. *Journal of Vegetation Science* 17: 47-56, 2006
- MacDougall, Keith L.; John W. Morgan; Neville G. Walsh; Richard J. Williams, 2005. Plant invasions in treeless vegetation of the Australian Alps. *Perspectives in Plant Ecology, Evolution and Systematics* 7 (2005) 159-171
- Miyawaki, Shigenari and Izumi Washitani, 2003. *Invasive Alien Plant Species in Riparian Areas of Japan: The Contribution of Agricultural Weeds, Revegetation Species and Aquacultural Species*. *Global Environmental Research* 8(1)/2004: 89-101
- Summary:** Available from: <http://ns.airies.or.jp/publication/ger/pdf/08-01-09.pdf> [Accessed 28 June 2010]
- Swenson, Ulf; Tod F. Stuessy; Marcelo Baeza and Daniel, J. Crawford., 1997. New and Historical Plant Introductions, and Potential Pests in the Juan Fernandez Islands, Chile! *Pacific Science* (1997), vol. 51, no. 3: 233-253
- USDA-ARS, 2010. Taxon: *Trifolium dubium* Sibth. *National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]*. National Germplasm Resources Laboratory, Beltsville, Maryland.
- Summary:** Available from: <http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?40219> [Accessed 28 June 2010]
- USDA-NRCS, 2010. *Trifolium dubium* Sibth. *suckling clover*
- Summary:** Available from: [http://plants.usda.gov/java/profile?symbol=TRDU2&photoID=trdu2\\_001\\_avd.tif](http://plants.usda.gov/java/profile?symbol=TRDU2&photoID=trdu2_001_avd.tif) [Accessed 28 June 2010]
- Wu, Shan-Huah; Shu-Miaw Chaw and Marcel Rejmánek, Naturalized Fabaceae (Leguminosae) species in Taiwan: the first approximation. *Botanical Bulletin Academia Sinica* (2003) 44: 59-66
- Summary:** Available from: <http://ejournal.sinica.edu.tw/bbas/content/2003/1/bot441-09.pdf> [Accessed 28 June 2010]