

# **GLOBAL INVASIVE SPECIES DATABASE**

FULL ACCOUNT FOR: Trifolium repens

Trifolium repens

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Magnoliopsida	Fabales	Fabaceae

Common name ladino clover (English), dutch clover (English), white clover (English), trébol

blanco (Spanish), trevo-branco (Portuguese), white dutch clover (English), ladino white clover (English), Weißklee (German), trèfle blanc (French), trèfle

**System:** Terrestrial

rampant (French)

**Synonym** Trifolium repens , L. var. nigricans G. Don

Trifolium repens , L. var. repens Amoria repens , (L.) C. Presl

Trifolium biasolettii , Steud. & Hochst.
Trifolium macrorrhizum , Boiss.
Trifolium occidentale , Coombe
Trifolium repens , var. rubescens hort.
Trifolium repens , var. biasolettii
Trifolium repens , var. giganteum
Trifolium repens , var. latum

Trifolium repens , var. macrorrhizum Trifolium repens , var. pallescens

Trifolium repens , var. atropurpureum hort.

Similar species

**Summary** Trifolium repens is a perennial legume that originated in Europe/East Asia and

has become one of the most widely distributed legumes in the world. It has naturalized in most of North America, Central and South America, Australia

and New Zealand.



view this species on IUCN Red List

## **Species Description**

*Trifolium repens* has a prostrate, stoloniferous growth habit with leaves that are composed of three leaflets, which sometimes have a crescent-shaped mark on the upper surface. Leaves and roots develop along the stolon at the nodes. The flower heads, each consisting of 40 to 100 florets which are white in colour, are borne on long stalks from the leaf axils (USDA-NRCS, 2010b).

## **Lifecycle Stages**

*Trifolium repens* is a perennial legume (Caradus, 1994).

#### Uses

*Trifolium repens* is reported to be contain both poison and healing abilities. Its leaves contain the chemical genistein which is reported to have ethnobotanical properties.

T. repens is also used as a forage crop.



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## **Habitat Description**

Trifolium repens, in the United States, thrives best in a cool, moist climate in soils with ample lime, phosphate, and potash. In general, *T. repens* is best adapted to clay and silt soils in humid and irrigated areas but also grows successfully on sandy soils with a high water table or irrigated droughty soils when adequately fertilized. *T. repens* seldom roots deeper than 2 feet, which makes it adapted to shallow soils when adequate moisture is available (USDA-NRCS, 2010b). In New Zealand, *T. repens* is frost tolerant down to -8 degrees Celsius (Caradus, 1994). In Australia it is common between the alpine and montane areas of the Australian Alps. It can be found up just over 2000m altitude and was introduced to help reduce the impacts of soil erosion (Johnston & Pickering, 2001). On the Amsterdam Islands it has been found to be a host for exotic aphid species, which could potentially affect endemic species (Hulle *et al*, 2010).

#### **Management Info**

Two varities of *Trifolium repens*; *T. repens* L. var. *nigricans* G. Don and *T. repens* L. var. *repens*, are known to be established alien species and/or found in the Japanese wild. Because of this, mitigation could be undertaken under the Invasive Alien Species Act, 2004 (Mito & Uesugi, 2004). However *T. repens* is so widespread within natural vegetation in the Australian Alps, that control is considered impracticable (MacDougall *et al*, 2005). Pickering & Hill (2007) further establish this by mentioning that although the feasibility of controlling vegetative regeneration is moderate, there is little chance of controlling the seed bank.

## **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

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### **ALIEN RANGE**

[2] AUSTRALIA

[1] CENTRAL AMERICA

[1] FALKLAND ISLANDS (MALVINAS)

[1] GREENLAND

[1] MEXICO

[1] SOUTH AMERICA

[1] TAIWAN

[1] WEST INDIES

[1] CANADA

[1] CHILE

[1] FRENCH SOUTHERN TERRITORIES

[1] |APAN

[1] NEW ZEALAND

[1] SOUTH GEORGIA AND THE SOUTH SANDWICH

**ISLANDS** 

[2] UNITED STATES

## **BIBLIOGRAPHY**

19 references found for Trifolium repens

### Managment 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 [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]



# **GLOBAL INVASIVE SPECIES DATABASE**

FULL ACCOUNT FOR: Trifolium repens

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**

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 [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 Greene, S. W & D. W. H. Walton, 1975. An annotated checklist of the sub-Antarctic and Antarctic Vascular Flora. Polar Record, Vol 17, No 110, 1975, p 473-84

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 repens L.

**Summary:** Available from: http://www.itis.gov/servlet/SingleRpt/SingleRpt?search\_topic=TSN&search\_value=26206 [Accessed 28 June 2010]

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

McDougall, 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]

Philcox, D., 1962. Recent Records for the Flora of South Georgia. Kew Bulletin, Vol. 16, No. 2 (1962), pp. 243-245

Pickering, Catherine and Wendy Hill, 2007. Roadside Weeds of the Snowy Mountains, Australia. Mountain Research and Development Vol 27 No 4 Nov 2007

Swenson, Ulf; Tod F. Stuessey; 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 repens* L. 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?300625 [Accessed 28 June 2010] USDA-NRCS, 2010a. *Trifolium repens* L. white clover

Summary: Available from: http://plants.usda.gov/java/profile?symbol=TRRE3 [Accessed 28 June 2010]

Wu, Shan-Huah; Shu-Miaw Chaw and Marcel Rejm@nek, 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]