GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: ***Bromus tectorum***

Bromus tectorum 简体中文 正體中文

System: Terrestrial

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Liliopsida	Cyperales	Poaceae

Common name cheat grass (English), Mormon oats (English), downy brome (English), thatch bromegrass (English), military grass (English), early chess (English), downy chess (English), drooping brome (English), cheatgrass brome (English), slender chess (English), broncograss (English)

Synonym
Anisantha tectorum , (L.)
Bromus tectorum , L. var. *glabratus*
Bromus tectorum , L. var. *hirsutus*
Bromus tectorum , L. var. *nudus*

Similar species

Summary The invasive grass Bromus tectorum is troublesome to farmers and many ecosystems. It usually thrives in disturbed areas preventing natives from returning to the area. Disturbance such as overgrazing, cultivation, and frequent fires encourage invasion. Once established the natives cannot compete and the whole ecosystem is altered.

view this species on IUCN Red List

Species Description
Bromus tectorum is a winter annual. The seedlings are bright green and have hairy leaves. Stems are erect and slender and may also be slightly hairy. The stem tips, where the seeds are located, droop slightly. The grass has an overall fine, soft appearance and typically grows 50-60cm tall. As it dries out it begins to turn purplish in colour. *B. tectorum* is a straw-like colour when completely dry, which is when it is most flammable.

Lifecycle Stages
High temperatures and light intensities inhibit germination, however, seeds have been known to germinate following 11 years of storage under dry conditions. Once germination occurs, the roots develop quickly and are usually well developed by spring.

Uses
Bromus tectorum is used as feed for many kinds of livestock, and it is also eaten by mule deer, pronghorn, elk, small mammals, upland game birds, and small non-game birds. It provides habitat to many small mammals and birds. *B. tectorum* is sometimes planted to decrease erosion.

Habitat Description
Bromus tectorum is predominately found in disturbed sagebrush grassland ecosystems but is also found in undisturbed shrub-steppe and intermountain ranges. It spreads into areas that are overgrazed, cultivated, frequently burned or otherwise disturbed. *B. tectorum* prefers full sunlight and does not grow well under the forest canopy.

Reproduction
Bromus tectorum is self-pollinating. Seeds are dispersed by wind and animals.

Nutrition
Bromus tectorum prefers potassium rich soil.

General Impacts
As *Bromus tectorum* is such a dry plant, it increases the frequency of fires in an area. This causes declines in natives that are accustomed to less frequent fires while *B. tectorum* flourishes. The more frequent fires cause a loss of topsoil and nutrients, which alters the make up of the soil and therefore the ecosystem. On the other hand, *B. tectorum* may stabilise the soil from wind and water erosion (Carpenter et. al, 1999). In Russia the impacts of *B. tectorum* are less serious, even in regions with similar precipitation to the Great Basin of the United States. While it will rapidly and completely dominate disturbed sites in Russia, these will often revert to more diverse, stable communities within three to five years of the invasion. It has been suggested that this is due to the more diverse natural communities present in these affected regions of Russia, and the greater proportion of summer rainfall that benefits perennials rather than winter annuals such as *B. tectorum* (Clark, 2001).North American *B. tectorum* invasions cost wheat farmers in the western United States and Canada US$350-375 million in control and loss yields each year. Although used by some farmers as feed, it can cause serious damage to livestock's mouth, intestines, nostrils, and eyes. In North America it competes with native shrubs and perennial grasses and totally alters the ecosystem.

Management Info
Preventative measures: It is important to avoid disturbance caused by overgrazing, cultivation and frequent fires as they encourage invasion.
\r\nPhysical: Where infestation is light, burning is not recommended, however, hand pulling can be effective in these areas. Care must be taken to remove most of the root, or it will grow back. Treatment should be followed by re-seeding of perennials, or else *B. tectorum* and other weeds will re-establish in the newly disturbed area. Follow-up treatment is required.
\r\nBiological: In North America, grasses, such as Crested Wheatgrass, have been planted to compete with *B. tectorum*. This has been successful in some cases.
\r\nIntegrated management: Mowing or cutting is not recommended. Burning and herbicide application are effective control measures, but to ensure selective control, they should be performed in early spring when non-target species are dormant. However *B. tectorum* fires can burn very hot and move very quickly so care should be taken (Beck pers. comm., in Carpenter et. al, 1999).

Pathway
Used for livestock forage.

Principal source:

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

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ALIEN RANGE

[1] AUSTRALIA
[2] CANADA
[1] CUBA
[1] GEORGIA
[1] GREENLAND
[1] ICELAND

[1] JAPAN
[1] RUSSIAN FEDERATION
[50] UNITED STATES

[1] NEW ZEALAND
[1] SOUTH AFRICA

Red List assessed species 2: EN = 1; LC = 1;

Brachylagus idahoensis **LC**

Spermophilus brunneus **EN**

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General information

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Summary: Available from http://www.ento.csiro.au/publicity/pressrel/2001/23may01.html [Accessed 26 August 2003].

CONABIO. 2008. Sistema de informaci□n sobre especies invasoras en M□xico. Especies invasoras - Plantas. Comisi□n Nacional para el Conocimiento y Uso de la Biodiversidad. Fecha de acceso.
Summary: English:
The species list sheet for the Mexican information system on invasive species currently provides information related to Scientific names, family, group and common names, as well as habitat, status of invasion in Mexico, pathways of introduction and links to other specialised websites. Some of the higher risk species already have a direct link to the alert page. It is important to notice that these lists are constantly being updated, please refer to the main page (http://www.conabio.gob.mx/invasoras/index.php/Portada), under the section Novedades for information on updates.
Invasive species - Plants is available from: http://www.conabio.gob.mx/invasoras/index.php/Especies_invasoras_-_Plantas [Accessed 30 July 2008]
Spanish:
La lista de especies del Sistema de informaci□n sobre especies invasoras de m□xico cuenta actualmente con informaci□n aceca de nombre cient□fico, familia, grupo y nombre com□n, as□ como h□bitat, estado de la invasi□n en M□xico, rutas de introducci□n y ligas a otros sitios especializados. Algunas de las especies de mayor riesgo ya tienen una liga directa a la p□gina de alertas. Es importante resaltar que estas listas se encuentran en constante proceso de actualizaci□n, por favor consulte la portada (http://www.conabio.gob.mx/invasoras/index.php/Portada), en la secci□n novedades, para conocer los cambios.
Especies invasoras - Plantas is available from: http://www.conabio.gob.mx/invasoras/index.php/Especies_invasoras_-_Plantas [Accessed 30 July 2008]

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