Agave americana **System:** Terrestrial

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Liliopsida	Liliales	Agavaceae

Common name American-aloe (English), wild century-plant (English), century plant (English), American agave (English), American century plant (English), maguey americano (Spanish), Amerikanische agave (German), agave (English), garingboom (Afrikaans), pite (French), spreading century-plant (English), maguey (English), American aloe (English), yucca (English), agave d'Amérique (French), Hundert-jährige agave (German), pita común (Spanish)

Synonym *Agave rasconensis* , Trel. ex Standl.
Agave zonata , Trel.
Aloe americana , (L.) Crantz

Similar species *Furcraea spp.*

Summary *Agave americana* is a large, rhizomatous succulent that grows in a wide range of conditions including cliffs, urban areas, woodlands, grasslands, riparian zones, beaches and sandy areas, and rocky slopes. *A. americana* is tolerant of wind, salt, high temperatures, and extreme drought. It can grow in shallow, very dry, low fertility soil and can colonise bare sand. It is grown for many reasons- ornamental, medicinal and agricultural. In South Australia *Agave americana* mainly invades disturbed sites, road sides and coastal vegetation. It may also harbour introduced animal species, such as rabbits, making feral animal control more difficult.

view this species on IUCN Red List

Species Description
Agave americana is a large and stemless succulent, with leaves that can grow up to 2 m. Leaves are robust and spear-like, and are in a basal rosette. The leaves have sharp hooks or spines on the edges, and very sharp tips. Leaves have stomata which open at night, taking in carbon dioxide. Flowers are yellow and occur rapidly after maturity, when the plant is 10 - 15 years old. Flowers are at the top of a long stalk (up to 10 m), and are branched, candelebra-like, from the main stalk. These are followed by seed capsules with seeds (black, 5 cm long). The plant dies after fruiting (Badana & Pugnaire 2004; Harris 2008).

Notes
A. americana sap can cause pain and dermatitis in humans if it comes in contact with skin (Kerner *et al.* 1973; Ricks *et al.* 1999). The sap has also been shown to have anti-bacterial, anti-fungal and anti-inflammatory properties (Jin *et al.* 2004; Parmar *et al.* 1992; Peana *et al.* 1997). *A. americana* appears in the FDA Poisonous Plant Database (McGuffin *et al.* 2000).
Direct children of *A. americana*: *A. americana* ssp. *americana* L.; *A. americana* ssp. *marginata* Trel.; *A. americana* ssp. *protamericana* Gentry; *A. americana* var. *expansa* (Jacobi) Gentry; *A. americana* var. *oaxacensis* Gentry (Catalogue of Life 2010; USDA-ARS 2010; ITIS 2010; Smith & Figueiredo 2007)

Uses
Agave americana has several uses: ornamental, medicinal, as a vertebrate poison, agricultural, fodder, erosion control (USDA-ARS, 2010). *A. americana* is grown as an ornamental on all continents, except Antarctica (Nobel 1990).
Fibres derived from *A. americana* have been shown to be more extensible than other natural fibres, and also exhibit high tensile strength and are low density and have a high moisture content (Msahli 2000, in El Oudiani *et al.* 2009). Ropes and twines made from *A. americana* fibre were important agriculturally (otherwise) in North Africa up until the 1960's (El Oudiani *et al.* 2009; Jaouadi *et al.* 2009).
A. americana is grown in South Africa as a fodder crop, although it cannot be directly grazed and requires processing before feeding (De Cock 1980; Le Houérou 2000; Myburgh 1994). *A. americana* is also used to brew an alcoholic liquor beverage, in Mexico and South Africa (Boguslavsky *et al.* 2007).
A. americana is used in Mexico, Brazil, India and China as a traditional treatment, as it has anti-inflammatory, anti-bacterial and anti-fungal properties and can be used as a diuretic (Boscolo *et al.* 2010, Jin *et al.* 2004; Parmar *et al.* 1992; Peana *et al.* 1997; Rivera *et al.* 2010).

Habitat Description
Agave americana can grow in a wide range conditions, including cliffs, urban areas, woodlands, grasslands, riparian zones, beaches and sandy areas, and rocky slopes. *A. americana* is tolerant of wind, salt, high temperatures, and extreme drought. It can grow in shallow, very dry, low fertility soil and can colonise bare sand (ARC 2007; Badano & Pugnaire 2004; Bezona *et al.* 2009; Le Houérou 2000).

Reproduction
Agave americana is monocarpic, *i.e.* it dies after fruiting. Bats, birds and insects are important pollinators of *A. americana* flowers. The black seeds produced have a high germination rate, though the majority of seedlings die 8-9 days post-germination. *A. americana* can also reproduce vegetatively from plant and stolon fragments, and *via* rhizomes. Bulbils are also produced in the floral stems, which can also give rise to daughter plants (Nobel 1988, Arizaga & Ezcurra 2002, in Badano & Pugnaire 2004; Gentry 1982, in Gordon *et al.* 2005).

General Impacts
One of the major impacts of *Agave americana* is its large leaves shading out native plant species. *A. americana* also has a very dense network of rhizome offshoots, which could draw resources away from native species. The rhizomatous nature of *A. americana* could also alter the nutrient status of the soil. *A. americana* may have adverse effects on human and animal health (Badano & Pugnaire 2004; Macdonald *et al.* 2003; NPPA 2008; Williams 2008).

Management Info
Control of *Agave americana* is mainly achieved by using a combination of physical and chemical management techniques. Small plants are usually removed manually, while larger plants can be treated manually and/or with herbicide. Effective chemical treatments include cutting down leaves close to the ground and painting the stump immediately with herbicide and injection of herbicide. Follow up treatment may be necessary, especially for larger plants (Bickerton 2006; Ecoscape (Australia) Pty Ltd 2005; Weedbusters 2010).

Pathway
A. americana is thought to be unintentionally introduced into sand dunes where it becomes invasive (Badano & Pugnaire 2004).

Principal source:

Compiler: IUCN SSC Invasive Species Specialist Group (ISSG) with support from the Auckland Regional Council (ARC)

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ALIEN RANGE

[1] ARGENTINA
[1] BRAZIL
[1] COSTA RICA
[1] CYPRUS
[1] ETHIOPIA
[1] FRANCE
[1] FRENCH SOUTHERN TERRITORIES
[1] INDIA
[2] JAPAN
[1] KIRIBATI
[1] MALAWI
[1] MEDITERRANEAN AREA
[1] NETHERLANDS
[1] OMAN
[1] PERU
[2] PORTUGAL
[1] SINGAPORE
[3] SPAIN
[1] TAIWAN
[1] TONGA
[1] UNITED STATES
[1] ZIMBABWE
[9] AUSTRALIA
[1] CHINA
[1] CROATIA
[2] ECUADOR
[1] FIJI
[1] FRENCH GUIANA
[1] GREECE
[1] ITALY
[1] KENYA
[1] LESOTHO
[1] MALTA
[1] MOROCCO
[6] NEW ZEALAND
[1] PAKISTAN
[1] PHILIPPINES
[1] ROMANIA
[1] SOUTH AFRICA
[1] SRI LANKA
[1] THAILAND
[1] TUNISIA
[1] VIRGIN ISLANDS, U.S.

Red List assessed species 3: CR = 3;

Cheirolophus crassifolius **CR**
Cremnophyton lanfrancoi **CR**
Helichrysum melitense **CR**

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