GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: ***Kunzea ericoides***

Kunzea ericoides 简体中文 正體中文

System: Terrestrial

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Magnoliopsida	Myrtales	Myrtaceae

Common name tree manuba (English), Kanuka-Oelbaum (German), white teatree (English), tree manuka (English, New Zealand), kanuka (Maori), burgan (English), white tea tree (English)

Synonym *Leptospermum ericoides* , A. Rich.
Kunzea peduncularis , F. Muell.

Similar species

Summary Kunzea ericoides is a shrub or small tree that can reach heights up to 6metres. It prefers to invade abandoned pasture and native forests in the Australasia-Pacific regions. It can also be classified as a rare species in coastland where it is infrequently found on coastal shrubland. This species easily invades any habitat containing open forest complexes and proceeds to out-compete other young trees and shrubs, shading out ground-layer plants. Natural fire regimes and heavy grazing historically kept this species under control, but with the reduction in both of these, this species has flourished.

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Species Description
PIER (2004) states that, \"*K. ericoides* is a shrub or small tree up to 6m tall. Its leaves leaves have petioles up to 1.5mm long and the blades are linear-ovate or linear-elliptic, while the apex is acute and the base cuneate and 1.2-2.5cm x 0.2-0.4cm. Leaves are also glabrous with few hairs when young and oil glands conspicuous. Flowers are arranged in leafy racemes. The pedicels are 4-7mm long; the hypanthium is 2-2.5mm long and glabrous. Sepals are 0.5mm long.\"

Uses
In Hawai'i, Harris (2002) states that, \"While *K. ericoides* is classed as an \"alien invasive pest plant\" it has provided some benefits by stabilizing ridge tops that have eroded following grazing by goats.\"
Williams and Karl (2002) state that, \"Native kanuka (*K. ericoides*) and adventive gorse (*Ulex europaeus*) stands aged 10-14 years, and not grazed by domestic stock, were studied near Nelson, New Zealand. The endemic native bird species, bellbirds (*Anthornis melanura*) which are omnivorous, brown creepers (*Mohoua novaeseelandiae*) and grey warblers (*Gerygone igata*) which are insectivorous, were more frequent in *K. ericoides* than in *Ulex europaeus*.\"
Lis-Balchin and Hart (1998) state that, \"The two New Zealand tea-tree oils, *Leptospermum scoparium* and *K. ericoides* have been used as folk medicines for treating diarrhea, colds and inflammation but their pharmacological action has not been investigated. The results indicate that the use of these oils as relaxants in aromatherapy might be valid, although their mode of action is not identical.\"

Habitat Description
Singer and Burgman (1999) state that, \"The formation and persistence of stands of *K. ericoides* have been observed in both abandoned pasture and native forest in southeastern Australia (Judd 1990; Kirschbaum & Williams 1991). There are rare occurrences of *K. ericoides* coastal shrubland in New Zealand but these are usually seral and are eventually overtopped by shade-tolerant taller species (Esler & Astridge 1974; Smale 1994). This process has not been observed in Australia, possibly due to the lack of tall shade-tolerant species in the communities invaded by *K. ericoides* (Judd 1990; Kirschbaum & Williams 1991).\" Singer and Burgman (1999) added that, \"*K. ericoides* is able to expand within all the *E. radiata* open forest complex subcommunities in Coranderrk Reserve. If expansion within these subcommunities continues, the only uninvaded areas will be small areas of riparian, floodplain and drainage line vegetation.\" de Lange and Norton (2004) report that, \"*K. ericoides* is normally a species of forest margins and gaps especially at lower altitudes.\"
Smale (1994) studied a rare coastal community of *K. ericoides*. \"The structure, composition, and dynamics of a rare coastal community, kanuka (*Kunzea ericoides* var. *ericoides*) shrub- and tree-heaths on sand dunes, were studied on Whale Island and at Thornton, in Bay of Plenty. This and other studies indicate that lack of competition is primarily responsible for the multi-stemmed habit, but interacting environmental (exposure, drought) and genetic factors may also play a part.\"

Reproduction
The Plants for a Future Database (2003) states that, \"*K. ericoides* is in leaf all year, and in flower in May. The scented flowers are hermaphrodite (have both male and female organs) and are pollinated by Insects.\"

General Impacts
Singer and Burgman (1999) state that, \"Coranderrk Reserve is under threat from a number of ecological processes. One of the most important of these is the expansion of the shrub *K. ericoides* (Myrtaceae) (McMahon & Carr 1991). *K. ericoides* is indigenous to the reserve but has greatly increased its abundance and distribution within the last 30 years. *K. ericoides* has invaded all four subcommunities of the *Eucalyptus radiata* (long-leaf peppermint) open forest complex. *K. ericoides* out-competes other young trees and shrubs, shading out ground-layer plants. The increase in *K. ericoides* in the reserve may be caused by factors associated with eucalypt dieback, fire suppression, past grazing of sheep, selective logging and the decline in the abundance and distribution of most shrubs and trees in the reserve.\" The authors also state that, \"Relatively little is known about the expansion of *K. ericoides* within native vegetation communities. The mode and spatial pattern of its regeneration may reflect causes of ecological change and suggest management options.\"
de Lange and Norton (2004) report that, \"A factor that contributed to earlier assessments of *Kunzea sinclairii* as a threatened species was the observation that it was hybridizing with the related *K. ericoides* (Harris *et al.* 1992 and Dopson *et al.* 1999). Hybrids are generally confined to the tall shrubland communities adjacent to rock outcrops. A consequence of deforestation has been expansion of the range of *K. ericoides*. Deforestation has brought the two Kunzea species into close contact and resulted in some hybridisation. However, no hybrids were found on the rhyolitic outcrops that are the preferred habitat for *K. sinclairii* and it seems unlikely that hybridisation represents a long-term threat to this species.\"
Harris (2002) states that, \"*K. ericoides* was first planted in Hawai‘i about 70 years ago and has now infested several islands where it form thickets that crowd out and suppress other plants.\"

Management Info
Singer and Burgman (1999) state that, \"Changes to the fire regime and overgrazing are probably the primary factors which led to the expansion of *K. ericoides* at the Reserve. However, re-instituting the natural fire regime will not help to control *K. ericoides* at this stage. Reducing grazing pressure and increasing the populations of other trees and shrubs may help.\" Through the information gathered in their study, Singer and Burgman (1999) concluded that, \"The results of this study suggest it is easier to prevent the invasion of *K. ericoides* into an area than to remove it once it is established. Although most of the techniques which have been suggested for minimizing the expansion of *K. ericoides* are expensive and time consuming, there is no easy solution to the problem. If left unchecked, the expansion of *K. ericoides* in Coranderrk Reserve is likely to eliminate the last remnants of a number of plant subcommunities indigenous to the foothills of the Yarra Ranges.\"
Singer and Burgman (1999) state that, \"Managers of urban ecosystems face very substantial problems if their goal is to retain vegetation in anything like the state that existed before human populations imposed unique ecological pressures. The first step in meeting these challenges must be to improve our knowledge of the fundamental ecology of the species and processes that determine the composition and structure of these plant communities.\"

Principal source: Singer and Burgman, 1999. The regeneration ecology of *Kunzea ericoides* (A. Rich.) J. Thompson at Coranderrk Reserve, Healesville (Singer and Burgman, 1999)

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ALIEN RANGE

[2] UNITED STATES

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10 references found for **Kunzea ericoides**

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