

Callistemon sieberi River Bottlebrush

TAXONOMY

Division Angiosperm
Subclass Dicotyledonae
Family Myrtaceae

Previous Taxonomic Names

Callistemon paludosus F.Muell. (ANH et al 2005)

Taxonomic Identification Number 43859 (ANH et al 2005)

Taxonomic Status

Long lived woody perennial

Common Names

River Bottlebrush (ANBG n.d).

Incorrectly referred to as Alpine Bottlebrush. The confusion occurs because Alpine Bottlebrush, *Callistemon ptyoides* was previously known as *Callistemon sieberi* var. *ptyoides*.

MORPHOLOGY

Shrub or small tree to 3 m high; bark hard, and fissured on old plants. Branches slightly weeping on mature plants. Leaves variable, narrowly oblanceolate, 3-5 cm long, 2-5 mm wide. The midrib is mostly obscure except on larger leaves, oil glands usually obscure, although occasionally evident on the lower surface. Flower spikes usually 3-5 cm long, 2-2.5 cm wide. Stamens 7-9 mm long; filaments cream to pale yellow, occasionally pink. Capsules cup-shaped, 3-5 mm long (Walsh & Entwistle 1996).

SUBSPECIES

None (Walsh & Entwistle 1996).

HYBRIDS

No natural hybrids known (Walsh & Entwistle 1996), however *Callistemon* is a highly cultivated species with many nursery hybrids. The Australian National Botanic Gardens website notes that it readily hybridises (ANBG n.d.)

GEOGRAPHIC RANGE

Widespread along watercourses and rocky riverbeds in south-central Victoria and the eastern half of the volcanic plains. Also SA, Qld, NSW, ACT and Tasmania (Walsh & Entwistle 1996).

BIOREGIONS

Central Victorian Uplands Victorian Volcanic Plain

PLANT COMMUNITIES

Mostly riparian ecosystems including Stream-bank Shrublands and Valley Grassy Forests. Also known from dry forest habitats.

FRAGMENTATION

Little data known.

RELEVANT HISTORY & RESEARCH

Callistemon is a popular garden plant with most work concentrating on garden hybrids.



POPULATION DENSITY

Unknown

BREEDING SYSTEMS

FLOWERING

Flowers mostly November-March. Flowers cream to pale yellow, occasionally pink (Walsh & Entwistle 1996). Flower spikes form in spring and summer, made up of a number of individual flowers (ANBG n.d.). Fertile flowers are hermaphroditic with floral nectaries (McFarlane et al 2000).

POLLEN

The pollen of *Callistemon* flowers form on the tip of a long yellow or red filaments. Sometimes the pollen adds a bright yellow flush to the flower spikes (ANBG n.d.).

POLLINATION

Pollination mechanism unspecialised (McFarlane et al 2000).

POLLINATORS

Birds (Bonney 2003), Insects (Earl et al 2001), Mammals (GAV n.d.)

SEED

SEED DESCRIPTION

Seed brown, very small, held in capsules (Bonney 2003).

2000-18030 seeds per gram (GAV n.d.).

3700-4500 viable seeds per gram (Langkamp 1987).

2100-4157 germinants per gram (GAV n.d.).

Each flower produces a small woody fruit containing hundreds of tiny seeds. The fruits are clustered along the stem, and are persistent for many years on the plant. The seeds are usually not released from the fruits for several years, but in some species the fruits open after about a year. Fire also stimulates the opening of the fruits in some bottlebrushes. (ANBG n.d.)

SEED CROP

Seed can be collected throughout the year. Summer months to ensure quicker seed release (Bonney 2003).

Collect from older, woody capsules (Earl et al 2001).

Seed retains viability for long periods (Ralph 1994; Ralph 2003).

SEED DISPERSAL

Birds (Earl et al 2001).

EXTRACTION & STORAGE

Dry the fruits to extract seed (Ralph 1994).

PROPAGATION

Sprinkle seed over propagating mix and cover lightly with fine gravel. Keep warm & moist. Seed germinates at temperatures between 18-25°C (Bonney 2003).

The bog method can also be used to grow from seed (Bonney 2003).

Cuttings are often difficult to strike. Mist and bottom heat may enhance strike rate (Earl et al 2001).

C. sieberi usually prefers more light than dark hours and warm ground temperatures to germinate (Ralph 2003).

TREATMENT OPTIONS

None required.

GERMINATION TIME

Usually germinates within 2-5 weeks (Ralph 2003).

FIELD ESTABLISHMENT

Tube stock

Suitable for direct seeding provided there is sufficient moisture throughout spring (Bonney 2003). Direct seeding usually undertaken in late winter or spring (Ralph 2003), but may be difficult in riparian situations (GAV n.d.) and is not recommended along fragile watercourses. Natural regeneration occurs after fire or disturbance triggers seed release (GAV n.d.). Flood regeneration occurs along watercourses if there is an absence of weed competition (Earl et al 2001). Regeneration also from stem and coppice (Earl et al 2001).

SEED COLLECTION RANGE - *Callistemon sieberi*

Intermediate—within which, collection can be extended to formally contiguous remnants.

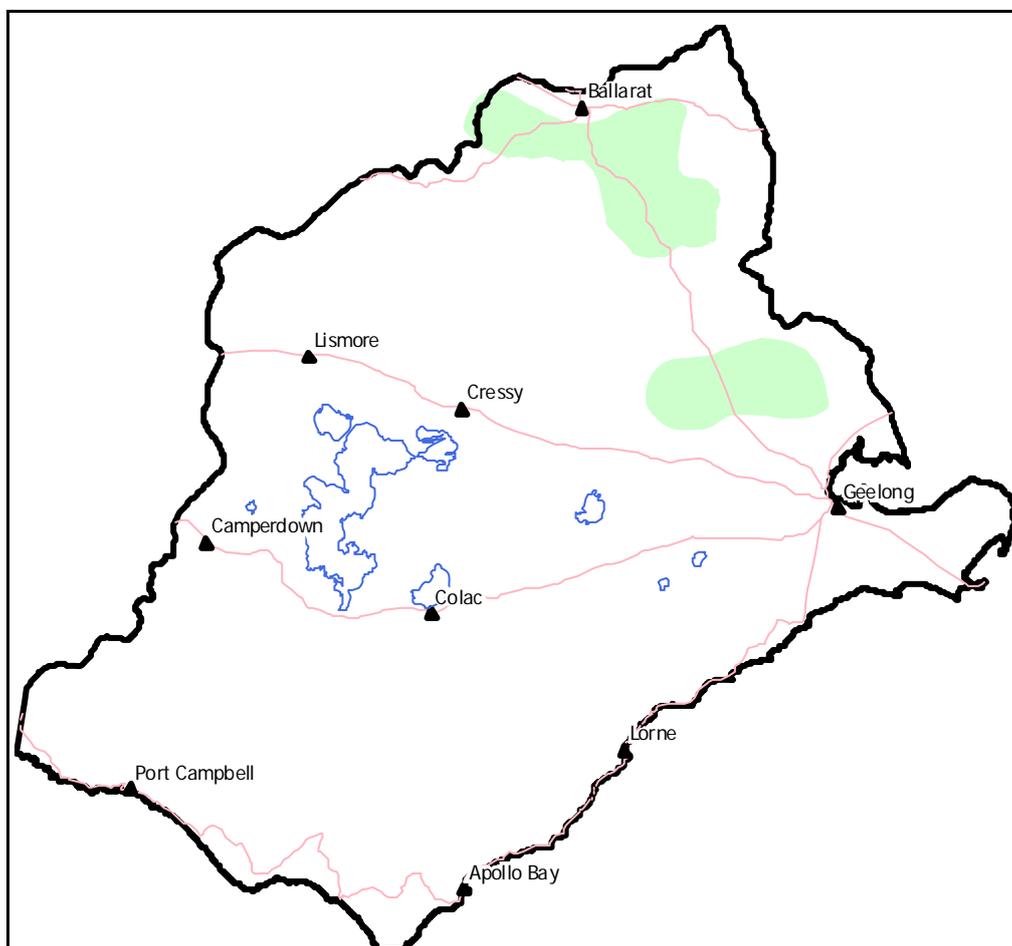
Callistemon sieberi has limited distribution along rivers in the region. Little is known about its natural spread and population size.

Consideration should be given to:

Maintaining collection within sub-catchment river systems, for example the Leigh river catchment or the Moorabool River catchment.

Collect from at least 30 plants within a particular bioregion and from a similar soil type where possible (such as Victorian Volcanic Plains or Central Victorian Uplands bioregions).

The Alpine Bottlebrush, *Callistemon ptyoides* often misrepresented as *Callistemon sieberi* should not be substituted for the endemic *Callistemon sieberi* in indigenous revegetation projects as *Callistemon* readily hybridises.



MAP: *Callistemon sieberi* distribution

DATA SOURCE: DSE Flora Information System May 2005, accessed May 2006



Broad distribution of *Callistemon sieberi*

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