

Citrus *glauca* Desert Lime

The Australian Desert Lime, *Citrus glauca*, is not as well-known as the Finger Lime, *Citrus australasica*, but like the Finger Lime, is becoming increasingly popular as a gourmet bushfood.

Unlike the other five species of Australian native *Citrus* that grow in coastal rainforests of north and eastern Australia, the Desert Lime is widespread across arid and semi-arid regions of Queensland, New South Wales and South Australia. Desert Limes grow as tall shrubs or small trees, from ~ 3 – 8 metres tall, armed with a ferocious network of spiny branches.



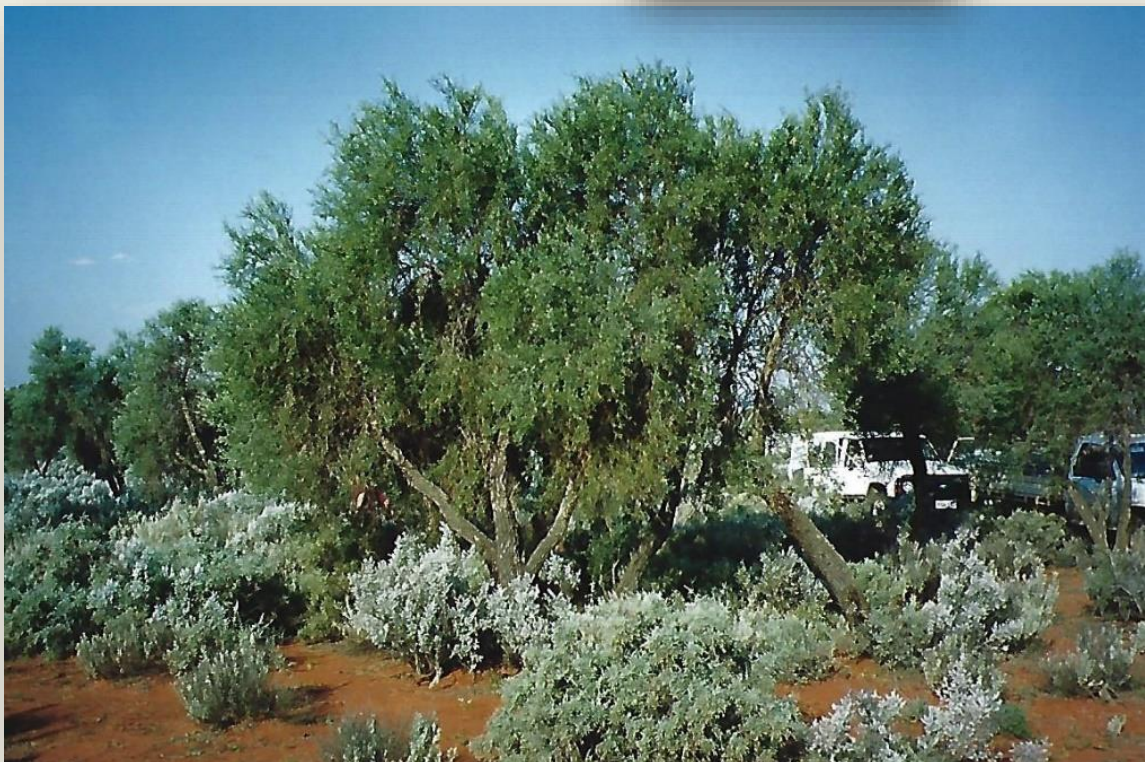
Citrus glauca, Desert Lime, about 30 kms north of Wilcannia in far western NSW, on the White Cliffs Road. Photograph by geologist, David Edgecombe: *Caught my eye because of the unusual shape, unlike Callitris (Cypress Pines) that occur in the area, so I went and had a closer look and realised it was a Desert Lime. Scattered chenopods include Maireana and Nitraria.*

This is not a species you would want to tangle with. It is amazingly tough, and can survive extreme prolonged drought, dropping its leaves to minimize water loss and utilizing the photosynthetic capacity of its green branches as an alternative. It can also grow where soil is high in salt concentration. Not only can it survive extreme high temperatures, but also temperatures that drop below freezing. It has another trick up its sleeve, developing a massive underground root system before investing energy in above ground stems, branches and leaves.



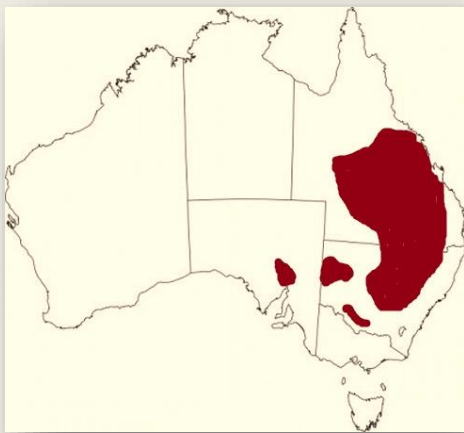


Citrus glauca, Desert Lime,
Mount Arden Station, ~ 40 km
north of Port Augusta.
Photographs: David Edgecombe



The Australian Desert Lime was known for a long period of time as *Eremocitrus glauca*. This classification was revised by David Mabberley in 1998, and the name resolved as *Citrus glauca*.

In South Australia, Desert Limes grow on a range of soil types, varying from deep dune sands interspersed with *Callitris* (Cypress Pine), to more clayey interdune soils, and also on clayey sands near claypans. The occurrence photographed here was a quite restricted, single stand/cluster on very limy soils, with an understory dominated by chenopods *Maireana*, and to a lesser extent, *Atriplex*. Mostly trees occur as scattered individuals. *Myoporum* and *Santalum* are also commonly found with Desert Lime.



Citrus glauca – Desert Lime

Citrus glauca is the only known xerophytic (adapted to dry conditions) species of the *Citrus* family. The distribution of the Australian Desert Lime across vast areas of semi-arid and arid Australia is in stark contrast to the distribution of most other Australian limes that are centred on high rainfall regions of coastal tropical and subtropical rainforests. *Citrus gracilis*, the Kakadu Lime, is known from eucalypt woodland of the Northern Territory and was described by David Mabberley in 1998. The Desert Lime probably shared a common ancestor with its coastal relatives,

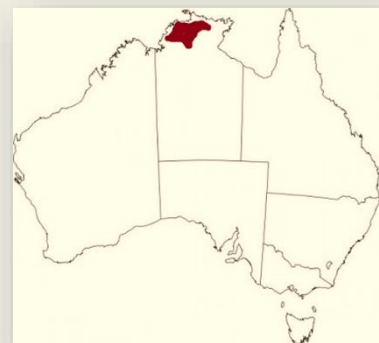
later migrating westward, and in the process adapting to semi-arid then arid environments and saline soils.



Citrus australasica – Finger Lime



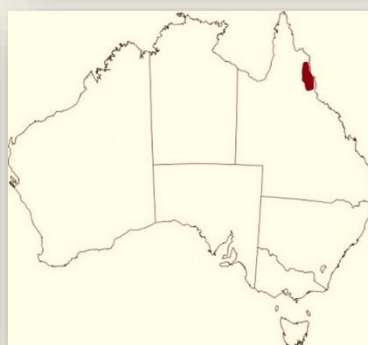
Citrus australis – Australian Round Lime



Citrus gracilis – Kakadu Lime



Citrus garrawayi – Mount White Lime



Citrus inodora – Russell River Lime



The **Bush Citrus** stamp issue, with illustrations by artist **Anita Xhafer**, was released by Australia Post in August 2019.

Unlike the Finger Limes (*Citrus australasica* and *Citrus garrawayi*), the Desert Lime has a rounded green juicy fruit. Remarkably, it takes only about 8 weeks from flowering to full fruit development, another adaptation to life in a hostile environment. The fruit, although relatively small, is thin skinned, quite tangy, and was used by indigenous Australians and by early settlers. Now it is catching up with finger limes as a gourmet bush food, a useful alternative to lemons and limes, and for

make marmalade, jams, pickles and cordials.

Alison Downing, Brian Atwell, David Edgecombe, Kevin Downing
Department of Biological Sciences

Australia Post: <https://australiapostcollectables.com.au/stamp-issues/bush-citrus>

Distribution maps generated from Atlas of Living Australia:

https://biocache.ala.org.au/occurrences/search?q=lsid:https://id.biodiversity.org.au/node/apni/2919253#tab_mapView

Koskinen J, The Citrus Pages: <http://citruspages.free.fr/australian.php#maideniana>

Mabberley D J. 1998 Australian Citreae with notes on other Aurantioideae (Rutaceae). *Telopea* 7(4): 333-344.

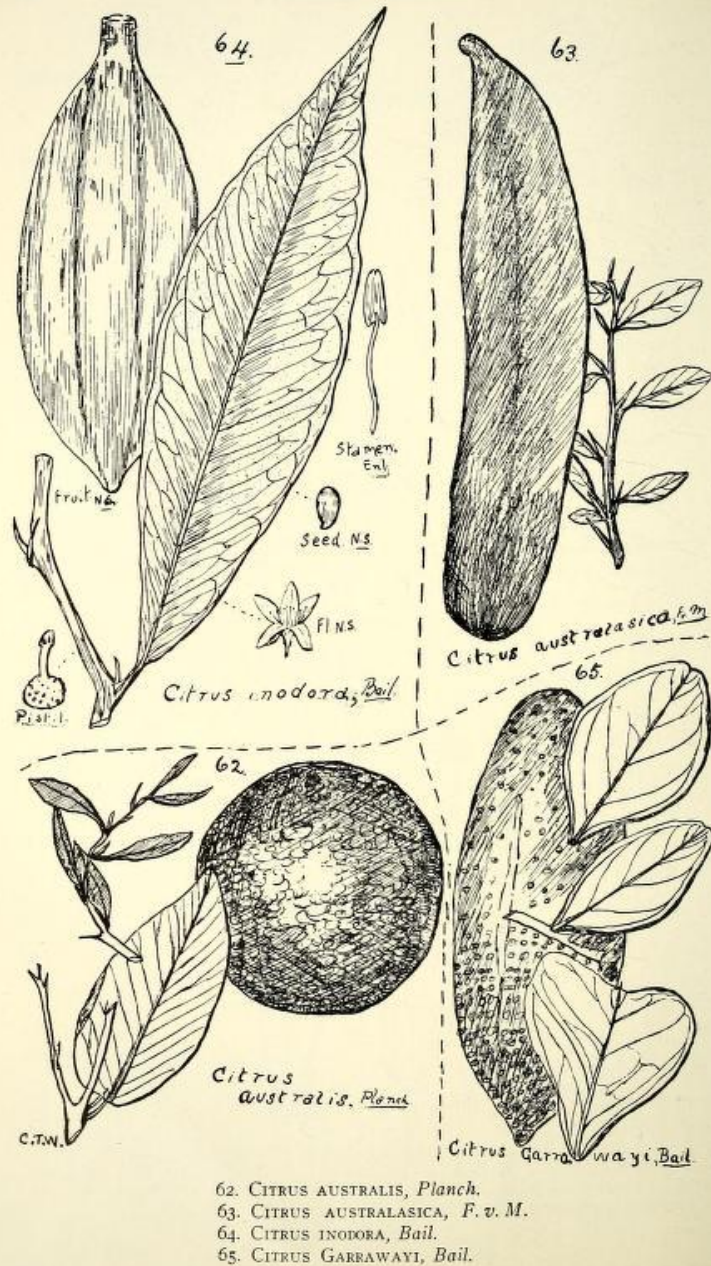
Primary Industry and Resources S.A. Fact Sheet: Australian Native Citrus - wild species, cultivars and hybrids. <http://www.ausbushfoods.com/bushfoodsonline/reports/Fact%20Sheets/pirsacitrus.pdf>

The Citrus Pages: <http://citruspages.free.fr/australian.php>



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Illustrations of Australian native *Citrus* from the 1912 book published by F. M. Bailey who held the position of *Colonial Botanist, Queensland Museum* from 1881 - 1915:

Bailey, Frederick Manson. 1909. *Comprehensive catalogue of Queensland plants, both indigenous and naturalised. To which are added, where known, the aboriginal and other vernacular names; with numerous illustrations, and copious notes on the properties, features, &c., of the plants.* A. J. Cumming, Government Printer, Brisbane.