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## MOGUMBER BELL

*Darwinia carnea* C. A. Gardner (MYRTACEAE)



(photo: P. M. Lambert)

*Darwinia carnea* is related to the famous Mountain Bells of the Stirling Range and is one of the few true 'bell' species to occur beyond that mountain range. The bells consist of tight clusters of pendent flowers, surrounded and hidden by large colourful bracts. All of the Darwinia bells are prized as garden plants and the Mogumber Bell is probably one of the most frequently cultivated.

The Mogumber Bell is so named because it was first collected from hills near Mogumber, about 100 kilometres north of Perth. Charles Gardner discovered it there in December 1922 and later named it from the Latin word *carneus*, meaning flesh-coloured, in reference to the unusual colour of its bells.

Between 1935 and 1965, several further collections were made in the Mogumber area, all apparently from the original locality. Later, a second population was discovered near Narrogin and this is now believed to be the only surviving wild population of the species. Fortunately the cultivated stocks include plants derived from both populations and these might provide a means of re-establishing the extinct population.

### DESCRIPTION

An erect open shrub up to 4 m tall in the wild but tending to be more bushy when grown in cultivation. Leaves in opposite pairs, folded down the centre, acutely pointed, up to 1.5 cm long and 0.4 cm wide when flattened. Bell bracts paired, multi-coloured with flesh, green and pinkish tints, up to 3 cm long. Flower clusters terminating the branchlets, pendent, with approximately 10-14 flowers. Styles 1.5-2.0 cm long, hairy just below the tip.

Cultivated plants derived from the two widely separated localities are distinct in appearance, the Mogumber plants tending to be lower and more spreading in habit than the Narrogin plants.

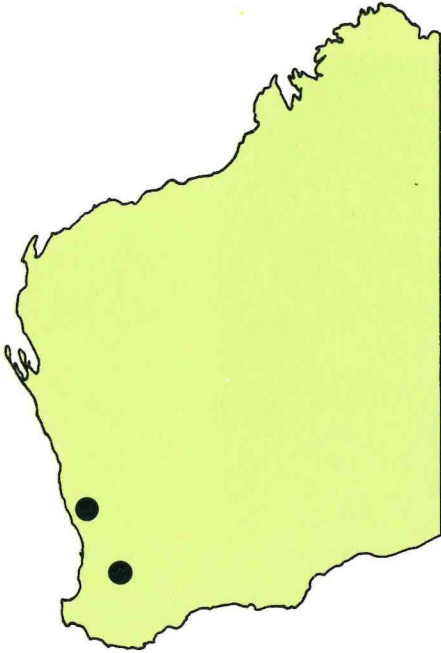
The Mogumber Bell does not seem to have any very close relatives and can be distinguished from other darwinias both by its leaves (as described above) and by the unique colour and shape of its bells. The strictly-ordered appearance of its bells results from the arrangement of the bracts in opposite pairs with successive pairs occurring at right angles to one another. A sandplain species, *Darwinia speciosa*, also has this arrangement but its 'bells' differ in many respects, for example they are more-or-less upright, more elongated and deep purple-red. All the Stirling Range bells have a much more irregular appearance.



(photo: E. Wittwer)

## DISTRIBUTION AND HABITAT

The two known localities near Mogumber and Narrogin are 250 km apart and have average annual rainfalls of about 500 mm. At Narrogin, The Mogumber Bell grows amongst the Giant Dryandra (*Dryandra nobilis*) and *Beaufortia incana* on a hard lateritic formation. At Mogumber the species was also recorded from a lateritic hilltop.



## REPRODUCTIVE BIOLOGY

Flowers are borne in October–December. They are apparently adapted for bird pollination although there have been no reported sightings of birds feeding on the flowers.

The level of seed set has not been measured but is presumably low because 100 nuts planted at Kings Park in 1980 all failed to germinate. No seedlings were seen at the Narrogin population but this could have been due to grazing by rabbits and stock rather than poor seed set.

The plants are probably killed by fires and rely on their seeds for regeneration.

## CONSERVATION

Provided it has well drained soil, The Mogumber Bell can be successfully grown in varied climates and is a popular garden plant in Melbourne and Sydney as well as Perth. Coming from a drier climate than the mountain bells, it is presumably better able to withstand high temperatures and low rainfall. However, none of the bells is easy to maintain in cultivation for long periods unless provided with suitable conditions.

The species is readily grown from cuttings but is apparently difficult to grow from seed. It is sold by a few native nurseries.

In August 1978 there were only six surviving wild plants in the Narrogin population. Members of the Western Australian Wildflower Society erected a fence around these plants to exclude grazing animals. The enclosure occupies less than 0.5 ha. It is on privately owned farmland and completely surrounded by cleared paddocks. The land owner and another local resident are anxious to protect the plants and have attempted to exterminate rabbits within the enclosure.

A recent thorough search of the Mogumber locality by Wildflower Society members failed to locate any plants of the species. This locality is also on a farm and is grazed by sheep. If it were fenced off the population might possibly be re-established naturally from residual seeds.

It is possible that there are further surviving populations of *Darwinia carnea* on other hills, particularly in the Mogumber area. However, there seems little doubt that the species is extremely rare in its natural state and must be regarded as an endangered species.

IUCN Red Data Book Category: ENDANGERED  
Australian Plants at Risk Code: 2E



Fenced habitat of the Narrogin population of the Mogumber Bell. (photo: P. M. Lambert)

## FURTHER READING

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