FLORA

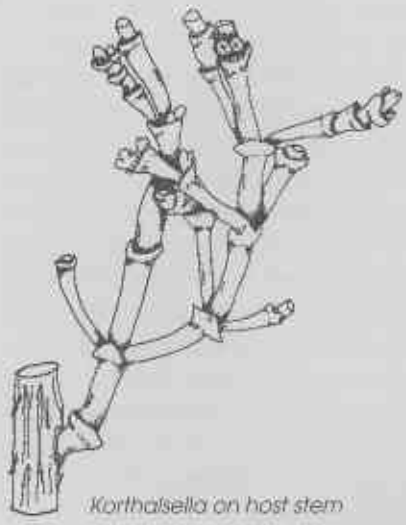
STRANGE PARASITE

Ray Cranfield

AN unusual looking perennial native parasite that grows on the branches of *Melaleuca lanceolata* has been known for many years but was finally named in 2002. The best way to describe this species is that it looks like a samphire (common salt lake plants) that has been randomly tossed among the Melaleuca foliage. The Melaleuca trees occur as a fringe around the edge of a small semi-saline lake south west of Eneabba. At present this lake is the only known location of this parasite and although *Melaleuca lanceolata* is fairly common in the area the parasite appears to be restricted to a few trees within the population.

The parasitic plant is relatively small and may vary from 7-10 cm in length with very jointed branches. The flowers are greenish in colour and are 1-1.5 mm long and clustered on the active growing branch nodes, surrounded by an opposing pair of triangular rudimentary leaves. In most instances it is the yellow of the pollen bursting from the male flowers that attracts the eye and has led to the collection of this species. The small green flowers were first noted on specimens collected by me in December 1992. Previous to this collection the parasite was considered to be a sterile relic of an unknown genus as no flowering material had been seen or collected. Although no material had been collected at this stage the plant was thought to be a member of the Loranthaceae or mistletoe family.

The Loranthaceae is a family that is well represented in WA and are easily recognised by the presence of large coloured flowers and sticky soft fruits. In 1960 this family was further divided to create the family Viscaceae based upon differences in floral, embryo and fruit structures. The discovery of flowering specimens led the author to realise that this Eneabba material belonged to the family Viscaceae, could be placed in the genus *Korthalsella*, and was a possible new species.



Korthalsella on host stem

Korthalsella is a genus of around 30 species that are parasitic mainly on rainforest to open forest plants occurring in several Pacific Rim countries. In Australia there are 7 species of which 4 are endemic with most species occurring on the east coast. The two currently recognised species that occur in WA are both located in dry sclerophyll scrub and are widely separated from each other. In WA little is known about the pollination of these species or how the seed is dispersed. Based upon other known species of *Korthalsella* we can assume that the fruit is usually under 2 mm long and could be either pear or ellipsoidal in shape. The seed is known to be a disc about 1 mm in diameter.

This new species of *Korthalsella* was formally described and published as *Korthalsella arthroclada**. The specific name refers to the jointed (*arthro*) appearance of the branches (*clados*). There are another two species of *Korthalsella* that have previously been recorded for Western Australia. *Korthalsella leucothrix* has been found growing on the branches of several *Acacia* species within the arid regions south east of Wiluna to the Warburton area and also located in arid areas of South Australia. The other species recorded for WA was *Korthalsella japonica* subsp. *japonica*, which has been reported growing at Mongers Lake on *Acacia acuminata*.

Korthalsella arthroclada has been placed on the Department of Conservation and Land Management's Priority Flora list. There is a need to find out how many individual plants occur at this site along with the number of host plants infected. Any further records or sighting of this unusual parasite would be appreciated. This species of *Korthalsella* is rare and excessive sampling is to be avoided, photographs would be desirable since our aim is to conserve this state's floral biodiversity. The more we learn about this species the greater the prospect of maintaining the population viability through informed management practices.

Can you help? A good, clear photograph with accompanying details should be sent to Ray at the WA Herbarium, or emailed to rayc@calm.wa.gov.au (Please note, as it is rare, the exact location of the existing population will not be provided.)

* *Cranfield, R.J. 2002. Korthalsella arthroclada (Viscaceae), a new species from south-west Western Australia. Nuytsia* ***14****: 361-364.*

Did you know?

That finches can drink with their heads down? They suck up water and therefore, unlike most other birds, do not have to tip up their heads to swallow.