

## Botanical name

*Acacia yorkrakinensis* subsp. *acrita* Cowan & Maslin, Nuytsia 10: 60 (1995)

The species name commemorates the Western Australian central wheatbelt area of Yorkrakin (north of Tammin) from where the specimens of the typical subspecies were originally collected.

The subspecific name is derived from *akritos*, a latinized Greek word meaning confused or mixed. It refers to the confusion that existed between *A. signata* (the name by which subsp. *acrita* had, until recently, been known) and this subspecies of *A. yorkrakinensis*.

## Common name

Soft-leaf Wodjil.

## Characteristic features

*Branchlets* pruinose. *Phyllodes* rather long and narrow, thinly textured, grey-green to glaucous when mature, finely multi-nerved (the central nerve more evident than the rest), marginal nerves red to light brown, apices acuminate to caudate-acuminate and normally shallowly curved. Spikes arranged in short racemes. *Pods* linear, commonly pruinose.

## Description

**Habit.** Obconic, flat-topped to sub-rounded *shrubs* or *trees* 1.5-4 m tall and 2-4 m wide, branching at or just above ground level into 2-6 main stems, crowns occupying about 30% of the total plant height, young plants bushy with rounded crowns that can extend to ground level.

**Bark.** Grey, finely fissured at base of main stems, smooth on the (often) pruinose branches.

**Branchlets.** Glabrous, pruinose.

**Phyllodes.** Linear to linear-elliptic, 8-16 cm long, 3-7 mm wide, thinly textured (not rigid), straight to shallowly incurved, glabrous, milky green (when young) or grey-green to glaucous (mature); *longitudinal nerves* numerous, fine and close together, the central nerve more evident than the rest; *marginal nerves* normally red to light brown; *apices* acuminate to caudate-acuminate and normally shallowly curved; *pulvinus* light orange.

**Spikes.** Arranged 1-4-headed racemes mostly 1-18 mm long (*raceme axes* glabrous and commonly pruinose), densely flowered, bright golden, somewhat fragrant, 1.5-2.5 cm long and 1 cm wide when fresh (Kalannie plants); *peduncles* 5-13 mm long, glabrous and commonly pruinose;

**Flowers.** 5-merous; sepals 1/2-3/4-united.

**Pods.** Linear, raised over but not constricted between seeds, 6-11 cm long, 4-5.5 mm wide, crustaceous-coriaceous, glabrous, commonly pruinose.

**Seeds.** Longitudinal in the pods, oblong-elliptic, 4-5 mm long, 2.5-3 mm wide, +/- glossy, dark brown to black; aril presumably white (needs confirming in the fresh state).

## Taxonomy

Subspecies *acrita* was until recently commonly called *Acacia "signata"*. However, "true" *A. signata* is a different species and does not occur in the Kalannie region.

**Superficially similar species.** Similar in some respects to *A. lasiocalyx* which is most readily distinguished by its green, often longer phyllodes and non-racemose, longer spikes.

### **Distribution**

Widespread in south-west Western Australia from near Perenjori and Wubin south-east to near Coolgardie, Lake King and Peak Charles.

Subspecies *acrita* is moderately common in the Kalannie region where it is often seen as an opportunist and primary colonizer in open disturbed sites (e.g. road verges and in railway reserves), but it generally does not form dense populations.

### **Habitat**

Over its geographic range this subspecies is most commonly found in yellow sand but it has also been recorded from gravelly sand, gravel, sandy clay and sandy loam.

**Recorded from the following Kalannie region Land Management Units.** Wodjil; Sand over Gravel; Pediment; Deep Yellow Sand; Shallow Soil over Laterite; Spillway Sand.

### **Conservation status**

Not considered rare or endangered.

### **Flowering**

Over its geographic range subsp. *acrita* flowers from late July to early October.

In the Kalannie region this subspecies was in full flower in August and September 1997.

### **Fruiting**

Over the geographic range of this species pods with mature seeds have been collected from late November to January.

In December 1996 plants of subsp. *acrita* in the Kalannie region failed to produce a pod crop (reduced seed set also occurred in many other acacias in the region that year). It would therefore appear as though local conditions (timing and/or intensity of rainfall events probably being the most important) influence fruit production.

### **Biological features**

**Longevity.** Probably about 20 years.

**Diseases.** The Kalannie region plants of this subspecies are invariably seriously infected by Gall Rust.

**Toxicity.** The phyllodes of this subspecies contain high concentrations of cyanogenic glucoside; however, they do not appear to possess an endogenous enzyme that is needed to hydrolyse this into hydrogen cyanide (Maslin *et al.* 1987). There are no reported cases of stock losses involving this species.

### **Propagation**

Propagate from seed.

### **Revegetation**

*Acacia yorkkrakinensis* subsp. *acrita* has some potential for use in revegetation within the Kalannie region on light-textured, sandy or gravelly soils. Its growth form is

suited as a low windbreak, visual screen and for providing shade and shelter for stock and wildlife. However, this subspecies is highly susceptible to Gall Rust infection and this would constrain its extensive useage.

### **Utilisation**

**Shade and shelter.** See Revegetation above.

**Windbreak and visual screen.** See Revegetation above.

**Wildlife refuge.** See Revegetation above.

### **Reference**

Maslin, B.R., Conn, E.E. and Dunn, J.E. (1987). Cyanogenic Australian species of *Acacia*: A preliminary account of their toxic potential. pp. 107-111. In: Turnbull, J.W. (ed.) 'Australian *Acacias* in Developing Countries'. Proceedings of an international workshop held at the Forestry Training Centre, Gympie, Qld, Australia, 4-7 August 1986.