MANGROVES OF THE NORTHERN TERRITORY, AUSTRALIA:

IDENTIFICATION and TRADITIONAL USE

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EXTRACT: *Acrostichum* (pp. 38–41)
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DARWIN 2006

Acrostichum PTERIDACEAE

DERIVATION: The Greek ‘acros’ means end, and ‘stichos’ means row, this alludes to the fertile apical pinnae (leaflets), whose lower surface are covered in spores.

A genus of about five tropical species often called marsh ferns, two occur in the NT. *Acrostichum speciosum* regularly occurs in mangroves in upper tidal environments.

Acrostichum speciosum Willd. **Mangrove Fern**

DERIVATION: The Greek ‘speciosa’ means showy, the application of this name is uncertain.

DESCRIPTION: Perennial fern forming coarse clumps to 1.5 m high; rootstock thick, often bearing buttress-like roots; scale on rhizome lanceolate, border hyaline, to 8 mm wide; stipule tufted, cartilaginous. Fronds pinnate, 1–3 m long; terminal pinnae conform; lateral pinnae oblong-lanceolate 10–20 x 2–3 cm, entire, apex acute-acuminate, venation anastomosing, coriaceous, dark green. Fertile pinnae rusty coloured, smaller than sterile pinnae, lower surface covered with sporangia mixed with capitate paraphyses. Spores tetrahedral, clear to translucent.

HABITAT: *Acrostichum speciosum* often forms colonies or clumps along landward margins of tidal areas, particularly in areas with perennial freshwater input, e.g., monsoon forest-mangrove forest ecotone. Soils include sands, muds and organic loams. Common associates are *Lumnitzera racemosa, Avicennia marina, Bruguiera gymnorhiza, Dalbergia candenatensis, Diospyros compacta* and *D. littorea.*

DISTRIBUTION*: Acrostichum speciosum* is widespread, though not particularly common around the NT coastline, it is more common in the north-west areas. This species also occurs in Western Australia, Queensland and New South Wales. Extra-Australian distribution includes most of tropical Asia.

DISTINCTIVE FEATURES: Clumping fern; pinnae (leaf) tips pointed; fertile pinnae rusty coloured.

ETHNOBOTANY: The Iwaidja, Rirratjingu and Anindilyakwa names for this species are terms used for ferns in general. The Tiwi name refers to plants that occur in monsoon vine forests or jungles. The presence of this plant indicates to Iwaidja speakers that fresh water is close by, either above or under the ground.

Reportedly used as a food resource in the north-west Crocodile Islands (Davis 1984), the part used preparation and name not provided.

Recorded Aboriginal language names

Ajuwajuwa (Anindilyakwa) Manggawiny (Iwaidja)
Yawurlama (Tiwi) Mayawarku (Rirratjingu, Yolngu matha)
Ngubiwi (Yanyuwa)

Watson (1928) notes Malayans using the fronds as high quality thatch. In Vietnam this species is preferred for domestic fuel for cooking, the new tender leaves are eaten in times of hardship and the pounded rhizome is used to treat wounds and boils (Hong & San 1993).

NOTES: The two species of *Acrostichum* that occur in the NT are very similar. *A. speciosum* is distinguished by its acute to acuminate leaf apices, in contrast with the blunt apices characteristic of *A. aureum.*

Fertile fronds are produced from August to April. Sporelings are copious from January to April, the majority of which perish during the dry season (April–November).

Reference: Short et al. 2003.

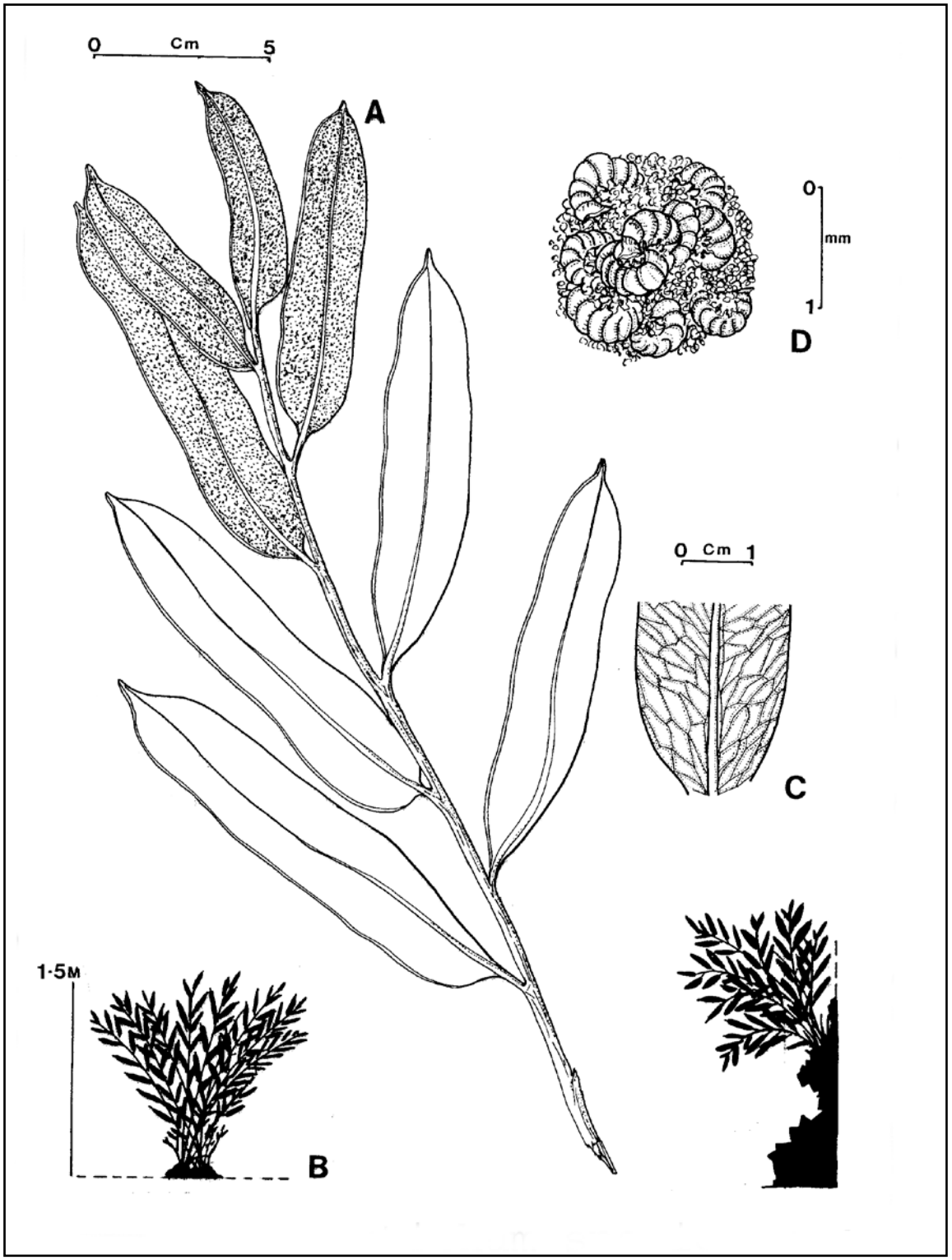

Figure 10. ***Acrostichum speciosum***. A, part of frond showing fertile pinnae; B, habit; C, pinnae venation; D, spores and indusia (A–D, B. Laing, s.n., DNA 7118)