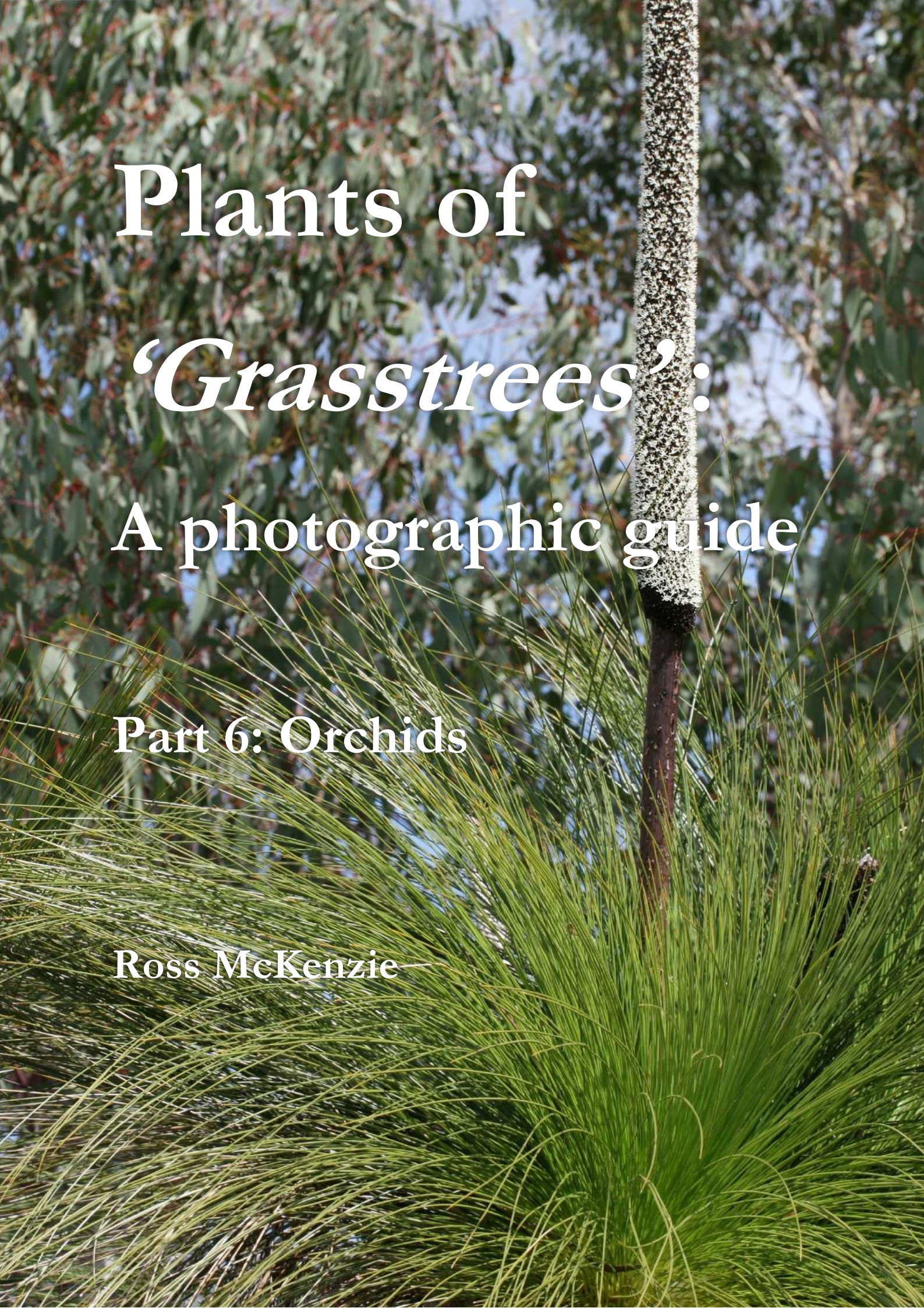




Plants of

'Grasstrees':

A photographic guide

Part 6: Orchids

Ross McKenzie

To the natural philosopher there is no natural object unimportant or trifling ... a soap bubble ... an apple ... a pebble ... He walks in the midst of wonders.

John Herschel (1792-1871): *A Preliminary Discourse
on the Study of Natural Philosophy* (1830)

Edition 1

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Published by Ross McKenzie, *Yapunyah*, 26 Cypress Drive, Ashgrove, Brisbane Q 4060

yapunyah.house@bigpond.com

About the author

Dr Ross A. McKenzie PSM BVSc (Hons) MVSc DVSc (1949 –) is a retired veterinary pathologist and toxicologist who worked in the Queensland Department of Primary Industries during 1973-2009 and taught toxicology to veterinary students at the University of Queensland during 1994-2008. He is also an amateur botanist and photographer. In retirement, Ross wrote and illustrated the definitive 976-page *Australia's Poisonous Plants, Fungi and Cyanobacteria: A Guide to Species of Medical and Veterinary Importance*, published by CSIRO Publishing in 2012, as a plain-language tool for understanding and preventing poisonings by natural toxicants – ‘natural’ does not mean ‘harmless’. His interests include natural history, bush-walking, gardening with Australian native plants and photography of landscape and Australian native flora. As a member of the Society for Growing Australian Plants (now Native Plants Queensland), the Queensland Naturalists’ Club and privately with his botanical artist wife Glenyth, he has travelled widely throughout Australia, visiting all states and crossing the continent by road east-west and return several times.

Notice to Guests

This guide is not comprehensive. It covers the plants identified so far on *Grasstrees*. If you come across a plant that is flowering or fruiting and it is not included in this guide, please notify Trish or John Stadtmiller so that it can be investigated and hopefully included in a later edition. Thank you. I hope you enjoy your stay!

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Orchids

Orchids are monocotyledons in Family Orchidaceae. They commonly have fleshy showy flowers that are pollinated by insects. Some orchids have an intimate relationship with the males of one species of insect attracted by chemicals and the resemblance of the flower parts to females of the particular insect species.

Ecological niches in which orchids grow are

- rocks (**lithophyte** orchids)
 - *Dendrobium speciosum* (rock or king orchid)
 - *Dockrillia linguiformis* (tongue, button or tick orchid)
 - *Erythrorchis cassythoides* (potato orchid)
- soil (**terrestrial** or ground orchids)
 - *Diuris chrysantha* (golden donkey orchid)
 - *Glossodia major* (waxlip orchid)
 - *Microtis parviflora* (slender onion orchid)
 - *Pterostylis mutica* (midget greenhood orchid)
 - *Pterostylis rufa* (red greenhood orchid)
 - *Spiranthes sinensis* subsp. *australis* (ladies' tresses orchid)
- trees (**arboreal** orchids)

Rock-loving orchids

Dendrobium speciosum (rock or king orchid) [Orchidaceae]

- Lithophyte
- Large sprays of golden flowers



Dendrobium speciosum (rock or king orchid): Whole plant.



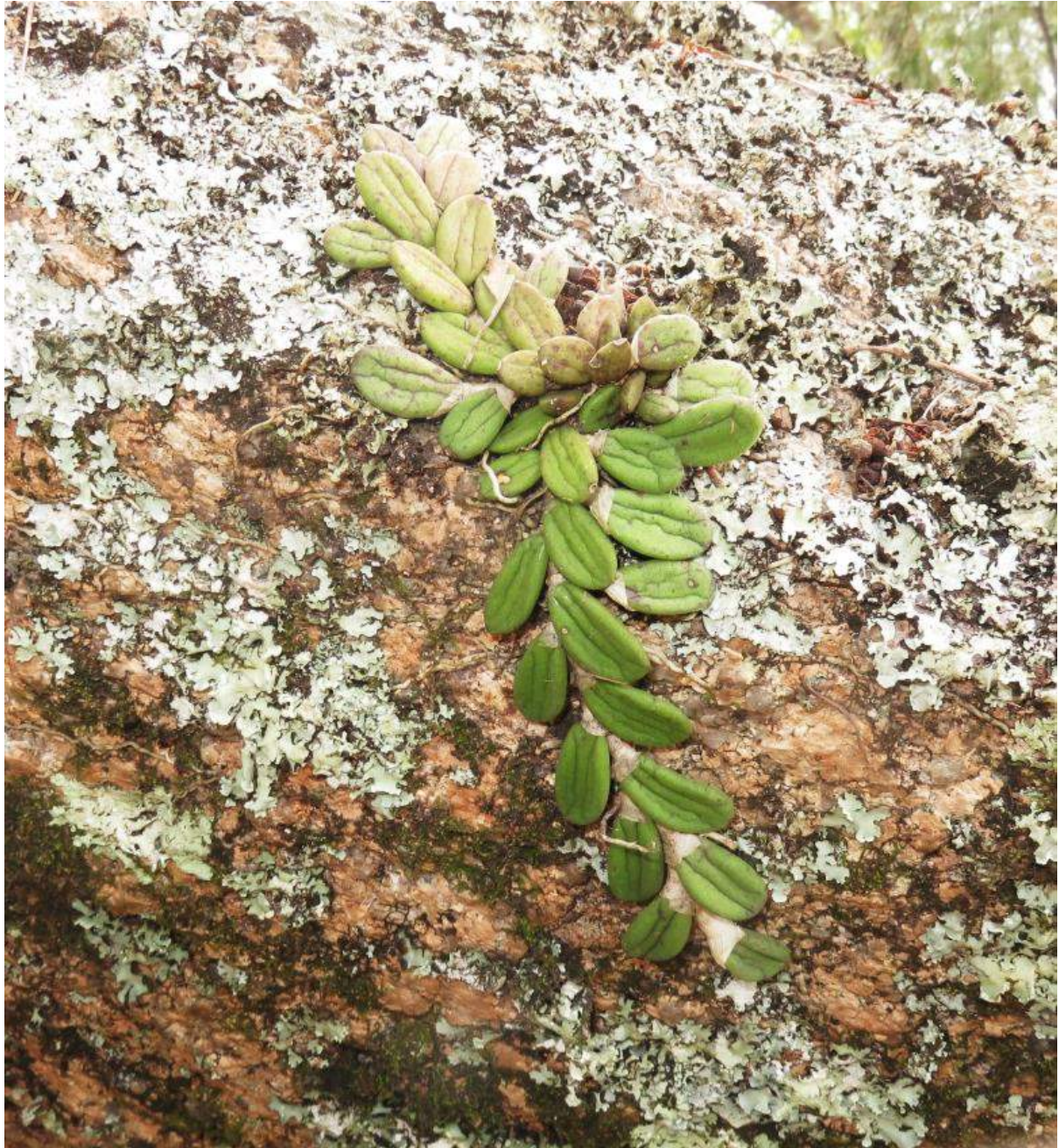
Dendrobium speciosum (rock or king orchid): Flower spike. Photographed at Maleny Q August 2013



Dendrobium speciosum (rock or king orchid): Flowers. Photographed at Maleny Q August 2013

***Dockrilla linguiformis* (tongue, button or tick orchid) [Orchidaceae]**

- Lithophyte
- Delicate sprays of white flowers
- Leaves fleshy ovals



Dockrilla linguiformis (tongue, button or tick orchid): Whole plant, non-flowering.



Dockrilla linguiformis (tongue, button or tick orchid): Whole plant, flowering.



Dockrilla linguiformis (tongue, button or tick orchid): Flower spikes.

***Erythrorchis cassythoides* (potato orchid) [Orchidaceae]**

- Lithophyte
- Leafless
- Golden-brown flowers



Erythrorchis cassythoides (potato orchid): Flowers



Erythrorchis cassythoides (potato orchid): Whole flowering stem

Ground orchids

Diuris chrysantha (golden donkey orchid) [Orchidaceae]

- Terrestrial
- Yellow & brown flowers



Diuris chrysantha (golden donkey orchid): Multiple flowering plants in habitat



Diuris chrysantha (golden donkey orchid): Flowering plant



Diuris chrysantha (golden donkey orchid): Flower



Diuris chrysantha (golden donkey orchid): Tubers

***Glossodia major* (waxlip orchid) [Orchidaceae]**

- Terrestrial
- Purple-blue flower with white- banded lip (labellum) on upright tall stem; August-October
- Leaf single hairy at ground surface



Glossodia major (waxlip orchid): Flower. Photograph by John Stadtmiller.



Glossodia major (waxlip orchid): Leaf and flower stem (hairy). Photograph by John Stadtmiller.

Microtis parviflora (slender onion orchid) [Orchidaceae]

- Terrestrial



Microtis parviflora (slender onion orchid): Whole plant in habitat



Microtis parviflora (slender onion orchid): Whole plant in habitat



Microtis parviflora (slender onion orchid): Flowers



Microtis parviflora (slender onion orchid): Roots and tubers

***Pterostylis mutica* (midget greenhood orchid) [Orchidaceae]**

- Terrestrial



Pterostylis mutica (midget greenhood orchid): Whole plant



Pterostylis mutica (midget greenhood orchid): Whole plant



Pterostylis mutica (midget greenhood orchid): Fruiting stem

***Pterostylis rufa* (red greenhood orchid) [Orchidaceae]**

- Terrestrial



Pterostylis rufa (red greenhood orchid): Flowering plants in habitat



Pterostylis rufa (red greenhood orchid): Whole flowering plant



Pterostylis rufa (red greenhood orchid): Flowering stem



Pterostylis rufa (red greenhood orchid): Flower, side view



Pterostylis rufa (red greenhood orchid): Flower, front view



Pterostylis rufa (red greenhood orchid): Leaves and tubers

Spiranthes sinensis* subsp. *australis (ladies' tresses orchid) [Orchidaceae]

- Terrestrial
- Pink flowers in a spiral down the stem



Spiranthes sinensis subsp. *australis* (ladies' tresses orchid):