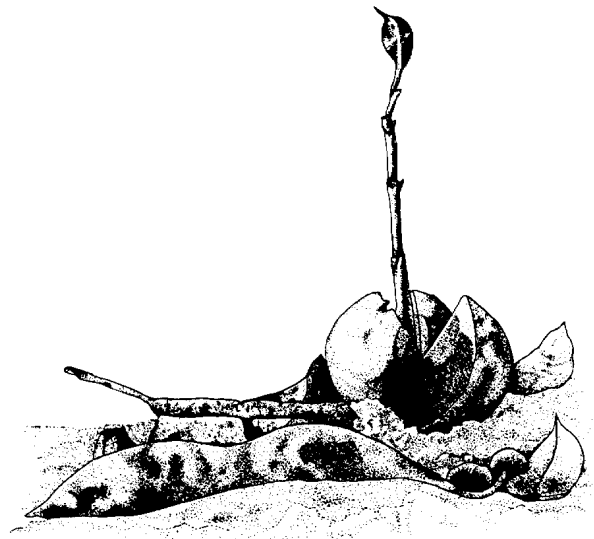


Tropical Factsheets

Ancient flowering plants

The Wet Tropics is a living museum of the highest concentration of ancient flowering plants on earth.

- Until about 200 million years ago, there were no flowering plants. Ferns, cycads and conifers dominated the earth.
- Then at the end of the Jurassic Period the first flowers evolved, creating the greatest change the world has ever seen. For the first time, plants provided animals with nectar, pollen and fruit to eat. In return, animals were pollinating their flowers and dispersing their seeds.
- Starting from West Gondwana in what is now western Africa and eastern South America, the flowering plants (called angiosperms) spread across the world.
- They eventually became the most successful plant form on earth. The current estimates of 235 000 species of flowering plants represents 88.7 per cent of all plant species on earth.
- Of the 19 angiosperm families described as 'primitive', 13 occur in the Wet Tropics - the highest concentration on earth. They have been nicknamed 'green dinosaurs'.
- The Ribbonwood tree (*Idiospermum australiense*) is very different from modern plants. All modern flowering plants produce seeds which have either one seed leaf (*monocots*) or two seed leaves (*dicots*) but the seeds of the *Idiospermum* can have between 2 to 6 seed leaves! Normally seeds will germinate and send up a single shoot but the Ribbonwood can sprout more than one shoot per seed.
- The red, spirally arranged flowers are another sign it is primitive.
- There is another intriguing aspect to the Ribbonwood tree and that is how its seeds are dispersed. Its seeds are large, heavy, do not float and are too poisonous for most animals to eat. Perhaps they were distributed by a much larger animal which has since become extinct. Now the tree only survives in two small patches in the Wet Tropics.



Idiospermum australiense