

# Comparison of Similar Looking Plants

## *Cratoxylum formosum* and *Cratoxylum maingayi*



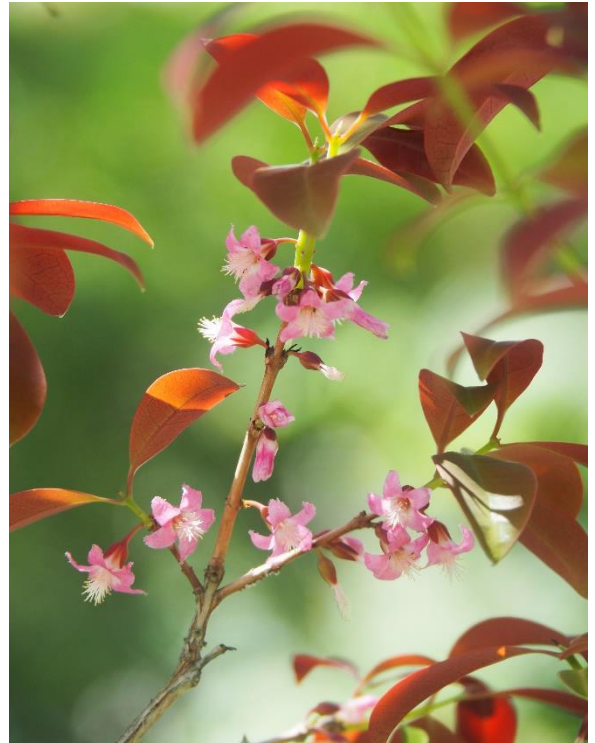
**Scientific name:**  
*Cratoxylum formosum*

**Common name:** Pink Empat

**Family name:** Hypericaceae

**Origin:** From Hainan to Southeast Asia

**Status:** Endangered



**Scientific name:**  
*Cratoxylum maingayi*

**Common name:** Derum

**Family name:** Hypericaceae

**Origin:** Southeast Asia

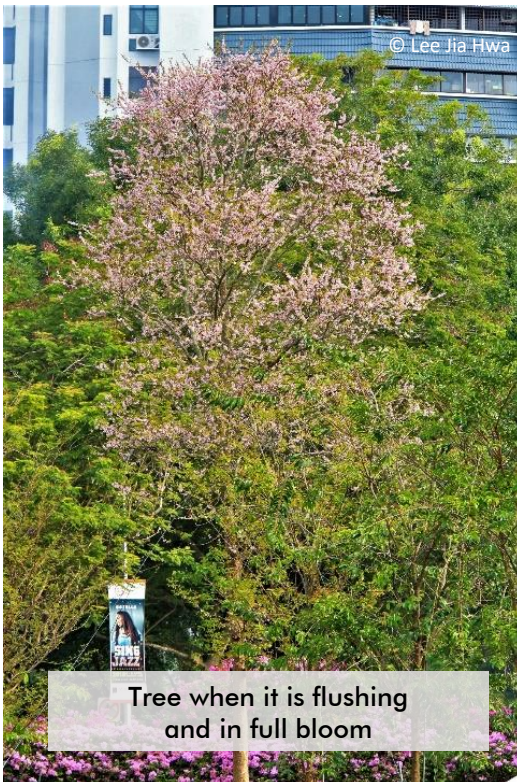
**Status:** Critically Endangered

# Character comparison

Form

## *Cratoxylum formosum*

- It is a tree, up to 45 m tall.
- Profuse blooming




## *Cratoxylum maingayi*

- It is a tree, up to 30 m tall.
- Profuse blooming




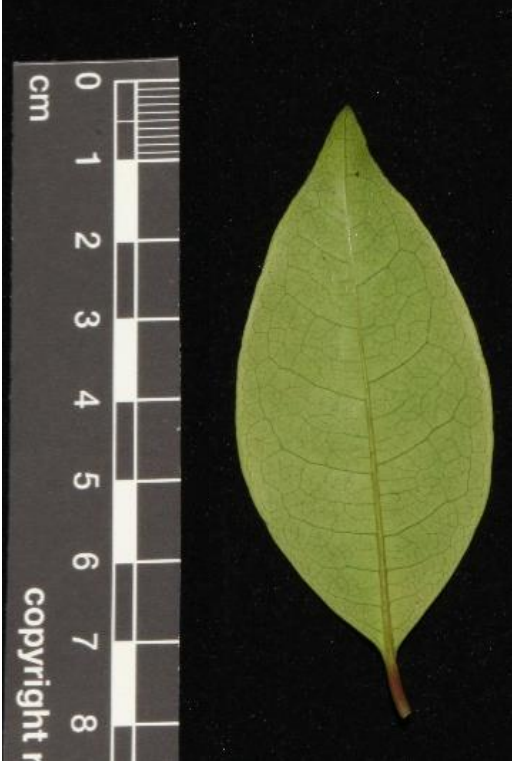
# Character comparison

Bark

<i>Cratoxylum formosum</i>	<i>Cratoxylum maingayi</i>
<ul style="list-style-type: none"> <li>• Young trees have spines at the base.</li> <li>• Bark is grey-brown to reddish brown</li> <li>• Bark is smooth to fissured or scaly.</li> </ul>	<ul style="list-style-type: none"> <li>• Young trees not observed to have spines.</li> <li>• Bark is dark grey-brown</li> <li>• Bark is smooth to fissured or flaky</li> </ul>
 <p>Spines on young tree</p> <p>Scaly Bark</p> <p>Fissured Bark</p>	 <p>No spines on young tree</p> <p>Fissured Bark</p>

# Character comparison

Mature Foliage

<b><i>Cratoxylum formosum</i></b>	<b><i>Cratoxylum maingayi</i></b>
<ul style="list-style-type: none"><li>• Leaf is elliptic, ovate, obovate or oblong</li><li>• Leaf is larger (5 – 15 cm long and 2.5 – 6.5 cm wide).</li><li>• Leaf stalk varies with leaf size, up to 15 mm long.</li></ul>	<ul style="list-style-type: none"><li>• Leaf is elliptic to oblong</li><li>• Leaf is smaller (1.5 – 5.5 (–8) cm long and 1 – 3 cm wide).</li><li>• Leaf stalk is 5 – 9 mm long.</li></ul>
	

# Character comparison

Lateral veins

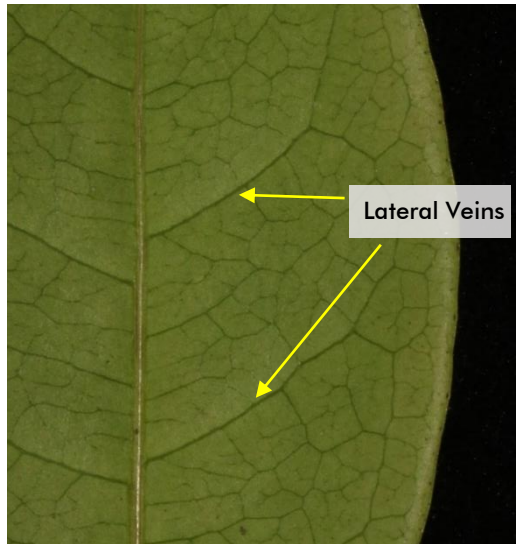
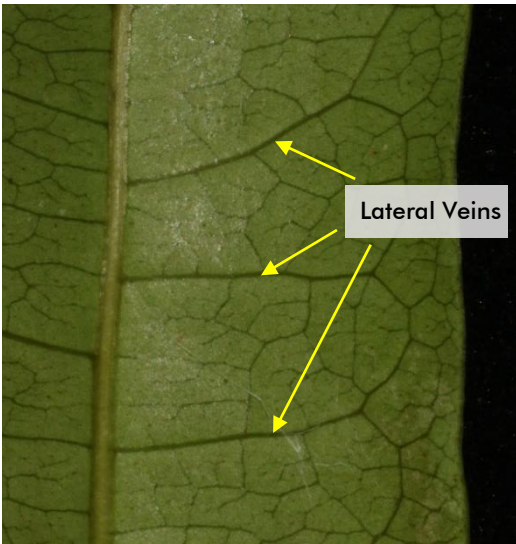
## *Cratoxylum formosum*

- 8 – 16 pairs of lateral veins




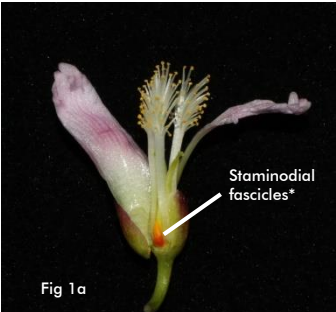




## *Cratoxylum maingayi*

- 5 – 7 (- 14) pairs of lateral veins



# Character comparison



Flowers

<i>Cratoxylum formosum</i>	<i>Cratoxylum maingayi</i>
<ul style="list-style-type: none"> <li>• Petals may be white, pink, red or purple.</li> <li>• Staminodial fascicles* are orange-red and 2 – 4 mm long. (Fig 1a)</li> <li>• 20 stamens per fascicle. (Fig 2a)</li> </ul>	<ul style="list-style-type: none"> <li>• Petals may be white, pink, red or purple.</li> <li>• Staminodial fascicles* are orange-red and 2 – 3 mm long. (Fig 1b)</li> <li>• 9 – 15 stamens per fascicle. (Fig 2b)</li> </ul>
   <p>Fig 1a</p> <p>Fig 2a</p>	   <p>© Cerlin Ng</p> <p>Fig 1b</p> <p>Fig 2b</p>

\* Staminodial fascicles refer to the sterile staminal structure.

# Character comparison

Fruits

<i>Cratoxylum formosum</i>	<i>Cratoxylum maingayi</i>
<ul style="list-style-type: none"><li>• Ellipsoid</li><li>• Sepals persistent and one-third of the fruit length.</li><li>• Up to 17 seeds per locule</li></ul>	<ul style="list-style-type: none"><li>• Spindle-shaped</li><li>• Sepals persistent and cover half or two-third of the fruit length.</li><li>• 5 – 6 seeds per locule</li></ul>
 <p>Ripe fruit splitting open</p> <p>© Cerlin Ng</p>	 <p>Unripe fruit yet to split open</p> <p>© Cerlin Ng</p>

## **Acknowledgement**

We would like to thank Louise Neo for her advice and guidance to improve this article.

## **Reference**

Neo, L., Chong, K.Y., Tan, S.Y., Koh, C.Y., Lim, R.C.J., Loh, J.W., Ng, W.Q., Seah W.W., Yee, A.T.K., and Tan, H.T.W. (2016). Towards a field guide to the trees of the Nee Soon Swamp Forest (II): Cratoxylum (Hypericaceae). Nature in Singapore, Vol 9, Pg 29 – 39.

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