REMARKABLE TREES ON NII CAMPUS

2. The Flamboyant Gul Mohar

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Common name: gulmohar, gold mohr, flamboyant, royal poinciana, flame tree, peacock tree

Botanical Name: Delonix regia (Bojer ex Hook.) Raf.

Family: Pea Family (Fabaceae, Subfamily Caesalpinioideae)

Where to Find: Fairly common on the campus - Entrance, near main building and elsewhere



Gul mohar (Delonix regia) in full bloom. Picture sourced from http://lonehillart.files.wordpress.com/2013/02/delonix-regia-flamboyant-acacia-final-1024ppi-1.jpg

^{*}Unless otherwise acknowledged, the photographs and the art work are mine.



A young gulmohar tree near the main building

"Gul mohar gar tumhara nam hota Mausame gulko hasana bhee hamara kam hota...".

This is how Rakesh Roshan, yesteryears' Bollywood hero, and his love interest Sarika famously lip-synced to Kishore Kumar and Lata Mangeshkar's voices in the 1978 Bollywood film *Devta* (Lyrics: Gulzar; Music: R D Burman). Indeed, gul mohar is arguably the prettiest

tree in the world. Come summer, you cannot ignore - or be indifferent to - its charm, as the blossoms paint the landscape in a riot of bright scarlet-to-orange hues.

Although the gul mohar has all but disappeared in the wild in its original home in **Madagascar**, it is one of the most extensively cultivated trees in tropical and subtropical regions across the world. This popular shade and showy ornamental tree was probably introduced into India around 1840 near Mumbai from Mauritius.



View from the roof of the main building shows several gul mohar trees in bloom. A cursory count shows that there are at least 36 trees on NII campus.

The tree is known by **several names**. The popular Indian name *gul mohar* refers to the beauty of its flowers (Persian *gul* = flower and *mohar* or *mor* = pea cock), possibly why it is known as 'peacock tree' as well. Á more common English name is 'flamboyant'. It is also called the 'flame tree' (but this name should not be confused with the 'flame of the forest', commonly known as *dhak* in northern India). The species was originally placed in the genus *Poinciana*, so named in honour of Phillippe de Longvilliers de Poincy, the 17th Century

governor of Saint Christophe (Saint Kitts), hence it is also known as the royal poinciana). In 1837, the name was transferred to the genus Delonix (Greek Delos = conspicuous and onyx = claw, referring to the distinctive shape of the flower petals), which has 11 species. Of these, nine are confined to Madagascar.

The popularity of the tree has led to the celebration of the **Annual Royal Poinciana Fiesta** in Miami, hosted by the Tropical Flowering Tree Society. This is Miami's oldest continuously running festival. The 76th edition was held in June 2013.

Gul mohar grows up to 30 m in height with a tall, unbranched trunk. The crown is umbrella shaped. The bark is smooth, pale grey and often creased at branch forks. Because it is a legume, the tree has nitrogen-fixing and soil improving properties.

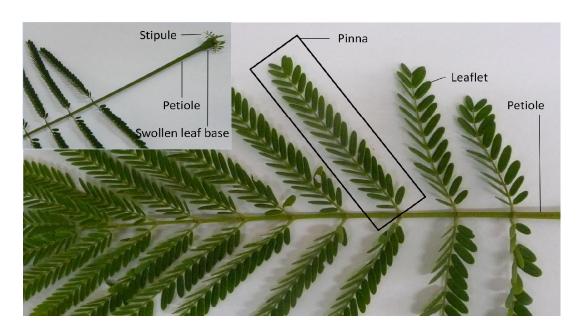


The gul mohar is a medium-sized, fast growing deciduous tree. Sometimes, roots close to the trunk are exposed to provide additional support to the trunk. These are called 'butresses'. The tree has a clear bole (portion of the trunk that is devoid of branches) with smooth, pale grey bark. A characteristic feature is that there are creases or folds in the bark, especially where the branches fork out. It reminds me of an elephant's skin!



The leaves are feather-like and are thickly packed on the crown providing dense shade underneath the tree. They usually turn yellow during November and by late January-early February, most of them are gone. New leaves appear by late March or early April.

The **leaves** are compound and feather-like (twice-divided or bipinnate). Each leaf is made of between 10 and 25 pairs of pinnae, with each pinna having 16-30 oppositely arranged leaflets. A mature leaf could have between 1500 and 2500 leaflets.

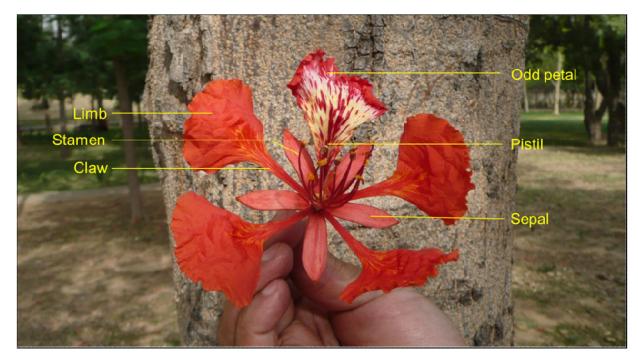


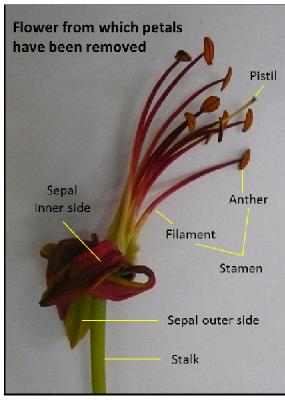
The leaf resembles that of Jacaranda in that it is compound and feather-like. However, there are some differences too: (i) At the swollen base of the leaf stalk or petiole, there are a pair of small but prominent feathery outgrowths known as stipules (inset); (ii) Each leaf has 10-25 pairs of pinnae (singular pinna) and each pinna has 16-30 pairs of leaflets; As in many members of the legume family, the leaflets fold up each evening after sunset.

Flowers are arranged in loose terminal clusters, are large (~10 cm across) and bright red (or orange) in colour. The sepals are fleshy and green on the outside but crimson on the inner side. Petals are separate and distinct (not fused into a tube as in Jacaranda). Out of five petals one is larger and has a prominent white-to-creamy-yellow blotch. The other four are crimson. There are 10 stamens surrounding the pistil (see opposite page).



We know little regarding the breeding system of gul mohar. However, some self-incompatibility has been recorded. The species is thought to be pollinated by sunbirds (Picture sourced from http://www.indianaturewatch.net/displayimage.php?id=453848)

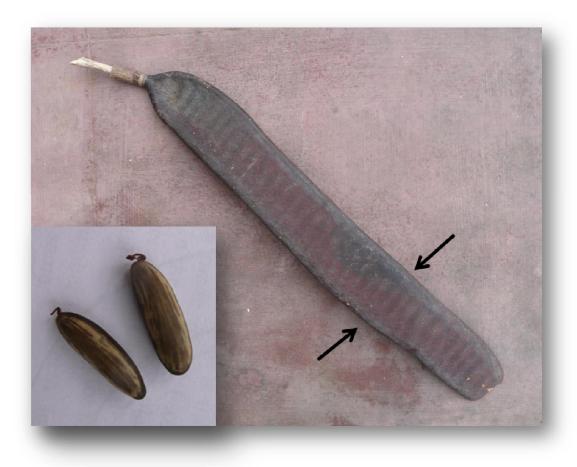




Above and left: Flowering in Delhi begins in early-t0-mid May and continues through June. The flower is bilaterally symmetrical and stalked. The sepals are fleshy, green on the outside but crimson on the inside. Out of five petals, the upper petal (also known as the odd petal) is larger than the other four and has prominent white-to-creamy-yellow blotch, speckled with red. All the petals are spatula shaped, the broader portion known as limb and the narrower portion as claw. The limb has crinkly edges. There are 10 stamens with red filaments. All the stamens are fused at the base. The pistil is green.

The **fruit** is a legume - also known as pod, long (30-70 cm), strap-shaped and flattened, containing up to 50 seeds each. Initially fruits are leathery, but become woody, turning reddish brown to almost black when ripe. It is not uncommon to see the previous year's fruits still hanging on the tree with the current

year's flowers. **Seeds** are dark brown, slightly elongated to rod-shaped, smooth with hard seed coats and streaked. They are neatly arranged linearly within the fruit.



The fruit of the gul mohar tree is technically known as 'legume'* or 'pod'. Pods are elongated dry fruits, splitting open when ripe on two sutures (see arrows). The pods make excellent 'swords' for children during playtime as the seeds within rattle alluringly. I still remember several 'wars' we fought with gul mohar sabres! Seeds (inset) are elliptical to rod-shaped, smooth, streaked and dark brown. You could eat the young seeds minus the seed coats.

{*Incidentally, the term 4egumeøis also employed to denote a plant in the family Fabaceae (formerly Leguminoceae) as well as the fruit or seed of such plant. Legumes are cultivated for food grain seed, forage and silage, and as green manure.}



Last year's pods still persist on the tree hanging like swords with the current year's flowers.



Poddy in the head? You can all go pod-mad this summer! Seeds can make great shakers for children's rattles. Painted, the pods are amazingly great decorations (above). You can use various themes. You can also collect enough pods for summer art projects for school and pre-school children.

The popularity of gul mohar is confirmed (if confirmation was required) by the fact that several countries have brought out commemorative **postage stamps** in honour of the tree. On the next two pages, I have given an indicative representation of the same (as available on the internet). To the best of my knowledge, there is no India stamp on the gul mohar. Is any philately enthusiast among you aware if there is one?



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POINCIANA REGIA











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