

PRAKRITI

QUEST FOR NATURE

Flora of the week
Oroxylum indicum

Fauna of the week
Canis aureus indicus

Bird of the week
Buceros bicornis

Officers' Club, CASFOS, Dehradun



FLORA OF THE WEEK

Oroxylum indicum

(Indian Trumpet Flower)

Oroxylum indicum is one of the most important medicinal plants in Ayurveda. Its

Ayurvedic name is Shyonak.

Common names: Broken bones tree, Indian trumpet flower, Damocles tree.

Morphological characteristics: It is a medium sized deciduous tree, growing 8-12 m tall. The bark is grayish-brown. Leaves are broad, 60-120 cm in length and bipinnately compound. Inflorescence is generally situated at the apices of branches and its length is about 30 cm or more. 20 to 30 flowers are stacked onto each other. When flowers bloom, outside petals turn dark purple and inside petals is cream. Flowers bloom from lower to upper, and they bloom at night time and fall in the morning. Its fruit is flat and long like a sword. Fruit peel is thick. Its young fruit is fresh green and is often eaten. Its seed is flat and winged.

Precautions:

It is found to be safe to use in children and in lactation period.

Pregnant women should use it under medical supervision.



Scientific classification:

Kingdom: Plantae

Order: Lamiales

Family: Bignoniaceae

Genus: *Oroxylum*

Species: *indicum*

Uses

Medicinal Uses: Apart from being eaten as food, it has proven medicinal properties such as anti-microbial, anti-inflammatory, anti-cancer, anti-oxidant and anti-cancer activity.

Agroforestry uses: As it is fast growing, it is quite suitable for use as pioneer species.

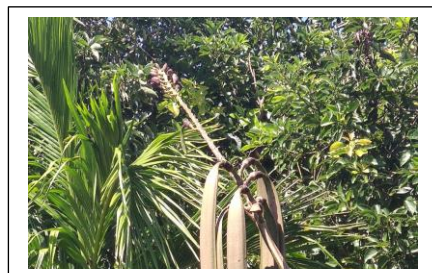
Other uses: The seeds are used as lining of hats. The winged seeds are strung together as offering to gods and goddesses by Buddhists. The fruits are used in tanning and dyeing. The bark is rich in tannins. Wood is soft and used for making matches and paper.

RANGE & DISTRIBUTION

Origin and Distribution: It is native to Indian sub-continent. It is found in India, Myanmar, Thailand, Laos, Malaysia, Indonesia, Vietnam, Philippines and Southern China.

FACTS:

- Also known as Sonapatha (Broken Bones Plant) is grown in India, South China, Sri Lanka, Malaysia, Celebes and Philippines. The name of the genus is derived from the Greek word oros which means mountain and xylon which means wood. It refers to the mountain areas where it is present.
- commonly known as: broken bones plant, Indian calosantes, Indian trumpet flower, midnight horror, oroxylum, tree of Damocles • Bengali: সোনা sona • Hindi: भूत वृक्ष bhut-vriksha, दीर्घवृन्त dirghavrinta, कुटन्नट kutannat, मण्डूक manduk (the flower), पत्रोर्ण patrorna, पूतिवृक्ष putivriksha, शल्लक shallaka, शूरण shuran, सोन or शोण son, वटुक vatuk
- It is a Red Listed Species (the species is facing risk owing to over-harvesting and habitat loss) Though distributed across India, it is sporadic in nature and only solitary or few trees seen here and there. but only recently we, from FRLHT, found a large population (in thousands :) in the central Indian region.



FAUNA OF THE WEEK

Canis aureus indicus

(Indian Jackal)

The golden jackal is a wolf-like canid

Description: It's a social species, the basic social unit of which consists of a breeding pair and any young offspring.

It is very adaptable, with the ability to exploit food ranging from fruit and insects to small ungulates. They will attack domestic fowl and domestic mammals up to the size of domestic water buffalo calves. The jackal's competitors are the red fox, wolf, jungle cat, wildcat.

- Compared with the Arabian wolf (smallest of the gray wolves), the jackal is smaller and possesses shorter legs, a shorter tail, a more elongated torso, a less-prominent forehead, and a narrower and more pointed muzzle.
- Its fur is coarse and relatively short, a mixture of black and white, with the base colour golden, buff on the shoulders, ears and legs.
- The buff colour is more pronounced in specimens from high altitudes. Black hairs predominate on the middle of the back and tail. The belly, chest and the sides of the legs are creamy white, while the face and lower flanks are grizzled with gray fur.
- The jackal moults twice a year, in spring and in autumn.

Size: Adults- length- 100 cm (39 in), height- 35–45 cm (14–18 in)

Weight: Averages - 8–11 kg (18–24 lb)

Diet: Both a predator and a scavenger. It scavenges off the kills made by the lion, tiger, leopard, dhole, and gray wolf. Omnivorous diet allows it to eat a large range of foods; this diet, together with its tolerance of dry conditions, enables it to live in different habitats



Conservation status

Least Concern (IUCN 3.1)

Classification:

Kingdom:	Animalia
Phylum:	Chordata
Class:	Mammalia
Order:	Carnivora
Family:	Canidae
Genus:	<i>Canis</i>
Species:	<i>aureus</i>

Indian Jackal: *C. a. indicus*

RANGE & DISTRIBUTION



Native to Southeast Europe, South Asia, South Asia, and regions of Southeast Asia

Indian Jackal - India, Nepal, Bangladesh, Bhutan



Habitat and Behaviour

Habitat: In India, they occupy surrounding foothills above arable areas, entering human settlements at night to feed on garbage, and have established themselves around hill stations at 2,000 m (6,600 ft) height AMSL

Social Behaviour: The breeding pair is the basic social unit, sometimes accompanied by their current litter of pups.

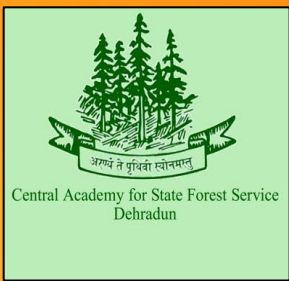
Distribution as a single jackal, 31%, 2- jackals, 35%, 3- jackals, 14%, >3 jackals, 20%.

Scent marking through urination and defecation is common around golden jackal den areas and, on the trails.

Family groups of up to 4–5 individuals have been recorded.

FUN FACTS:

- It portrayed as the familiar of several deities with the most common being **Chamunda**.
- Wolves dominate jackals, and **jackals dominate foxes**. Red foxes fear jackals, which are three times bigger than red foxes.
- Social interactions such as **greetings, grooming, and group howling** are common in jackals
- Golden jackals appear in Indian folklore and in two ancient texts, the *Jakatas* and the *Panchatantra*, where they are portrayed as **intelligent and wily creatures**.
- The orthodox dharma texts **forbid the eating of jackals because they have five nails**.
- Some indigenous Indians, **Kolis & Vaghirs** of Gujarat and Rajasthan and the **Narikuravas** in Tamil Nadu, **hunt & eat golden jackals**, but the majority of South Asian cultures consider it to be unclean.
- A Popular saying "**the sharpest among beasts, the crow among birds, and the barber among men**"



BIRD OF THE WEEK

Buceros bicornis

(Great Indian Hornbill)

Description: The great hornbill is a large bird with a very large bill, which bears a sizable, brightly colored, horny growth known as the casque. The body is mostly black with a white neck, wing coverts, and flight feathers.

Size: 100 to 120 cm (40 to 48 in.); 150 cm (5 ft.) wingspan; males grow larger than females

Weight: Averages 3 g (6.6 lbs.)

Diet: Figs comprise a major part of the diet but the species also takes eggs, amphibians, reptiles, insects, mammals, and small birds.

Incubation: 25 to 40 days

Clutch Size: 1 to 2 eggs

Life Span: 35 or more years

Range: The great hornbill has a wide distribution and can be found in China, India, Nepal, Bhutan, Bangladesh Myanmar, Thailand, Laos, Vietnam, Cambodia, Malaysia, and Indonesia. The large majority of the population is found in India.

Habitat: The Great Hornbill frequents wet evergreen and mixed deciduous forests, ranging out into open deciduous areas to visit fruit trees and ascending slopes to at least 1,560 m (5118 ft) in southern India and up to 2,000 m (6562 ft) in Thailand.

India has nine hornbill species, of which four are found in the Western Ghats: Indian Grey Hornbill (endemic to India), the Malabar Grey Hornbill (endemic to the Western Ghats), Malabar Pied Hornbill (endemic to India and Sri Lanka) and the widely distributed but endangered Great Hornbill. India also has one species that has one of the smallest ranges of any hornbill: the Narcondam Hornbill, found only on the island of Narcondam.

Unlike woodpeckers, hornbills cannot excavate their own nest. During nesting, the female incarcerates herself in the tree hollow for 3 to 4 months, and seals the entrance with her droppings, leaving only a slit through which the male delivers food to her and later to the chick.

RANGE & DISTRIBUTION

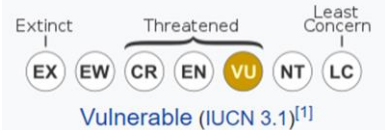


During the breeding season (January to April) great hornbills become very vocal. They make loud duets, beginning with a loud "kok" given about once a second by the male, to which the female joins in.

By eating fruits and dispersing seeds through droppings or regurgitation, hornbills aid in the regeneration of many mature forest trees. This service has earned them the title of 'feathered foresters'.



Conservation status



Scientific classification

Kingdom:	Animalia
Phylum:	Chordata
Class:	Aves
Order:	Bucerotiformes
Family:	Bucerotidae
Genus:	<i>Buceros</i>
Species:	<i>B. bicornis</i>

FUN FACTS:

- Malabar Pied and Great Hornbills may also clash their beaks in rare and spectacular aerial displays called casque-butting.
- Sighting hornbill in wild is like sighting a tiger.
- It is a monogamous bird.
- Their feathers produce a loud ruffle sound when in flight.
- They eat mainly Ficus figs by tossing them in air!
- Nagaland has hornbill festival celebration every year where people costumes are like hornbill and they dance.
- It is also the logo of Bombay Natural History Society.

