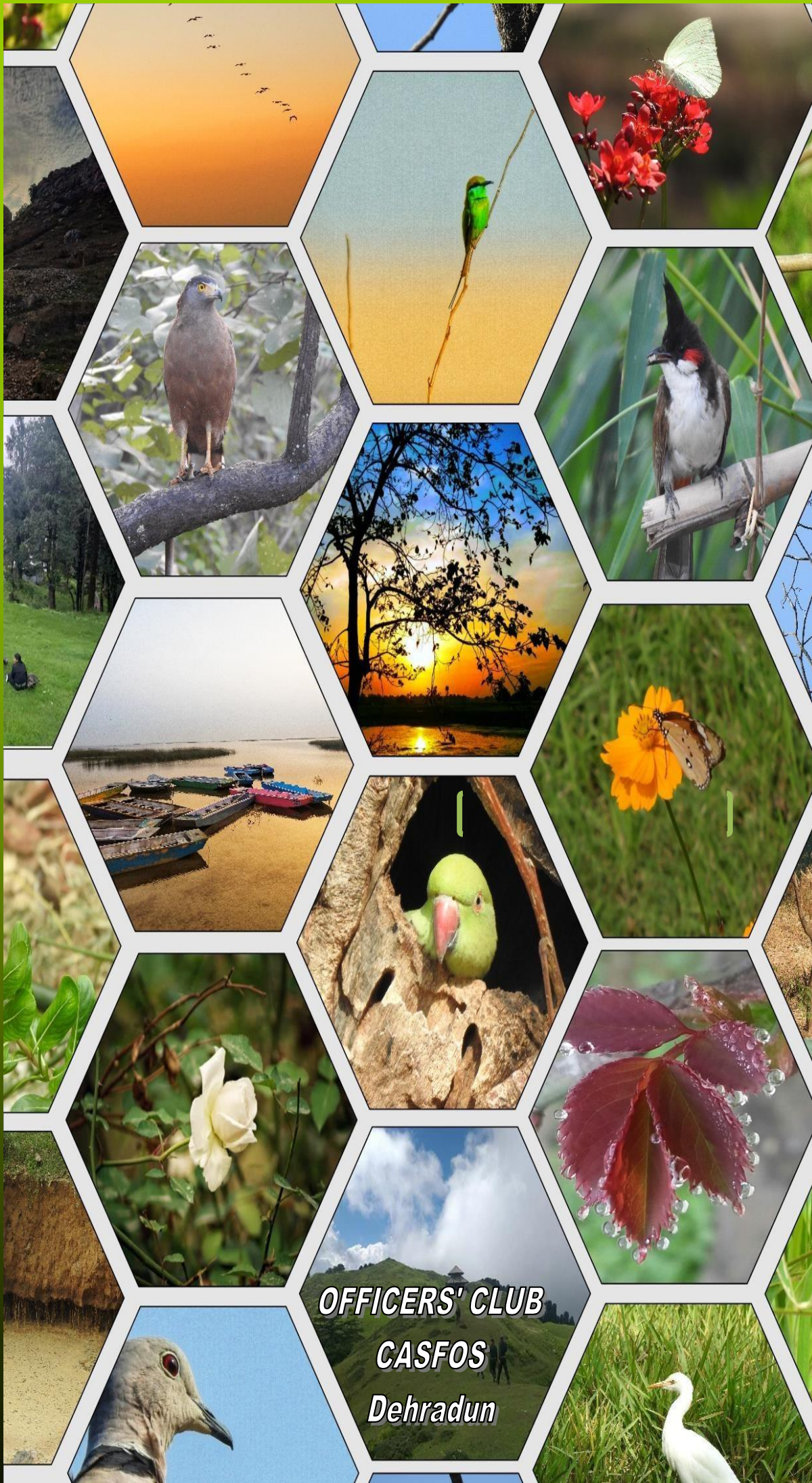


## Quest for nature







Central Academy for State Forest Service  
Dehradun

# FLORA OF THE WEEK

## *Phyllanthus acidus* (Star Gooseberry)

**P***hyllanthus acidus* or *Star Gooseberry* locally known as Harpharevadi, Lavali, Harpharai. It is tropical or subtropical species found throughout Asia, Central and South America. Fruits, Leaves, Roots, Bark are used for several purposes.

Star gooseberry is a deciduous small tree growing up to 2-9 meter high. Leaves compound, alternate, 2-5 cm long, upper surface is smooth, green, lower surface is blue green in color. Flowers are small, pinkish, appear in clusters, arising from nodules, pale yellow or white, Oblate having 6-8 ribs, droopy, densely clustered. Tree produces fruit twice a year. 4-6 seeds are found at the centre of each fruits.

Kingdom	Plantae
Clade	Tracheophytes
Clade	Angiosperms
Clade	Eudicots
Order	Malpighiales
Family	Phyllanthaceae
Genus	<i>Phyllanthus</i>
Species	<i>acidus</i>

### Pharmacological Activities

Antibacterial, antinematodal, anti-tumour, antioxidant, hepato-protective, diuretic, analgesic, anti-inflammatory properties.



Amla murabba

### Nutritional Value

Moisture- 91.0 g, Protein- 0.155g, Fat- 0.52 g, Ash- 0.51g, Calcium- 5.4mg, Phosphorus- 17.9 mg, Iron- 3.25 mg, Carotene- 0.019 mg, Thiamine- 0.025 mg, Riboflavin- 0.013 mg, Niacin- 0.292 mg, Ascorbic acid - 4.6 mg.

### Medicinal qualities

Sweet, sour, astringent, cardiac tonic, clarity, improves tastes. Heavy to digest, dry in nature. As per Bhojana Kutuhalam, the Lavali fruit checks vitiation of Blood, Kapha and Pitta related disorders and hemorrhoids and is heavy to digest.

### Traditional Remedies

- ◇ The poultice of leaves added with pepper is applied as remedy in sciatica, lumbago and rheumatism.
- ◇ Decoction of leaves is used to induce sweating.
- ◇ Leaves are used as demulcent in gonorrhea.
- ◇ Roots are boiled & steam is inhaled to relieve headache & cough.
- ◇ Root infusion in small dose to treat asthma.
- ◇ Roots applied externally to treat psoriasis of soles.
- ◇ Latex used as emetic and purgative.
- ◇ Fruit is eaten to enhance the Blood and acts as liver tonic.
- ◇ Decoction externally applied in Urticaria.
- ◇ Bark decoction in Bronchial catarrh.



Leaves of Star Gooseberry are cooked and eaten. It possesses analgesic, antipyretic, antirheumatic properties. Leaves are used to treat jaundice, small pox, itching and gum infection. An aqueous extract of leaf possesses antiviral, anticystic fibrosis, hepatoprotective and antioxidant properties. Root Bark of this plant is said to be poisonous and causes headache, fatigue, severe abdominal pain & death.





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# FAUNA OF THE WEEK

## *Funambulus palmarum* (Indian palm squirrel)

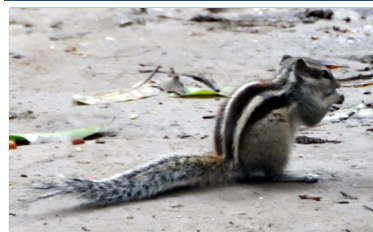
The Indian palm squirrel or three-striped palm squirrel (*Funambulus palmarum*) is a species of rodent in the family Sciuridae found naturally in India (south of the Vindhyas) and Sri Lanka.

The closely related five-striped palm squirrel, *F. pennantii*, is found in northern India, and its range partly overlaps with this species.

Kingdom:	<i>Animalia</i>
Phylum:	<i>Chordata</i>
Class:	<i>Mammalia</i>
Order:	<i>Rodentia</i>
Family:	<i>Sciuridae</i>
Genus:	<i>Funambulus</i>
Species:	<i>palmarum</i>

### Life cycle

The **gestation period** is 34 days; **breeding** takes place in grass nests during the autumn. Litters of two or three are common. The young are weaned after about 10 weeks and are sexually mature at 9 months. Adult weight is 100 g. Little is known about their longevity, but one specimen lived 5.5 years in captivity.



"The reason we are chewing on things is because we have incisors — front teeth — that are always growing,"



### Diet and Behavior.

These squirrels **eat mainly nuts and fruits**. They are fairly vocal, with a cry that sounds like "**chip chip chip**" when danger is present. They are opportunists in urban areas, and can be easily tamed and trained to accept food from humans. They tend to be **very protective of their food sources**, often guarding and defending them from birds and other squirrels.



### Ecological Importance

**They are nature's gardeners.**

Their seed-eating habit help in disperse of seeds. Important part of the ecosystem in which they live.

### Description

It is about the **size of a large chipmunk**, with a **bushy tail** slightly shorter than its body. The **back is a grizzled, grey-brown** colour with **three conspicuous white stripes** which run from head to tail. The two outer stripes run from the forelegs to the hind legs only. It has a **creamy-white belly** and a tail covered with interspersed, long, black and white hair. **Juvenile squirrels** have significantly lighter coloration, which gets progressively darker as they age. Albinism is rare, but exists in this species.

Squirrels are considered sacred in India and are not to be harmed. They are even fed by many Hindu families, mainly because of their association with Lord Rama. It is said that lord Rama caressed the squirrel's back for helping in construction of Ram-setu Bridge and ever since, the Indian squirrel carried white stripes on its back, which are believed to be the mark of Lord Rama's fingers.



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# BIRD OF THE WEEK

## *Vanellus indicus* (Red wattled Lapwing)

A distinctly marked lapwing with a black breast and throat and a red bill with a black tip. It also sports red wattles in front of the eyes and a white patch that runs down the cheeks to the underparts. In flight, note the black flight feathers that contrast with the white wing patch. Usually found in small groups around water bodies, agricultural fields, and dry land. They feed primarily on insects, catching them in a typical plover like manner, running a short distance and picking up food from ground. A bird known for its characteristics loud alarm call, often compared to the words "Did we do it?"

### Morphology

1. Large waders, 35 cm. Long, wings and back are light brown with a purple to green sheen, but the head, a band on the front and back of the neck are black.
2. Predominantly white patch between these two colours from belly and tail.
3. Long yellow legs.

<b>Kingdom</b>	<b>Animalia</b>
<b>Phylum</b>	<b>Chordata</b>
<b>Class</b>	<b>Aves</b>
<b>Order</b>	<b>Charadriiformes</b>
<b>Family</b>	<b>Charadriidae</b>
<b>Genus</b>	<b>Vanellus</b>
<b>Species</b>	<b>indicus</b>



### Distribution

India, Pakistan, Afghanistan, Bhutan, Nepal, Bangladesh, Sri Lanka, Iraq and Iran



### Cultural Believe

- Egg laying on high ground is indication of good rains.
- Egg laying on dry beds of streams is the indication of drought or delayed rains.

**IUCN Status:** Least Concern (LC)

### Characteristic Features

- The Red Wattled Lapwing is an Asian lapwing, a wader in family-Charadriidae.
- Ground bird incapable of perching and usually seen in pairs or group not far from waters.
- Loud alarm calls indicators of human or animal movements.
- Feeds on insects, grubs, molluscs and other invertebrates and also on some grains.
- Nest in a ground scrape and gives 3-4 camouflaged eggs.
- Adults near the nest fly around, diving at potential predators while calling noisily.

### Major Threats

Egg destruction by dogs, cattle and humans leading 40 % reproductive success, hunting and habitat destruction.