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PRAKRTI

Quest for nature

Officers' Club
CASFOS, Dehradun

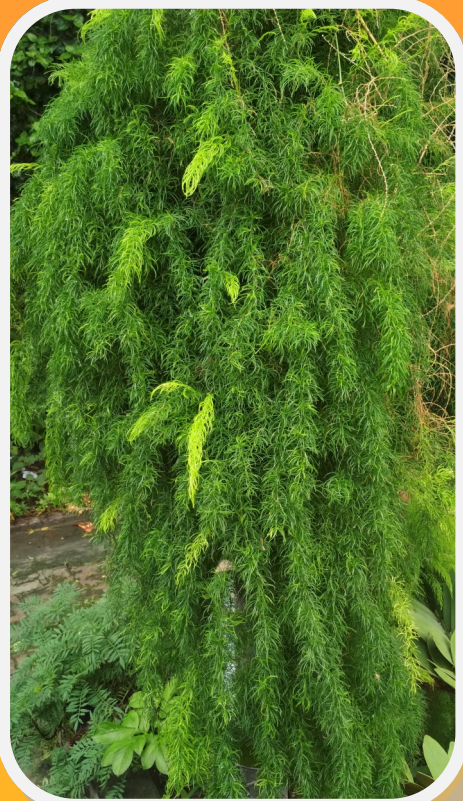


Central Academy for State Forest Service
Dehradun

FLORA OF THE WEEK

Asparagus racemosus (Satavar)

A. racemosus belongs to family Liliaceae and commonly known as **Satavar**. This is a highly medicinal plant which is found in **India, Nepal, Srilanka**. In India it distributed throughout low hill plains and Himalayan regions. It was Botanically described in 1799. Because of its multiple uses, the demand for Satavar is constantly increases. Due to the destructive harvesting, habitat destruction and deforestation, the plant is now considered endangered in its natural habitat. In Ayurvedic text the plant and its extract are used in prevention and treatment of many human diseases.



Kingdom

Plantae

Clade

Tracheophytes

Clade

Angiosperm

Clade

Monocots

Order

Asparagales

Family

Liliaceae

Genus

Asparagus

Species

A. racemosus

Common Name and Meanings

Satavar/Satavari/Shatmul/Shakakul.

Satvar means: who possesses hundred husbands or acceptable to many or curer of 100 diseases.

Statement may be translated as 100 spouses, implying its ability to increase fertility and vitality.

In Ayurveda, this amazing herb is known as **Queen of Herbs** because it promotes love and devotion.

In Nepal it is known as **Kurilo**.



Plant Morphology

It is a woody climber growing to 1-2 m in height. It prefer gravelly, rocky soils and piedmont plains.

Leaves: The leaves are like pine needles, small, phylloclades with photosynthetic branches, shiny green color.

Stem: woody hard type with spines.

Root: Adventitious root system, tuberous, tapering at both ends, can grow up to one meter.

Flower: The flowers are very small and white in colour.

Fruit: Its fruits are like round berries which are blackish red in colour.

Medicinal Values

Saponin: Antioxidant properties.

Racemofuran: Anti inflammatory properties.

Immunity booster, Cough reliever, Stress reliever.

In treatment of Diarrhoea, Ulcers/Sores in Stomach/gut.

Promoting Gut health by increasing enzymatic activity.

Have Diuretic activities and treat kidney stone.

It can maintain blood sugar.

It have anti-aging properties.

It have many antibiotic properties.

It maintain hormonal function and endocrine system.

Medicinal Importance for Female

It is useful in all stages of female. It support female reproductive system and maintain estrogen deficiency. It prevent irregularities and manage menstrual cycle. Saponin of this plant protect them from miscarriages and uterine malfunctions. It is used in treatment of endometrial dysfunction, blockage of fallopian tube, uterine fibrosis and ovarian cysts and endocrine problems. It is also helpful in milk formation and lactation.

FAUNA OF THE WEEK

Spotted deer *Axis axis* (Cheetal)



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The **chital** (*Axis axis*), also known as **spotted deer**, **chital deer**, and **axis deer**, is a species of deer that is native in the Indian subcontinent. The species is sexually dimorphic; males are larger than females, and antlers are present only on males. The upper parts are golden to rufous, completely covered in white spots. The abdomen, rump, throat, insides of legs, ears, and tail are all white.

Kingdom:	Animalia
Phylum:	Chordata
Class:	Mammalia
Order:	Artiodactyla
Family:	Cervidae
Subfamily:	Cervinae
Genus:	<i>Axis</i>
Species:	<i>A. axis</i>

Distribution:

Axis deer live throughout various areas of India, primarily in Nepal, Sri Lanka, Bhutan, and Bangladesh. They live from Rajasthan to the foothills of the Himalayan Mountains and east to Assam. sparsely found in Nepal and Pakistanstan



Male

Behavior: These deer are diurnal, or active during the day. They spend much of their time foraging in groups called herds. The herds of deer are extremely vigilant, and listen carefully for any sound of a predator.

They also use their keen sense of smell to detect potential threats. Herds are matriarchal, which means an adult female deer leads them. The rest of the herd is usually her offspring from previous years.

Females have a gestation period of about 7.5 months, and they usually give birth to a single fawn. The female hides her fawn in the forest for about a week, and then it joins the herd. After 3 or 4 months, the mother weans the fawn off her milk, and it slowly becomes more independent.



Female

Spotted Deer Facts: The spotted deer, or chital, is the most common deer species in Indian forests. With a lifespan of about 20 to 30 years, it stands at about 35 inches tall and weighs about 187 pounds. The deer's golden-rufous coloring is speckled with white spots, and it has a white underbelly. Its curved, three-pronged antlers extend nearly 3 feet and shed each year. The spotted deer has a prolonged mating season, as the perpetually warm climate allows females to remain fertile and to give birth to fawns any time of year. Spotted deer most commonly occur in herds of 10 to 50 individuals, with one or two males and a number of females and young. They primarily eat grasses and vegetation but will also ingest their shed antlers as a source of nutrients.

Diet: Like most deer species, axis deer are herbivores. They both browse on leaves and shrubs, and graze on grasses. Their food preferences vary by season. In spring the grasses are tender and fresh, but in winter browsing on leaves and shrubs is much easier. Some of the different types of foods they eat include flowering plants, herbs, shrubs, fruits, leaves, and more. While feeding they remain in herds to better watch for predators.

Conservation status: The chital is listed by the IUCN as being of least concern "because it occurs over a very wide range within which there are many large populations". However, population densities are below ecological carrying capacity in many places due to hunting and competition with domestic livestock. Hunting for the deer's meat has caused substantial declines and local extinctions. The axis deer is protected under Schedule III of the Indian Wildlife Protection Act (1972) and under the Wildlife (Preservation) (Amendment) Act, 1974 of Bangladesh. Two primary reasons for its good conservation status are its legal protection as a species and a network of functioning protected areas.



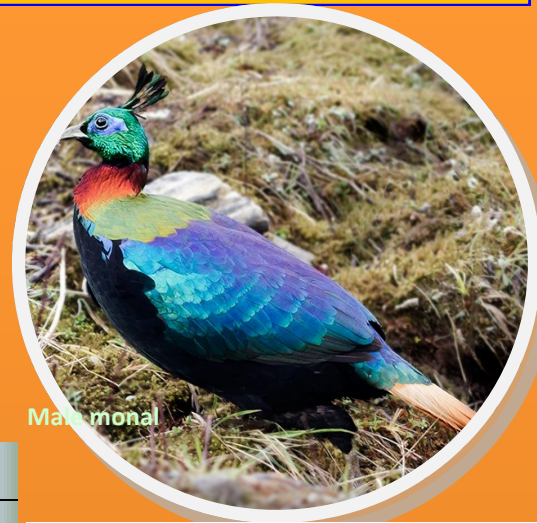
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BIRD OF THE WEEK

Lophophorus impejanus

(Himalayan monal)

One of the most colorful bird in the world, endemic of Himalaya. It lives in the coniferous and open forests at high altitude. They normally live in the steep sided forested valleys in winter but when summer comes they move to higher altitude, often above the tree line. The species inhabits the high-altitude temperate forests at elevations between 2000-4500m. The habitat used by the species during spring and summers majorly have Spruce (*Picea smithiana*), Fir (*Abies pindrow*), Yew (*Taxus wallichiana*) and Oak (*Qercus semicarpifolia*). Dense undercover is a characteristics of both summer and winter habitat. It is national bird of Nepal, state bird of Uttarakhand, India, and It was also the state bird of Himachal Pradesh until 2007.



Male monal

Morphology

1. It is a relatively large-sized pheasant. The bird is about 70 cm (28 in) long. The male weighs up to 2,380 g (84 oz) and the female 2,150 g (76 oz). The adult male has multicoloured plumage throughout, while the female, as in other pheasants, is more subdued in colour.
2. The male include a long, metallic green crest, coppery feathers on the back and neck, and a prominent white rump.
3. The female has a prominent white patch

Kingdom	Animalia
Phylum	Chordata
Class	Aves
Order	Galliformes
Family	Phasianidae
Genus	<i>Lophophorus</i>
Species	<i>impejanus</i>



Distribution : The Himalayan monal's native range extends from Afghanistan and Pakistan through the Himalayas in India, Nepal, southern Tibet, and Bhutan at an elevation between 2,000 m to 4500m.

IUCN Status : Least concern / **WPA,1972** : Schedule I / **CITES** : Appendix I



Female monal

Ecological Role

- Omnivore
- Pollinators & seed dispersor
- Maintains high altitude ecosystem
- Socio-cultural and aesthetic value

Characteristic Features

- Length: 2-2.5 feet; Weight: 3-5 pounds
- Lifespan: In the Wild: Unknown; In Captivity: 10-12 years
- They are often found in pairs or small groups maintaining defined home ranges.
- Males are more competitive and aggressive than females.
- Their wide range of calls allows them to differentiate between contentment, aggression, alarm and advertising for a mate.
- They reach sexual maturity at 2 years of age for both sexes.
- The breeding season begins in April when the monals are at higher altitudes. The male switches from calling only in the early morning to calling throughout the day
- Once a female notices his display, they mate and shortly afterwards she scrapes a nest in the ground and lays between 3 and 5 eggs. The female must incubate the eggs alone.
- The female incubating them for 27 days with the male standing guard over her throughout this period. He continues to protect the young until they fledge. The young become completely independent at around six months of age.

Major Threats

The **main threat** to the species is poaching, as the crest is valuable. Other threats include habitat de-

Information source* : Wikipedia,
Annual status report of GHNP, WII
website