

New genus of parasitic flowering plant discovered from Nicobar Islands

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In news— A new genus of a parasitic flowering plant has recently been discovered from the Nicobar group of islands.

About new genus of the plant-

- The genus *Septemeranthus* grows on the plant species *Horsfieldia glabra* (Blume) Warb.
- The name *Septemeranthus* derived from the Latin word 'septem' meaning 'seven', referring to the **arrangement of flowers**.
- The **genus belongs to the family Loranthaceae**, a hemiparasite under the sandalwood order Santalales and is of widespread importance.
- The parasitic flowering plants have a modified root structure spread on the stem of the tree and are anchored inside the bark of the host tree.
- The genus *Septemeranthus* has a **distinct vegetative morphology, inflorescence architecture and floral characters**.
- **The leaves of the plant are heart-shaped** with a very long tip and the ovary, fruit and seeds are 'urceolate' (earthen pot-shaped).
- The **flowers have five persistent bracts** having conspicuous margins.
- The newly discovered plant that derives nutrients from its hosts has green leaves capable of photosynthesis.
- The new genus is unique in that **it is endemic only to the Nicobar group of islands**.
- **In addition to *Septemeranthus*, four other genera on non-parasitic plants, *Nicobariodendron* (Hippocrateaceae), *Pseudodiplospora* (Rubiaceae), *Pubistylis* (Rubiaceae),**

Sphyranthera, (*Euphorbiaceae*) have also been discovered earlier from Nicobar group of islands.

- Recently a new species in the hemiparasitic family Loranthaceae, *Dendrophthoe laljii* have also been discovered from the Nicobar group of islands.

**TOTAL PARASITE
VERSUS
PARTIAL PARASITE**

| TOTAL PARASITE | PARTIAL PARASITE |
|---|--|
| A complete parasite that depends on the host to fulfil all its requirements | A parasite that depends on the host for some requirements |
| Depend on the host plant for sugar, minerals, and water | Photosynthetic and produce their own food, depending on the host for water and shelter |
| Called holoparasitic plants | Called hemiparasitic plants |
| Achlorophyllous (does not contain chlorophyll) | Chlorophyllous (contain chlorophyll) |
| Ex: dodder, broomrape, and Rafflesia | Ex: Castilleja, mistletoe, yellow rattle, etc. |

Andaman & Nicobar Islands-

- The Andaman & Nicobar Islands is a union territory of India.
- It is located in the Indian Ocean, in the southern reaches of the Bay of Bengal, nearer to Indonesia and Thailand.
- This comprises two island groups – the Andaman Islands and the Nicobar Islands – which **separates the Andaman Sea to the east from the Indian Ocean.**
- The Andaman Sea lies to the east and the Bay of Bengal to the west.
- The island chains are thought to be a **submerged extension of the Arakan Mountains.**
- These Islands were formed when the Indian and Burmese plates collided in the subsequent opening of the back-arc basin about 4 million years ago.
- **These two groups are separated by the 10° N parallel (the Ten Degree Channel)**, the Andamans lying to the

north of this latitude, and the Nicobars to the south.

- The territory is divided into three districts: the Nicobar District with Car Nicobar as its capital, the South Andaman district with Port Blair as its capital and the North and Middle Andaman district with Mayabunder as its capital.
- There are 836 Islands/Islets/Rocky Outcrops in the territory, of which only some 38 are permanently inhabited.
- The smaller Nicobars comprise some 22 main islands (10 inhabited).
- The territory's population as per the most recent (2011) Census of India was 3,79,944 and the literacy rate is 86.27%.
- Hindi and English are the official languages of the islands.
- Bengali is the dominant and most spoken language, with 28% of the population speaking Bengali followed by Tamil, Telugu, Hindi, Malayalam and Nicobarese.
- The **highest point is Saddle Peak** at 732 m (2,402 ft), located in North Andaman Island.
- The only active volcano in India, Barren Island (recently erupted in 2017), is located in Andaman and Nicobar.
- It also has a mud volcano situated in Baratang Island.
- The Andaman Islands are also home to the Sentinelese people, an uncontacted tribe.
- The islands host the **Andaman and Nicobar Command, the only tri-service geographical command of the Indian Armed Forces.**