**Sandalwood Spike Disease**

**Why in News**

India’s sandalwood trees are facing a serious threat due to *Sandalwood Spike Disease* (SSD).

**Key Points**

- The natural population of sandalwood in *Marymoor Sandal Forest* of Kerala and various reserve forests in Karnataka, including *MM Hills (Malai Mahadeshwara Wildlife Sanctuary)*, are heavily infected with SSD.

- **Sandalwood Spike Disease:**
  - It is an infectious disease which is **caused by phytoplasma**.
    - Phytoplasmas are **bacterial parasites** of plant tissues — which are **transmitted by insect vectors** and involved in plant-to-plant transmission.
  - There is **no cure** as of now for the infection.
    - Presently, there is **no option but to cut down** and remove the infected tree to prevent the spread of the disease.
  - The disease was **first reported in Kodagu, Karnataka in 1899**.
    - More than a million sandalwood trees were removed in the Kodagu and Mysore region between 1903 and 1916.

- **Concerns:** About **1% to 5%** of sandalwood trees lost every year due to the disease, scientists warn that it could **wipe out the entire natural population** if measures are not taken to prevent its spread.
  - Another concern is, any delay in arresting the trend may result in the disease spreading to cultivated sandalwood trees.
• **Reason:** The present rapid spread of the infection is largely due to **restrictions on green felling** in forests, which has allowed vectors to spread the disease to healthy trees.
  
  - **Green felling (silviculture felling)** is the felling of green trees of one or more types.
  - **Silviculture** is the art and science of controlling the establishment, growth, composition, health, and quality of forests and woodlands to meet the diverse needs and values of landowners and society such as wildlife habitat, timber, water resources, restoration, and recreation on a sustainable basis.

• **Recent Steps:** In an effort to combat the killer disease, the **Institute of Wood Science and Technology (IWST), Bangalore** will join hands with the **Pune-based National Centre for Cell Sciences** for a three-year study, initiated by the **Union Ministry of AYUSH** with a financial allocation of Rs. 50 lakh.

  IWST is a **Centre of Excellence** for Sandalwood Research and Wood Science.

### Red Sandalwood

- Red sanders (**Pterocarpus santalinus**) is endemic to South India.
- They are found in the **Tropical Dry Deciduous forest** of the **Palakonda** and **Seshachalam hill** ranges of Andhra Pradesh and also found in Kerala, Tamil Nadu and Karnataka.
- Red Sanders usually grow in the rocky, degraded and fallow lands with Red Soil and hot and dry climate.
- **The International Union for Conservation of Nature (IUCN)** has put it under the category of **near threatened** from earlier **endangered species** in the Red List.
- It is listed in **Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).**

  **Appendix II** – Species which are not necessarily threatened with extinction, but in which trade must be controlled to avoid utilisation incompatible with their survival.

  - It is known for its **rich hue and therapeutic properties**, is high in demand across Asia, particularly in China and Japan, for cosmetics and medicinal products, wood-works and musical instruments.
  - Its popularity can be gauged from the fact that a tonne of red sanders costs anything between Rs. 50 lakh to Rs. 1 crore in the international market.

**Source: TH**