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*Shaping Lives...
Empowering Communities...*

Center for Smart Agriculture

Organic Farming



Module 8: Introduction of forest trees

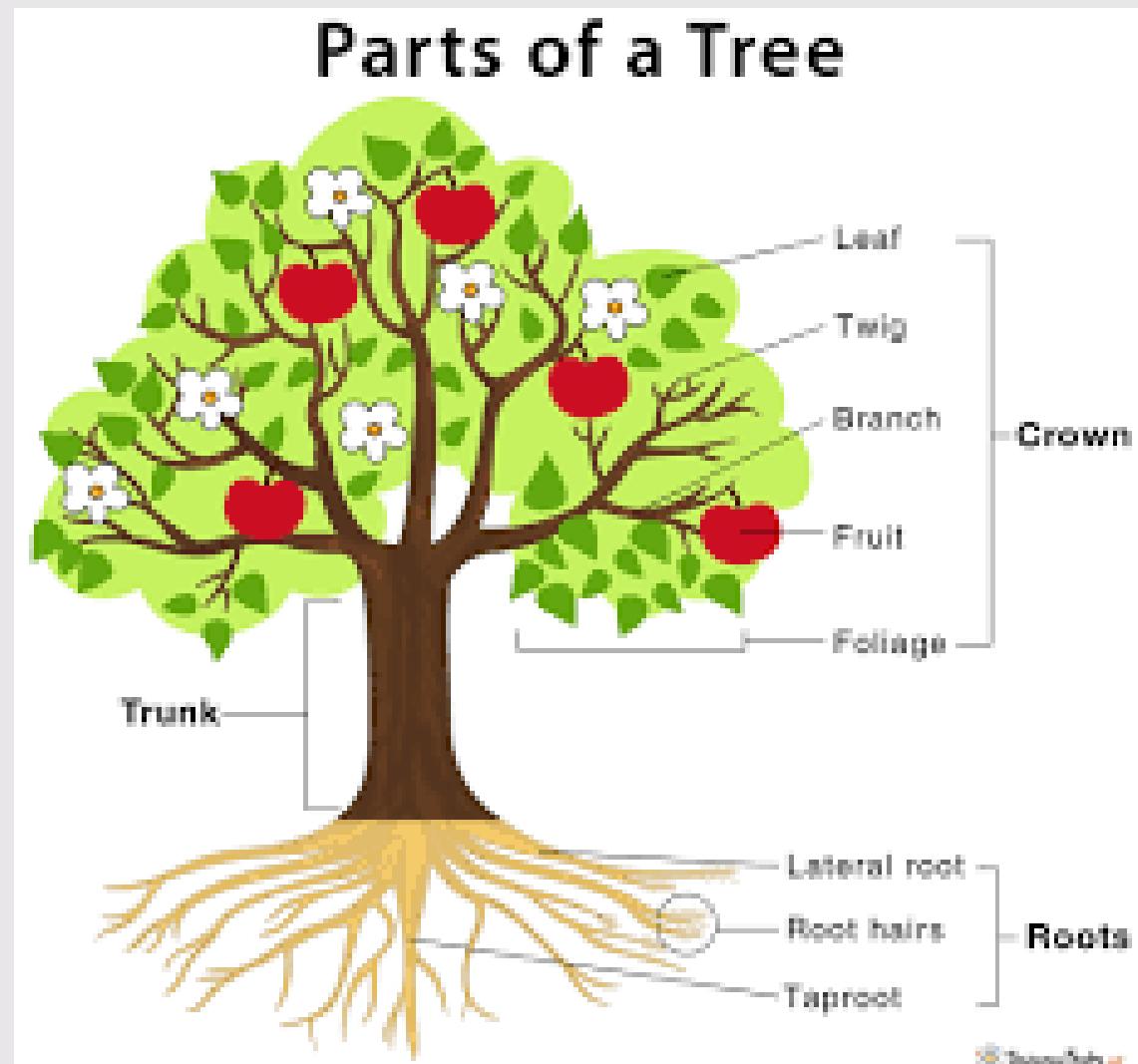
Session1: Introduction



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tree is a perennial plant with an elongated stem, or trunk, supporting branches and leaves





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Other definitions

- A tree is a tall plant with a trunk and branches made of wood
- A perennial woody plant growing to a considerable height and size, with a self-supporting main stem and usually developing branches at some distance from the ground.
- tree is any plant with a self-supporting,perennial woody stem (i.e. living for more than one year).



Classification of trees

- Broadleaved trees:
 1. Compound leaves
 2. Simple leaves
- Conifers:
 1. Needle like leaves
 2. Scale like leaves





Other classifications with eg.

	Light Demande r	Shade Bearer	Shade demander
Evergreen	<i>Calophyllum,</i> <i>Dipterocarpus</i>	<i>Artocarpus</i>	<i>Mesua,</i> <i>Pallaquium</i>
Deciduous	Teak, Sal, Sisso, Khair, <i>Adina</i>	Rosewood, <i>Gmelina,</i> <i>Pterocarpus</i> <i>marsupium,</i> Toon	<i>Xylia,</i> <i>Schleichera,</i> <i>Syzygium</i> <i>cumini</i>
Sub-tropical	Chirpine, <i>Quercus</i> <i>inacana</i>	<i>Quercus glauca,</i> <i>Olea</i>	Rhododendron
Moist-temperate	Bluepine	Spruce, Deodar, Maple	Fir, <i>Taxus buccata</i>



Trees are needed for improving the farm productivity. With depletion of agricultural lands and lack of irrigation facilities, agriculture in arid and semiarid regions is becoming uneconomical.





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Benefits of trees

- Trees enhances environment
- Helps in evapotranspiration
- Provides clean air
- Protects soil
- Acts as wildlife habitat



- They are sources of fruits and flowers.
- They offer us cool shade during summer and reduce water needs.
- During the rainy season, we take shelter under the trees.
- Trees and plants are the sources of many life saving drugs.
- They prevent land erosion and guard us against pollution.
- Trees protect us from bad wind as well.
- They are a great source of materials for paper and rubber.
- Commercial importance

(Source: saveourwater.com/trees)



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Agroforestry provides a viable solution for such problems. Promotion of afforestation should be based on well tested technical and economic data to guide the farmers and general public in the right direction.

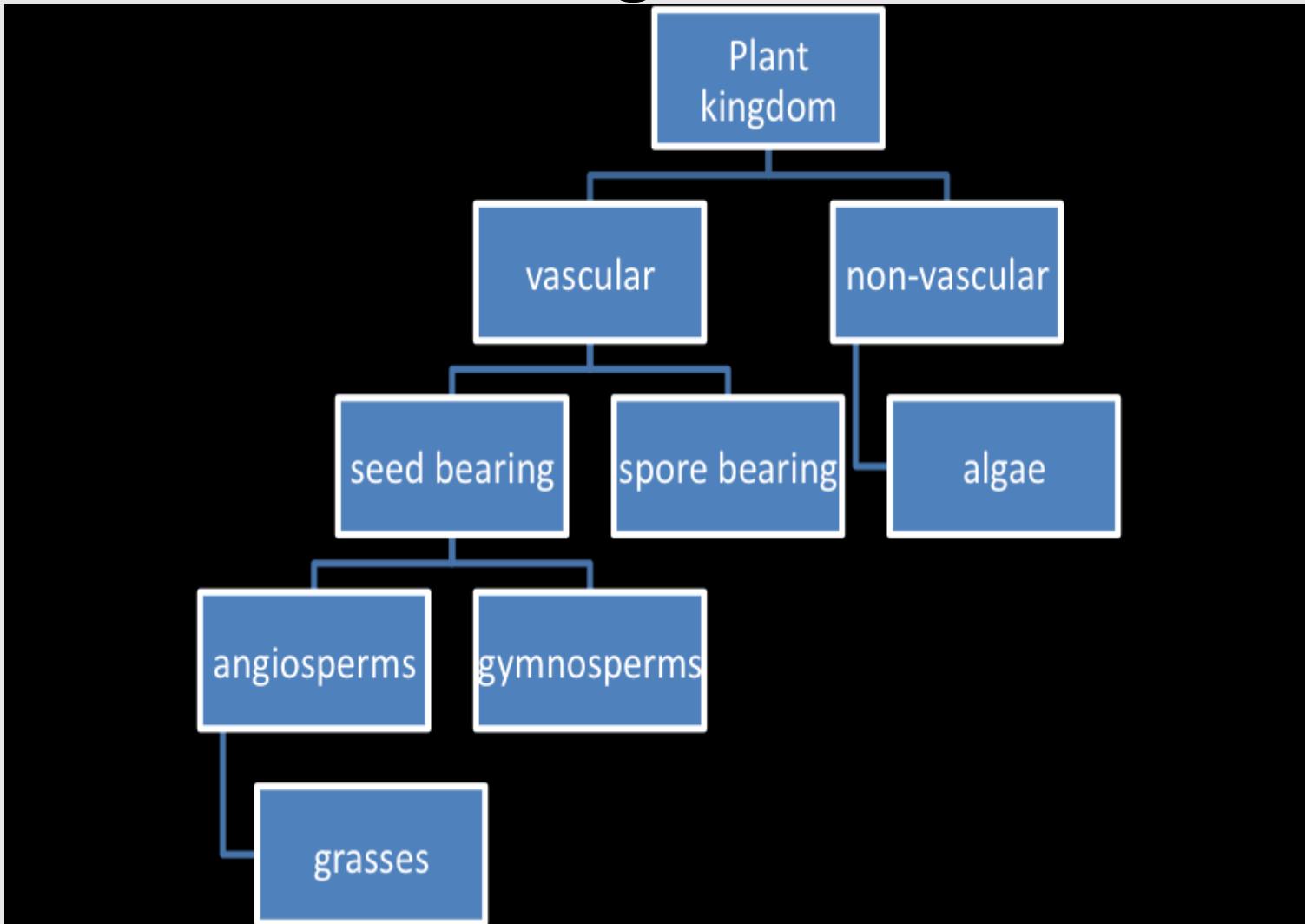




We need trees for our survival. Trees purify the atmosphere by converting carbon dioxide into oxygen, provide food, fodder, medicines, organic manure, fuel, timber and also improve the soil productivity, ground water table and the ecosystem. Thus, trees play a significant role in improving our quality of life



Plant Kingdom

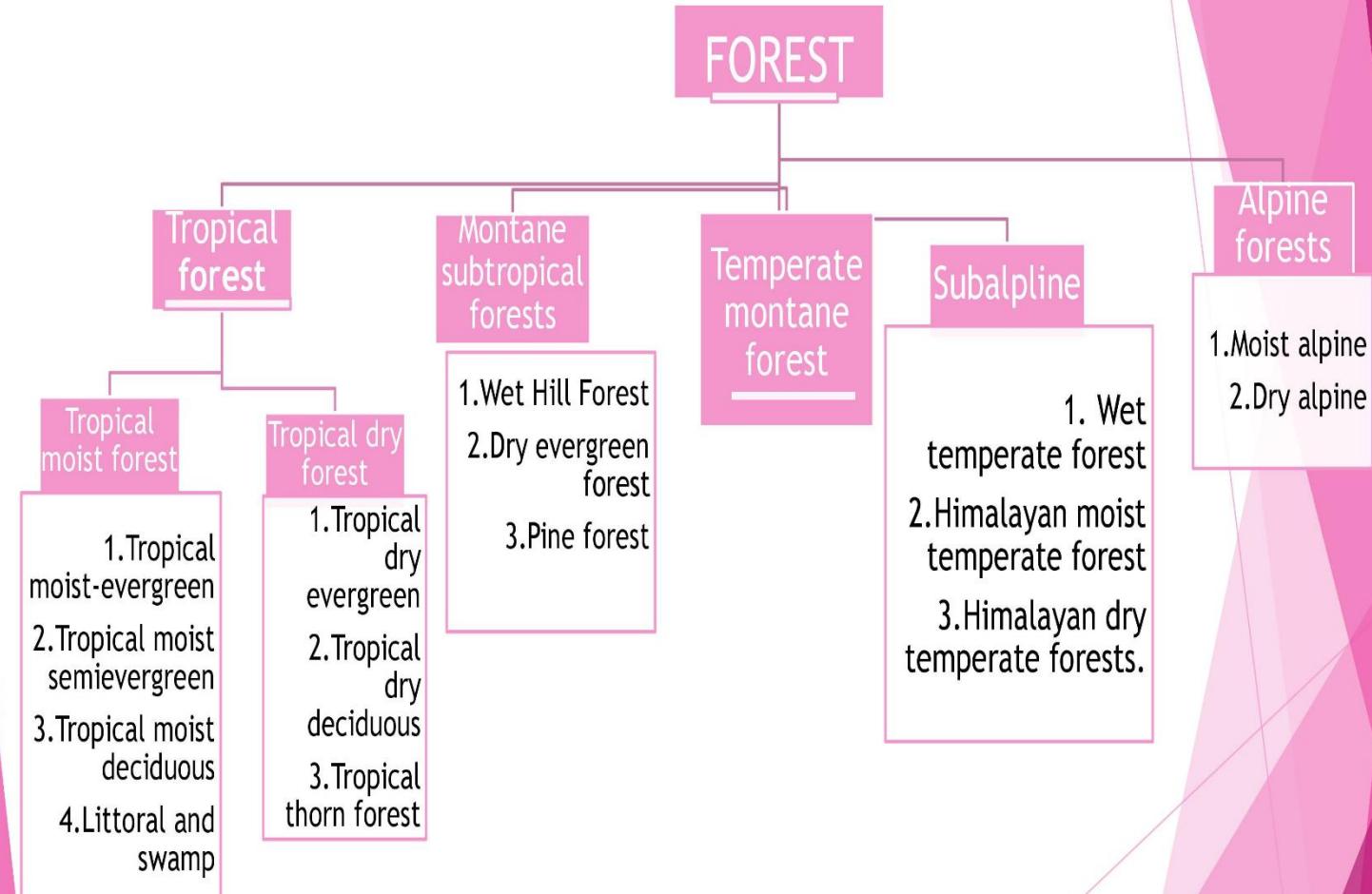




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FOREST TYPES OF INDIA





- T**-Timber, the first and the foremost use of trees
- R**-Restoration, reclamation and rejuvenation of denuded and disturbed soils by using trees to control soil erosion and desertification, protect water-sheds, improve soil nutrient status (by growing nitrogen-fixing trees) and retain moisture in the soil
- E**- Ecological, eco-developmental and environmental use of trees for effective and efficient purification of the environment because trees act as oxygen banks and eliminate air pollutants; for abating or moderating temperature, noise and wind by planting trees as environmental screens, thus affecting the microclimate; for harboring wildlife; for maintaining biodiversity; and for conserving energy
- E**-Educational and recreational value in gardening, landscaping, bioesthetic planning, art, culture and religion
- S**- Source of sustenance; i.e., food, fuel, fodder, fertilizer, fiber, medicine, tannin, dyes, oils, etc.



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THANK YOU