## Lecture:8

- a- Seed- producing plants:
  - 1- Gymnosperms:
- The sporophytes are woody trees or shrubs.
- Animals, wind or moving water carry the pollen to the female gametophyte.
- Produce huge amounts of pollen

There are four groups of the gymnosperm:

- a- Cycads (Phylum Cycadophyta)
- Live in the tropical and sub-tropical regions
- Have palm like leaves
- Plants are male and female
- Produce large cones
  - Ex. Cycas
  - b- Ginkgos (Phylum Gingophyta).
- Fan –shaped leaves
- Tree either male or female

Ex. Ginkgo

- c- Conifers (Phylum Coniferophyta):
- Have needle like or scale like leaves
- Produce cones
- Monoecious (Pinus) or Dioecious (Juniperus)
- Sprorophytes are woody trees
- Gametophytes are reduced
  - d- Gnetophyles (Gnetophyta):
- Having vessel elements (Which transport water) like flowering plants, Sogentophytes is closest relations to the flowering plants.

Ex. Ephedra

Angiosperm (Seed Palnt): Plant produce seeds enclosed in a structure such as a carpel or ovary:

- Are plants with flowers and fruits
- More than 95% of modern plants are angiosperms
- Dominate major terrestrial zones.