Leaf

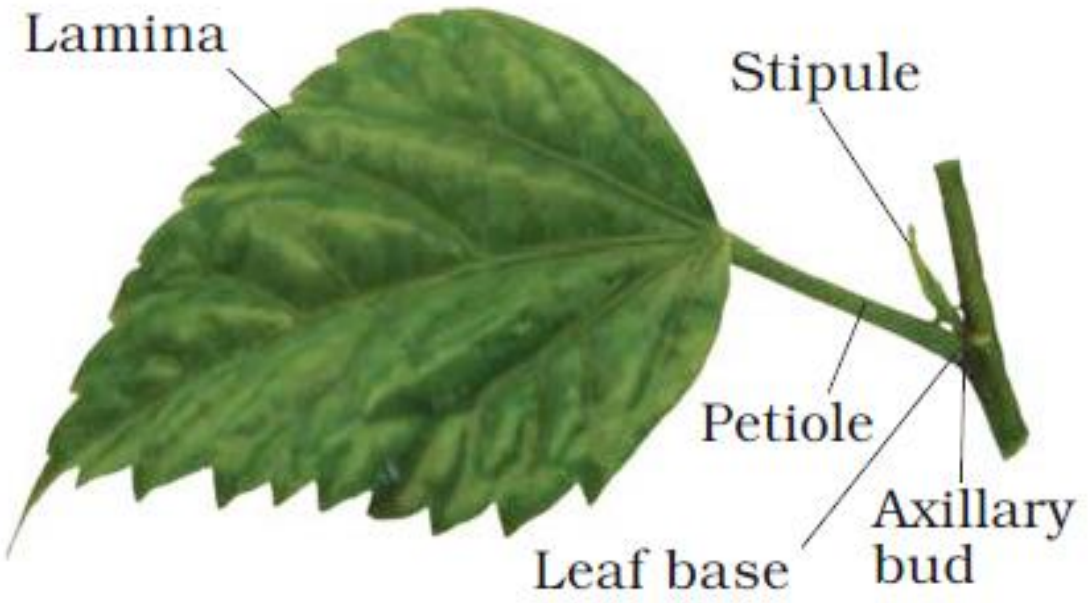
is the lateral appendage of the vascular plant, attached to a stem and usually borne above the ground, has photosynthesis, transpiration, Guttation, Storage, Defense and exchange of gases functions.

*Structure of Leaf

1- Blade

2- Petiole

3-Stipule

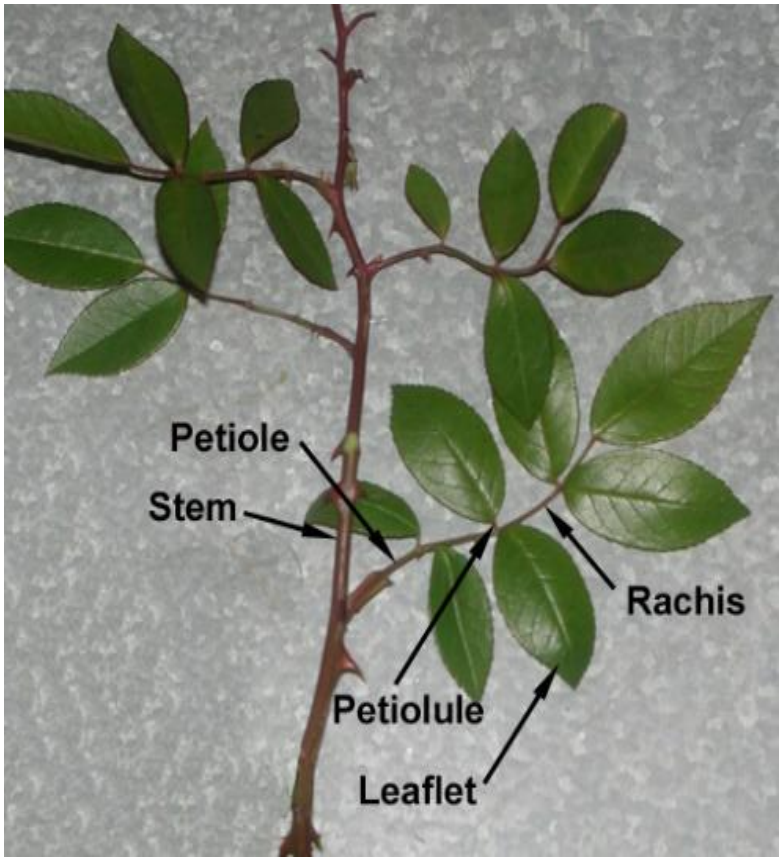


Types of leaf

1. Simple leaf / the blade is undivided…… ***Punica***

2. Compound leaf / The blade is divided into several leaflets

Simple leaf
Punica



Compound leaf

Types of compound leaves

According to the leaflet's arrangement, compound leaves divided in to:

a- Palmately: the leaflets radiate from a single point at the distal end of the petiole ----- ***Vitex***

Compound leaf
a. Palmately
Vitex

b- Pinnately: the leaflets are borne in pairs along the rachis**.**

1. **Imparipinnate…… *Rosa***
2. **Paripinnate…… *Cassia***

Compound leaf
b. Pinnately
(Imparipinnate)
Rosa

Compound leaf
b. Pinnately
(paripinnate)
Cassia

c- Bipinnate…… ***Prosopis***

d- Tripinnate or **Decompounds**…. ***Duacus carota***

Compound leaf
c. Bipinnate
Prosopis

Compound leaf
d. Tripinnate
Duacus carota

Types of compound leaves

according to the leaflets number, compound leaves divided in to:

1. **Unifoliate**…… ***Citrus***
2. **Bifoliate**…... ***Zygophyllum***

Compound leaf
1- Unifoliate
Citrus

Compound leaf
2- Bifoliate
Zygophyllum

3-Trifoliate

a. Palmately---*Oxalis*

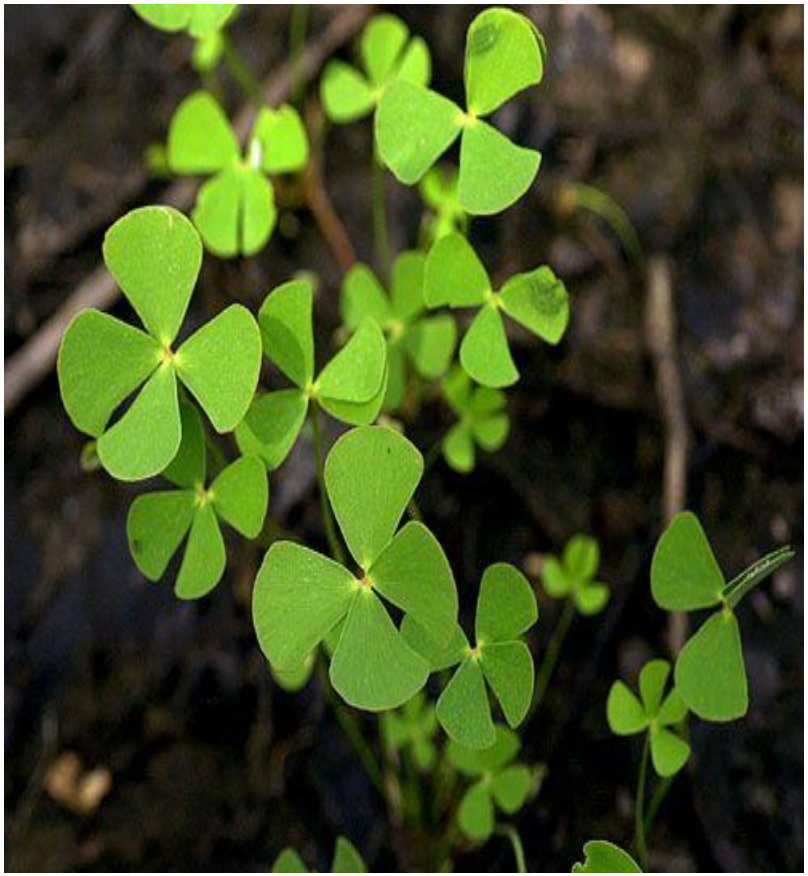
b- Pinnately---*Medicago*

Compound leaf
3- Trifoliate, palmately
Oxalis

Compound leaf
3- Trifoliate, pinnately
Medicago

4-Quadrifoliate -------*Marsilea*

5-Polyfoliate or **multifoliate**…… ***Rosa***



Compound leaf
4-Quadrifoliate

Marsilea

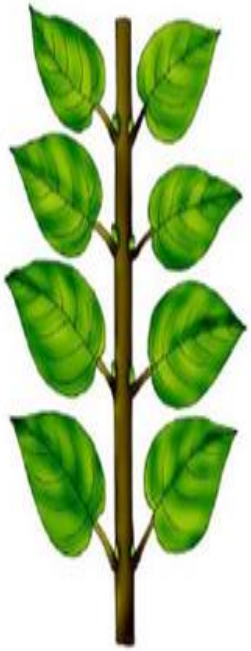
Compound leaf
5- Polifoliate (multifoliate)
Rosa

Phyllotaxy :is the arrangement of leaves around the stem

Alternate (Distichous)
Triticum

Alternate (Spiral)
Eucalyptus

Opposite (Decussate)
Crassula



Opposite (Superposed)
Combritum

Whorled (Verticillate)
Nerium oleander