#### ADULT RESOURCES CULTURE: THE WORLD OF PLANTS

### **BOTANY DEFINITIONS**

# 1. Shapes of the Lamina

The Lamina is the expanded portion or a blade of a leaf and it is an above ground organ specialized for photosynthesis. The shapes of the lamina are as follows:

- a) Aciculate: Lamina is needle shaped, long, thin, and pointed.
- b) Cordate: Lamina is heart shaped that is its base
- c) Elliptical: Lamina is broad and lobed and has a pointed apex.
- d) Obovate: Lamina is like an inverted egg, it's a reverse of an ovate.
- e) Hastate: Lamina is arrow shaped, but the two lower lobes are directed outwards.
- f) Lanceolate: Lamina is broadest in the middle or a little below and tapering towards both the ends.
- g) Orbiculate: Lamina is circular and petiole is attached below the centre and the leaf looks like an umbrella.
- h) Ovate: Base of lamina is wider than the apex.
- i) Sagitate: Lamina is arrow-shaped that is two lower lobes, one on each side pointing downwards.
- k) Reniform: Lamina is rounded above with a deep notch at its base.
- I) Spatulate: Lamina is broad and rounded at the apex and gradually tapers towards the base.
- m) Triangular: Lamina is a thin plate that has a triangular shape.
- n) Obcordate: Lamina is like an inverted heart, its apical region is broad and bilobed.
- o) Linear: Lamina is long and very narrow with nearly parallel margins

# 2. PARTS OF A TREE

The parts of a tree are as follows

- a) Leaves: Leaves are the part of the crown of a tree, they are the part of the tree that converts energy into food, and they are the food factories of a tree.
- b) Branch: The branches provide the support to distribute the leaves efficiently for the type of tree and the environment.
- c) Trunk: The trunk of the tree provides its shape and support and holds up the crown.

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- d) Roots: The roots are the part of the tree that grows underground.
- e) Bark: The outside layer of the trunk, branches and twigs of trees, it serves as a protective layer for the more delicate inside wood of the tree.
- f) Crown: The crown is made up of the leaves and branches at the top of a tree. The crown shades the roots, collects energy from the sun and allows the tree to remove extra water to keep it cool.

#### 3. PARTS OF A LEAF

- a) Leaf base: This part of the leaf is attached to the stem or the branch
- b) Petiole: The petiole is the stem-like part of the leaf that joins the blade to the stem; this is the stalk which might fix the leaf to the stem.
- c) Lamina: This is the major part of the leaf, also called the blade; it's usually large and flat, the flat and extended part next to the petiole is the lamina.
- d) Veins: Smaller veins turn off from the midrib to make sure that the transportation organism of the plant extends to all parts of the leaf. The sections between the leaf veins are known as inter-veinal areas.
- e) Midrib: It is a large strengthened vein along the midline of a leaf
- f) Margin: It is the boundary area extending along the edge of the leaf.

# 4. PARTS OF A FLOWER

- a) Petal: It is a part of the perianth that is usually brightly colored.
- b) Anther: It is the pollen bearing part of stamen.
- c) Filament: It is a fine or slender part of a stamen that supports the anther of a flower; the stalk of a stamen.
- d) Ovary: It is the enlarged basal portion of the pistil, the female organ of a flower.
- e) Sepal: It is the outer part of the flower that encloses a developing bud.
- f) Style: The stalk of the pistil which connects the ovary to the stigma.
- g) Stigma: The part of the pistil where the pollen germinates.
- h) Receptacle: It is the part of the flower stalk where the parts of the flower are attached.

#### 5. PHYLLOTAXIS

It is the arrangement of leaves on a stem and in relation to one another.

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# **6. KINDS OF LEAVES**

There are two kinds of a leaf

a) Simple b) Compound- Unifoliate, Bifoliate, Trifoliate, Quatrefoliate and Multifoliate

### 7. PARTS OF THE LAMINA

- a) Apex: The tip of the leaf is known as the apex.
- b) Midvein: The main vascular bundle passing usually through the centre of the leaf.
- c) Secondary vein: These are the extensions of the primary vein in the lamina plant leaf, covering the entire leaf blade.
- d) Leaf margin: The boundary area following the edge of the leaf is called the leaf margin.

**SOURCE:** www.mirriamwebster.com

www.languages.oup

www.dictionary.com

www.encyclopedia.com

www.sciencefacts.net