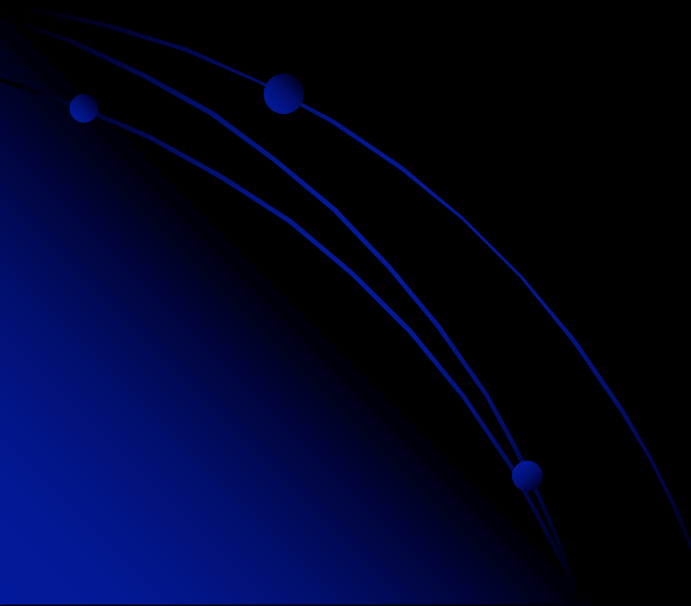


# 4. PLANT APPEARANCE, LIFE SPAN AND SEX STATUS



# **1. PLANT APPEARANCE (HABIT)**

**Plant habit refers to the general form of a plant, encompassing a variety of components such as stem duration and branching pattern, development, or texture.**

**The term plant habit typically includes all of the plant species' unique characteristics that it utilizes to thrive and survive.**

**Plant habit is also called plant life form. It is a process that all plants undergo that is a form of evolutionary adaption.**

**The term also refers to how well a plant ultimately reproduces and colonizes in global regions.**

Most plants can be clearly designated as an **herb**, **vine**, **liana**, **shrub**, or **tree**.

## **1. Herb:**

A herb is a plant in which any aboveground shoots, whether vegetative or reproductive.

The herb itself may be annual, biennial, or perennial, but always lack significant thickening by secondary woody growth.



## 2. Shrub:

A **shrub** is a perennial, woody plant with several main stems arising at ground level. Shrub is usually less than 4 to 5 meters in height.

A **sub-shrub** is a short shrub that is woody only at the base and that seasonally bears new, non-woody, annual shoots above. Low-growing shrub usually under **0.5 m** tall, never exceeding **1 meter** tall at maturity.

### Viburnum tinus





### 3. Tree:

A tree is defined as a generally tall, perennial, woody plant having one main stem (the trunk) arising at ground level and normally greater than 4 to 5 meters in height; in environmental conditions, some tree species may develop a multi-stemmed.

*Platanus orientalis*





## 4. Vine and Liana:

**A vine** is a plant with elongate, weak stems, that are generally supported by means of scrambling, twining, tendrils, or roots and can be woody or herbaceous.

**A liana** is a vine that is perennial and woody; lianas are major components in the tree canopy layer of some tropical forests.

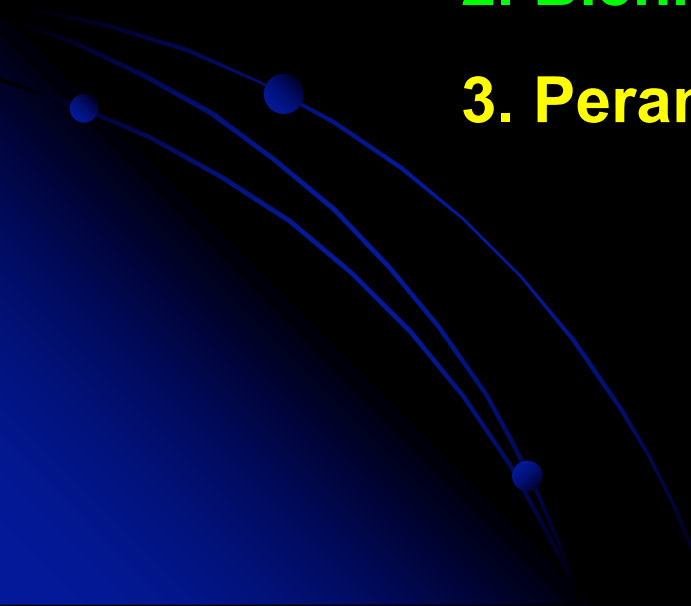
**Vitis vinifera**



## 2. LIFE SPAN

The cycle of a plant's life is referred to as its life span (from seed germination to death). Some plants have short life spans, whereas others have life spans that are measured in centuries.

According to life cycles, plants are divided into three groups;

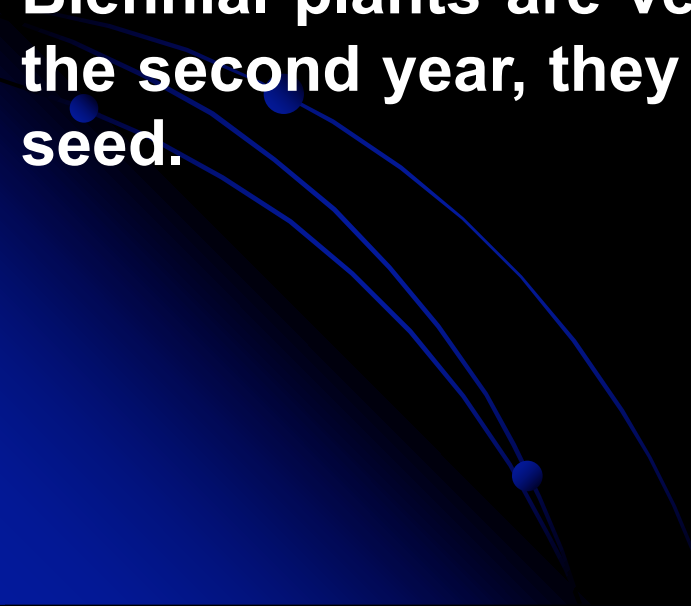
1. **Annual** plants
  2. **Biennial** plants
  3. **Perennial** plants
- 

# **1. Annual Plants**

**An annual is simply a plant that can complete its full life cycle from germination to death in one growing season.**

# **2. The Biennial Plants**

**A biennial generally completes its life cycle in two years. Biennial plants are vegetative in their first year of growth. In the second year, they use up all this energy to flower and set seed.**



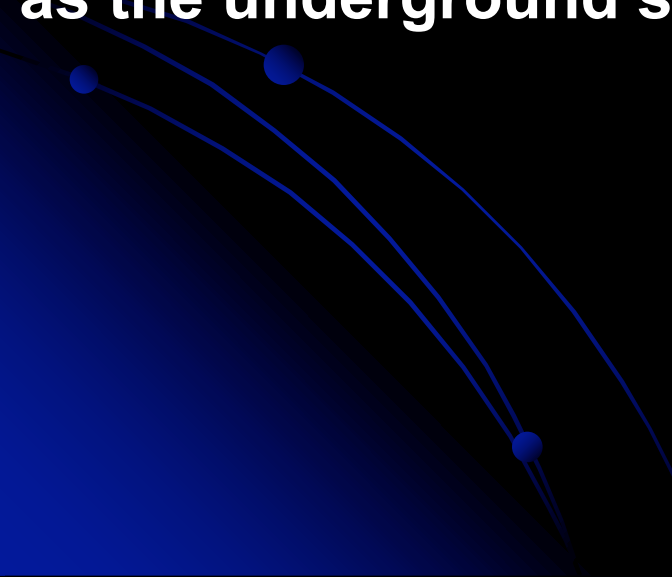


### 3. The perennial Plants

The general definition of a perennial is a plant that lives for three or more years. The aerial parts of such plants die every year at the end of the season but next year new shoots develop again from the underground stem.

Perennials plants can be **herbaceous** or **woody**.

Some perennial herbs, having a bulb, corm, rhizome, or tuber as the underground stem, are called **geophytes**.

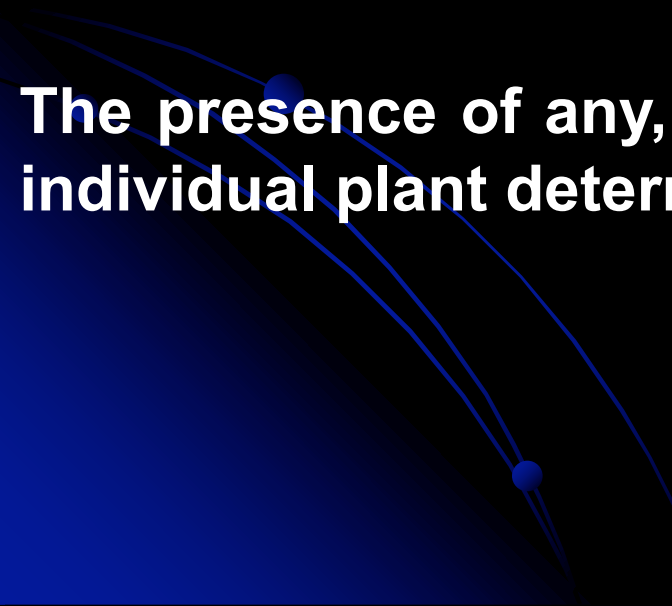


### 3. SEX STATUS

Plant sex refers to the presence and distribution of perfect or imperfect flowers on individuals of a species.

There are three types of sex in individual or solitary flowers: (1) perfect, also called **bisexual**, **hermaphrodite**, and **monoclinous** flower; (2) staminate or male flower; and (3) pistillate, also called carpellate and female flower.

The presence of any, or all, of these three flower types in an individual plant determines its sex type, or plant sex.



# 1. Hermaphrodite

Some plants are hermaphrodites and these plants are one with only bisexual flowers. In their reproductive organs, flowers, there are both male and female reproductive systems. The pollen, or male gamete is released from a **stamen**. The female part, the stigma, is a long tube that leads to ovules containing **eggs**.

# 2. Monoecious

A **monoecious** (*mono*, one + *oikos*, house) plant is one with only unisexual flowers, both staminate and pistillate on the same individual plant.

For example, **Quercus spp.** (oaks),  
**Castanea sativa** (chestnut).



### 3. Dioecious

A **dioecious** (*di*, two + *oikos*, house) plant is one with unisexual flowers, but with staminate and pistillate on separate individual plants.

For example, *Salix* spp. (willows), *Urtica dioica* (nettle), *Rumex* ssp.

### 4. Polygamous

Polygamous is a general term for a plant with both bisexual and unisexual flowers.

### 5. Andromonoecious

Andromonoecious refers to a plant with both staminate and perfect flowers (hermaphrodite) on the same individual.

## **6. Gynomonoecious**

**Gynomonoecious** is a plant with both pistillate and perfect flowers (hermaphrodite) on the same individual.

## **7. Androdioecious**

**Androdioecious** refers to a plant with male flowers on some individuals and perfect flowers (hermaphrodite) on other individuals.

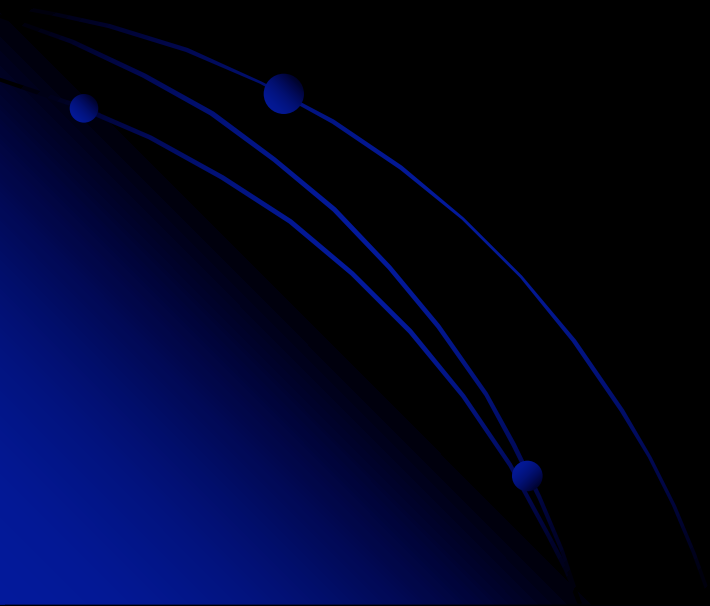
## **8. Gynodioecious**

**Gynodioecious** refers to a plant with female flowers on some individuals and perfect flowers (hermaphrodite) on other individuals.



## 9. Trioecious

Trioecious refers to a plant with pistillate, staminate, and perfect flowers on different individuals.





**Thanks...**

