### FAMILY FABACEAE

Herbs, vines, shrubs, trees

Leaves alternate

Leaves compound (rarely simple)

Leaves once or twice pinnately compound, palmately compound, or trifoliolate

Flowers in racemes, heads, umbels, or panicles

Flowers bisexual

Flowers actinomorphic or zygomorphic

Calyx of 5 united sepals

Corolla of 5 petals, separate or the lower two united

Androecium usually of 10 stamens, sometimes fewer or sometimes numerous

Stamens separate, all united by their filaments, or 9 united by their filaments with one separate

Gynoecium of 1 simple carpel

Ovary superior

### Fruit a legume

Member of Subclass Rosidae

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### **Subfamily Mimosoideae**

Mostly trees and shrubs

Leaves often bipinnately compound

Flowers actinomorphic

Petals separate

Stamens 10-many, separate

Flowers commonly in tight heads of numerous small flowers, each with numerous radiating stamens with long, often brightly colored filaments

Some Common Names: Mimosa, Acacia, Mesquite

Some Important Plants: Mimosa Tree (ornamental), Mesquite (wood)

# **Subfamily Caesalpinoideae**

Mostly trees and shrubs

Leaves pinnate, bipinnate, or simple

Flowers often large and showy, zygomorphic but usually not markedly so

Petals separate

Stamens usually 10, separate

Some Common Names: Redbud, Orchid Tree, Senna, Palo Verde, Royal Poinciana

Some Important Plants: Ornamentals

# **Subfamily Papilionoideae**

Herbs, shrubs, and trees

Leaves pinnately compound, palmately compound, trifoliolate, or simple

### Flowers usually markedly zygomorphic and papilionaceous

Petals differentiated into a banner at the top, two lateral petals (wings), and two lower petals (keel petals), which are usually united.

Stamens usually 10, often with 9 united and 1 separate

Some Common Names: Clover, Lupine, Wisteria, Locoweed, Vetch

Some Important Plants: Beans, Peas, Alfalfa

### Primitive vs. Advanced

Fabaceae	Primitive	Advanced
Sepals		
5		X
United		X
Petals		
5		X
Separate	X	
2 United		X
Stamens		
10-numerous	X	X
Separate	X	
United		X
Pistil		
1 pistil		X
1 carpel	X	
Ovary superior	X	
Symmetry		
Actinomorphic	X	
Zygomorphic		X