

FAMILY ROSACEAE

Herbs, shrubs, trees

Leaves alternate

Leaves simple or compound

Flowers usually bisexual

Flowers actinomorphic

Calyx of 5 united sepals

Corolla of 5 separate petals

Androecium usually of numerous separate stamens

Gynoecium

Several to numerous separate simple carpels (Rosoideae)

2-5 (rarely 1-12) separate simple carpels (Spiraeoideae)

1 simple carpel (Prunoideae)

2-5 united carpels (Pomoideae)

Ovary position

Ovary superior and usually situated within a floral cup (hypanthium)

Ovary inferior (due to fusion of hypanthium to ovary)

Fruit an achene, aggregate, drupe, pome, or follicle

Member of Subclass Rosidae

Subfamily Rosoideae

Trees, shrubs, and herbs

Flower perigynous

Ovary superior

Several to numerous separate simple carpels

Fruit an achene or druplet or an aggregate of either

Some Common Names: Rose, Blackberry, Raspberry, Dewberry, Strawberry, Cinquefoil

Some Important Plants: *Rosa* (ornamentals); various berries

Subfamily Spiraeoideae

Shrubs

Flower perigynous

Ovary superior

2-5 (rarely 1-12) separate simple carpels

Fruit a series of follicles, a capsule, or rarely an achene

Some Common Names: Spiraea

Some Important Plants: *Spiraea* (many ornamentals)

Subfamily Prunoideae

Trees and shrubs

Flower perigynous

Ovary superior

1 simple carpel

Fruit a solitary drupe

Some Common Names: Cherry, Plum, Apricot, Peach, Almond

Some Important Plants: Many ornamentals and food plants

Subfamily Pomoideae

Trees and shrubs

Flower epigynous

Ovary inferior

2-5 united carpels

Fruit a pome

Some Common Names: Apple, Pear, Loquat, Service Berry, Hawthorne, Quince

Some Important Plants: Many ornamentals and food plants

Rosaceae

Primitive vs. Advanced

	Primitive	Advanced
Sepals		
5		x
United		x
Petals		
5		x
Separate	x	
Stamens		
Numerous	x	
Separate	x	
Pistil		
Simple (3 subfamilies)	x	
Compound (1 subfamily)		x
Carpels numerous (1 subfamily)	x	
Carpels few or 1 (3 subfamilies)		x
Ovary superior (3 subfamilies)	x	
Ovary inferior (1 subfamily)		x
Symmetry		
Actinomorphic	x	