

Fruit Types and Definitions, Biology 205, Fall 2005

Fruit: a mature ovary and all of its contents and accessory parts.

Dehiscent fruit: ovary walls splits open and releases seeds at maturity.

Indehiscent fruit: do not open at maturity. Pericarp is attached to the seed coat.

Major Fruit Types

1. Simple fruits

Formed from **one** carpel OR **several fused** carpels.

2. Aggregate fruits

Formed from a number of separate (i.e., free) carpels in **one** flower.

E.g., stawberry, blackberry, raspberry

3. Multiple fruits

Formed from the gynoecia of **more than one** flower.

E.g., pineapple, fig.

Particular Types of Fruits

Dry, Simple, Dehiscent Fruits

Follicle: derived from a single carpel and dehisces along **one** side.

e.g., *Asclepias* (milkweed).

Legume: derived from a single carpel and dehisces along **two** sides.

E.g., Fabaceae

Capsule: Several (two or more) fused carpels. Opens in a variety of ways.

E.g., *Iris*, poppy.

Dry, Simple, Indehiscent Fruits

Achene: small, 1-seeded fruit, formed from 1 carpel. Seed free inside of pericarp.

E.g., Asteraceae, strawberry.

Nut: Achene-like, but pericarp stony and derived from a compound ovary.

E.g., Pecan

Samara: Winged achene.

Caryopsis: Grain. Seed united to pericarp.

E.g., Poaceae.

Simple, Fleshy Fruits

Berry: Pericarp fleshy except for skin-like exocarp.
E.g., tomato, grape.

Types of Berries:

Pepo: a berry with a thick, inseparable rind.

E.g., Cucurbitaceae (cucumbers, melons).

Hesperidium: a berry with a leathery, inseparable rind.

E.g., *Citrus*.

Drupe: Stone fruit. Fruit with a skin-like exocarp, fleshy mesocarp and stony endocarp.
E.g., peach, apricot, olive, coconut.

Pome: Formed from a compound pistil and inferior ovary. Hypanthium (floral tube), an accessory tissue, becomes the major fleshy part of the fruit.
E.g., apple, pear.