

ANNONACEAE



General characters

Vegetative characters

Trees, shrubs or lianas.

Evergreen, deciduous, cultivated as well as wild
oil ducts present in the bark & leaves.

Leaves – Simple, entire, **margin wavy**, alternate, distichous,
gland dotted.



General characters

Reproductive characters

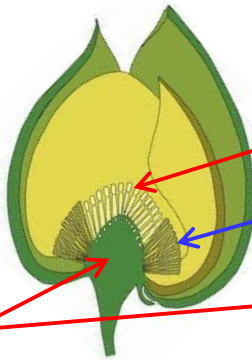
- **Inflorescence:** Often solitary, axillary, sometimes cauliflorous in groups.
- **Flower:** Actinomorphic, bisexual, complete, trimerous, hypogynous, spirocyclic, often aromatic.
- **Calyx:** Sepals 3, polysepalous, connate at the base, valvate.
- **Corolla:** Petals 6 in two whorls of 3 each, valvate or slightly imbricate. Sometimes no distinction into sepals and petals so perianth in 3 or more whorls of 3 each.
- **Androecium:** Stamens numerous spirally arranged on the axis which forms a large convex receptacle, filament short and thick, anthers long.

General characters

Gynoecium: Carpels numerous, free (apocarpous), spirally arranged on the raised receptacle (thalamus), superior, monocarpellary, unilocular

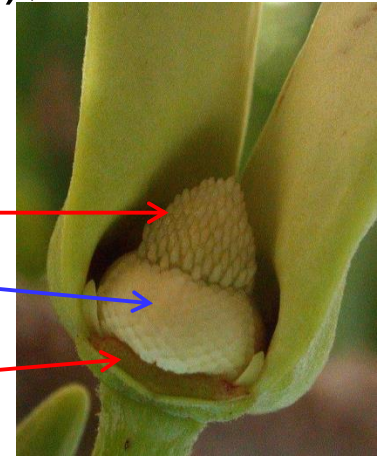


thalamus



Carpels

stamens



Fruit: An aggregate of berries or united to form a single compound fruit



Key characters

Vegetative characters

Leaves : Simple, entire, margin wavy, alternate, distichous, gland dotted.

Flowers : trimerous, hypogynous, spirocyclic, often aromatic.

Calyx: Sepals 3, polysepalous,

Corolla: Petals 6 in two whorls of 3 each

Androecium: Stamens numerous spirally arranged on the axis which forms a large convex receptacle

Gynoecium: Carpels numerous ,free (apocarpous), spirally arranged on the raised receptacle, superior, monocarpellary

Fruit: An aggregate of berries, or can be united to form a single compound fruit

Annona squamosa (സീതപ്പഴം)



Annona reticulata (ആത്തച്ചക്ക)



Annona muricata (മുളുളുൻചക്ക)



Cananga odorata



Uvaria narum



Desmos chinensis



Polyalthia longifolia (അരണമരം)



Rollinia deliciosa



Artrabotrys odoratissimus



Mitrephora grandiflora



© TopTropicals.com



Phaeanthus malabaricus



Orophea uniflora



Annonaceae

- **Affinities of Annonaceae:**
- The family Annonaceae is closely allied to Magnoliaceae but ruminant endosperm separates it from Magnoliaceae. It seems that it had been derived from ancestors of Magnoliaceae. In the secondary cortex bast fibres are alternately present with phloem.
- The family is also primitive and is one of the members of the arboreal Ranales. The trimerous flowers and small embryo indicates its relationship somewhat with Monocotyledons. **Hutchinson** treated it along with the Eupomatiaceae.

Primitive characters

1. Shrubs or trees

Flowers solitary

2. Actinomorphic, hermaphrodite, hypogynous, spirocyclic

3. Calyx Polysepalous

4. Corolla Polypetalous

5. Stamens numerous spirally arranged on the axis which forms a large convex receptacle

6. Carpels numerous or a few, usually free, spirally arranged on the raised receptacle, apocarpous, superior

7. Fruit an aggregate of berries, united to form a single compound fruit

8. Pollination entomophilous, due to gaudy and scented flowers.

Advanced characters

- Trimerous condition
- Flowers produced in inflorescence (in a few members only)