

Acanthaceae

Field characters:

Herbs or lianas with swollen nodes when fresh (shrunken ones when dry), cystoliths usually present; corolla tubular, usually 4 stamens; Fruits a capsules, usually with hooks inside

Confused with:

Gesneriaceae: leaves without cystoliths, often hairy; fruit capsule or indehiscent berry without hooks with many tiny seeds.

Lamiaceae: cystoliths absent, fruits usually a drupe, 1-4 seeds seldom with wings, herbs often with angular stems.

Scrophulariaceae: cystoliths absent, fruits usually with persistent style and many seeds.

Description:

Habit: Herbs, sometimes shrubs or rarely lianas, swollen nodes on stem (dry shrunken).

Sap: absent.

Stipules: absent.

Leaves: simple, opposite, decussate (rarely alternate), margin entire to serrate, usually cystoliths present.

Inflorescence: determinate, flowers often associated with showy bracts.

Flowers: corolla funnel-shaped, 2-lipped or 1-lipped.

Ovules: superior, usually 2-10.

Fruit: a 2-valved, often stipulate capsule, usually with jaculators (hooks); seeds 2 or 4, rarely more, usually latterly flattened.



Swollen nodes on stem (shrunken when dry)



Ruellia Fruit with hooks



Ruellia flower

Major Genera:

- Acanthus:** Herb with spines, cystoliths absent, corolla with upper lip absent, hooks in the fruits.
- Barleria:** Herb with spines, cystoliths present, calyx with 2 large and 2 small lobes, hooks in the fruits.
- Justica:** Herb without spines, cystoliths present, 2 filaments with the 2 thecae attached at different levels, hooks in the fruits.
- Ruellia:** Herb without spines, cystoliths present, corolla lobes sub-actinomorphic, fruits with hooks and more than 4 seeds.
- Staurogyne:** Small herb without spines, no cystoliths, corolla lobes sub-actinomorphic, hooks absent in fruit.
- Strobilanthus:** Herb without spines, with cystoliths, Inflorescences large, fruit with hooks.
- Thunbergia:** Liana, no cystoliths, flower surrounded by two big bracts, fruit duckbill shaped, without hooks; seeds globose.



Leaves with cystoliths