

Family: Solanaceae**Popular name: The Potato Family****Taxonomic Position According to Cronquist (1981)**

| | |
|----------|----------------|
| Kingdom | :Plantae |
| Division | :Magnoliophyta |
| Class | :Magnoliopsida |
| Subclass | :Asterdae |
| Order | :Solanales |
| Family | :Solanaceae |

Origin and Distribution

The family Solanaceae consists of about 85 genera and 2800 species of nearly cosmopolitan distribution. In Bangladesh, the family is represented by 13 genera and 37 species.

Identifying Characters of the Family

- ✓ Plants are dichotomously branched
- ✓ Leaves are alternate
- ✓ Calyx persistent
- ✓ Fruit is berry

Botanical Description of the Family

Habit: Mostly herbs, a few shrubs, armed or unarmed with branched taproots.

Stem: Stem erect, herbaceous or woody, branched, solid or hollow, hairy or glabrous, sometimes with underground tubers.

Leaves: Petiolate or sessile usually alternate, often in unequal pairs, rarely clustered or opposite near the inflorescence, simple, entire, lobed divide in some species, unicostate.

Inflorescence: Inflorescence axillary or extra-axillary and leaf-opposed racemes or cymes (helicoïd, umbellate or scorpioid). Open or closed panicles or flowers axillary and solitary, sometimes extra axillary.

Flower: bracteate or ebracteate. pedicellate or sessile, actinomorphic to zygomorphic, bisexual, pentamerous.

Calyx: Sepals 5, imbricate or valvate, tubular, campanulate or urceolate, persistent or accrescent.

Corolla: Petals 5, rotate or tubular to funnel-shaped, cup-shaped or salver-shaped, imbricate or valvate.

Androecium: Stamens 5, sometimes 4, rarely 6, epipetalous, alternate with the corolla lobes, usually equal, rarely didynamous, anthers 2-celled, dehiscent longitudinally or poricidally, included or exserted, basifixed or dorsifixed.

Gynoecium: Ovary superior, bilocular, occasionally becoming tetralocular by the formation of a false septa, or remaining unilocular apically, placenta swollen, axile, with numerous anatropous to amphitropous ovules, styles simple, filiform or flattened above, stigmas bifid or capitate, disk usually apparent below the ovary.

Fruit: Fruit a berry, sometimes enclosed within an inflated persistent calyx or a capsule.

Seeds: endospermic, cotyledons plain (not plicate), embryo embedded in the fleshy and semi-transparent endosperm.

Table 1. Crop plant species of the family

| Serial No. | Bangla name | English name | Scientific name | Plant parts used | Usefulness |
|------------|-------------|----------------------|---|------------------|-----------------|
| 1 | Morich | Chili | <i>Capsicum frutescens</i> / <i>C. annum</i> | Fruit | Spices |
| 2 | Begun | Brinjal/ eggplant | <i>Solanum melongena</i> | Fruit | Spices |
| 3 | Tomato | Tomato | <i>Solanum lycopersicum</i> | Fruit | Vegetable/fruit |
| 4 | Alu | Potato | <i>Solanum tuberosum</i> | Tuber/stem | Vegetable/food |
| 5 | Tamak | Tobacco | <i>Nicotiana tabacum</i> / <i>N. rustica</i> | Shoot | Narcotic |

| | | | | | |
|---|------------|------------|--------------------------|-------|-----------|
| 6 | Belladonna | Belladonna | <i>Atropa belladonna</i> | Shoot | Medicinal |
|---|------------|------------|--------------------------|-------|-----------|

Mia Baset