

Characters of Orchidaceae:¹

Perennial herbs, epiphytes or saprophytes may be terrestrial; flowers zygomorphic, hermaphrodite, epigynous, resupinated; perianth 6 in two whorls, the posterior segment of the inner whorl developed as lip or labellum; presence of peculiar structures – Labium, column and Rostellum; Stamens 1-2, one or two staminate pollengrains united into pollinia; gynoecium tricarpellary, inferior unilocular with parietal placentation; the fertile stamen is adherent to the style and forms with it the column or gynostemium, which projects more or less in the centre of flower; Stigma 2 or 3 lobed, in some two fertile and one sterile and modified into rostellum.

Habit:

Perennial terrestrial, succulent, scapose herbs; many are epiphytic or saprophytic, sometimes climbers
Vanilla.

Root:

Adventitious, tuberous, (Orchis), fleshy, climbing or aerial. Main roots always absent.

Stem:

Erect, sometimes climbing or trailing, annual in terrestrial forms, perennial in epiphytic forms; generally thickened into rhizome or pseudobulbs (Phajus, Bulbophyllum), bearing aerial assimilatory roots.

Simple, alternate, sometimes opposite or whorled, usually fleshy, linear to ovate, sheathing base, sometimes reduced to achlorophyllous scales.

B. Floral characters:**Inflorescence:**

Solitary or spike, racemes or panicle (Oncidium).

Flower:

Flowers are of variable and peculiar, shape, size and colour, often showy, bracteate, zygomorphic, bisexual or rarely unisexual, epigynous, trimerous, mostly resupinate i.e. twisted to 180° or upside down.