**The Genus Phalaenopsis**

Carl Ludwig Blume 1825

Type: Phalaenopsis amabilis

fal-en-OP-sis (having moth-like flowers)

Common Name: **refers to being similar to a moth**

Etymology: Greek, *phaluna,* meaning moth, -*opis*, meaning resembling) referring to the supposed likeness of the flower to the type species to certain tropical moths.

Monopodial terrestrials, lithophytes and epiphytes. 93 species found (OrchidWiz)

They grow in dense, shady, steamy, low elevation, hill forests with a few species found in cool, upper elevations, montane forests from southern China, Taiwan, India, Sri Lanka, Myanmar to Vietnam, Thailand, Indonesia, the Philippines, and New Guinea to northern Australia.

These plants have a very short stem and appears to be stemless as the clasping leaves hide the stem, lacking pseudobulbs. Leaves are few in number, leathery and up to 2 feet (60 cm) long and 6-8 inches (15-20 cm) wide (i.e. *P. gigantea*), shiny green or sometimes mottled silvery above and green or purplish beneath. The inflorescence arises from the axil of the leaf and varies from a few inches to several feet in length depending on the species.

Roots, adventurous, fleshy, chlorophyll-bearing in leafless species.

The flowers are predominantly white, pink, yellow and mottled. Small to large, they vary in size 0.5-3 inches (1-7.5 cm) in diameter, the flowers are sufficiently alike to tie the genus together. The three sepals are alike in size and color. The two lateral petals are either much broader than the sepals *(e.g., P. amabillis),* equal to the sepals (e.g. *P. equestris)* or narrower than the sepals in size (e.g., *P. pulchra*) and are usually of the same color. The lip varies considerably in this genus. The midlobe of the three-lobed lip may have two antennae, or teeth, at the apex. The lip also exhibits various appendages or callus-like tissue depending on the species and are often rippled. Some species have an entire midlobe on the lip.

The column is short, narrow, wing-less and often the same color as the petals. The rostellum often has a pronounced beak in the center with an almost similar beak on the anther cap. Two round, yellow pollinia are borne on an almost –transparent stipe with a shield-shaped base (viscidium) that is very sticky.

Christenson’s genus summary:

Monopodial terrestrials, lithophytes and epiphytes. **Stems** short, leafy, concealed by imbricating, persistent leaf sheaths, rooting at the base. **Leaves** alternate, distichous, succulent, persistent or sometimes deciduous, oblong to broadly elliptic, sometimes marbled or suffused with purple or silver. **Inflorescences** axillary pedunculated racemes or panicles, erect to laxly pendent, the peduncle terete, the rachis terete or bi-laterally compressed, rarely swollen relative to the peduncle, the floral bracts inconspicuous, persistent, succulent or papery.  **Flowers** few to many, resupinate,inconspicuous to showy, membranous to thickly fleshy, produced simultaneously or in succession over time, often extremely long-lasting, often fragrant, immaculate or variously marked with spots, marbling or bars. **Sepals** and **petals** free, spreading, sub-similar to dimorphic, the lateral sepals usually oblique and larger than the dorsal sepal. **Lip** three-lobed, clawed, continuous with the foot, sometimes saccate or subsaccate, the lateral lobes erect and subparallel, often callose, the middle oblong-elliptic to obtrullate, rarely transverse, sometimes pubescent to villose, the **callus** uni, bi- or triseriate, longitudinal, rarely transverse. **Column** stout, often subtended by a pair of fleshy knee-like protrusions, without wings, with a foot, usually dilated lateral to the stigma. **Pollinia** two or four, on a common spatulate stipe and viscidium. **Pedicel** and **ovary** terete, slender, shallowly six-sulcate. **Capsule** pedicellate.

Barbara McNamee Page 1 of 2 2/8/2020

Christenson’s taxonomy is as follows:

Genus Phalaenopsis Bl.

Subgenus *Proboscidioides* (Rolfe) E. A. Christ., stat. now.

Subgenus *Aphyllae* (Sweet) E. A. Christ., stat. now.

Subgenus *Parishianae* (Sweet) E. A. Christ., stat. now.

Subgenus P*olychilos* (Breda) E. A. Christ., stat. now.

Section *Polychilos* (Breda) Rchb.f

Section *Fuscatae* Sweet

Section *Amboinenses* Sweet

Section *Zebrinae* Pfitz.

Subgenus *Phalaenopsis*

Section *Phalaenopsis*

Section *Deliciosae* E A. Christ.

Section *Esmeralda* Rchb.f

Section *Stauroglottis* (Schauer) Benth.

Terminology:

Axillary – from the leaf axil

Dimorphic – two forms such as unisex flowers

Saccate – sack or bag shaped

Callose – hard and thick in texture

**Obtrullate**

**Transverse**

Villose – a covering of long, soft hairs

Callus – variously shaped protuberance(s) on the lip

**Uni, bi or triseriate**

Stigma – a pollen-receptive structure

Pollinia – pollen masses

Stipe – slender stalk from the column attaches pollinia to a viscidium

Viscidium – sticky pad attached to the pollinia and removed by the pollinator

Six-sulcate – grooved or furrowed

Pedicellate – single stem

References:

OrchidWiz Database X5.3

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Barbara McNamee Page 2 of 2 2/8/2020