The genus Coelogne

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The Genus *Coelogyne*

Over the past few years, raffle prizes have often been *Coelogyne* and *Maxillaria* species as they are mostly relatively easy to grow and are less common in local collections than say *Cattleya, Cymbidium* and *Dendrobium* species. So, in this article, I will introduce you to this genus and provide further information about some of the more widely available species. The next article will cover the genus *Maxillaria*.

In 1821, John Lindley named and described the genus *Coelogyne* based upon *Coelogyne cristata* Lindl. And *Coelogyne punctulata* Lindl. *Coelogyne cristata* Lindl.is accepted as the type species for the genus. In 2002, when D Clayton published his book *The Genus Coelogyne – a Synopsis*, *Coelogyne* was a genus of 190 species, two subspecies and 12 varieties: a total of 204 taxa. These taxa are further divided into 21 sections based upon plant physical appearance and flower characteristics. However, since the genus was first described by Lindley, more than 400 taxa have been included with many subsequently found to be synonymous or misplaced. In his publication *The Orchids, Natural History and Classification*, R L Dressler (1981) included the genus *Coelogyne* in the Subfamily *Epidendroideae* Lindl., Tribe *Coelogyneae* Pfitzer, and Subtribe *Coelogyninae* Bentham. The Subtribe *Coelogyninae* Bentham includes a further 15 genera.

The name *Coelogyne* is derived from the Greek ***koilos*** (hollow, cavity) and ***gyne*** (female) referring to deeply set stigmatic cavity at the front of the column. Pronunciation of the genus name Coelogyne is most commonly 'see-lo-GUY-nee' or 'see-LODGE-eh-nee'.

The genus is widely distributed in South and Southeast Asia and extends to the Southwest Pacific Islands. This distribution includes Myanmar, Cambodia, Laos, Vietnam, China, Sumatra, Java, Sulawesi, Malaku, Brunei, Sarawak, Sabah, Kalimantan, South India, Sri Lanka, Tibet, Nepal, Bhutan with the highest proportion of endemic species in Borneo, followed by Tibet, Nepal, Bhutan, Upper Myanmar and South China. Species in the genus are found in Tropical Evergreen Rainforest at sea level – 1,500m, Tropical Monsoon Forest 900-1,500m, Tropical Lower Montane Rainforest 900-1,00m, Tropical Upper Montane Forest 1,800- 2,900m and Tropical Sub-Alpine Forest (although the orchid diversity in these areas is generally low).

Most *Coelogyne* species are epiphytic, but occasionally lithophytic or terrestrial. They range from short to tall with crowded pseudobulbs that grow into large clumps, to log creeping rhizome species with widely spaced pseudobulbs. Their roots are generally slender (thin), rhizomes slender to thick, terete, flattened and branched or non-branched with clustered or widely spaced unifoliate or bifoliate pseudobulbs. The leaves are stiffy herbaceous and generally long-lived, and the flowers are terminal or lateral from mature pseudobulbs and most often arching although occasionally upright. Flowers open in successively or simultaneously and vary from short-lived, to longer-lived. Early species identification was based on flower characteristics, but more recently taxonomists have resorted to phylogenic analyses or molecular data (DNA sequencing) to more accurately identify orchid genera and species that has resulted in for example, the transfer of species formerly in the genus *Laelia* and *Sophronitis* to *Cattleya,* and *Doritis* to *Phalaenopsis*. In due course, this is likely to lead to further revision of this genus, and possible inclusion of some other genera from the Tribe *Coelogyneae* Pfitzer.

The revision of the genus by Pfitzer & Kraenzlin (1907) recognised 14 sections in two series, *Succedanae* and *Simultanae,* the former with successively opening flowers and the latter with simultaneously opening flowers. Since then, further revisions of this genus have been published by Butzin (1974, 1992), Siedenfaden (1975), Prahdan (1975), Das & Jain (1980), De Vogel (1993) and the most recent work by Gravendeel & De Vogel (1993) who in 2001 published their findings "*Molecular Phylogeny of Coelogyne and Allied Genera: An Urge to Reorganise*" Their work expended the number of sections from 14 to 22, although the continuing discovery of apparently new species may have further impact on the classification of this genus. The 22 sections now recognised are:

1. *Elatae* Pfitzer
2. *Proliferae* Lindl.
3. *Fulginosae* Lindl.
4. *Micranthae* Pradhan
5. *Brachypterae* Clayton
6. *Speciosae* Lindl.
7. *Bicellae* J J Sim
8. *Moniliformes* Carr
9. *Longifoliae* Pfitzer
10. *Cyathogyne* Clayton
11. *Verrucosae* Pfitzer & Kraenzlin
12. *Tomentosae* Pfitzer
13. *Hologyne* (Pfitzer) Clayton
14. *Rigidiformes* Carr

15. *Veitchiae* Clayton
16. *Ptychogyne* (Pfitzer) Clayton
17. *Lawrenceanae* Clayton
18. *Coelogyne*
19. *Fuscescentes* Pfitzer
20. *Ocellatae* Pfitzer
21. *Lentiginosae* Pfitzer
22. *Flaccidae* Lindl.

The evolving taxonomy revealed by the growth in the number of sections and the interest of taxonomists in this genus illustrates the constantly evolving world of identification of flowering plants, and I accept contributes to the frustration often expressed by orchid hobbyists about changes to the names of their orchids. Unfortunately, this is often exploited by less reputable sellers who continue to advertise and sell orchids using synonyms or invalid names as the less experienced growers will purchase them thinking that they are a different species. This said, I accept that all this is mind-numbing and for many, is of no interest.

The type species is *Coelogyne cristata* Lindl. 1824 Section *Coelogyne*. Found in the western Himalayas, eastern Himalayas, Assam, Nepal, Bhutan, Sikkim and Java, this species inhabits lower to upper montane forests at 1,500-2,600m. Their wild habitat has year-round fog and mist, bright winter light and they can be found on mossy trees or on exposed rock outcrops. *Coelogyne cristata* is a small to medium sized, cool to cold growing epiphyte and occasional lithophyte. Oblong, smooth, clustered to well-spaced pseudobulbs on a visible rhizome carry two, apical, plicate, sessile, acute and slightly undulate leaves. Flowering from mid-winter through spring occurs on a terminal, pendulous to semi-erect 15-30cm racemose 3-10 flowered inflorescence with persistent bracts on arising basally on mature growths. Flowers have a banana fragrance. This species has a reputation as being difficult to grow in cultivation for extended periods of time, although given the year-round fog and mist of its habitat, it is easy to see why it does not do well in our hot, dry summers.

Photo source: https://travaldo.blogspot.com/2018/04/coelogyne-cristata-care-and-culture.html

The common name is the Crested Coelogyne referring to the keels on the labellum. Synonyms are *Coelogyne cristata* fma*. hololeuca* (Rchb.f.) M.Wolff & O.Gruss 2007; *Coelogyne cristata* var. *hololeuca* Rchb.f. 1881; Cymbidium *speciosissimum* D. Don 1825; *Pleione speciosissima* (D.Don) Kuntze 1891

Another in situ photo, this time from https://www.plantsrescue.com/posts/coelogyne-cristata.

This photo from the Writhlington Orchid Project is of a *Coelogyne cristata* in Sikkim. In situ photo source: https://wsbeorchids.org/2020/signs-of-spring/

This site has some excellent advice on the culture to successfully grow and flower this species.

Coelogyne cristata has several recognised colour and flower form variants including *Coel. cristata* var. *citrina*, *Coel. cristata* var. *albina*, *Coel cristata* var. *hololeuca*, *Coel. cristata* var. *maxima* and *Coel. cristata* var. *duthiei*.

The remainder of this article will cover some of the more commonly grown *Coelogyne* species including those that have been raffle prizes over the past several years, then some that are clearly desirable, but difficult if not impossible to obtain and more challenging to grow and flower

Coelogyne asperata Lindl. 1849 Section *Verrucosae* Pfitzer & Kraenzlin. This species comes from Sulawesi, the Moluccas, Borneo, Java, Sumatra, the Philippines, Papua and New Guinea, Malaysia and the Solomon Islands where it grows in swamp forests at sea-level to 1,600m. It is a large, hot to cool growing epiphyte or occasional lithophyte in primary forests near rivers and streams. The somewhat compressed, ribbed, broadly conical pseudobulbs carry oblanceolate, long-petiolate, plicate leaves. Flowering in late winter, spring and summer occurs on terminal, arching, 45cm crowded inflorescences with ovate, large, dry, concave floral bracts, and 15-40, short-lived, fragrant, heavy textured, waxy flowers.

Photo source: https://orchidofborneo.blogspot.com/2011/05/coelogyne-asperata-lindl-1849.html

Its common name the Rough Lipped Coelogyne refers to the rough surface of the lip. Synonyms include *Coelogyne edelfeldtii* F. Muell. & Kraenzl. 1894*; Coelogyne lourii* Paxton 1849; *Coelogyne lowii* Paxton 1849; Coelogyne macrophylla Teijsm. & Binn. 1867*; Coelogne pustulosa* Ridley 1886; *Cymbidium robustum* Gilli 1980 publ. 1983; *Pleione asperata* (Lindl.) Kuntze. 1891

In situ photo source: https://travaldo.blogspot.com/2019/06/coelogyne-asperata-care-and-culture.html

Coelogyne chloroptera Rchb. f. 1883 Section *Lentiginosae* Pfitzer & Kraenzlin can be found in the Nueva Vizcaya region in Luzon, Philippines where it grows on trees and rocks as a small sized, warm to cool growing epiphyte or occasional lithophyte at 800- 1,700m. Pear shaped pseudobulbs carry 2, apical, plicate,7 nerved, coriaceous leaves. Flowering in spring, the waxy, fragrant flowers are carried on an erect to arching 15-20cm loosely 4-8 flowered inflorescence that open sequentially. This species is commonly mis-identified as *Coelogyne confusa*. Its common name is the Green Winged Coelogyne

Photo source: https://www.orchidroots.com/detail/information/?pid=44983&rol

Coelogyne chloroptera in situ Pannay, Philippines

Photo source:
http://phytoimages.siu.edu/imgs/pelserpb/r/Orchidaceae_Coelogyne_chloroptera_21329.html

Coelogyne flaccida Lindl. 1830 Section *Flaccidae* Lindl is the type species for this section and can be found in Nepal, northern India, Bhutan, Sikkim, Myanmar, Laos and southern China at 900-2,000m in rain forests, lower and upper montane forests as a medium sized, warm to cool growing epiphytic species with close set, conical, lightly grooved pseudobulbs.

Pseudobulbs each carry 2 apical, lanceolate, acuminate, plicate, 3 nerved, grooved, petiolate base leaves. Basal, slender, pendulous 25cm, fractiflex (zigzagged) flower racemes with 5-12 highly perfumed [unpleasant) cream simultaneously opening flowers arise from mature pseudobulbs.

Photo source: http://orchids.la.coocan.jp/Coelogyne/Coelogyne%20flaccida/Coelogyne%20flaccida.htm

Its common name is the Loose Coelogyne, and in China, Li Lin Bei Mu Lan. Synonyms are *Coelogyne esquirolii* Schltr. 1919; *Coelogyne flaccida* var. *longiracemosa* Roeth 2006; *Coelogyne huettneriana* Auct. non Rchb.f; *Pleione flaccida* (Lindl.) Kuntze 1891.

Seidenfaden considered *Coelogyne flaccida* to be a variety of *Coelogyne lactea*, however further examination showed them to be conspecific, and accordingly, *Coelogyne flaccida* Lindl. takes preference.

The in-situ photo shows the multiple flower racemes carried by a mature specimen. Photo source: https://en.wikipedia.org/wiki/File:Coelogyne_flaccida_at_Phalee.jpg

Coelogyne huettneriana Rchb.f. 1872 Section *Flaccidae* comes from Myanmar, Thailand, Laos and Vietnam where it can be found as a small sized, cool growing epiphyte or lithophyte in open areas in evergreen forests at 1,100-1,200m. Close set, oblong-ovate pseudobulbs are basally enveloped by few sheaths and carry 2, elliptic, acuminate, plicate, 7 nerved, gradually narrowing, petiolate base leaves. Flowering in spring occurs on an arching 14 cm, slender, 4-8 flowered inflorescence arising from mature pseudobulbs. Flower racemes have deciduous floral bracts with simultaneously opening, musk scented flowers.

Photo source: http://idao.plantnet-project.org/orchisasia/genre/Coelogyne/Coelogyne%20huettneriana/

The common name is Huettner's Coelogyne named for a German orchid enthusiast of the 1800's. The synonym is Pleione huettneriana (Rchb.f.) Kuntze 1891

Coelogyne lawrenceana Rolfe 1905 Section *Lawrenceanae* D.A.Clayton 2002 is the type species for this section, and can be found in the Himalayas and Vietnam as a medium sized, cool to warm growing an epiphyte in primary montane forests at moderate elevations. Ovoid-oblong pseudobulbs carry 2, lanceolate, broad, plicate, 8 nerved, acuminate, openly grooved petiolate base leaves. Flowering takes place in autumn to spring on 25cm arching, terminal racemes arising from mature pseudobulbs. Up to 6 waxy, fragrant sweet-scented flowers are long-lasting, and open successively as solitary blooms held just above the leaves. Its common name is Lawrence's Coelogyne named after an 1800's English orchid enthusiast. The synonym is *Coelogyne fleuryi* Gagnep. 1930

In situ photo source: https://br.pinterest.com/pin/711498441102147579/

Photo source: http://www.epharmacognosy.com/2021/04/coelogyne-lawrenceana.html

Coelogyne marmorata Rchb. f. 1877 Section *Lentiginosae* Pfitzer & Kraenzlin comes from the Philippines where it occurs as a medium sized, cool growing epiphyte above 1,000m. Crowded, tapering, elongate pseudobulbs enveloped by dry, membraneous sheaths and carry 2, apical, oblong-lanceolate, petiolate base leaves. This species flowers in spring on arching, slender, 3-6 flowered 15cm inflorescences carrying up to 5 fragrant, waxy flowers that arise from new growth.

Its common name is the Marbled Coelogyne refers to the marbled side lobes of the lip. Some sources report *Coelogyne zahlbrucknerae* as a synonym of this species but it has more rounded apically side lobes and 5 lined different calli on the lip.

Photo source:
https://orchids.fandom.com/wiki/Coelogyne_marmorata

Coelogyne miniata Lindl. 1830 Section *Hologyne* D.A.Clayton is the type species for this section and can be found as a small sized, cool to cold growing epiphyte or lithophyte on large rocks in lower and upper montane forests at 1,000 to 2,400m in Java, Bali, Lesser Sunda Islands and Sumatra. The creeping rhizome has cylindrical to ovate, narrowing apically pseudobulbs, enveloped in youth by a few basal sheaths approximately 2.5cm apart. Each pseudobulb carries 2 apical, elliptic, acute, plicate, 7 nerved, abruptly narrowing petiolate base leaves. Flowering takes place in winter as either synanthous (flowers and leaves appear at the same time) or proteranthous (flowers appear before the leaves) on stiff, terete, fractiflex 7.5-10cm racemes arising from the base of the pseudobulb. The few flowered inflorescence is basally enveloped basally by loose bracts. Floral bracts fall as up to 4 simultaneous flowers appear in a short zig-zag inflorescence. Its common name is the Rust Red Coelogyne. Synonyms are *Chelonanthera miniata* Blume 1825; *Coelogyne lauterbachiana* Kraenzl. 1895; *Coelogyne simplex* Lindl. 1854; *Hologyne lauterbachiana* (Kraenzl.) Pfitzer 1907; *Hologyne miniata* (Blume) Pfitzer 1907; *Pleione lauterbachiana* (Kraenzl.) Kuntze 1903; *Pleione miniata* (Blume) Kuntze 1891; *Pleione simplex* (Lindl.) Kuntze 1891

Photo source:
https://www.flowershots.net/Coelogyne_species_2.html

In situ photo source:
https://www.orchidroots.org/detail/45155/species/
?newgen=65189&tab=sum

Coelogyne ovalis Lindl 1838 Section *Fulginosae* occurs as a small sized, warm to cool growing epiphyte or lithophyte in Assam, Tibet, Nepal, Bhutan, Xizang and Yunnan provinces of China, northeastern India, Myanmar, Laos, Thailand and Vietnam. Growing in montane valleys on trees or rocks at 600 – 2,100m, this species has ovoid-fusiform, smooth, ridged basally enveloped

by dry sheaths pseudobulbs some 5-7cm apart, carrying two erect, narrowly elliptic, acute to acuminate, elongate, petiolate base leaves. Flowering from summer through winter, successively opening fragrant flowers with deciduous floral bracts are carried on slender 12cm few flowered inflorescences that arise from mature pseudobulbs. Its common name is the Oval Coelogyne based on the shape of the midlobe of the labellum. Both *Coelogyne ovalis* and *Coelogyne pallens* are considered by some taxonomists to be synonyms for *Coelogyne fimbriata*. Other synonyms are *Coelogyne decora* Wall. ex Voigt 1845; *Coelogyne pilosissima* Planch. 1855;

Several authors recommend growing this species on a large hardwood slab given its spreading habit.

Photo source: https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:623974-1https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:623974-1

Coelogyne pandurata Lindley 1853 Section *Verrucosae* Pfitzer & Kraenzlin occurs in Malaysia, Sumatra, Borneo and the Philippines where it can be found as a large sized, hot growing epiphyte on large trees near rivers or as a terrestrial. Widely spaced, strongly compressed, oblong or suborbicular, sulcate pseudobulbs carry 2, apical, plicate, elliptic-lanceolate leaves with stout petioles. Flowering in late spring through summer,racemes arise from the center of newly emerging growths, each carrying up to 15 flowers on each terminal, arched to pendant 15-30cm racemose inflorescence. The simultaneously opening flowers are highly fragrant (honey to cinnamon), but short lived. Its common name is the Lute-Shaped Coelogyne. Synonyms are *Coelogyne peltastes* var. *unguiculata* J.J.Sm. 1927; *Pleione pandurata* (Lindl.) Kuntze 1891

This orchid is best grown in a wire basket as it spreads rapidly. Suitable media includes sphagnum with wood chips. If required, this species can be repotted when the new lead emerges.

Photo source: https://orchidroots.com/detail/45191/species/?tab=sum

In situ photo source: https://en.wikipedia.org/wiki/Coelogyne_pandurata

Coelogyne remediosae Ames & Quisumb. 1932 Section *Longifoliae* Pfitzer comes from the Philippines where it can be found as a medium sized, cool to cold growing epiphyte at mid to high elevations. Narrow cylindrical pseudobulbs are enveloped by obtuse, membraneous sheaths, and carry two apical, plicate, elliptic-oblong, petiolate base leaves. This species flowers in winter on a terminal, erect to arcuate, 23-31cm successive few flowered inflorescence arising from a newly emerging growth with odourless flowers. Its common name is the Remedios Coelogyne named after a mid-1900's female Philippine orchid enthusiast]

Photo source: https://ne-np.facebook.com/JardinerongSunog/posts/1072626573118204

In situ photo source: In situ photo source: https://br.pinterest.com/pin/711498441102147579/

Coelogyne rochussenii de Vriese 1854 Section *Tomentosae* Pfitzer & Kraenzlin comes from Malaysia, Borneo, Java and Sumatra and through to the Philippines where it grows as a medium sized, hot to cool growing epiphyte on trees overhanging rivers or occasional lithophyte in lowlands up to 1,500m.Strongly furrowed cylindric, narrow pseudobulbs, spaced apart carry 2, oblanceolate to obovate, rounded and slightly acuminate, petiolate base leaves. Flowering in winter, basal, heteranthous (a growth that produces neither pseudobulb nor leaves from which a new inflorescence arises) up to 45cm pendant inflorescences have up to 40 fragrant, lemon-scented, simultaneously opening flowers. The flowers semi-close each night and reopen in the morning.

Its common name is Rouchussen's Coelogyne named after a mid-19th century Dutch governor-general of the Dutch East Indies. Synonyms include *Chelonanthera cymbidioides* Teijsm. ?; *Coelogyne macrobulbon* Hook. f. 1890; *Coelogyne plantaginea* Lindl. 1855; *Coelogyne steffensii* Schltr. 1925*; Coelogyne stellaris* Rchb.f. 1886; *Pleione macrobulbon* (Hook.f.) Kuntze 1891; *Pleione plantaginea* (Lindl.) Kuntze 1891; *Pleione rochussenii* (de Vriese) Kuntze 1891

Photo source: http://www.orchidspecies.com/coelrochusseni.htm

In situ photo source:
https://www.nparks.gov.sg/florafaunaweb/flora/5/0/5013

This photo shows how a large, well grown specimen can flower.

Photo source: https://my.onlinefriday.info/FRAGRANT-Coelogyne-Rochussenii-SPECIES-SEEDLING/58909297.4436819437

Coelogyne sanderiana Rchb.f. 1887 Section *Coelogyne* can be found in Sarawak, Borneo, Lesser Sunda Islands and Sumatra in as a large sized, hot to cool growing terrestrial, epiphyte or lithophyte in secondary hill forests, moss forests

and on sandstone ridges or limestone at 200 – 1,300m. 6 cm spindle-shaped pseudobulbs, basally enveloped and sulcate (having long, narrow grooves or channels) when young becoming rugose (wrinkled) with age carry two, apical, erect, lanceolate, plicate, five nerved, acute petiolate base leaves. Flowering occurs in late spring on basal 25cm fractiflex (zigzagged) 6-9 flowered inflorescences arising before the pseudobulb has developed. Persistent, light green [Borneo] or dark red [Sumatra] floral bracts support simultaneously opening flowers that smell of dried coconut. Its common name Sander's Coelogyne after the well-known 1800's English nurseryman. The synonym is *Pleione sanderiana* (Rchb.f.) Kuntze 1891

Photo source:

https://www.orchidroots.com/detail/information/?pid=45266&role=pub

In situ photo source:
https://orchid.unibas.ch/index.php/en/?option=com_content&view=article&id=3&SearchResultID=2045175/Coelogyne/sanderiana/Reichenbach_Heinrich_Gustav&setLang=en-GB

Coelogyne septemcostata J.J.Sm. 1903 Section *Speciosae* grows Thailand, Malaysia, Sumatra and Borneo [Sabah] as a medium sized, hot to cool growing epiphyte in moist shady lowland hill forests, often in trees overhanging rivers and streams at 50 -2,300m. Clustered, ovoid, longitudinally rugose pseudobulbs carry single, apical, plicate, elliptic, acute, narrowing at the base into elongate, petiolate stalk leaves. Flowering in winter through to early summer, flowers are carried on a synanthous (flowers and leaves appear at the same time), basal, erect, slender, 12cm single flowered inflorescence arising from newly developing pseudobulbs, completely enveloped by a few imbricate, acute bracts with successively opening flowers that do not open fully and are downward set.

Its common name is the Seven Ribbed Coelogyne which refers to the keels on the lip. Only the Sumatran species has 7 keels, but from other countries, it can vary from 5 to 8. The synonym is *Coelogyne membranifolia* Carr 1932

Photo source:
https://orchid.unibas.ch/index.php/en/?option=com_content&view=article&id=3&SearchResultID=2100232/Coelogyne/septemcostata/Smith_Johannes_Jacobus&setLang=en-GB

In situ photo source: https://www.flickr.com/photos/malaysianorchidinsitu/16785995137

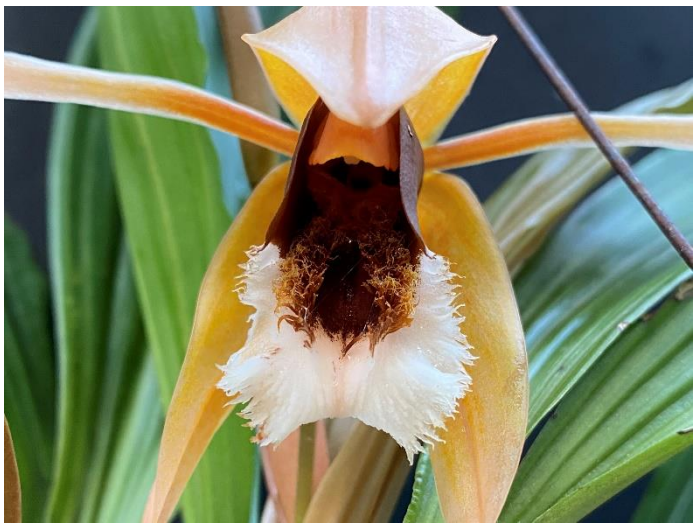
Coelogyne speciosa [Bl] Lindley 1833 Section *Speciosae* Lindley, the Type species for the section is another large sized, warm to cool growing epiphyte and occasional terrestrial found in Malaysia, Borneo, Java and Sumatra rainforests at 700-2,000m. Clustered ovoid pseudobulbs carry single or two apical, elliptic or lanceolate, acute petiolate, plicate leaves. Primarily flowering in spring and summer, although this species can flower at any time of the year, terminal, erect to nodding inflorescences carry up 3 musky scented flowers on racemose inflorescences that arise out of the center of a new pseudobulb growth. The flowers of this species have a strange flying insect appearance. It is said to grow best in baskets in semi shade.

Photo source: https://eol.org/pages/1091872

Its common name is the Beautiful Coelogyne. The many synonyms include *Chelonanthera speciosa* Bl. 1825; *Coelogyne speciosa* subsp. *fimbriata* (J.J.Sm.) Gravend. 1999; *Coelogyne speciosa* subsp. *incarnata* Gravend. 1999; *Coelogyne speciosa* var. *alba* auct. 1905; *Coelogyne speciosa* var. *albicans*, Man. 1890; *Coelogyne speciosa* var. *fimbriata* J.J.Sm. 1907; *Coelogyne speciosa* var. *incarnata* (Gravend.) M.Wolff & O.Gruss 2007; *Coelogyne speciosa* var. *major* C.F.Sander, F.K.Sander & L.L.Sander 1927; *Coelogyne speciosa* var. *rubiginosa* auct. 1922; *Pleione speciosa* (Blume) Kuntze 1891

Coelogyne speciosa subsp. *incarnata*

Photo source: https://www.aos.org/sitf-blog/coelogyne-speciosa-ssp-incarnata-2020-02-10.aspx



Coelogyne speciosa in situ in Malysisa

Photo source: https://orchidroots.com/detail/45275/species_detail/?tab=tax

Coelogyne stricta (D. Don) Schltr. 1919 Section Elatae Pfitzer is the type species for the section and comes from northeastern India, Nepal, Bhutan, upper Myanmar, China and Vietnam where grows as a medium sized, warm to cold growing epiphyte on broadleafed trees in lower and upper primary montane forests on steep riverbank slopes at 900-2,100m. Glossy green oblong-cylindrical pseudobulbs enveloped basally by a few imbricate sheaths are about 5cm apart with each carrying 2 apical, elliptic-oblong, acute, coriaceous, plicate, gradually narrowing into elongate petiolate base leaves. Flowering in winter -spring occurs on an erect 40 cm, 6-15 flowered inflorescences arising from mature pseudobulbs, enveloped by imbricate sheaths at the juncture of the peduncle and rachis carrying simultaneously opening, fragrant flowers.

Its common name is the Rigid Coelogyne. Synonyms are *Coelogyne elata* Lindl. 1830; **Cymbidium strictum* D. Don 1825; *Pleione e*lata (Lindl.) Kuntze 1891

Photo source: https://www.researchgate.net/figure/A-flower-of-Coelogyne-stricta_fig1_295397652

In situ photo source: https://www.researchgate.net/figure/Coelogyne-stricta-habit-a-flowers-b-and-fruits-c_fig1_348414840

Coelogyne tomentosa Lindl. 1854 Section *Tomentosae* Pfitzer unsurprisingly is the type species for the section. This species is found as a cool to cold growing epiphyte in mountainous regions, principally river valleys in montane forests and on high ridges in Malaysia, Sumatra, Borneo and Java in at 1,150-2,100m. Elongate-conical, somewhat angled pseudobulbs when young that become yellowish green and wrinkled with age carry single, apical, plicate, elliptic-obovate, long petiolate leaves. Flowering most often occurs in summer on terminal 37cm pendant, fractiflex (zigzagged) racemose inflorescences from new pseudobulbs with short bracts and 20-30 short-lived, delicately perfumed flowers.

Its common name is the Hairy Coelogyne referring to the pubescent ovary. This species is often marketed as *Coelogyne massangeana* which is a synonym of this species. Synonyms include *Coelogyne cymbidioides* Ridl. 1908 [Rchb.f] Rolfe var. *massangeana* Ridley; *Coelogyne densiflora* Ridley 1903; *Coelogyne massangeana* Rchb.f. 1878; Coelogyne tomentosa Lindley var. *cymbidioides* Ridley; *Coelogyne tomentosa* Lindley var. *massangeana* Ridley; *Pleione massangeana* (Rchb.f.) Kuntze, 1891; *Pleione tomentosa* (Lindl.) Kuntze 1891

Photo source: https://orchidroots.com/detail/information/?pid=45304&role=

Coelogyne triplicatula Rchb.f. 1864 Section *Fulginosae* Lindl. is found in lower Myanmar as a miniature to small sized, warm to cool growing epiphyte. Close set, pyriform to oblong, angled longitudinally grooved pseuduobulbs each carry 2 lanceolate, slightly acute, undulate leaves. Flowering in autumn takes place on a 10cm 1-2 flowered inflorescence arising from newly emerging growth with lanceolate, acuminate deciduous floral bracts and successively opening flowers. This species is said to be difficult to grow.

Photo source: https://www.orchidsforum.com/threads/coelogyne-triplicatula.12791/

Coelogyne trinervis Lindl. 1830 Section *Flaccidea* Lindl. Is found in Myanmar, Thailand, Malaysia, Laos, Cambodia, Vietnam, Java, Lesser Sunda Islands, Mollucas and Sumatra at 100-1,600m as a medium sized, hot to cool growing epiphyte or lithophyte on trees or rocks. Ovoid, closely set longitudinally 4 grooved, brownish pseudobulbs are enveloped basally by a few sheaths and carry two apical, plicate, 3 nerved petiolate base leaves. Flowering in autumn takes place on an erect 25cm slender slightly fractiflex raceme carrying 4-8 flowers with deciduous floral bracts arising from a new growth. The simultaneously opening flowers are lightly fragrant [although some say the fragrance is unpleasant). This species exhibits significant clonal variation in both colour and flower form between the localities in which it is found.

Its common name is the Three-Veined Coelogyne in reference to the nerves on the labellum. Synonyms are *Coelogyne angustifolia* Ridl. 1897, nom. illeg.; *Coelogyne cinnamomea* Lindl. 1858; *Coelogyne pachybulbon* Ridl. 1897; *Coelogyne rhodeana* Rchb.f. 1867; *Coelogyne rossiana* Rchb.f. 1884; *Coelogyne stenophylla* Ridl. 1924; *Coelogyne wettsteiniana* Schltr. 1920; *Pleione rossiana* (Rchb.f.) Kuntze 1891; *Pleione trinervis* (Lindl.) Kuntze 1891.

Photo source: https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:624081-1

In situ photo source: http://www.orchidspecies.com/coeltrinervis.htm

Coelogyne verrucosa S.E.C.Sierra 2000 Section *Verrucosae* Pfitzer This the type species for the section and can be found in Borneo at sea level to 700m where it is a medium sized, hot to warm growing epiphyte that climbs up its hosts has a tree-climbing habit and occasional terrestrial with 3/4" to 2" [1.8 to 5 cm] between each flattened, ovate pseudobulb enveloped by a few bracts and carrying 2, apical, lanceolate, plicate, 7 to 9 nerved, gradually narrowing below into the petiolate base leaves that blooms in the summer in situ and has up to 10 flowers on proteranthous (flowers appear before the leaves) or synanthous (flowers and leaves appear simultaneously) 48 cm arching inflorescences carrying simultaneously opening flowers. Its common name is the Warty Coelogyne.

Photo source: https://orchidroots.org/detail/photos/45331/?gen=44927&pid=45331&type=species&role=pub

In situ photo source: http://www.orchidspecies.com/coelverrucosa.htm

Coelogyne viscosa Rchb. f. 1856 *Section Flaccidae* Lindl. comes from northeastern India, Myanmar, southern China, Laos, Vietnam, Thailand and peninsular Malaysia at 700-1,500m where it grows in evergreen lowland forests and primary montane forests as a medium sized, warm growing epiphyte or lithophyte. Clustered, narrow ovoid or fusiform, grooved, glossy pseudobulbs carry 2, lanceolate, plicate, finely nerved, acute leaves with a tapering, grooved petiolate bases. Flowering in winter take place on erect, few flowered 10-15cm slender, very slightly fractiflex racemes with deciduous floral bracts. The simultaneously opening fragrant flowers arise from newly developing pseudobulbs. Most authors conclude that this species and *Coelogyne graminifolia* are the same species. Its common name is the Sticky Coelogyne, and synonyms are *Coelogyne graminifolia* Rchb. f. 1874; *Pleione graminifolia* (C.S.P.Parish & Rchb.f.) Kuntze 1891; *Pleione viscosa* (Rchb.f.) Kuntze 1891.

Photo source: https://www.orchidroots.com/detail/photos/45333/

In situ photo: https://pbase.com/glazemaker/image/110022540

The next group of Coelogyne species are those that are less often seen in cultivation as they present more challenges to the hobbyist orchid grower, are more difficult to acquire, often need specialised conditions and can be less vigorous than the more common species.

Coelogyne beccarii Rchb.f. 1886 *Section Speciosae* occurs in the Bismark Islands, New Guinea and the Solomon Islands in lowland rain and secondary forests at sea level to 1,500m This species is a medium sized, hot to cool growing epiphyte or rarely terrestrial with a woody rhizome. Cylindrical-ovoid, smooth, 4 grooved, 4 angled pseudobulbs carry 2, linear to linear-lanceolate, acuminate, plicate, 7-9 nerved petiolate base leaves. This variable species flowers throughout the year, (often more than once) on erect to suberect, 50cm fractiflex racemes carrying 3-7 successively opening flowers with attractively coloured large flowers. The flower raceme with deciduous floral bracts arising from newly emerging growth.

Photo source: https://www.orchidroots.com/detail/information/?pid=44948&role=pub

Its common name is Becarri's Coelogyne after an original orchid species collector in the late 1800's. Synonyms are *Coelogyne beccarii* var. *micholitziana* (Kraenzl.) Schltr. 1915; *Coelogyne beccarii* var. t*ropidophora* Schltr. 1914; *Coelogyne micholitziana* Kraenzl. 1891.

Photo source: http://www.orchidsnewguinea.com/orchid-information/species/speciescode/1816

Coelogyne bilamellata Lindl. 1853 *Section Longifoliae* Pfitzer & Kraenzlin come from the Philippines and where it can be found in wet forests at 60-1,000m as a small to medium sized, hot to warm growing epiphyte or lithophyte. Basally broad, tapering upwards pseudobulbs carry 2 apical, oblong-lanceolate, acute, plicate, 5 nerved petiolate base leaves. Flowering in spring on inflorescences that arise from mature pseudobulbs, the fractiflex 30cm pendulous raceme carries up to 60 successively opening flowers, and has deciduous, chafflike bracts that fall before the flowers open.

Photo source: https://www.orchidroots.com/detail/44956/hybrid/?tab=sum

Photo source:
http://www.orchidspecies.com/coelbillamelata.htm

An alba form also exists.

Jim Cootes writing in The Orchids of the Philippines notes that once established, this species often seems to be continually in flower. Its common name is the Two-Ledged Coelogyne refers to the 2 keels on the labellum. Synonyms are *Panisea bilamellata* (Lindl.) Rchb.f. 1861; *Pleione bilamellata* (Lindl.) Kuntze 1891

Coelogyne celebensis J.J.Sm. 1917 *Section Speciosae* Lindley comes from Sulawesi [Celebes] where it grows in roadside forests at sea level to 1,000m. as a large sized, hot to warm growing epiphyte with close set cylindric, 4 ridged in youth pseudobulbs. As the in-situ photo shows, this species has 1-2 apical, obovate-lanceolate, acuminate, coriaceous, plicate, petiolate base leaves. Flowering in late winter and early spring occurs on slender, suberect 40cm slightly arcuate fractiflex 4-12 successively opening flowered inflorescence arising from newly emerging growth. There is considerable variation in the petal and sepal colour in this large flowered species. Its common name is the Sulawesi Coelogyne, and the synonym is *Coelogyne platyphylla* Schltr. 1925

Photo source:
https://www.orchidsforum.com/threads/coelogyne-celebensis.2420/

In situ photo source:
http://www.orchidspecies.com/orphotdir/coelocelebenensis.jpg

Coelogyne corymbosa Lindl. 1853 *Section Ocellatae* Pfitzer & Kraenzlin is a creeping, small sized, cool to cold growing, epiphytic or lithophytic species found in Nepal, Bhutan, northeastern India, and China on moss-covered tree trunks and branches in upper montane forest or on humid cliffs at 1,400-3,500m. Short, clustered, ovoid to subrhomboidal pseudobulbs are basally enveloped by dark brown sheaths and carry 2 apical, elliptic-lanceolate, suberect, plicate, 5 nerved, acute, gradually narrowing into elongate, grooved, petiolate base leaves. Flowering in summer and autumn, terminal erect or pendant 20cm racemose inflorescences arise from newly emerging pseudobulb growths. Two-five fragrant, heavily textured simultaneously opening flowers have persistent floral bracts. Its common name is the Umbrella-like Coelogyne.

Photo source: https://www.orchidsforum.com/threads/coelogyne-corymbosa.4653/

In situ photo source: https://travaldo.blogspot.com/2018/05/coelogyne-corymbosa-orchid-plant-care-and-culture.html

Coelogyne eberhardtii Gagnep. 1930 *Section Lawrenceanae* was initially found in the Da Lat region of Vietnam and more recently in Thailand at 1,000-1,500m as a small sized, cool growing epiphyte. The ovoid-oblong, longitudinally rugose, brilliant green pseudobulbs carry 2, apical, oblong-lanceolate, attenuate-obtuse, plicate, 5 nerved, shortly petiolate base leaves. This species flowers in autumn on hysteranthous (flowers open before the leaves appear) successively single, few flowered 8-9cm racemes. It is another of the larger flowered species. Its common name is Eberhardt's Coelogyne after the 1900's collector of the type species.

Photo source: https://www.flickr.com/photos/afriorchids/18478255418

Coelogyne endertii J.J.Sm. 1931 *Section Longifoliae* Pfitzer & Kraenzlin can be found in Kalimantan and Sarawak Borneo in primary hill forests on small trees at 800-900ms as a small to medium sized, warm growing epiphyte on small trees. A stout rhizome carries close set, pyriform, thickened neck elongated base pseudobulbs. Each pseudobulb carries 2 erect, plicate, nine-nerved, oblong-elliptic, acuminate-acute, petiolate base leaves. Flowering in late summer and early autumn occurs on initially synanthous, but becoming hysteranthous, elliptic in cross-section 23-31cm zig-zag raceme, carrying many successively opening flowers with deciduous floral bracts.

Its common name is Endert's Coelogyne named for the German collector of the type specimen.

Photos source:
https://orchid.unibas.ch/index.php?option=com_content&view=article&id=68&Itemid=150&lang=en&SearchResultID=194444

Coelogyne fuscescens Lindl. 1828 *Section Fuscescentes* Pfitzer & Kraenzlin is the Type species for the section. Coming from Nepal, India, Sikkim, Bhutan, lower Myanmar, China and northeastern Thailand where it grows on mossy branches in damp, shady hill forests and lower montane forests at 600-2,100 meters, it is a medium to large sized, warm to cold growing, creeping epiphyte. Erect, clustered, cylindric-fusiform, deeply grooved with age pseudobulbs carry 2 apical, oblanceolate to oblong-elliptic, acute, plicate, 6 nerved, short petiolate base leaves. This species flowers in autumn and on an erect to suberect,16 cm slightly fractiflex rachis, with 2 to 10 simultaneously opening flowers arising with a newly emerging pseudobulb growth subtended by 4 to 5 short imbricating sheaths. The floral bracts are deciduous.

There is a *Coelogyne fuscescens* var. *brunnea* [Lindley] Lindley which now is known as *Coelogyne brunnea* that differs from this species by having a brown-marked lip with an acute midlobe and occurs in Thailand, Myanmar, Laos and Vietnam, There also is a variety *Coelogyne fuscescens* var. i*ntegrilabia* Pfitzer 1907that has almost no side lobes to the lip and is most likely pink, and a variety *Coelogyne fuscescens* var. *viridiflora* Pradhan 1979 that differs by having smaller to 5 cm green flowers. Its common name the Ocher Yellow Coelogyne, and synonyms are *Coelogyne integrilabia* (Pfitzer) Schltr. 1915; *Pleione fuscescens* (Lindl.) Kuntze 1891.

Photo source:
https://andysorchids.com/pictureframe.asp?pic=images/Species/7443med.jpg&PicId=7443&PicNam=Coelogyne%20-%20fuscescens

Coelogyne fuscescens var. *viridiflora*

Photo source: https://www.orchidroots.com/detail/information/?pid=45053&role=pub

In situ photo source: https://efloraofindia.com/wp-content/uploads/2020/10/DSC01256.JPG

Coelogyne gibbifera J.J.Sm. 1912 *Section Moniliformes* Carr comes from Borneo where it grows as a medium sized, warm to cool growing epiphyte in hill and lower montane forests at 600 – 1.,600m. Close set, erect, elongated, fleshy, green, ellipsoid pseudobulbs carry single, apical, lanceolate, acuminate, plicate, 6-7 nerved, finely coriaceous petiolate base leaves. Flowering in spring and autumn takes place on an erect, slender 8-10cm fractiflex rachis with up to 12 flowers arising from a newly emerging growth. The large flowers open in succession. Its common name is the Nerved Coelogyne from the prominent median nerves on the back of the sepals and petals. The synonym is *Coelogyne macroloba* J.J.Sm. 1927

Photo source:
https://orchid.unibas.ch/index.php/en/?option=com_content&view=article&id=3&SearchResultID=2100093/Coelogyne/gibbifera/Smith_Johannes_Jacobus&setLang=en-GB

In situ photo source: https://www.flickr.com/photos/jvinoz/8585901622

Coelogyne holochila P.F.Hunt & Summerh. 1966 *Section Elatae* Pfitzer is found in Nepal, Bhutan, northeastern India, Myanmar and Yunnan (China) as a medium sized, cool to cold growing epiphyte or lithophyte on mossy rocks in lower and upper montane forests at 1,000 – 2,500m. Erect, oblong-cylindric, obtusely angled, narrowly grooved pseudobulbs are basally enveloped youth by evanescent (quickly disappearing) sheaths and carry 2, apical, oblanceolate, acute to slightly acuminate, coriaceous, plicate, 7-nerved, grooved elongate petiolate base leaves with undulate margins. This species flowers in spring on an erect, imbricate (overlapping petals and sepals while in bud) bracts at junction of the peduncle and rachis, 40cm fractiflex rachis carrying 6-10 flowers arising with newly emerging growth. The floral bracts are deciduous, and the raceme has simultaneously opening, long-lasting, fragrant flowers. Its common name is the Almost Entire Lip Coelogyne.

Photo source:
https://orchidroots.com/detail/photos/45080/?tab=sum&gen=44927&att=

Coelogyne kemiriensis J.J Sm.1943 *Section Coelogyne* grows in Aceh Sumatra as a small sized, cold growing terrestrial in mossy forests on montane ridges at 2,300 – 3,300m. Tubular pseudobulbs carry 2, lanceolate and acuminate 5-nerved beneath, gradually narrowing petiolate base leaves. Flowering in winter occurs on an erect, peduncle, synanthous (flowers and leaves appearing at the same time) 9.5cm fractiflex short-lived successively 5-6 flowered inflorescence. Its common name is the Mt. Kemirir Coelogyne.

Photo source: https://orchid.unibas.ch/index.php/en/?option=com_content&view=article&id=3&SearchResultID=2045319/Coelogyne/kemiriensis/Smith_Johannes_Jacobus&setLang=en-GB

Coelogyne lentiginosa Lindl. 1852 *Section Lentiginosae* Pfitzer & Kraenzlin. This species is the Type species for the *Section* and comes from Myanmar, Thailand and Vietnam where it grows as a small to medium sized, warm to cool growing epiphyte or lithophyte in evergreen and in semi-deciduous and deciduous dry lowland forests and savannah woodlands at 500-1,300m. Ellipsoid, cylindrical, narrow or ovoid pseudobulbs carry 2 elliptic to oblanceolate, narrow, arched to suberect, petiolate, plicate, acute, petiolate base leaves. Flowering take place in spring on erect 6-16 cm few flowered inflorescences arising with a newly emerging pseudobulb. The flower racemes have persistent floral bracts and simultaneously opening, fragrant flowers. The common name is the Freckled Coelogyne, and the synonym is *Pleione lentiginosa* (Lindl.) Kuntze 1891

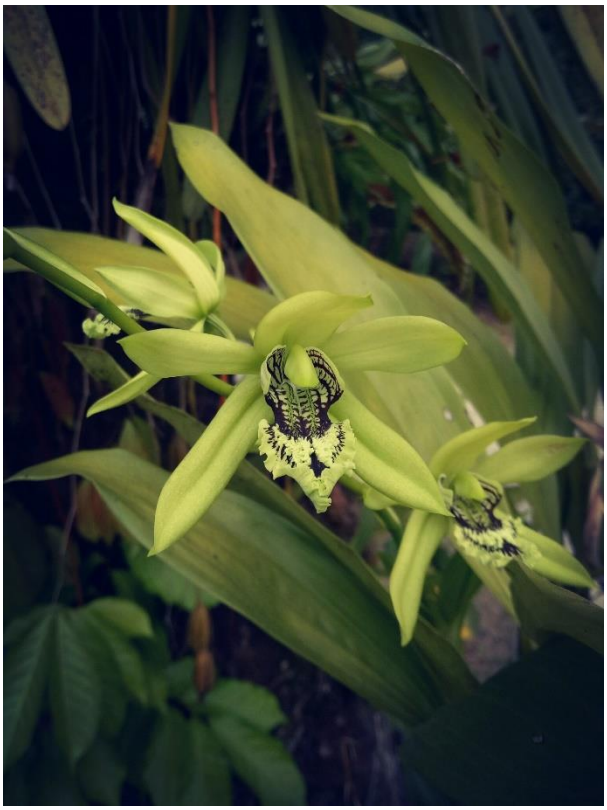
Photo source: http://www.orchidspecies.com/coellentignosa.htm (photo by Tony Watkinson)

In situ photo source: https://idao.plantnet-project.org/orchisasia/genre/Coelogyne/Coelogyne%20lentiginosa/Coelogyne_lentiginosaED_DSCN5770.jpg

Coelogyne mayeriana Rchb. f. 1877 *Section Verrucosae* Pfitzer & Kraenzlin can be found in Malaysia, Sumatra, Java and Borneo as a medium to large sized, hot growing epiphyte on tree trunks or occasionally as a terrestrial in humus at sea-level to 100m, often near fringing mangroves. Pyriform, circular in cross-section pseudobulbs are basally enveloped by imbricate sheaths and carry two apical, plicate, 7 nerved, acute petiolate base leaves. Flowering in summer and autumn occurs on arching to pendant, 45cm proteranthous inflorescences with many lemon scented, simultaneously opening flowers.

This species is similar to *Coelogyne pandurata* with smaller flowers and a different, non-pandurate, deeply ruffled lip with hard, white warts. Its common name is Mayer's Coelogyne named after the 1800's Stuttgart Botanical Garden Director.

Photo source: https://www.exotic-plants.de/seeds/orchids/Coelogyne-mayeriana.php



In situ photo source: https://www.orchidroots.com/detail/45149/species/?newgen=44927&newpid=45149&tab=sum&role=pub

Coelogyne multiflora Schltr. 1911 *Section Cyathogyne* [Schlechter] Clayton 2006 is the Type species for the *Section,* and comes from Sulawesi [Celebes] where it grows as a large sized, cool growing epiphyte, lithophyte or terrestrial in lower montane forests on fallen tree trunks at 1,200m. Close set, cylindric, compressed, longitudinally sulcate, yellow green pseudobulbs carry two erect-spreading, lanceolate-elliptic, acute, coriaceous, plicate, 7 nerved, petiolate base leaves. Flowering in winter takes place on a bare, terete, 40 cm densely many flowered cylindrical form inflorescence with flowers that smell of fresh cut ginger root. Its common name is the Many Flowered Coelogyne

Photo source: https://www.aos.org/orchids/orchids-a-to-z/letter-c/coelogyne.aspx

Coelogyne radioferens Ames & C.Schweinf. 1920 *Section Tomentosae* Pfitzer is found in Brunei, Kalimantan and Sabah, Borneo as a warm to cold growing epiphyte or occasional lithophyte in lower and upper montane oak-laurel forests on bases of tree trunks at 900-2,100m. Close set, slender, spindle-shaped to long cylindrical, shallowly grooved pseudobulbs carry two apical, long-obovate to long-elliptic, acute, slightly acuminate, plicate, 5 to 9 nerved, gradually narrowing petiolate base leaves. Flowering in spring and autumn takes place on proteranthous, basally curved, apically pendulous,

slightly fractiflex 28cm, 6-15 flowered inflorescence arising from a mature pseudobulb carrying persistent floral bracts and simultaneously opening flowers. Its common name is the Rayed Coelogyne referring to the lines on the lip.

Photo source:

http://www.orchidspecies.com/orphotdir/coeloradioferens.jpg

In situ photo source: https://pbase.com/rogiervanvugt/image/142282279

Coelogyne salmonicolor Rchb.f. 1883 *Section Speciosae* Lindley comes from Sumatra as a small sized, warm to cool growing epiphyte in hill forests, lower montane forest and open areas in both wetter and drier mountainsides at 950-1,500m. Close set, obliquely ovoid, slightly flattened quadrangular pseudobulbs carry a single apical, erect, elliptic, plicate, acute petiolate base leaf. Flowering in spring occurs on a synanthous, slender at the base and thickening towards the apex, erect then pendulous, fractiflex 8cm 2-4 flowered inflorescence with ovate-oblong acuminate, persistent floral bracts and salmon-coloured flowers. Its common name is the Salmon Colored Coelogyne, and synonyms are *Coelogyne bella* Schltr. 1911 and *Coelogyne salmonicolor* var. *virescentibus* J.J.Sm. ex Dakkus 1935

Photo source: https://orchidroots.com/detail/45263/species/?tab=sum

Coelogyne tiomanensis M.R.Hend. 1930 *Section Speciosae* Lindl comes from Tioman island (off peninsular Malaysia) where it grows as a medium sized, warm to cool growing epiphyte or lithophyte in montane dwarf forests at 600-1,100m. Ovoid pseudobulbs carry a single, apical, lanceolate, acuminate to mucronate, plicate, 2 nerved elongate petiolate base leaf. Flowering in spring and summer takes place on an erect 30cm fractiflex 2-10 flowered inflorescence arising from a newly emerging growth with ovate-oblong, acuminate deciduous floral bracts with flowers that open in succession. Its common name is the Tioman Coelogyne from the island on which it is found.

Photo source:
http://www.orchidspecies.com/coeltiomanensis.htm

Coelogyne trinervis Lindl. 1830 *Section Flaccidea* Lindl comes from Myanmar, Thailand, Malaysia, Laos, Cambodia, Vietnam, Java, Lesser Sunda Islands, Mollucas and Sumatra where it grows as a medium sized, hot to cool growing epiphyte or lithophyte on trees or rocks at 100 – 1,600m. Ovoid, closely set, longitudinally 4 grooved, oblique, brownish pseudobulbs are basally enveloped by sheaths and carry 2, apical, plicate, 3-nerved, acute, elongate, grooved, petiolate base leaves. Flowering occurs in autumn on erect 25cm slender, slightly fractiflex rachis with few to several flowered inflorescences arising with the new growth. This species has deciduous floral bracts and fragrant (though some report unpleasant while others report light and airy) simultaneously opening flowers. Its common name is the Three-Veined Coelogyne

Photo source:
http://www.orchidspecies.com/orphotdir/coelsp.jpg

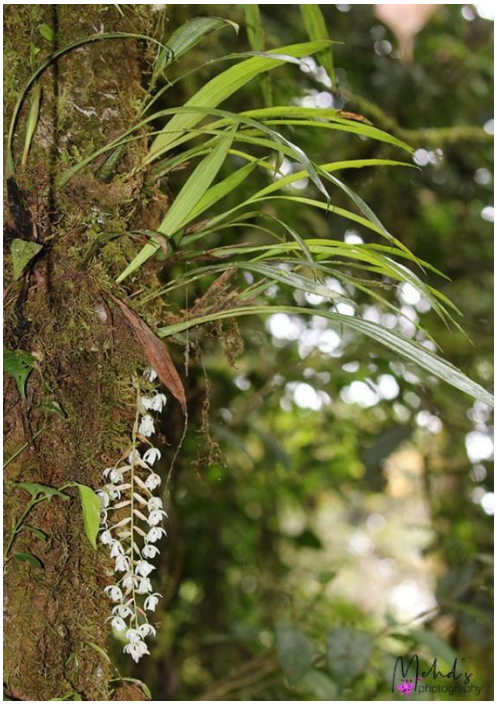
Synonyms are *Coelogyne angustifolia* Ridl. 1897, nom. illeg.; *Coelogyne cinnamomea* Lindl. 1858; *Coelogyne pachybulbon* R idl. 1897; *Coelogyne rhodeana* Rchb.f. 1867; *Coelogyne rossiana* Rchb.f. 1884; *Coelogyne stenophylla* Ridl. 1924; *Coelogyne wettsteiniana* Schltr. 1920; *Pleione rossiana* (Rchb.f.) Kuntze 1891; *Pleione trinervis* (Lindl.) Kuntze 1891

In situ photo source: In situ photo https://idao.plantnet-project.org/orchisasia/genre/Coelogyne/Coelogyne%20trinervis/Coelogyne_trinervisPB0342.jpg

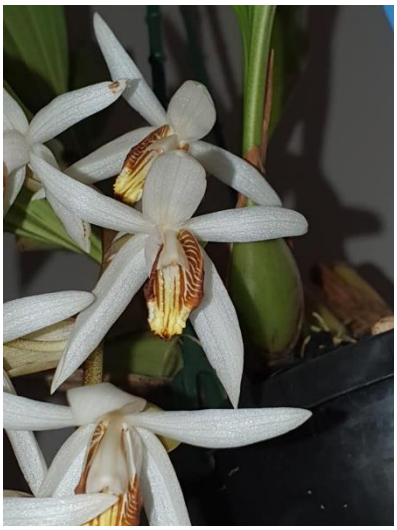
Coelogyne veitchii Rolfe 1895 *Section Veitchiae* Clayton 2002 is the type species for the section. Found in New Guinea and the Solomon Islands this medium sized warm to cool growing epiphyte grows in lower, shady montane forests on mossy trees at 600 – 1,700m. A stout rhizome of fusiform-oblong to conical-ovoid, angular pseudobulbs that are basally enveloped by evanescent (short lived and soon disappearing) sheaths that carry two apical, elliptic-lanceolate, acuminate, plicate, 5-nerved channeled petiolate base leaves. Flowering in winter, spring and autumn takes place on newly matured growths with pendulous up to 75cm laxly many flowered racemose inflorescences. Simultaneously, wide opening unscented small flowers have persistent, inflated, brown floral bracts that almost cover the ovary. Its common name is Veitch's Coelogyne named for the 1800's English Orchid collector.

Close up photo source: http://www.orchidsnewguinea.com/orchid-information/species/speciescode/1820

In situ photo: https://orchidroots.com/detail/45326/species/?tab=sum



Coelogyne velutina de Vogel 1992 *Section Tomentosae* Pfitzer comes from Thailand and peninsula Malaysia where it grows as a medium sized warm to cool growing epiphyte on trees and shrubs or lithophyte in lower montane forests at 900 – 1,950m. Close set more or less ovoid pseudobulbs carry two, often quite stiff, elliptic to obovate, acuminate, plicate, 5-7 nerved elongate petiolate base leaves. Flowering in late winter and early spring occurs on a pendulous, 12-26 flowered velvety red brown hairy, 23-59 cm inflorescence arising from a mature pseudobulb with persistent floral bracts and simultaneously opening flowers. Several colour forms are known ranging from yellow, brown, pink and white. Its common name is the Velvety Coelogyne referring to the rachis and ovary. The synonym is *Coelogyne tomentosa* var. *penangensis* Hook.f. 1890.



Photos source: https://orchidroots.com/detail/information/?pid=45327&role=

Coelogyne virescens Rolfe 1908 *Section Brachypterae* D.A.Clayton is found in northern Thailand and Vietnam as a medium sized, hot growing epiphyte in deciduous forests at 200-350m. Elongated conical, 4 angled, slightly grooved, pale green pseudobulbs about 2.5cm apart are basally enveloped by scarious bracts and carry 2, elliptic, subacute, undulate margin, 7 nerved plicate petiolate base leaves. Flowering in spring takes place on a terminal, erect to arcuate, 10cm racemose, up to 5 flowered inflorescences arising from mature pseudobulbs carrying simultaneously opening, fragrant green flowers. Its common name is the Greenish Coelogyne, and the commonly encountered synonym is *Coelogyne brachyptera* Rchb. f. 1881.

Photo source:https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:623785-1

In situ photo source: http://www.qsbg.org/database/botanic_book%20full%20option/search_detail.asp?botanic_id=3212

Coelogyne usitana J.Roeth & O.Gruss 2001 *Section Speciosae* Lindley comes from Mindanao Island(the Philippines) where it grows as a small to medium sized, hot to warm growing epiphyte or lithophyte at 800m. Close set, narrowly ovoid, 4-angled, ancipitous (two-edged rather than round) pseudobulbs basally enveloped by 3 to 4 membraneous, bracts carrying single, apical, broadly elliptical, acute, plicate, 5 to 7 nerved petiolate base leaves. Flowering throughout the year, but most frequently from spring to summer occurs on an erect to pendulous wiry 50 cm fractiflex rachis with up to 20 successive flowers arising from a newly developed pseudobulb. The striking flowers are wide-spread and downward facing with only a single flower open at any one time. Its common name is Usita's Coelogyne named for the Philippines orchid enthusiast and collector of the type specimen.

Coelogyne usitana created significant interest when first shown at Chelsea Flower Show in 2002 by Burnham Nursery. It was awarded a Certificate of Botanical Merit by the RHS, and has been used as the yardstick for similar awards since.

Photo source: http://www.orchidspecies.com/coelusitana.htm

Coelogyne xyrekes Ridl. 1915 *Section Speciosae* Lindley comes from Thailand, Peninsular Malaysia and Sumatra where it grows as a medium sized, warm to cool growing epiphyte in primary and secondary montane forests at 700 – 1,900m. Clustered, elliptic, 4 ribbed, deeply grooved dark glossy green pseudobulbs carry single, apical, plicate, 5 nerved, pink to purple in youth, dark glossy green leaves that gradually narrows into a distinct petiole. Flowering in winter, successively single flowers are borne on a10 -20cm limp up to 5 flowered inflorescences with tubular acute sheathes. Flowers arise from center of a new growth and are sometimes sweetly scented and variable in colour. Its common name is the smooth and clean shaven *Coelogyne* referring to the lack of long hairs on the lip

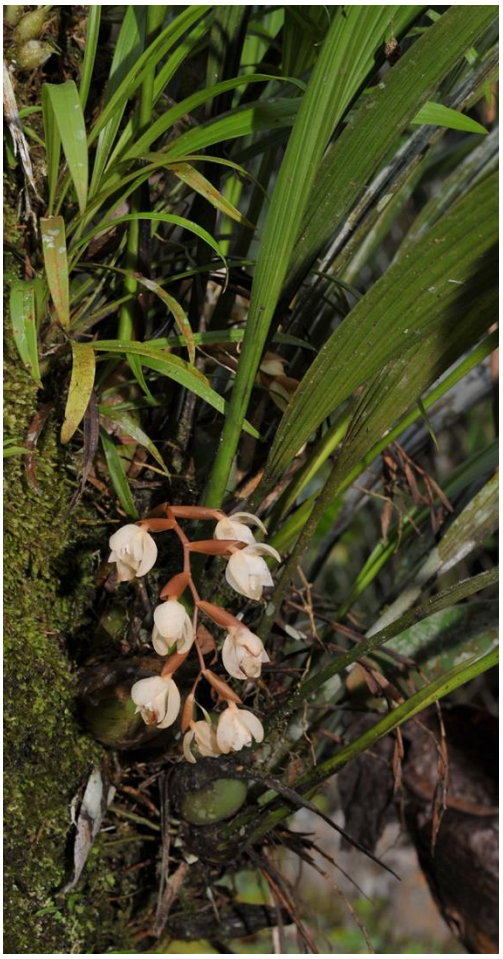
Photo source: https://www.exotic-plants.de/seeds/orchids/Coelogyne-xyrekes.php

In situ photo source: https://travaldo.blogspot.com/2018/11/coelogyne-orchid-care-and-culture.html

Coelogyne clemensii Ames & C.Schweinf. 1920 *Section Rigidiformes* Carr is found as a medium sized, warm to cold growing epiphyte in Sabah in hill, lower and upper montane mossy forests at 800-2,400m. Slender, pyriform to cylindrical pseudobulbs carry single, apical, linear-oblong to oblong, abruptly acuminate, erect, rigid, strongly plicate, 7 nerved, coriaceous deeply grooved, petiolate base leaves. Flowering in spring on 17cm suberect, fractiflex rachis 5-7 flowered inflorescence that arises from mature pseudobulbs that has persistent floral bracts and simultaneously opening, fragrant flowers. Its common name is Clemens' Coelogyne named after English orchid collectors in Borneo in the 1900's who were the original collectors of the species. Synonyms are *Coelogyne clemensii* var. *angustifolia* Carr 1935; *Coelogyne clemensii* var. *clemensii*; *Coelogyne clemensii* var. *longiscapa* Ames & C.Schweinf. 1920.

Photo source: http://www.orchidspecies.com/coelclemmensii.htm

In situ photo source: http://www.orchidspecies.com/coelclemmensii.htm



To conclude this article, I will cover a few of the more recently discovered species. The majority of these have been published in the journal Phytotaxa as part of the revision of the genus to include other genera such as *Dendrochilum*. For the time being, I will ignore these far-reaching changes and concentrate on species which are more recognizable as *Coelogyne*.

Coelogyne alboaurantia Elis.George & J.-C.George 2010 *Section Elatate* is found in northern Thailand as a warm to cool growing epiphyte. Ovoid, longitudinally grooved pseudobulbs carry 2 apical, lanceolate, acute, prominently median nerved petiolate base leaves. Flowering in late winter the peduncle 10cm rachis arising from a newly developed pseudobulb carries 7-10 simultaneously blooms with persistent floral bracts. Its common name is the White and Yellow Coelogyne.

Photo source: http://www.orchidspecies.com/coelalboauratia.htm

Coelogyne benkii Cavestro 2018 *Section Ptychogyne* (Pfitzer & Kraenzlin) D.A.Clayton comes from Sulawesi where it grows as a small sized, warm growing epiphyte at 800m. The short creeping rhizome has ovoid to conical pseudobulbs basally enveloped by chartaceous (paperlike) scales with 2 apical, erect, lanceolate, 4-5 nerved, apically acute leaves. Flowering in winter on an erect then arching, peduncle short 12-25cm rachis with up to 25 light brown to light pink flowers that mostly open simultaneously. This species is similar to Coelogyne flexuosa Rolfe but differs by the oblong (not orbicular) side lobes and a triangular (not oblong-ovate) labellum midlobe. Its common name is Benk's Coelogyne after the manager of Jungle Orchid West Java.

Photo source: http://www.orchidspecies.com/coelbenkii.htm

Coelogyne magnifica Y.H.Tan, S.S.Zhou & B.Yang 2017 section Ocellatae Pfitzer & Kraenzl is a new species from Myanmar. It is morphologically similar to Coelogyne corymbosa and *Coelogyne.taronensis.*

Photo source: https://www.orchidroots.com/detail/527430/species/?newgen=339941&tab=sum

Coelogyne marthae S.E.C. Sierra 2000 *Section Verrucosae* Pfitzer & Kraenzlin comes from Sarawak Borneo where it grows as a small to medium sized, hot growing epiphyte on lower tree trunks in flooded heath forests at 50 -300m. meters Ovate-oblong flattened pseudobulbs carry 2, apical, lanceolate, 3-5 nerved, plicate petiolate base leaves. Flowering in spring takes place on a proteranthous or synanthous, 10-25 cm 3 to 5 flowered inflorescence with persistent floral bracts and simultaneously opening flowers. Its common name is Martha's Coelogyne named for Dr Martha Tillar, a Netherlands Botanist.

Photo source: https://www.orchidroots.com/detail/photos/45147/

Coelogyne motleyi Rolfe ex J.J.Wood, D.A.Clayton & C.L.Chan 1998 *Section Longifoliae* Pfitzer & Kraenzlin can be found in Sabah, Sarawak and Kalimatan Borneo in lowland mixed forests as a medium sized, hot growing epiphtye or terrestrial in sandy soil at 50-400m. Cylindrical to fusiform pseudobulbs are basally enveloped by ovate to triangular-ovate, acute to acuminate sheaths and carry 2 apical, narrowly elliptic, acute to shortly acuminate, thin, coriaceous, plicate, 5 nerved petiolate base leaves. Flowering in summer occurs on erect to arcuate, terete, naked 23 cm slender fractiflex racemes carrying 2-3 flowers arising from newly emerging growth with narrowly elliptic to ovate-elliptic, sub-obtuse to acute deciduous floral bracts and simultaneously opening flowers. Its common name is Motley's Coelogyne named for the English engineer who collected this species in the mid 1800's.

Photo source: https://www.orchidstudygroup.org.uk/james-motley-the-life-story-of-a-collector-and-naturalist/