



Nomenclatural notes on the taxonomy of some Indian and Chinese orchids

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Abstract

Two orchid species viz. *Coelogyne ghatakii* T.K.Paul, S.K.Basu & M.C.Biswas and *Cylindrolobus motuoensis* X.H.Jin & J.D.Ya are reduced to new synonyms. Two more species viz. *Cleisostoma parishii* (J.D.Hooker) L.A.Garay and *Seidenfadeniella salimii* J.Mathew, Hrideek, V.B.Sreekumar & K.Madhusudhanan are transferred to the genera *Sarcogyphis* L.A.Garay and *Cleisostomopsis* Seidenfaden respectively.

Keywords: orchid species, new synonyms, *Sarcogyphis*, *Cleisostomopsis*

INTRODUCTION

During the course of critical study on orchid flora of India, based on the comparative study of protologues, type specimens, detailed descriptions with analytical drawings and photos, some of the orchid species are found either conspecific with already described species or required generic transfers due to their salient features. All these species are enumerated below with notes of critical observations.

1. *Coelogyne ghatakii* T.K.Paul, S.K.Basu & M.C.Biswas in J. Bombay Nat. Hist. Soc. 86: 425 1989 (publ. 1990)

While describing this species as new from Manipur (Paul *et al.* 1989), considering the character of inflorescence with flowers which mostly open successively, only one or a few at a time, the authors have compared it with the species *Coelogyne griffithii* J.D.Hooker of the section *Ancipites* E.H.Pfitzer & F.Kraenzlin (1907). However, in the present study, it is found that *C. ghatakii* is agreeing in all vegetative and floral features with *C. prolifera* Lindley (Table 1) of the section *Proliferae* Lindley (1854), *sensu stricto* where generally flowers in the inflorescence open all at a time.

Table 1. Similarities between *Coelogyne ghatakii* and *C. prolifera*

Character	<i>C. ghatakii</i>	<i>C. prolifera</i>
Leaf	10-15 x 2.5-3.0 cm	9.0-16.5 x 1.5-2.8 cm
Inflorescence	12-14 cm long, 6-8 flowered	6-22 cm long (elongating every year upto 6 times), 5-11 flowered
Flowers	1.0-1.5 cm across, greenish yellow	1.0-1.3 cm across, greenish yellow
Sepals	0.6-0.7 x 3.0 cm, 3-nerved	0.6-0.8 x 0.3-0.4 cm, ???-nerved
Petals	6-7 x 0.5 mm	0.6-0.8 x 0.05 cm
Labellum	Lateral lobes ovate-oblong, 2 keels on disc	Lateral lobes oblong, obtuse, 2 keels on disc
Flowering time	April-June	May-June

The sectional delineating character i.e. flowers in the inflorescence open all at a time or successively, cannot be considered always as a strict parameter because there are some instances where the author has noticed the inflorescences with few buds and opened flowers in the wild populations

of species *C. longipes*, *C. prolifera*, *C. schultesi* of the section *Proliferae*. Hence, considering this character as exceptional, since *C. ghatakii* is similar to *C. prolifera* in remaining all important characters as indicated in Table.1, both the species are proved conspecific. Accordingly, *C. ghatakii* has been reduced here as a new synonym to the latter and the citation of *C. prolifera* is as follows.

Coelogyne prolifera Lindl., Genera and Species of Orchidaceous plants: 40.1835; Folia Orchidacea-*Coelogyne*: 10 (1854) *pro parte* (excluding J.D.Hooker's collection from Khasi Hills).

Synonyms: *C. flavida* N.Wallich ex Lindley, Folia Orchidacea-*Coelogyne*:10.1854; J.D.Hooker, Flora of British India 5:839.1890; G.King & R.Pantling in Annals of Royal Botanic Garden Calcutta 8:138, T.191.1898; *C. ghatakii* T.K.Paul, S.K.Basu & M.C.Biswas in Journal of Bombay Natural History Society 86 : 425 (1989) *Synonym Novum*.

Specimen examined: Type - *Coelogyne prolifera* Wallich *s.n.*, Napalia (Nepal) 1821, Wallich List Number 1956, CAL, K!; Type - *Coelogyne ghatakii*, India, Manipur, Imphal valley, 20.04.1988, *Ghatak* 2213a, CAL!.

2. *Cylindrolobus motuoensis* X.Z.Jin & J.D.Ya in Phytokeys 130: 107-113. 2019

While describing this new species from China, the authors have overlooked the species *C. glandulifera* (N.C.Deori & S.J.Phukan) A.N.Rao which is proved similar in major morphological characters (Table-2) after a critical comparative study based on the Type protologues and illustrations of both the species. Hence, *C. motuoensis* has been reduced to a new synonym of *C. glandulifera*.

Table 2. Similarities between *Cylindrolobus motuoensis* and *C. glandulifera*

Character	<i>C. motuoensis</i>	<i>C. glandulifera</i>
Roots	pubescent	Pubescent
Stem	18-24 cm long, 3(2) leaved	About 16 cm long, 3-4 leaved
Leaves	lanceolate, acuminate, 10-13 cm long	lanceolate, acuminate, about 9 cm long
Inflorescence	2-flowered, produced from upper stem nodes	2-flowered, borne on near the apical of the stem
Floral bracts	Dark red, 7 mm long	Chest-nut brown, 7 mm long
Flowers	White, with brown tomentum on sepals externally	White, sepals pubescent externally
Sepals	Sepals 9-11 mm long, 5-veined	Sepals about 8 mm long, 3-4 veined
Petals	Petals 10 mm long, 3-veined	Petals about 8 mm long, 3-veined
Lip	6x3 mm, 3-lobed, 3-keeled on disc (laterals glabrous, running from base to middle of midlobe; central keel thickened with orange papilla, from base to tip of midlobe); lateral lobes of lip suberect, subovate, slightly introvert at apex; midlobe ligulate, thickened and papillose on margins.	5x3 mm, 3-lobed, 3-lamellate on disc (lateral lamellae narrow, clavate, glabrous, running from base to base of midlobe; median lamella yellow papillose band ending into a large hairy cushion beyond the lateral lamellae); side lobes of lip erect, rounded; mid lobe with long clavate hair at base and glandular hair along the periphery

Considering the conspecificity, the new citation for *Cylindrolobus glandulifera* is as follows.

Cylindrolobus glandulifera (Deori et Phukan) A.N.Rao in Bull. Arunachal For. Res.26(1&2): 103.2010.

Synonyms. *Eria glandulifera* N.C.Deori & S. Phukan in J.Orch. Soc. India 2 (1-2): 73- 75, 1989. *Cylindrolobus motuoensis* X.Z.Jin & J.D.Ya in Phytokeys 130: 107-113.2019, ***Synonym novum***.

Specimen examined: Eria glandulifera, Type- India, Meghalaya, Khasi Hills, Mawsmai forest, 19.04.1978, N.C.Deori 71816A, CAL! & Isotype- N.C.Deori 71816B, ASSAM!; *Cylindrolobus motuoensis*, Type- China, Xizang Autonomous Region, alt.2000 m, 26.02.2017, J.D.Ya, C.Liu, H.J.He 17HT0073, KUN & Paratype- X.H.Jin, J.D.Ya, 17HT1088, KUN, Colour illustrations!)

NEW COMBINATIONS:

1. *Sarcoglyphis parishii* (Hook.f.) A.N.Rao, *comb.nov.*

Basionym: Sarcanthus parishii J.D.Hooker in Bot. Mag. 86:T.5217.1860.

Other Synonyms: Cleisostoma parishii (J.D.Hooker) Garay in Bot. Mus. Leaf. 23: 173 (1972); *Sarcoglyphis manipurensis* A. N. Rao, Vik. Kumar & H. B. Sharma in Nordic Journ. Botany 34(2): 191.2016.

Distribution: India (Manipur) and Myanmar (Moulmaine),

Note: *Sarcoglyphis manipurensis* A.N.Rao *et al.* has been found conspecific with *Cleisostoma parishii* (Hook.f.) Garay and hence treated as a heterotypic synonym by R.Govaerts (2020). Critical study by the present author with the fresh floral material also confirmed that these two species are conspecific but at the same time revealed that the taxon belongs to the genus *Sarcoglyphis* Garay and not *Cleisostoma* Blume due to the special characteristic features like the column which has raised clinandrium, laterally compressed rostellum; anther cap with curved beak; pollinia which are placed on the dorsal side of column and with long curved stipe. Hence, *Sarcanthus parishii* has been transferred for the first time to the genus *Sarcoglyphis*.

2. *Cleisostomopsis salimii* (J.Mathew, T.K.Hrideek, V.B. Sreekumar & K.Madhusudhanan) A.N.Rao, *comb. nov.*

Basionym: Seidenfadeniella salimii J.Mathew, T.K.Hrideek, V.B.Sreekumar & K.Madhusudhanan in Webbia 71: 69 (2016).

Distribution: India: Kerala (Endemic)

Note : R. Rice (2019) has recognised the fact that the genus *Seidenfadeniella* C.S.Kumar (1994) is congeneric to the genus *Cleisostomopsis* Seidenfaden (1992) because of the identical characters like terete leaves, racemose inflorescence, 3-lobed lip with tubular spur, aseptate spur with y-shaped front-wall callus, column with 2 dentate lateral auricles, sigmatic surface with a basal process etc. Accordingly, he has transferred two species of *Seidenfadeniella* viz. *S. filiformis* (H.G.Reichenbach) Christenson & P.Ormerod and *S. rosea* (R.Wight) C.S.Kumar to *Cleisostomopsis*. While doing so, he has overlooked one more species viz. *Seidenfadeniella salimii* J.Mathew *et al.* (2016) which is described as new species from Kerala. Hence, this transfer has been done in the present paper.

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