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Rediscovery of *Odontoglossum luteopurpureum* var. *vuylstekeanum* (Rchb. f.) A. H. Kent is Reported and Variation in *Odontoglossum luteopurpureum* Lindl. is Illustrated.

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Abstract

Rediscovery of *Odontoglossum luteopurpureum* var. *vuylstekeanum* (Rchb. f.) A. H. Kent is reported and variation in labella and petals of *Odontoglossum luteopurpureum* Lindl. is illustrated.

Odontoglossum × *vuylstekeanum* was first described by Reichenbach in 1884 (Gard. Chron., n.s., 22: 7) as a natural hybrid without mention of the parentage. Reichenbach states: Take an *Odontoglossum mulus sulphureum* (in reference to the natural hybrid of *O. luteopurpureum* × *O. gloriosum*), give it a lip much detailed at the top, and add the sharp edges of the petals of *Odontoglossum Wilckeanum*. The whole is sulphur colored. The few blotches, however, of the odd sepal, petals, and lip are deepest richest dazzling orange, the lateral sepals are of that colour except their base. I was exceedingly surprised by the extra beauty, and so were my orchidie visitors during the last days. One, however, bitterly complained of Mr. Vuylsteke's not selling his best uniques. I regard this a matter of taste. As to me, I well know this is no botanic species. It is one of those painful riddles we shall be puzzled by till Messrs. Veitch reveal the question by a few thousand flowering mules, produced by Mr. Seden's laborious work and careful notes. As it is, the bright royal beauty wants a name for horticulture. I name it with great satisfaction in honour of Mr. Vuylsteke, of Lochristy, Ghent, who sent so many fine things to the grand exhibition of St. Petersburg, though the greater part did not appear, having been detained by unexpected impediments.”

Kent in Veitch (Man. Orchid. Pl. 1: 47, 1887) published Reichenbach's *O. x vuylstekeanum* as a variety of *Odontoglossum luteopurpureum* (*Odontoglossum luteopurpureum* var. *vuylstekeanum*) and not a natural hybrid. Kent's description of var. *vuylstekeanum* is 'Flowers somewhat smaller than the common form with the segments much more undulated; the usual chestnut-brown is here deep nankeen-yellow, and the yellow markings pale sulphur-yellow; crest deep yellow.

The World Checklist of Selected Plant Families (WCSP, 2018) cites *Odontoglossum* × *vuylstekeanum* Rchb. f., (Gard. Chron., n.s., 22: 7, 1884) and *Odontoglossum luteopurpureum* var. *vuylstekeanum* (Rchb. f.) A. H. Kent (H. J. Veitch, Man. Orchid. Pl. 1: 47, 1887) as synonyms of *Oncidium* × *wilckeanum* (Rchb. f.) M. W. Chase & N. H. Williams (Orchids 77(12) in Lindleyana 21(3): 27, 2008). In addition WCSP cites *O. (Oncidium) alexandrae* × *O. (Oncidium) luteopurpureum* as the parentage.

In the protolog of *Odontoglossum* × *wilckeanum* Rchb. f. (The Gardeners' Chronicle & Agricultural Gazette 1: 298. 1880) Reichenbach states 'it is just intermediate between *O. crispum* and *O. luteopurpureum*. In the protolog of *O. x vuylstekeanum* (Gard. Chron., n.s., 22: 7, 1884) Reichenbach mentions the similarity of the sharp edges of the petals of *Odontoglossum Wilckeanum* to that of *Odontoglossum x vuylestekeanum*, indicating that Reichenbach considered the two taxa different.

It is possible that Reichenbach may have been correct in thinking that *O. x vuylstekeanum* was a natural hybrid or at least an introgression hybrid. However, determining exactly what is *O. luteopurpureum* is difficult because of the extreme range of variation due to introgression in all the populations. Dalström (2019) describes *O. luteopurpureum* very well: “*Odontoglossum luteopurpureum* Lindl., is really a widely distributed and variable complex, or “superspecies”, that due to geographic isolation in some areas have developed a degree of sub-speciation, which makes taxonomic handling rather difficult and sometimes controversial. *Odontoglossum luteopurpureum* also tends to hybridize naturally with several other sympatric species, which makes the picture even more blurry. It may therefore be preferable to have a broader and more tolerant species concept in this particular case, unless you really want to punish yourself and the world by opening the “Pandora’s Box” filled with indefinable “sub-taxa”.

We here present the rediscovery of the yellow variety of *O. luteopurpureum* as *Odontoglossum luteopurpureum* var. *vuylstekeanum* (Rchb. f.) A. H. Kent. We disagree with the concept of Chase & Williams (2008) that *Odontoglossum luteopurpureum* var. *vuylstekeanum* is an *Oncidium* or a synonym of *Oncidium x wilckeanum*. The arguments for maintaining the genus *Odontoglossum* distinct from *Oncidium* are well presented by Dalström (2018) and Kolanowska & Szlachetko (2016). Also considering the comments of Dalström (2019), this plant falls within the broad description of *O. luteopurpureum*.

This plant has been in the collection of the senior author for many years without flowering. It was acquired with a group of other odontoglossums from Colombia. Exact locality is unknown.

A distinctive characteristic of this plant is the yellow color of the pseudobulbs and leaves. It appears to have introgression with *O. crispum* but has the distinctive column of *O. luteopurpureum*.



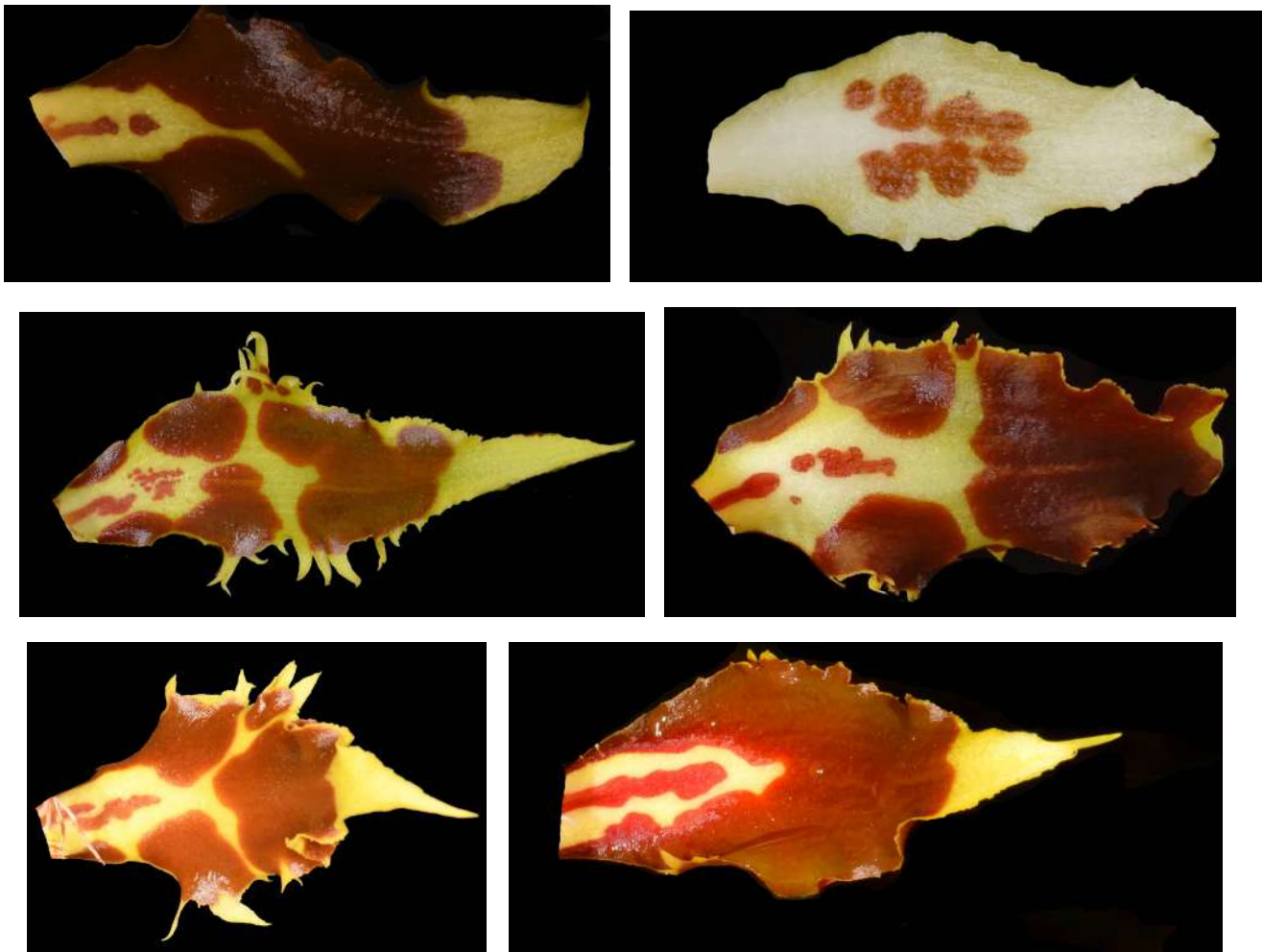
Labellum column and petal of *Odontoglossum luteopurpureum* var. *vuylstekeanum* (Rchb. f.) A. H. Kent.



Variation among labella of *Odontoglossum luteopurpureum* Lindl.



Variation among labella of *Odontoglossum luteopurpureum* Lindl.



Variation among petals of *Odontoglossum luteopurpureum* Lindl.



Variation among petals of *Odontoglossum luteopurpureum* Lindl.



Odontoglossum hunnewellianum



Odontoglossum crispum



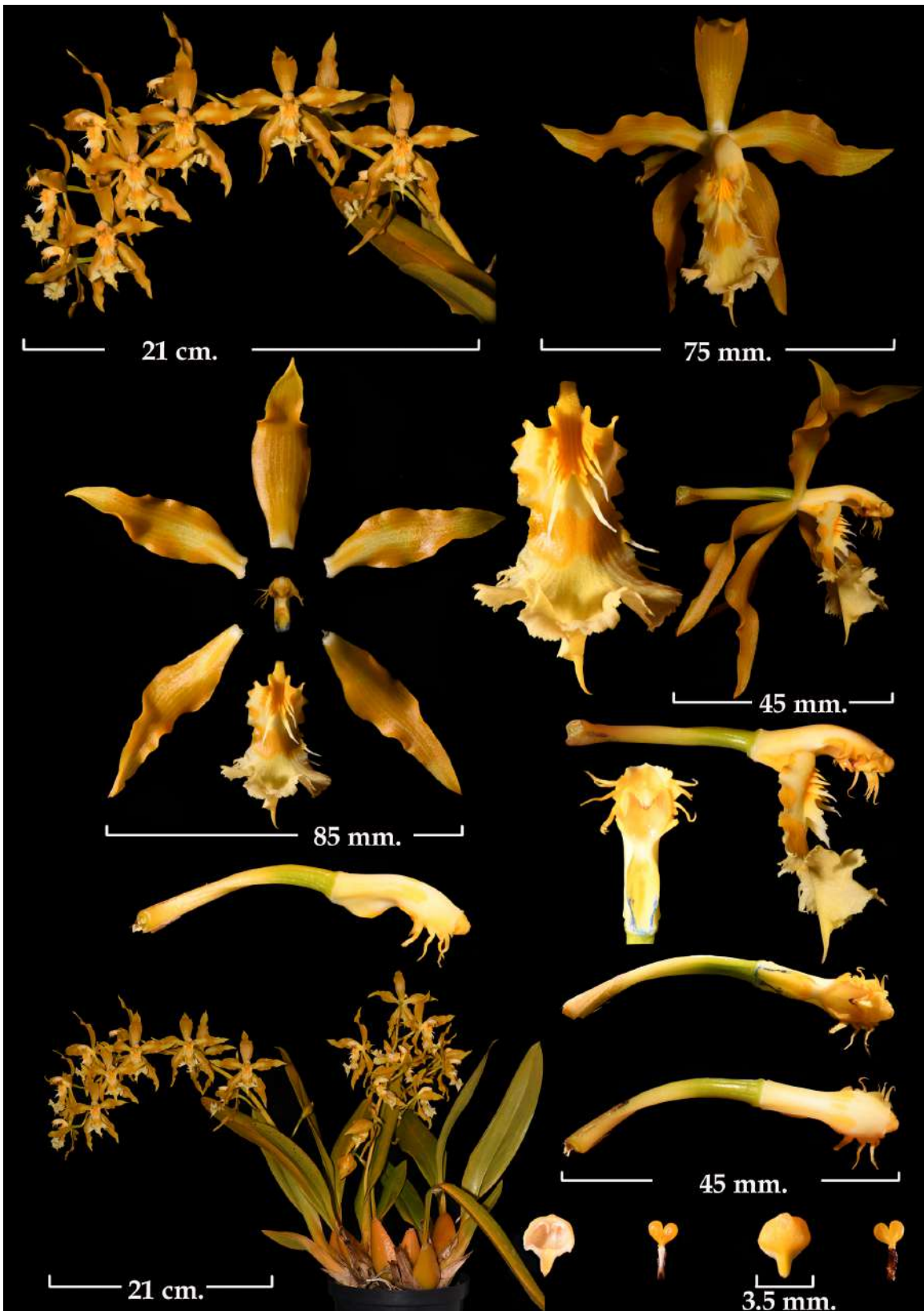
Odontoglossum luteopurpureum var. *vuykstekeanum* (Rchb.f.) A. H. Kent.



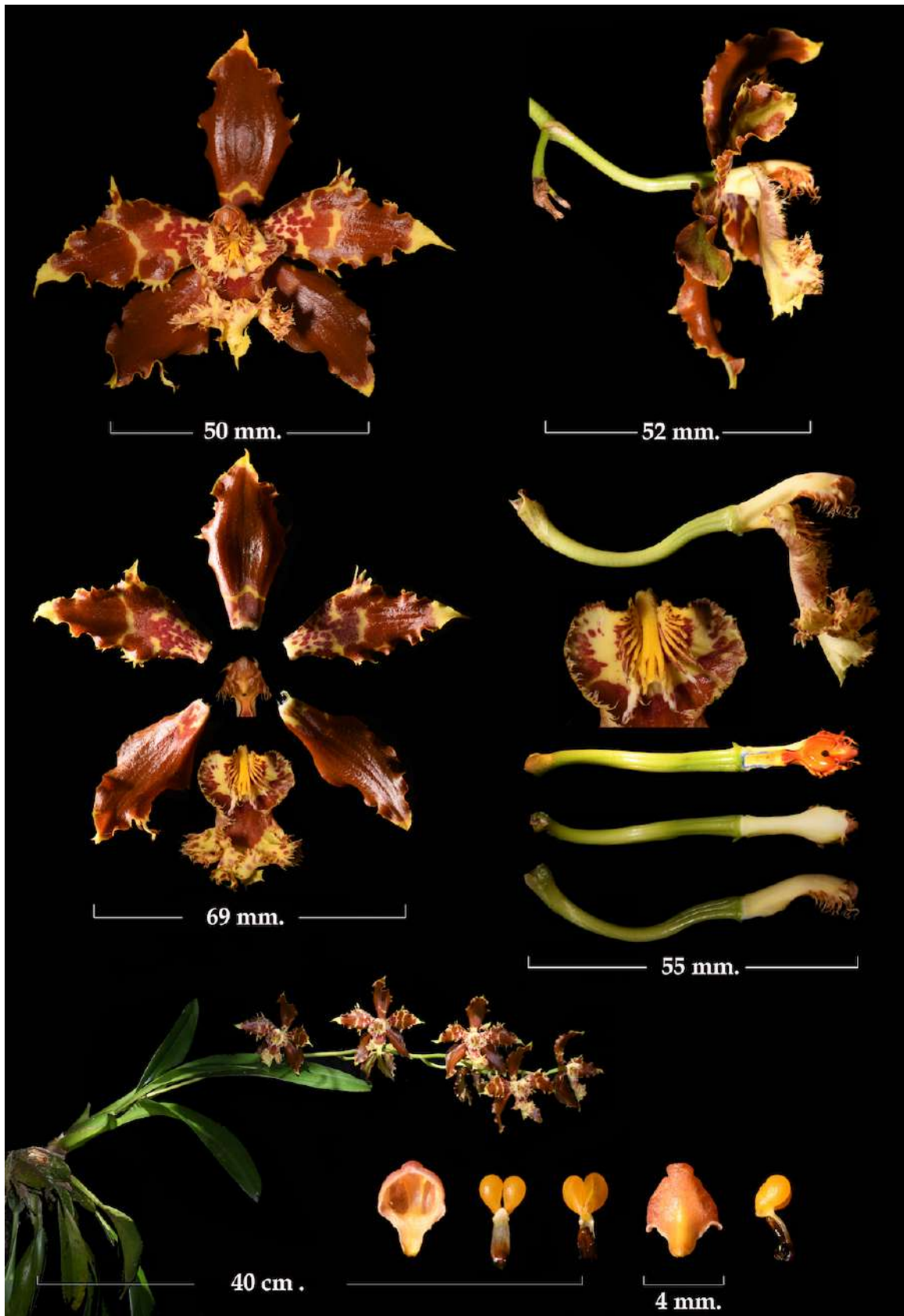
Odontoglossum luteopurpureum var. *vuylstekeanum* (Rchb.f.) A. H. Kent.



Odontoglossum × *vuystekeanum* Rchb. f. Published by R. Warner & B.S. Williams, The Orchid Album, vol. 7, pl. 334 (1888).



Odontoglossum luteopurpureum var. *vuykstekeanum* (Rchb. f.) A. H. Kent.



Odontoglossum luteopurpureum Lindl.

Literature Cited

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