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GUARIANTHE, A GENERIC NAME FOR THE "*CATTLEYA*" *SKINNERI* COMPLEX

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Molecular systematics, the comparison of DNA sequences, has brought a continuing revolution to plant taxonomy. In most cases, the results are intuitively reasonable, even when they demand changing long-known names. The analysis of the Laeliinae, by van den Berg *et al.* (2000) has confirmed some clear relationships, showing, for example, that *Schomburgkia* is quite distinct from *Myrmecophila* but very close to *Laelia anceps*. Among other things, this study has shown that *Cattleya*, as we have known it, is not clearly delimited. One of the clearest segregates is the largely Central American "*Cattleya*" *skinneri* complex (van den Berg 2000). With the removal of this group from *Cattleya*, most of the remaining species form a natural group, with some South American misfits, all quite unlike the *skinneri* complex. As it is now clear that *C. skinneri* and its close allies are out of place in *Cattleya*, the present paper proposes a new generic name for this complex, *Guarianthe*, based on Guaria, a Costa Rican word for orchid, and the Greek *anthe*, or flower. *Guaria*, by itself, might be confused with the Meliaceous *Guarea*.

According to the molecular analysis by van den Berg *et al.* (2000), the sister group of the *C. skinneri* alliance is *Rhyncholaelia*. There is no bootstrap support for combining these two groups, and, indeed, the bootstrap support for *C. skinneri*, *C. patinii* and *C. aurantiaca* as a group is minimal. *Guarianthe* is quite distinct from *Rhyncholaelia* in most features. *Guarianthe* has a racemose inflorescence, the pollinia are four, and the cuniculus type nectary is quite small, while the inflorescence of *Rhyncholaelia* is sessile and one-flowered, the pollinia are eight, and there is a very prominent nectary separating the ovary from the rest of the flower, so the fruit is long-beaked.

Though *Cattleya bowringiana* is not placed within the *C. skinneri* alliance in the molecular analysis, there is also no bootstrap support to exclude it from the clade. We treat *C. bowringiana* as a member of *Guarianthe* because of the strong agreement in all structural features. Further analysis may falsify this conclusion, but, in the meantime, we may call *C. bowringiana* a *Guarianthe*.

There is a special problem involving the hybrid swarm between *C. aurantiaca* and *C. skinneri*. Plants from this hybrid swarm have been described as new, including *Cattleya deckeri* Klotzsch, *C. guatemalensis* Moore, *C. pachecoi* Ames & Correll, *C. skinneri* var. *parviflora* Hook., and apparently *Cattleya laelioides* Lemaire (Withner 1999). Withner suggests that the name *C.* x *guatemalensis* should be conserved for the members of this hybrid swarm (1999), so we refrain from publishing any new combination based on the hybrid swarm. Both Rolfe (1900) and Withner (1999) hold that *C. deckeri* is the oldest name for *C. patinii*, a species widespread in northern South America. The available evidence suggests, however, that *C. deckeri* was based on a hybrid backcross to *C. skinneri* (Dressler 1998).

Guarianthe Dressler & W.E. Higgins, *gen. nov.*

Plantae pseudobulbis claviformibus, bifoliatis, inflorescentia racemosa terminalis, labello columnam parvam involvens.

Epiphytic, pseudobulbs clavate, bifoliate; inflorescence terminal, racemose, from a prominent sheath; sepals and petals similar, lip infundibuliform, surrounding the column; column clavate, 10-12 mm long; anther incumbent, pollinia 4, with caudicles.

Type species: *Cattleya skinneri* Bateman.

Guarianthe aurantiaca (Bateman ex Lindl.) Dressler & W.E. Higgins, *comb. nov*.

Basionym: *Epidendrum aurantiacum* Bateman ex Lindl., Edward's Bot. Reg. 24: misc. p. 8. 1838.

Guarianthe bowringiana (Veitch) Dressler & W.E. Higgins, *comb. nov*.

Basionym: *Cattleya bowringiana* Veitch, Gard. Chron. 2: 683. 1885.

Guarianthe skinneri (Bateman) Dressler & W.E. Higgins, *comb. nov*.

Basionym: *Cattleya skinner*i Bateman, Orchid. Mex. Guat. t. 13. 1838.

Guarianthe patinii (Cogn.) Dressler & W.E. Higgins, *comb. nov.*

Basionym: *Cattleya patinii* Cogn. Dict. Icon. Orchid. 2: t. 25. 1900.

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Robert L. Dressler nació en el centro de los EE.UU., en la Sierra de Ozark, en 1927, y salió a la civilización (California) a la edad de 10 años. Desde sus años formativos, sentía mucho interés en el campo y en la naturaleza. En la universidad, la combinación de una profesora mediocre de zoología y un profesor excelente de botánica le guió definitivamente hacia la botánica. Recibió el Doctorado en Biología de Harvard en 1957, y trabajó en el Jardín Botánico de Missouri de 1957 a 1963, cuando fue al Instituto Smithsoniano de Investigaciones Tropicales. Vivió algo más de 20 años en Panamá, estudiando la clasificación y la ecología de orquídeas, especialmente su polinización natural. Ahora vive en el norte de Florida, asociado con el Jardín Botánico de Missouri y el Herbario de la Universidad de Florida. Ha escrito varios libros y numerosos artículos. Ahora está trabajando en el proyecto Flora Mesoamericana.

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