



## A new species of *Catasetum* (Cymbidieae, Epidendroideae, Orchidaceae) from the Southern region of the Brazilian Amazon

ADARILDA PETINI-BENELLI<sup>1,2</sup> & CÉLIA REGINA ARAÚJO SOARES-LOPES<sup>2</sup>

<sup>1</sup>Instituto de Biociências, Universidade Federal de Mato Grosso. Av. Fernando Correa da Costa, Bairro Boa Esperança, Cuiabá, 78060-900, Mato Grosso, Brazil; e-mail: ada.benelli@gmail.com.

<sup>2</sup>Herbário da Amazônia Meridional, Universidade do Estado de Mato Grosso (UNEMAT). Rodovia MT 208, km 147, Bairro Jardim Tropical, Alta Floresta, 78580-000, Mato Grosso, Brazil.

### ABSTRACT

A new species of *Catasetum* has been found along the banks of the River Teles Pires, in the Southern region of the Brazilian Amazon. In the present study it is described and illustrated, and has its conservation status discussed. The species presents unique features and stands out among others found in the same region, and can be compared partially to *C. mattosianum*.

**Key words:** Mato Grosso, *Catasetum telespirense*, conservation, native species.

### RESUMO

Uma nova espécie de *Catasetum* está sendo registrada para a Amazônia Meridional brasileira, oriunda das margens do Rio Teles Pires. Ela é descrita, ilustrada e tem seu *status* de conservação discutido no presente trabalho. A espécie apresenta caracteres únicos e destaca-se das demais ocorrentes na região, sendo parcialmente comparada à *C. mattosianum*.

**Palavras-Chave:** Mato Grosso, *Catasetum telespirense*, conservação, espécies nativas.

### Introduction

The state of Mato Grosso has a very extensive territory (903,366,192 km<sup>2</sup>) where Biomes of the Cerrado, Pantanal and Amazon can be found. Knowledge of the native flora in the state of Mato Grosso is still in its early stages, leaving many gaps in all the botanic families and huge vegetation areas that have yet not even been studied (Piaia 1997, Zappi *et al.* 2011).

The construction site of the Teles Pires Power Plant is located along the River Teles Pires, in Paranaíta County - state of Mato Grosso, and in Jacareacanga County - state of Pará. Salvage or rescue activities were performed in 2011–2012. Throughout this period, more than 105,000 specimens of epiphytes were rescued and relocated to conservation areas in the power plant reservation (Soares-Lopes 2012, unpublished report). Hundreds of species were sampled and identified; all the voucher specimens were prepared according to Fidalgo & Bononi (1989) and stored at the HERBAM, including the holotype and the paratypes of the new species, which also have their diagnoses, illustration and pictures recorded.

Currently, the genus *Catasetum* Rich. *ex* Kunth (1822:330) has a controversial number of valid species—130 according to Romero (2009), versus 194 species listed in the World Checklist of Selected Plant Families (Govaerts *et al.* 2014). Studies about the genus in the state of Mato Grosso have so far presented an increasing number of native species (Petini-Benelli *et al.* 2007; Petini-Benelli 2012); 26 species and two natural hybrids have been accepted by the latter publication. Additions to such numbers result from findings of the new species from the vegetation suppressed in the construction site of the Teles Pires Power Plant. The new species is described below.

**TABLE 1.** Comparison of floral morphology for *C. telespirense* and *C. mattosianum*.

	<i>C. telespirense</i>	<i>C. mattosianum</i>
Inflorescence	arched to pendent	upright to short arched
Flowers on the stem	sparsely distributed along the last $\frac{3}{4}$ of the floral stem	grouped in the apical end portion
Flower resupination	yes	no
Flower size distended	40–45 mm	38–45 mm
Peduncle (including a ovary)	28–30 × 2 mm	18–20 × 1.5–1.8 mm
Dorsal sepal	20–21 × 11–12 mm	23.5–25 × 13 mm
Lateral sepal	20–21 × 13–14 mm	19–20 × 11 mm
Petals	19–20 × 12–13 mm	21–22 × 10 mm
Lip	13 mm long × 10 mm wide × 5 mm deep	17 mm long × 15 mm wide × 14 mm deep
Lip ornament	careniform calluses (8–11) extending over the lip	lateral lobes with short, stiff fimbriae
Antennas	Convergent parallel (12 mm long) curvature following the inside of the saccate lip, almost touching the base of the column, separating from this point	Convergent parallel (12 mm long) curvature following the inside of the saccate lip, the hook-shaped ends attenuated and inner facing
Column	upright (ca. 14 × 6 mm)	erect (ca. 12 × 6 mm)
Stipe	triangular (ca. 4 × 3 mm)	subtriangular (ca. 4 × 3.2 mm)

## References

- Barros, F., Vinhos, F., Rodrigues, V.T., Barberena, F.F.V.A., Fraga, C.N., Pessoa, E.M., Forster, W. & Menini Neto, L. (2013) *Orchidaceae* in Lista de Espécies da Flora do Brasil. Jardim Botânico do Rio de Janeiro. Available from: <http://reflora.jbrj.gov.br/jabot/floradobrasil/FB11323> (accessed 11 February 2014).
- Bicalho, A.D. (1973) *Catasetum mattosianum* n.sp. *Boletim da Sociedade Campineira de Orquídeas* 3 (1): 22.
- Fidalgo, O. & Bononi, V.L.R. (1989) *Técnicas de Coleta, preservação e herborização de material botânico*. Instituto de Botânica, São Paulo, 62 pp.
- Govaerts, R., Bernet, P., Kratochvil, K., Gerlach, G., Carr, G., Alrich, P., Pridgeon, A.M., Pfahl, J., Campacci, M.A., Baptista, D.H., Tigges, H., Shaw, J., Cribb, P., George, A., Kreuz, K. & Wood, J. (2014) *World Checklist of Orchidaceae*. Facilitated by the Royal Botanic Gardens, Kew. Available from: <http://apps.kew.org/wcsp/> (accessed 1 February 2014).
- IUCN (2014) *Guidelines for Using the IUCN Red List Categories and Criteria*. Version 11. Prepared by the Standards and Petitions Subcommittee. February 2014. Available from: <http://www.iucnredlist.org/documents/RedListGuidelines.pdf>.
- Petini-Benelli, A., Fernandes, E.R. & Macedo, M. (2007) O Gênero *Catasetum* em Mato Grosso, Brasil. *Orchidstudium – International Journal of Orchid Study* 2: 22–35.
- Petini-Benelli, A. (2012) *Orquídeas de Mato Grosso – Genus Catasetum L.C.Rich ex Kunth*. PoD Editora, Rio de Janeiro, 130 pp.
- Piaia, I.I. (1997) *Geografia de Mato Grosso*. Cuiabá: Ed. Unic, 202 pp.
- Romero, G.A. (2009) Distribution [of *Catasetum*]. In: Pridgeon, A.M., Cribb, P.J. & Chase, M.W. (Eds.) *Genera orchidacearum* 5, *Epidendroideae (part two)*. Oxford University, Oxford, pp. 1–14.
- Zappi, D.C., Sasaki, D., Milliken, W., Piva, J., Henicka, G.S., Biggs, N. & Frisby, S. (2011) Plantas vasculares da região do Parque Estadual Cristalino, norte de Mato Grosso, Brasil. *Acta Amazonica* 41: 29–38.