



## An enigmatic species of *Croton* (Euphorbiaceae) is rediscovered after more than 100 years in midwestern Brazil

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### Abstract

*Croton spica*, an enigmatic species of *Croton*, was newly recollected after more than 100 years and is herein redescribed, including fruits and seeds, and illustrated for the first time. The species was described by Henri Baillon in 1864 and is part of a complex of similar species that includes *C. abaitensis*, *C. agoensis*, *C. longinervius*, *C. mucronifolius* and *C. pycnadenius*, all of which occur predominantly in the Brazilian Planalto. A detailed description, illustration, photographs, distribution, habitat, phenology, IUCN Red List Category, morphological relationships, and a key to *Croton spica* and allied species are provided.

**Keywords:** cerrado, *Croton* sect. *Geiseleria*, Crotonaeae, new records

### Introduction

*Croton* Linnaeus (1753: 1004) is a large genus represented by about 712 species in the Americas out of approximately 1200 species worldwide (Berry *et al.* 2005, van Ee *et al.* 2011). In the New World, Brazil is the center of diversity of *Croton*, with over 350 species, and it is one of the better studied genera of Euphorbiaceae there (Berry *et al.* 2005, Secco *et al.* 2012). Although the only complete treatment of *Croton* in Brazil was that of Müller Argoviensis (1873) in the Flora Brasiliensis, more recent publications with taxonomic or revisional studies in *Croton* made substantial improvements, such as Gomes (2006), Medeiros (2007), Lima & Pirani (2008), Riina *et al.* (2010), Caruzo *et al.* (2011) and Caruzo & Cordeiro (2013) as well as the regional floras prepared by Lucena (2000), Lima & Pirani (2003), Secco (2008), Carneiro-Torres (2009), Guimarães & Secco (2010), Silva (2010), and Alves (2012). These publications contributed significantly to a better understanding of some species and sections of the genus, revealing new species and updating the morphology and geographical distribution of many others.

As a part of a project that aims to study the diversity of Euphorbiaceae in the midwest region of Brazil, collections of *Croton* of different states of this region revealed specimens with a distinctive floral morphology. After carefully analyzing these collections, we concluded that they correspond to *Croton spica* Baillon (1864: 362), a species that not had been collected for more than 100 years. The species is here redescribed in greater detail, including fruits and seeds, illustrated for the first time, and also its geographic distribution and conservation status are discussed.

### Taxonomic treatment

*Croton spica* Baillon (1864: 362) (Figs. 1 and 2)

**Type:**—BRAZIL. Matto Grosso: without locality, 1833, *C. Gaudichaud* 249 (holotype: P [P00634647 image!], isotype F!).