

## On the taxonomic identity and conservation status of *Campomanesia ilhoensis* Mattos and *C. viatoris* Landrum (Myrtaceae)<sup>1</sup>

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### RESUMO

(Sobre a identidade taxonômica e o status de conservação de *Campomanesia ilhoensis* Mattos e *C. viatoris* Landrum (Myrtaceae)). Com base no estudo taxonômico de *Campomanesia* Ruiz & Pavón para o estado da Bahia, Brasil, concluiu-se que *C. ilhoensis* Mattos e *C. viatoris* Landrum pertencem à mesma entidade taxonômica. Ambos os nomes são legítimos e validamente publicados; entretanto, *C. ilhoensis* tem prioridade sobre *C. viatoris*, nome em uso desde 1984. Sendo assim, a distribuição da espécie mais inclusiva se estende desde a Bahia até o Ceará. Além disso, um novo status de conservação é proposto em razão de um melhor conhecimento sobre a distribuição da mesma.

**Palavras-chave:** Myrteae, taxonomia, Nordeste brasileiro, distribuição, IUCN

### ABSTRACT

(On the taxonomic identity and conservation status of *Campomanesia ilhoensis* Mattos and *C. viatoris* Landrum (Myrtaceae)). Based on a taxonomic study of *Campomanesia* Ruiz & Pavón in the state of Bahia, Brazil, we observed that *C. ilhoensis* Mattos and *C. viatoris* Landrum belong to the same taxonomic entity. Both names are legitimate and validly published; however, *C. ilhoensis* has priority over *C. viatoris*, which has been in use since 1984. In addition, the distribution of the more inclusive species is now known to extend from Bahia to Ceará. A new conservation status for this species is suggested because of a better knowledge of its distribution.

**Key words:** Myrteae, taxonomy, Northeastern Brazil, distribution, IUCN

*Campomanesia* Ruiz & Pav. is a genus of about 45 species (Govaerts et al. 2008, Landrum & Oliveira 2010, Proença et al. 2010, Proença et al. 2011), most of which can be found in Brazil, with more than half of them endemic (Sobral et al. 2010). It is characterized especially by the high number of locules in the ovary, which can reach 18; the usual abortion of all ovules or all but one ovule in each locule; and the glandular locule wall, which in the ripe fruit acts as a false seed coat (Landrum 1986, Landrum & Kawasaki 1997).

During the examination of *Campomanesia* collections in northeastern Brazil, we concluded that *C. viatoris* Landrum and *C. ilhoensis* Mattos are conspecific, which

implies an extended range for this species and makes a reevaluation of the conservation status of this species necessary. Specimens were examined at the following herbaria: ALCB, ASE, ASU, HRB, HUEFS, HUNEBA, MBM, RB, SP, SPF and UB (acronyms according to Holmgren et al. 1990, except HUNEBA - Herbário da Universidade do Estado da Bahia). A review of the literature was also conducted. The distribution map was made using ArcView®GIS 3.2a (ESRI 1999).

**1. *Campomanesia ilhoensis*** Mattos, Loefgrenia 66: 3. 1975. Type: Brazil. Bahia: Ilhéus, Centro de Pesquisas do

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**Figures 1-6.** Specimens attributed to *Campomanesia ilhoensis* Mattos and *C. viatoris* Landrum. 1. Holotype of *C. ilhoensis* at UB. 2. Ovary cross-section showing the elevate number of locules, typical for the genus (isotype of *C. ilhoensis* at CEPEC). 3. Immature fruit with characteristic protrusions and cross-section showing seeds (holotype of *C. ilhoensis* at UB). 4. Isotype of *C. viatoris* at K (under *Abbevillea gardneriana* O.Berg). 5. Flowering specimen at Itaberaba, Bahia. 6. Fruiting specimen at Entre Rios, Bahia. Scale = 2.5 mm. (Photos: 5-6 S.H.Monteiro).

Cacau, CEPLAC, CEPEC, 31 mar. 1965, fr., R.P. Belém & M. Magalhães 619 (holotype: UBL; isotype: CEPEC!).

= *Campomanesia viatoris* Landrum, Brittonia 36(3): 242. 1984, **syn. nov.**, new name for *Abbevillea gardneriana* O.Berg, Fl. Bras. 14(1): 436. 1857. Type: Brazil. "Habitat in prov. Alagoas" ["Banks of the Rio St. Francisco near the town of Penedo, mar. 1838" ex label at K], bot., fl., Gardner 1293 (holotype: W; isotypes: BM, F-fragment, GH, K, S, US, W, F neg. 23310 of isotype at G), not *Campomanesia gardneriana* O.Berg.

In 1984, Landrum proposed the new name *Campomanesia viatoris* for *Abbevillea gardneriana* O. Berg (Berg 1855-56, Berg 1857-59), because the name *C. gardneriana* O.Berg, now considered a synonym of *C. aurea* O.Berg (Landrum 1986), already existed. At that time, the species was only known from two collections restricted to the state of Alagoas, and therefore included in the Red List of Threatened Species as Endangered B1+2c (IUCN 2008).

New collections of *Campomanesia viatoris* have been made since 1984, and the species was first reported in Sergipe and Bahia by Landim & Landrum (2002). The type

specimen of *C. ilhoensis* had not been clearly marked by Mattos and was not recognized as the type until recently. In fact Landrum identified it as "*Campomanesia* cf. *schlechtendahlia* var. *rugosa* (O.Berg) Landrum" in 1995 when his knowledge of *C. viatoris* (= *C. ilhoensis*) was still limited to two specimens seen about 10 years before. Once the type had been clearly identified (Fig. 1-3) and compared with more specimens of *C. viatoris* from Bahia and other states of Brazil (Fig. 4-6), it became clear that the names referred to the same species. *Campomanesia ilhoensis* is the oldest available epithet for *Abbevillea gardneriana* under *Campomanesia* and has priority according to Article 11.4 of the ICBN (2006).

Data from herbarium specimens are essential for making inferences about biodiversity (Bebber et al. 2010), and based on label information and the *speciesLink* system (CRIA 2011), we can now state that *Campomanesia ilhoensis* extends from Bahia to Ceará (Fig. 7). Because of the taxonomic changes hereby proposed and because we now know that the species is widely distributed and grows at several localities, its IUCN status can be modified to "least concerned" (IUCN criteria 2008).

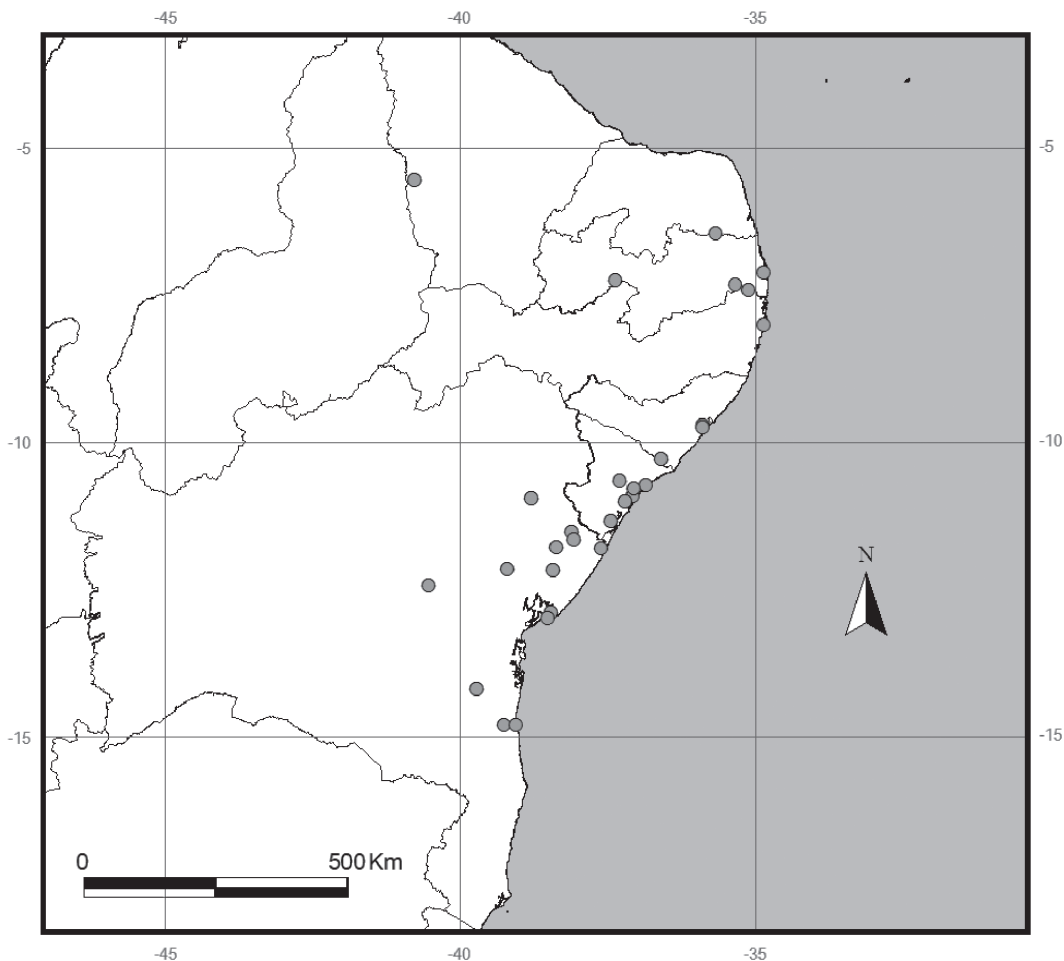


Figure 7. Distribution map of *Campomanesia ilhoensis* Mattos in Brazil.

In spite of this, it is noteworthy that most specimens were collected in non-protected forest areas of the coastal Atlantic Forest, one of the most threatened biomes in the world because of continuing human pressures (Tabarelli et al. 2005). Furthermore, knowledge about the number of individuals per population is still scarce. We hope that future floristic surveys will contribute to a more accurate understanding of this and other species' ranges and population sizes, data that are fundamental for conservation efforts.

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