



Emended description of *Anthurium hatschbachii* (Araceae) and a new record for Santa Catarina State, Brazil

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We report the rediscovery of *Anthurium hatschbachii* in Paraná State and the first published record of this species in the state of Santa Catarina, Brazil. We add to its original description the following: the shape and colour of its cataphylls, peduncle, midrib, petiole, spathe and spadix, taxonomic and ecological notes, photographs of live plants, a distribution map and conservation assessments. Moreover, we report that two paratypes were found at RB and the MOBOT herbarium.

Anthurium hatschbachii Gonçalves (2011: 64–65) was described as endemic to Paraná with a restricted geographical distribution to the Morro dos Perdidos at Serra do Araçatuba. It was previously only known from the type material and described based on just two collections from the late 1950s and early 1960s (Gonçalves 2011).

Here, we report the rediscovery of the type locality of *A. hatschbachii* in Paraná and a new record of its presence at Morro da Tromba, Santa Catarina. This species is found in Atlantic rainforest areas above 1000 m in Paraná state and above 800 m in Santa Catarina. Since the original collection of the type material from Paraná, the species had not been collected until our record, although many researchers had conducted many field trips in regions where this species occurs.

The type locality of *A. hatschbachii* is on private property that is not legally protected; it contains only a few individuals and is threatened by deforestation and by exploitation by rural tourism. However, the new record in Santa Catarina is protected in the Parque Municipal Rolf Colin and includes many individuals in a preserved forest area. This record extends the geographic distribution of this species to southern Brazil and is the first record of this species outside Paraná (Fig. 2).

Nevertheless, this species is considered critically endangered because its area of occurrence is less than 100 km², it is only known from three localities, one of which is subject to continuous decline of habitat quality and number of mature individuals (Bachman *et al.* 2011; IUCN 2013).

During the examination of herbarium material we located two previously unknown paratypes at RB and MOBOT, and the curators were notified.

New morphological data provided by analysis of live material include the distinct discolouration of the blade and the clear visibility of the veins (Fig. 1c), in contrast to concolour leaf blades with poorly visible veins as originally described (Gonçalves 2011) on the basis of herbarium material. Moreover, we provide new information about certain life characteristics of this species, including the shape of the stem and the midrib; the shape and colour of the cataphylls, petiole and peduncle; and the colour of the spathe, spadix and berries.

Anthurium hatschbachii Gonçalves (2011: 64–65). (Fig. 1a–f)

Type:—BRAZIL. Paraná: Guaratuba, Itararé River, 12/1962, fl., *G. Hatschbach* 9689 (holotype MBM!).

Terrestrial or *epiphytic herb*; stem erect, internodes 0.3–0.6 cm. *Cataphylls* chartaceous, entire, persistent at the apex of the stem, 4.5–11 cm long, greenish to white-reddish when young, brown when senescent. *Petioles* 21.8–61.6 cm, green to green with red base; straight, 1–sulcate, margins obtuse adaxially; rounded abaxially; with white or greenish glandular punctuations; geniculum 1–3.3 cm long, thicker than petiole, green in live and nigrescent in dried material, with

Midrib adaxially obtuse at base, round at apex, middle part more prominent, abaxially round, more prominent at base. *Primary lateral veins* 13–19; strongly sunken adaxially, prominent abaxially; basal ribs 2 per lobe; acroscopic veins absent, basioscopic veins absent, submarginal collective vein 0.8–2.3 cm from margin on each side. *Peduncles* cylindrical, 22–48 cm, longer or shorter than petiole, green. *Spathes* lanceolate to oblong, 3.7–9.5 × 0.8–1.5 cm, forming an acute to obtuse angle at the junction with the peduncle, margins meet on the peduncle at acute or obtuse angle, green to pinkish, decurrency absent. *Spadices* cylindric, 4–10 × 0.3–0.7 cm, purple at pre-anthesis, vinaceous to pinkish at anthesis, green to pale brown at post-anthesis, stipe 0.1 cm long, acroscopic maturation. Placentation axial–apical, presence of trichomes at ovary septum. Immature berries green.

Anthurium hatschbachii is recognised by its cordate leaves and glandular punctuations (Fig. 1b) on both surfaces of leaves, midrib, geniculum and petiole. It is morphologically similar to other cordate-leaved species of *Anthurium* that occur in eastern Brazil: *A. augustinum* Koch & Lauche (1855: 7), *A. laucheanum* Koch (1857: 191), *A. lhotzkyanum* Schott (1860: 491), *A. lucidum* Kunth (1841: 73), *A. maximilianii* Schott (1862: 5) and *A. parvum* Brown (1880: 588), but can be easily distinguished from all of these by the presence of white or greenish glandular punctuations on both surfaces of the leaves, midrib, geniculum and petiole.

Anthurium hoehnei Krause (1925: 271) is similar to *A. hatschbachii* because it also has glandular punctuations, but differs by blades with basal lobes not imbricated and stipe 1–4.5 cm long in contrast to *A. hatschbachii* with basal lobes imbricated and stipe 0.1 cm long.

Material examined:—BRAZIL. Paraná: Guaratuba, Itararé River, December 1962, 1000 m, *G. Hatschbach 9689* (holotype MBM!); idem, Serra de Araçatuba, 22 December 1959, 1050 m, *G. Hatschbach 6644* (paratype MBM!; RB!; MOBOT). Santa Catarina: Joinville, Morro da Tromba, 26°12'43"S–48°57'28"W, 07 July 2012, 800–950 m, *A.P. Cardozo 63* (UPCB!); idem, 07 July 2012, 800–950 m, *A.P. Cardozo 62* (UPCB!).

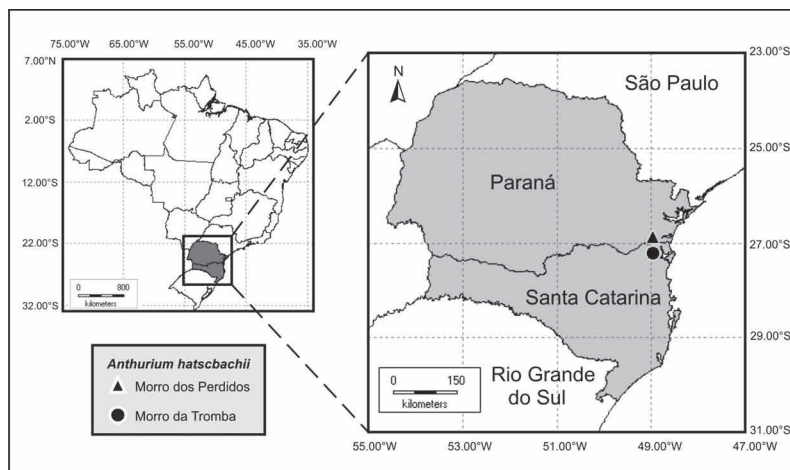


FIGURE 2. Records of *Anthurium hatschbachii*, type locality at Parana State and the new record for Santa Catarina State.

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