



## ECOSYSTEMS

# Taxonomy of *Hohenbergia lanata* Pereira & Moutinho, new collections with an amendment to its description

BRAYAN P. CAVALCANTE, EVERTON H. DE SOUZA, LEONARDO M. VERSIEUX & ADRIANA P. MARTINELLI

**Abstract:** *Hohenbergia lanata* Pereira & Moutinho is an endemic bromeliad of the State of Bahia (Brazil), occurring in an altitudinal transition forest between Caatinga dry woodland and Atlantic Forest. The type material was collected by Roberto Burle-Marx, who introduced it into cultivation in his gardens, but lacking the accurate provenance, only mentioning that it was collected between Milagres and Amargosa municipalities. It was later described by Pereira & Moutinho based on a cultivated specimen. In this work, we present new specimens found in natural populations in an area that coincides with the type locality description, enabling us to expand the description of the species, as well as to provide images of the living plants in the field, adding information about its habitat. The herbarium collections revision and the new population found in the field enabled us to propose an updated conservation status and to better characterize the habit, plant architecture, and to add new morphological comparisons and geographical distribution.

**Key words:** Bromeliaceae, caatinga, *Hohenbergia correa-araujo*, Serra do Jatobá, Poales.

## INTRODUCTION

*Hohenbergia* Schult. and Schult. f. (1830:1251) comprises 52 spp. (Gouda et al. 2021 cont. upd.) occurring mostly in the coastal portion of Brazil (Baracho 2004, Forzza et al. 2015, Flora do Brasil 2020, Cavalcante et al. 2020, 2021), but exhibiting a disjunct distribution, with a few records from Central America and Colombia (Benzing 2000, Baracho 2004, Forzza et al. 2015, Aguirre Santoro et al. 2016, Gouda et al. 2021 cont. upd.). In Brazil, the species occurs from the states of Maranhão to Santa Catarina, mostly in the Atlantic Forest, however, endemic species are observed in *Campos Rupestres* and *Caatinga* throughout the country (Baracho 2004, Forzza et al. 2015, Cavalcante et al. 2017, 2019, Gouda et al. 2021

cont. upd., Souza et al. 2021, Cavalcante & Silva 2021). The state of Bahia, in the Northeastern region of Brazil, holds the greatest number of species (42 spp.), with high levels of endemism, encompassing all the *Campos Rupestres* and *Caatinga* species, which are all endemic to this state (except *H. catingae* Ule [1908:195] and *H. vestita* Smith [1972:446]) (Baracho 2004, Forzza et al. 2015, Cavalcante et al. 2018, 2021).

*Hohenbergia lanata* Pereira & Moutinho (1980:88) might be considered among the rarest species of the genus considering the limited collections and the small occurrence area. The addition of morphological data to the description of the species, based only on the holotype, is important, since morphological features, such as the petal description, as well as

the morphological variation for measurements of several traits, are limited. Additionally, the species was illustrated only by the image of the holotype, lacking images of living plants. Only a few herbarium specimens of this species were collected after its discovery and it was also reported in the field notes of an expedition to Bahia by Leme (1986). The type specimen was collected between the municipalities of Amargosa and Milagres in Bahia, without an accurate provenance of the type locality or the type of environment in which the species grows. The species can be recognized by its deep tubular rosette, composed of few ligulate and erect leaves covered by a dense white-lanate indument, by the pinkish inflorescence, also covered by a dense white-lanate indument, by its green and strobilate spikes, and flowers with yellow petals, which is a rare feature for *Hohenbergia*. The use of the specific epithet “*lanata*” by the authors refers to the dense white-lanate indument that covers both the vegetative body and the inflorescence (peduncle, lateral peduncle, branches, and flowers). This species was initially collected by the Brazilian landscape designer Roberto Burle-Marx, and cultivated in his personal greenhouse, and described by Pereira & Moutinho (1980) when the specimen bloomed.

As part of an ongoing project about the distribution and reproduction of the genus *Hohenbergia*, in this article we provide an amendment to the description of *H. lanata* to complement some important traits in the protologue description, as well as morphological variations to all characteristics. We also provide a new morphological comparison with similar species, comments on distribution and habitat, and provide its current conservation status.

## MATERIALS AND METHODS

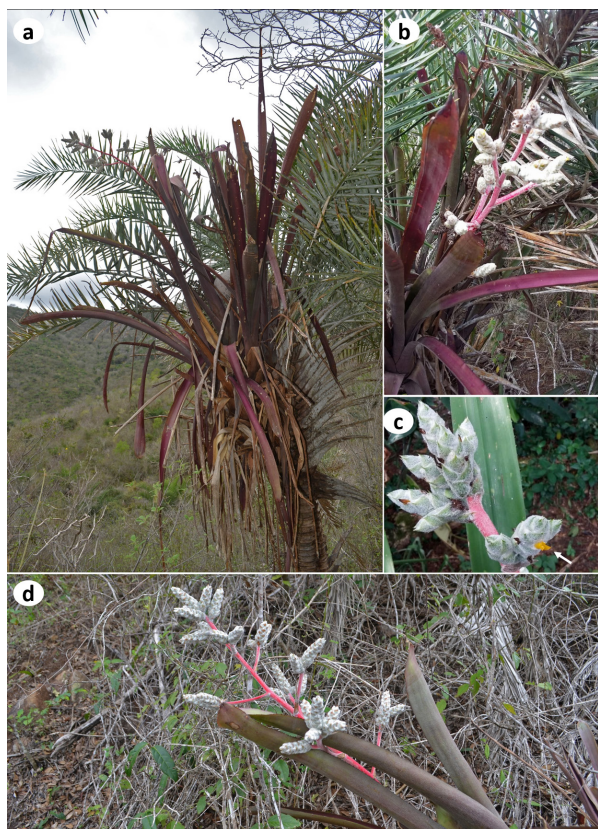
*Hohenbergia lanata* and similar species (*H. correia-araujoii* and *H. ramageana*) were collected during field works at Bahia state (Brazil) in the region of the Caatinga and Atlantic Forest, from 2018 to 2019. The morphological description of the species was based on living plants and in the holotype, and the measurements were taken during field expeditions and from plants maintained in the greenhouse, examined in the Herbarium of Universidade Federal do Recôncavo da Bahia (HURB), *Embrapa Mandioca e Fruticultura*, and *Centro de Energia Nuclear na Agricultura* (CENA-USP). Additionally, the species was searched in online databases, namely SpeciesLink (<http://splink.cria.org.br/>) and Jabot (<http://jabot.jbrj.gov.br/v3/consulta.php>), resulting in nine specimens from the HURB, ALCB, HUEFS, and RB collections. For the taxonomic description, all specimens deposited in the last 20 years were considered. The conservation assessment for the species was based on geographic distribution and analyzed using the GeoCat software ([geocat.kew.org](http://geocat.kew.org)) applying the IUCN red list category criteria (IUCN 2014) and taking into account all the nine specimens verified by the first author and listed as additional examined material.

## TAXONOMY

***Hohenbergia lanata*** Pereira & Moutinho (1980:88), *emend.* B.P. Cavalcante, E.H. Souza, A.P. Martinelli & Versieux (Figs. 1–2).

**Type:** BRAZIL. Estado da Bahia, entre Milagres and Amargosa, R. Burle Marx s.n., fl. cult. dez. 1979. Holotype HB69482!

Amended description: Plant epiphytic or rarely terrestrial, 150–250 cm tall when flowering, tubular rosette (small distance between leaf sheaths limiting the capacity to impound



**Figure 1. *Hohenbergia lanata*. a) An epiphytic population in full bloom. b) A blooming plant. c) Details of the upper portion of the inflorescence, showing branches and one flower in anthesis (arrow). d) A terrestrial plant and inflorescence in detail.**

water), tank ca. 50x30 cm tall, propagates by basal shoots, stem short. *Leaves* <10 in number, up to 150 cm long, coriaceous, covered by a dense white-lanate indument (the indument follows the leaf venation), erect for ca. 2/3 of the height and then slightly recurved, forming a deep tubular rosette impounding water; sheath ca. 20 x 14–15 cm, ovoid to elliptic, smooth margins, brownish white to whitish indument on both surfaces, highly coriaceous; leaf blade 80–130 x 4–7 cm, linear to lanceolate, vinaceous or greenish (full sun grown plants can show yellowish leaves) with the adaxial surface lustrous, margins densely serrate, with hard spines (less than 2 mm long), similar to the leaf blade in color, apex acute to acuminate

and erect, rarely slight reflexed (apical mucro ca. 1 cm long) or rounded. Peduncle 55–145 cm long, ca. 1.5 cm diam., erect, light pink along all its extension and covered by a dense white-lanate indument; peduncle bracts 10–21 x 1.1–1.8 cm, lanceolate with an acuminate apex, smooth margins, light brownish, chartaceous, imbricate, exceeding and hiding the internode and covered by a dense white-lanate indument; inflorescence (fertile portion) 60–85 cm long, 28–40 cm diam., commonly 3-branched at the base, laxly pyramidal, erect to slightly suberect, covered by a dense white-lanate indument; primary bracts of basal branches 10–17 x 1.1–1.3 cm, lanceolate with an acuminate apex, smooth margins, shorter than branches in length, papyraceous, light brownish; *basal branches* 12–19 cm long, long-stipate (lateral peduncle of basal branches 7–13 cm long) commonly 3-branched, light pinkish covered by a dense white-lanate indument; primary bracts of the middle branches 5–9 cm long, similar to the basal bracts in shape and color; middle branches 8–17 cm long, short-stipate or sub-sessile the lateral peduncle 4–11.4 cm long, similar to the basal branches in shape and color, but 2-branched; primary bracts of distal branches 2–3.5 cm long, similar to the basal bracts in shape and color; distal branches 6–8 cm long, sessile, with 5–8 spikes congested in the apical portion of the rachis, similar to the basal branches in shape and color; spikes 6–8 cm long, 1–1.5 cm diam., cylindrical, greenish and covered by a dense white-lanate indument, presenting up to 50 flowers per spike. Flowers 1.9–2.1 cm long, tubulate, sessile, flattened in the dorsal portion, spirally arranged on the branch, diurnal with a discreet sweet odor; floral bracts 1.4–1.6 x 1.2–1.3 cm, triangular to slightly sub-orbicular, concave with a slightly reflexed apex, apex pungent, margins smooth, greenish, and covered by a dense white-lanate indument, commonly reaching the same height as the





**Figure 2.** Herbarium specimen (HURB24520) from the recently found population of *Hohenbergia lanata* Pereira & Moutinho emend. B.P. Cavalcante, E.H. Souza, A.P. Martinelli & L.M. Versieux. a) Leaf. b) Inflorescence.

sepals; sepals 1.1–1.3 x 0.8 cm, triangular with an acute apex, partially free from each other, with lateral wings on both sides that exceed the mucro, margins smooth, whitish; petals 1.6–1.8 cm long, distinctly yellow, erect and spatulate, free from each other, with the petal appendage reaching half of the length of the petal; stamens included, 1.3–1.4 cm long, shorter than the petals; filaments 1.1–1.2 cm long, whitish, partially adnate to petals; anthers 0.2–0.3 cm long, yellowish; style ca. 1.4 cylindrical, whitish; stigma conduplicate-spiral, higher than anthers and shorter than the petals; ovary ca. 0.3 x 0.5 cm diameter, slight pyramidal, dorsal side rounded, axile placentation restricted to the apical portion of the locule; ovules numerous, caudate. Fruit berry, ca. 2 cm long, cylindrical to pyramidal, whitish, indument persistent, blue

when mature, calyx persistent; seeds ca. 0.2 mm, elliptic, dark-brownish.

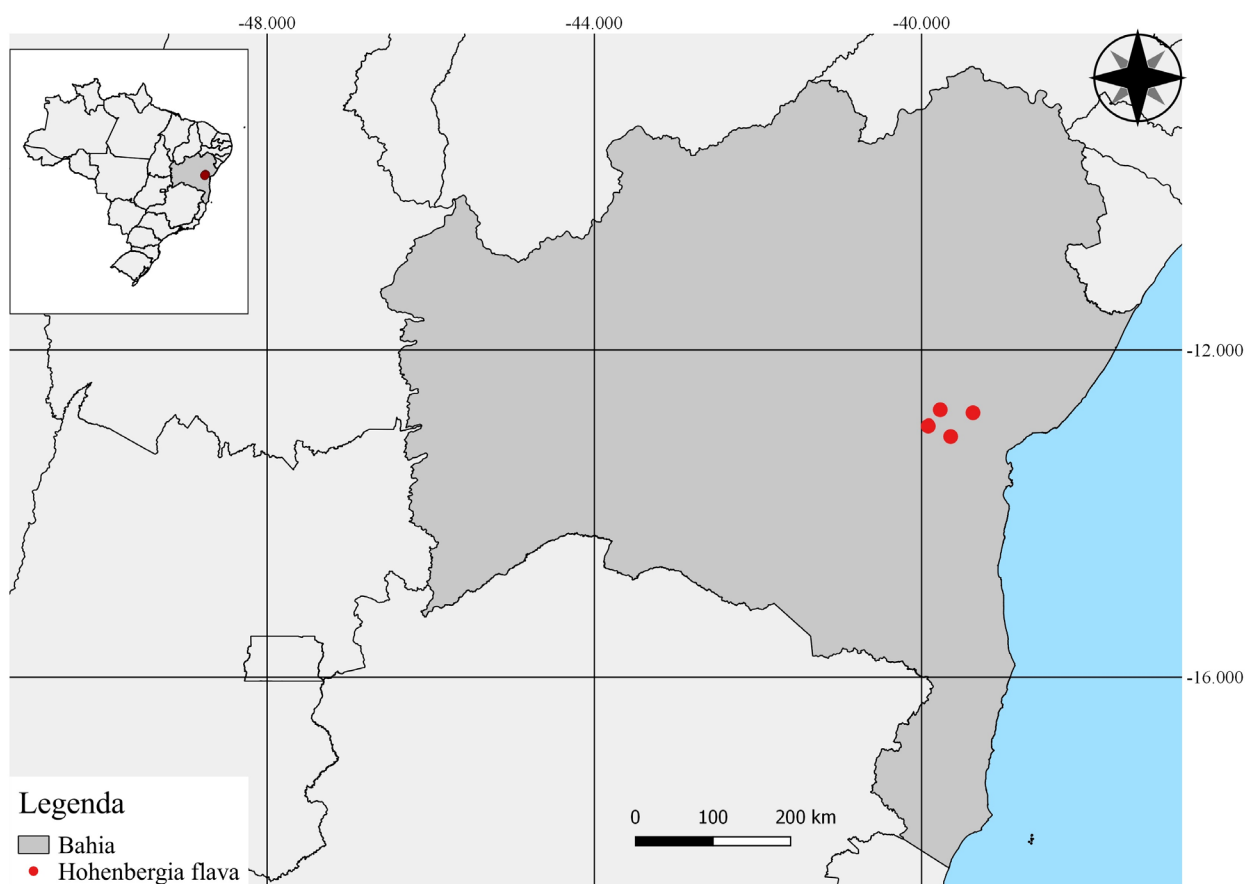
**Additional specimens examined:** BRAZIL. Bahia, Milagres, Serra do Jatobá, BA026 Milagres – Amargosa, Souza E.H. 648 & Carvalho A.J.A., Jul. 2018 (HURB 24520); BRAZIL. Bahia, BA026, Estrada Amargosa-Milagres; Serra do Jatobá, Milagres, Carvalho A.A. 31 & Souza E.H., Sept. 2018 (HURB22129). BRAZIL. Bahia, Serra das Flores, Santa Teresinha, Souza, E.H. s.n. & Costa, M.A.P.C., Sep. 2014 (HURB 23957). BRAZIL. Bahia, Serra do Jatobá, Milagres, Costa G. 3624, Luz P., & Martins M., Mar. 2019 (HURB 23066). BRAZIL. Bahia, Santa Teresinha, Noblick L.R., 4370. Aug. 1985 (HUEFS 5341). BRAZIL. Bahia, Recôncavo Sul, Amargosa, Clarêncio, J., s.n., Sep. 1996 (ALCB028633). BRAZIL. Bahia, Santa Teresinha, Serra da Pedra Branca, Sandra L., s.n., 1996 (RB781497). BRAZIL. Bahia, Ibitipanga, Liedel, A. 1079, s.d., (RB267189). BRAZIL.

Bahia, Milages, Serra do Jatobá, Costa, G. 3624, Jul 2018 (UFRN25954).

**Distribution and ecological notes:**

*Hohenbergia lanata* is an epiphytic or terrestrial bromeliad that grows only in altitudinal transition areas (ecotonal) between Caatinga and Atlantic Forest, preferring high insolation, but also growing near shrubs and trees, showing a disjunct distribution throughout the mountain range of the region of Milagres (12°55'50.1"S 39°47'21.9"W) (Fig. 3). The main population found for *H. lanata* is in the upper region of *Serra do Jatobá*, placed along the highway that connects Amargosa to Milagres, 12°55'24"S; 39°46'44"W, at an elevation of 764 m.s.m., near the base of the mountain range. There, it is common to observe the species growing epiphytically

on palm tree stems (*Licuri*, *Syagrus coronata*), creating dense clumps (Fig. 1). Small and fragmented populations of *H. lanata* are also observed in other mountain ranges in the region, such as Santa Teresinha municipality (12°50'53.5"S 39°28'29.7"W, starting at 750 m.s.m), *Serra da Jiboia* (localized at highway BA120, between Santa Teresinha and Elísio Medrado municipalities,) and in *Fazenda Ferrugem* (Elísio Medrado municipality, at highway BA026, which connects Amargosa to Santo Antonio de Jesus, 12°58'42.4"S 39°31'05.0"W). The description of deposited specimens indicate that the species can also grow in other areas within the Amargosa city regions, such as Ibipitanga, but always in altitudinal caatinga. The leaves are



**Figure 3.** Geographic distribution of *Hohenbergia lanata* Pereira & Moutinho emend. B.P. Cavalcante, E.H. Souza, A.P. Martinelli & L.M. Versieux in the state of Bahia.

predominantly vinaceous, with a few plants presenting greenish leaves.

**Phenology:** The blooming season is between January and April, during the rainy season. The herborized collections indicate that some plants may also bloom between July and September.

**Conservation status:** The main locality of the species is surrounded by a busy federal highway and the other two localities are natural areas of extractivism, making the species vulnerable to extinction. By plotting the known occurrences in GeoCat software (geocat.kew.org), it was estimated that the extent of occurrence is about 1,094.202 km<sup>2</sup> while the estimated area of occupancy is 20 km<sup>2</sup> defining the species as Endangered (EN). Since these areas are under threat of a rapidly human expansion and crossed by high traffic roads, we categorized the species as Endangered (EN), following the IUCN definition (IUCN 2014). We reinforce that it is only known from small fragments of forests, where the quality of the habitats can decrease rapidly, despite one of these localities being a private reserve.

**Remarks:** *Hohenbergia lanata* was compared with *H. ramageana* Mez (1896:127) by Pereira & Moutinho (1980), mainly due to questionable characteristics presented by Smith & Down (1979), such as plant and inflorescence shape, leading the authors to compare two plants with completely different shapes and habits (Baracho 2004). Baracho (2004) also related *H. lanata* with *H. ramageana* and explained that both differed only by the size of sepals and spikes. Currently *H. ramageana* has a better circumscription compared to other *Hohenbergia* species from the Atlantic Forest, it presents a crateriform rosette formed by patent leaves (while species from Caatinga habitat have a tubular rosette and erect leaves, as also observed in *H. lanata*) and pyramidal and 4-branched long-stipate inflorescence with short spikes (vs. pyramidal,

single-branched short stipate inflorescence with long spikes in *H. lanata*). Additionally, these species show many morphological differences, as shown in Table I.

In this work, we compared *H. lanata* with *H. correia-araujoi* Pereira & Moutinho (1980:88), both endemic to *Caatinga* forests of Bahia, sharing many characteristics, including the shape of the plant and the ecological characteristics (Table I). Initially, it is important to emphasize that *H. lanata* and *H. correia-araujoi* present unique plant and inflorescence architectures within the genus. The presence of a tubular rosette with long leaves (> 80 cm long) and a triangular inflorescence distinguish both of them from *Campos Rupestres* species (which have lageniform rosette with short leaf blades and a sub-cylindrical inflorescence). Additionally, the tubular rosette, the erect leaves, and the combination of the light pink inflorescence covered by a dense white-lanate indument, light green floral bracts, and yellow petals distinguish them from the Atlantic Forest species (which have patent leaves forming a crateriform rosette, reddish or green inflorescence covered by a brownish or white indument, red or yellowish floral bracts and purple or white petals) (Smith & Down 1979, Baracho 2004).

Comparing *Hohenbergia lanata* with *H. correia-araujoi*, *H. lanata* is identified by the absence of the horizontal scale bands in the leaves (unique to *H. correia-araujoi*) however, additional discrete traits can also be indicated. *Hohenbergia lanata* presents a constrict rosette (the spaces between the sheaths are smaller than in *H. correia-araujoi*, creating a deep tubular rosette), longer and narrower leaves (up to 150 x 4 – 7 cm vs. less than 70 x 12 – 15 cm in *H. correia-araujoi*), acuminate leaf apex (vs. cuspidate to acute leaf apex), dense white-indument on both leaf surfaces with no ornamentation (vs. discreetly

**Table I.** Morphological comparisons between *Hohenbergia lanata*, *Hohenbergia correia-araujo*, *H. ramageana*, and *H. flava*. The measurements are based on the original description of each species and were complemented by observations of living plants.

Characteristics/ species	<i>H. lanata</i>	<i>H. correia-araujo</i>	<i>H. ramageana</i>	<i>H. flava</i>
Plant habit	Epiphytic (or rarely terrestrial) in mountain transitional area (Caatinga – Atlantic Forest)	Epiphytic in low land Caatinga	Epiphytic in the Atlantic Forest	Terrestrial in low land Caatinga
Rosette shape and width	Tubular, ca. 30 cm diam.	Tubular, ca. 40 cm diam.	Crateriform, ca. 60 cm diam.	Crateriform, ca. 50 cm diam.
Leaf ornaments	Longitudinal bands of scales following the leaf nerves	Horizontal bands of scales	Discreet white-indument on all leaf surfaces.	Absence of a visible indument on leaf surface
Leaf length	ca. 150 cm	ca. 70 cm	ca. 250 cm	ca. 120 cm
Leaf width	4–7 cm	12–15 cm	10–14 cm	6–8 cm
Leaf sheath	Ovoid to elliptic, dilated, and wider than leaf blade, similar to leaf blade in color	Ovoidal, not dilated, and similar to leaf blade in width, whitish	Ovoidal, not dilated, and similar to leaf blade in width, brownish	Elliptic, dilated, and wider than leaf blade, brownish
Leaf blade	Linear-lanceolate, vinaceous or green	Linear, brownish to reddish	Linear, greenish or rarely yellowish (sun plants)	Lanceolate, yellowish
Leaf apex	Acute to acuminate, erect (rarely slight reflexed)	Rounded to cuspidate, erect	Cuspidate, reflexed	Acute to acuminate, erect
Peduncle diameter	1.5 cm diam.	2.5 cm diam.	3.2 cm diam	1.8 cm diam.
Inflorescence form/ color	Pyramidal, light pink	Sub-cylindrical to pyramidal, light pink	Pyramidal, reddish or green	Cylindrical, reddish
Basal branch length	12–19 cm long	6–14 cm long	25–45 cm long	1–6 cm long
Spikes length	6–8 cm	< 6 cm	3–5 cm	4–5 cm
Bracts of the lateral peduncle	Shorter than the branches	Longer than the branches	Shorter than the branches	Longer than the branches
Flower length	1.9–2.1 cm	1.6–1.9 cm	1.6–1.8 cm	1.4–1.6 cm
Stigma	Lower than petals	Higher than petals	Higher than petals	Lower than petals
Petal shape/color	Spatulate and erect, yellow	Spatulate and erect, yellow	Spatulate and reflexed, purple	Spatulate and erect, yellowish
Fruit indument	Present (similar to the flower)	Absent (different from the flower)	Absent (different from the flower)	Present (similar to the flower)

brownish indument with horizontal scale bands ornamentation), longer basal branches (up to 19 cm long vs. less than 14 cm long), bracts of the lateral peduncle shorter than branches (vs. longer than branches). Another *Hohenbergia* species that lives near *Hohenbergia lanata* is *H. flava* Leme (2004:22), both species present a quite lanate inflorescence with greenish branches and yellow petals, but *H. flava* can easily be distinguished by its crateriform rosette with patent and yellowish leaves, inflorescence with a sessile branch, and sharp floral bract. Other characteristics of the inflorescence are very similar when both are compared, thus a detailed morphological comparison among *H. lanata*, *H. correia-araujoi*, *H. ramageana*, and *H. flava* is presented here (Table I).

### Acknowledgments

The authors acknowledge the editor and reviewer for valuable comments and suggestions; the curator and staff of HURB (Prof. L. Y. S. Aona) for their support with digital images and curation, the *Associação de Produtores de Ouricuri do Jatobá* (APOJ) and its president Antônio da Hora. The authors acknowledge Marília R. G. Henyei for assistance with references formatting. This study is part of the doctorate dissertation of BPC at PPG-Ciências, CENA/USP, and was supported by Fundação de Amparo à Pesquisa do Estado de São Paulo, FAPESP (doctorate scholarship, process 2018/08276-9), Coordenação de Aperfeiçoamento de Pessoal de Nível Superior – Brazil (CAPES) – Finance Code 001 (PROCAD/CAPES, Project 88881.068513/2014-01, PNPD/CAPES/UFRB - 88882.315208/2019-01). APM and LMV acknowledge Conselho Nacional de Desenvolvimento Científico e Tecnológico, CNPq, for research productivity grants (Processes 312602/2019-7 and 303794/2019-4, respectively).

### REFERENCES

AGUIRRE-SANTORO J, MICHELANGELI FA & STEVENSON DW. 2016. Molecular phylogenetics of the *Ronnbergia* Alliance (Bromeliaceae, Bromelioideae) and insights into their morphological evolution. *Mol Phylogenet Evol* 100: 1-20. <https://doi.org/10.1016/j.jympev.2016.04.007>.

BARACHO GS. 2004. Revisão taxonômica de *Hohenbergia* Schult. & Schult. f. subg. *Hohenbergia* (Bromeliaceae). Tese de doutorado. Recife: Universidade Federal de Pernambuco, 172 p.

BENZING DH. 2000. *Bromeliaceae: Profile of an adaptive radiation*. Cambridge: Cambridge University Press, 690 p.

CAVALCANTE BP, SILVA KR, PEREIRA MA, SOUZA EH, VERSIEUX LM & MARTINELLI AP. 2021. Establishment of the *Hohenbergia capitata* complex (Bromeliaceae) with notes on leaf anatomy and description of a new endangered species. *Phytotaxa* 518: 166-208. <https://doi.org/10.11646/phytotaxa.518.3.2>.

CAVALCANTE BP & SILVA MF. 2021. *Hohenbergia densa* (Bromeliaceae), a new species from Rio Grande do Norte, Brazil. *Phytotaxa* 520: 203-208. <https://doi.org/10.11646/phytotaxa.520.2.7>.

CAVALCANTE BP, SILVA MF, ROMEIRO DHL & FREIRE AC. 2018. The Bromeliads of Parque Natural Municipal Dom Nivaldo Monte. *Unisanta Biosci* 7: 84-88.

CAVALCANTE BP, SILVA MF, SOUZA RG, ROMEIRO DHL & FREIRE AC. 2017. Checklist de Bromeliaceae na Mata do Pilão, um fragmento de Mata Atlântica no Rio Grande do Norte. *Carpe Diem: Rev Cult Cient* 15: 91-104.

CAVALCANTE BP, SOUZA EH, VERSIEUX LM & MARTINELLI AP. 2020. *Hohenbergia ituberaensis* (Bromeliaceae): a new white-flowered species from Bahia, Brazil. *Phytotaxa* 439: 119-126. <https://doi.org/10.11646/phytotaxa.439.2.2>.

CAVALCANTE BP, SOUZA EH, WILLIAMS JH & VERSIEUX LM. 2019. Reproductive systems and post-pollination barriers between two closely related eu-bromelioids (Bromeliaceae) in the Atlantic Forest of Brazil. *Bot J Linn Soc* 192: 828-839. <https://doi.org/10.1093/botlinnean/boz101>.

FLORA DO BRASIL. 2020 em construção. Rio de Janeiro: Jardim Botânico do Rio de Janeiro. <http://floradobrasil.jbrj.gov.br/> (accessed: 25 March 2020).

FORZZA RC, COSTA A, SIQUEIRA FILHO JA, MARTINELLI G, MONTEIRO RF, SANTOS-SILVA F, SARAIVA DP, PAIXÃO-SOUZA B, LOUZADA RB & VERSIEUX LM. 2015. Bromeliaceae. In: FLORA DO BRASIL. Lista de Espécies da Flora do Brasil. Rio de Janeiro: Jardim Botânico do Rio de Janeiro. <<http://floradobrasil.jbrj.gov.br/jabot/floradobrasil/FB6096>> (accessed: 25 March 2020).

GOUDA EJ, BUTCHER D & GOUDA CS. 2021. (continuously updated) Encyclopaedia of Bromeliads, Version 4. Utrecht: University Botanic Gardens. <http://bromeliad.nl/encyclopedia/> (accessed: 10 September 2021).



IUCN. 2014. The IUCN red list of threatened species, version 2010.4. Cambridge UK: IUCN Red List Unit. <http://www.iucnredlist.org/> (accessed: 25 March 2020).

LEME EMC. 1986. Rio – Bahia – Rio. Journal of the Bromeliad Society 36(6): 243-257.

LEME EMC. 2004. Two new species of Brazilian Bromeliads. Vidalia 2: 21-29.

MEZ CC. 1896. Bromeliaceae. In: Candolle APP & Candolle ACP (Eds). Monographiae Phanerogamarum, Paris: G. Masson, p. 1-990.

PEREIRA E & MOUTINHO JL. 1980. Species Novae in Brasilia Bromeliacearum – XVII. Bradea 3(12): 85-100.

SMITH LB. 1972. Notes on Bromeliaceae XXXIV. Phytologia 25: 446-447.

SMITH LB & DOWN RJ. 1979. Bromelioideae (Bromeliaceae). Flora Neotropica, Monograph 14(3): 1493-2142.

SOUZA EH, CAVALCANTE BP & AONA LYS. 2021. Rediscovering Natural Populations of *Hohenbergia correia-araujo* Pereira & Moutinho, a Rare Yet Widely-Used Ornamental Bromeliad. Cactus and Succulent Journal 93: 197-201. <https://doi.org/10.2985/015.093.0306>.

ULE E. 1908. Beitrage zur Flora von Bahia. I. Unter Mitwirkung einigen Autoren herausgegeben von. Bot Jahrb Syst Pflanzengesch Pflanzengeogr 42: 191-238.

#### How to cite

CAVALCANTE BP, DE SOUZA EH, VERSIEUX LM & MARTINELLI AP. 2021. Taxonomy of *Hohenbergia lanata* Pereira & Moutinho, new collections with an amendment to its description. An Acad Bras Cienc 93: e20200973. DOI 10.1590/0001-3765202120200973.

Manuscript received on June 20, 2020;  
accepted for publication on August 26, 2021

#### BRAYAN P. CAVALCANTE<sup>1</sup>

<https://orcid.org/0000-0003-1768-4958>

#### EVERTON H. DE SOUZA<sup>2</sup>

<https://orcid.org/0000-0002-8593-5010>

#### LEONARDO M. VERSIEUX<sup>3</sup>

<https://orcid.org/0000-0003-1560-3691>

#### ADRIANA P. MARTINELLI<sup>1</sup>

<https://orcid.org/0000-0003-1278-3930>

<sup>1</sup>Universidade de São Paulo, Centro de Energia Nuclear na Agricultura (CENA/USP), Avenida Centenário, 303, 13416-903 Piracicaba, SP, Brazil

<sup>2</sup>Universidade Federal do Recôncavo Baiano (UFRB), Departamento de Biologia, Rua Rui Barbosa, s/n, 44380-000 Cruz das Almas, BA, Brazil

<sup>3</sup>Universidade Federal do Rio Grande do Norte (UFRN), Departamento de Botânica e Zoologia, Avenida Senador Salgado Filho, 3000, 59064-720 Natal, RN, Brazil

Correspondence to: **Adriana Pinheiro, Martinelli, Brayan Paiva Cavalcante,**  
E-mail: [adriana@cena.usp.br](mailto:adriana@cena.usp.br); [brayanpaiva93@yahoo.com.br](mailto:brayanpaiva93@yahoo.com.br)

#### Author contributions

BPC and EHS were responsible for field expeditions and herbarium work, BPC analyzed taxonomic data, wrote the first version of the manuscript, provided illustrations and figures. APM and LMV co-supervised the work. All the authors discussed, contributed to the elaboration of the manuscript, and revised the data and text.

