CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA



Sixteenth meeting of the Conference of the Parties Bangkok (Thailand), 3-14 March 2013

CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

A. Proposal

Delete *Tillandsia sprengeliana* Klotzsch ex Mez, Mart from Appendix II, as the species no longer complies with the provisions of Article II, paragraph 2b), in accordance with Resolution Conf. 9.24 (Rev. CoP15), Criterion A in Annex 2b.

B. Proponent

Brazil^{*}.

- C. Supporting statement
- 1. <u>Taxonomy</u>
 - 1.1 Class: Monocotiledonea
 - 1.2 Order: Poales
 - 1.3 Family: Bromeliaceae
 - 1.4 Genus, species or subspecies, including author and year:

Tillandsia sprengeliana Klotzsch ex Mez, Mart, 1894.

1.5 Scientific synonyms: None

1.6	Common names:	English:
		French:
		Spanish:

- 1.7 Code numbers: Not applicable
- 2. <u>Overview</u>

Tillandsia sprengeliana, native to Brazil, has been included in CITES Appendix II since 1992. According to CITES trade data, international trade does not appear to be a factor affecting the status of this species, as no international trade has been recorded since the species was included in Appendix II. Therefore, we propose its deletion from the CITES Appendices, given that it does not meet the criteria outlined in Resolution Conf. 9.24 (Rev. CoP15).

The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CITES Secretariat or the United Nations Environment Programme concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.

3. Species characteristics

3.1 Distribution

Tillandsia sprengeliana is endemic to Brazil, being found in the States of Rio de Janeiro and Bahia. In the State of Rio de Janeiro, it occurs from the region of Macaé to Punta Negra, being most abundant on the island of Cabo Frio, where various specimens have been collected. It is also found in areas of the Atlantic Forest and the Cerrado (Figure 1).

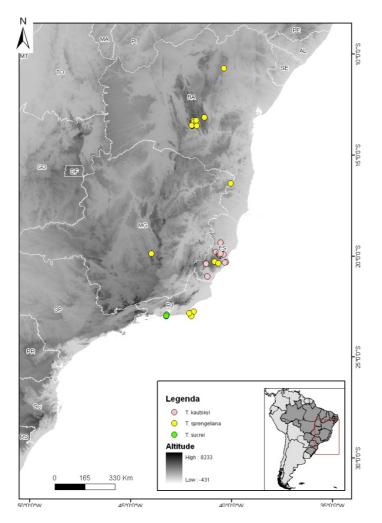


Figure 1: Distribution of the species T. sucrei, T. kautskyi and T. sprengeliana

The distribution map was developed based on data from the Lista de Espécies da Flora do Brasil. (Forzza, R.C., Costa, A., Siqueira Filho, J.A., Martinelli, G. 2010.)

3.2 Habitat

The species is epiphytic or rock-dwelling, and mesophytic. Historical records indicate that the species was primarily present in the coastal vegetation of the State of Rio de Janeiro. However, the recent history of the species in the montane subtropical savannah regions of Bahia, demonstrates a high plasticity in relation to its habitat.

3.3 Biological characteristics

In the Atlantic Forest, bromeliads contain most of the sources of food for hummingbirds. Pollination of the genus *Tillandsia* is primarily by butterflies, whilst seed dispersal is by birds. Studies carried out in the Ecological Station of Santa Lucía showed an annual flowering period extending from October to January.

3.4 Morphological characteristics

Plants with flowers 8.5-11 cm high, growing alone or in small clusters, epiphytic, mesophytic. Roots present in adult plants. Rhizome short, 1 to 2.5 cm long, no stems. Leaves 4.5 to 6.5 cm long, 0.6 cm wide, densely imbricate, base of the leaf 0.8 to 1.2 cm wide, not very distinct, orbicular. Lamina 3-6 cm long, 0.5 to 0.7 cm wide, narrowly triangular, acuminate, fleshy, slightly caniculate, lepidote, asymmetrical absorbent trichomes, covering the edges of the leaves, grey, giving the plant a greyish-green colour. Main stem 2.5 to 5.0 cm wide, equivalent to the rosette, thin, straight or slightly curved, glabrous. Bracts 2 cm long, 0.7 cm wide, elliptical, longitudinally acuminate, pale red in colour, the lower foliage larger than the joints, imbricate, densely lepidote. Inflorescence 2.5 to 3.5 cm long, 3 cm in diameter, reaching above the rosette of leaves, elliptical or rounded, simple, spiky, with 10 clustered flowers or panicles, with 4-10 branches with 1-3 flowers, with one rudimentary, sterile and erect flower at the upper or slightly spreading part, glabrous spine. Primary bracts 2 cm long, equal to or longer than the branches, acuminate, oval, inflated, pink in colour, glabrous or lepidote towards the apex. Floral bracts 1.0 to 1.8 cm long, 0.8 to 1.0 cm wide, extending beyond the sepals, oval, cuspidate, the lower ones distinctly carinate, membranous, glabrous, red or salmon pink in colour. Flowers 1.8 to 2,0 cm long, sessile. Sepals 0.9 to 1.3 cm long, 0.3 cm wide, lanceolate, those in the posterior part slightly concrescent at the base, acuminate, but with a thick central nerve, glabrous, greenish coloured. Petals 1.5 to 2.0 cm long, 0.25 cm -0.35 cm wide, elliptical, upright at anthesis, forming a closed corolla, base coloured white, pink or purple towards the apex. Stamens 1.6 cm long, almost equal to the total size of the petals, included, filaments 1.2 to 1.4 cm long, free-ended, flat, not protruding, erect, white, antheras 0.2 cm long, 0.03 cm wide, linear, dorsifixed, ochre yellow in colour. Ovary 0.2 cm long, 1 cm in diameter, style 0.8 cm long, white, stigma 0.1 cm long, trilobate, red in colour.

3.5 Role of the species in its ecosystem

No data.

- 4. Status and trends
 - 4.1 Habitat trends

No data.

4.2 Population size

No data.

4.3 Population structure

Tillandsia sprengeliana has an absolute frequency of 10.26 and an absolute density of 0.81 in the *Morro do Pai Inácio*, in the State of Bahia. In the coastal region of the State of Rio de Janeiro, the species demonstrated intermediate constancy, making it characteristic of the region.

4.4 Population trends

No data.

4.5 Geographic trends

No data.

5. Threats

The principal threats to this species relate to the loss and degradation of its habitat. The coastal region of the State of Rio de Janeiro has a high degree of property speculation and illegal occupation of the land, which have a direct impact on the vegetation growing in these locations.

6. Utilization and trade

6.1 National utilization

No data on utilization, nor on legal or illegal trade.

6.2 Legal trade

No data on utilization, nor on legal or illegal trade.

6.3 Parts and derivatives in trade

No data on utilization, nor on legal or illegal trade.

6.4 Illegal trade

No data on utilization, nor on legal or illegal trade.

6.5 Actual or potential trade impacts

No data on utilization, nor on legal or illegal trade.

7. Legal instruments

7.1 National

The species is included in the List of Threatened Species of the State of Espíritu Santo, with the status "at risk of extinction" owing to the degradation of its habitat. It is also referred to by the Regulatory Instruction controlling the National List of Threatened Species of Flora, under the heading "Insufficient Data". This category has to do with those species for which there are not sufficient data to categorize the risk of extinction, with priority being assigned to research to obtain such data.

7.2 International

International trade in the species is regulated by the provisions of CITES, as it has been in Appendix II since 1992. In 1992, it was listed with Annotation #1 (which excludes seeds, spores, pollen, tissue cultures and seedlings) and, since 2010, it has been listed with Annotation #4.

8. Species management

8.1 Management measures

No data.

8.2 Population monitoring

No data.

- 8.3 Control measures
 - 8.3.1 International

The international control measures are implemented by the Institute for the Environment and Renewable Natural Resources (IBAMA), which is the CITES Management and Enforcement Authority of Brazil and which issues export permits and certificates and enforces the law relating to CITES in Brazil. IBAMA also issues export authorizations for Brazilian native flora.

8.3.2 Domestic

IBAMA, through a federal technical registry, has records on all dealers in Brazilian native flora.

8.4 Captive breeding and artificial propagation

No data.

8.5 Habitat conservation

The species is protected in the Conservation Unit of the National System of Nature Conservation Units (SNUC) of the Chapada Diamantina National Park, the Environmental Protection Area of the Sierra del Barbados, the area of ecological significance for the Rio de Cuentas river, the Wildlife Refuge of the National Forest of Muriquis, the Fuente Grande State Park and the Marine Harvest Reserve of Arraial do Cabo.

8.6 Safeguards

It is recommended that the species be deleted from Appendix II since it is not in international trade and grows in protected natural areas.

9. Information on similar species

No data.

10. Consultations

There is no need to consult other Parties since the species is endemic to Brazil only.

- 11. Additional remarks
- 12. References
 - CONCEIÇÃO, A. A.; <u>GIULIETTI, A. M.</u>; <u>MEIRELLES, S. T.</u> Ilhas de vegetação em afloramento de quartzito-arenito no Morro do Pai Inácio, Chapada Diamantina, Bahia, Brasil. Acta Botanica Brasilica, v. 21, p. 335-347, 2007.
 - FORZZA, R.C., COSTA, A., SIQUEIRA FILHO, J.A., MARTINELLI, G. 2010. Bromeliaceae in Lista de Espécies da Flora do Brasil. Jardim Botânico do Rio de Janeiro. [http://floradobrasil.jbrj.gov.br/2010/FB000066]
 - MOURA, R. L. ; COSTA, A. F. ; <u>ARAUJO, D. S. D.</u>. A família Bromeliaceae nas restingas fluminenses: florística e fitogeografia. Arquivos do Museu Nacional, v. 65, p. 139-168, 2007.
 - TARDIVO, R.C. INÉD. Revisão taxonômica de Tillandsia L. subgênero Anoplophytum (Beer) Baker (Bromeliaceae). Tese de doutorado, Universidade de São Paulo, São Paulo, 2002.
 - VERSIEUX, L. M. ; WENDT, T.; <u>LOUZADA, R. B.</u>; . Bromeliaceae da Cadeia do Espinhaço. Megadiversidade (Belo Horizonte), v. 4, p. 98-110, 2008.
 - WANDERLEY, M.G.L.; LOUZADA, R. B.; SOUSA, G. M. ; LIMA, T. T. ; VERSIEUX, L. M. . Bromeliaceae. In: Ana Maria Giulietti; José Maria Cardoso da Silva; Alessandro Rapini; Luciano Paganucci de Queiroz & Maria José Gomes de Andrade. (Org.). Catálogo das espécies de plantas raras do Brasil. Belo Horizonte: Conservação Internacional do Brasil, 2009, v. , p. 103-114.