### 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 kautskyi* E. Pereira 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<sup>\*</sup>.

- 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 kautskyi E. Pereira, 1974
  - 1.5 Scientific synonyms: None
  - 1.6 Common names: English: French: Spanish:
  - 1.7 Code numbers: Not applicable
- 2. <u>Overview</u>

*Tillandsia kautskyi*, 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. Since the species was included in CITES, very little international trade has been recorded by the Convention (one shipment of 55 artificially propagated specimens since 1992).

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.

Given that there is no international trade in this species, *Tillandsia kautskyi* no longer qualifies for inclusion in Appendix II, according to the criteria outlined in Resolution Conf. 9.24 (Rev. CoP15). Therefore, we propose its deletion from the CITES Appendices.

## 3. <u>Species characteristics</u>

## 3.1 Distribution

*Tillandsia kautskyi* is a rare species which is only found in the sierra of the State of Espíritu Santo on mountainous slopes of the Atlantic Forest and the dense montane rainforest, at altitudes between 700 and 1200 m above sea level, and extending as far as the border with the State of Rio de Janeiro. To date only a few specimens have been found (Figure 1).



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

## 3.2 Habitat

A plant of mesophytic habit, it lives as an epiphyte, either in isolation or in small clumps. In the area around the Ecological Station of Santa Lucía, in the State of Espíritu Santo, the species is primarily found growing on large-sized trees around clearings giving them more exposure to the wind. It is also found on rocky outcrops.

## 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 May to September.

#### 3.4 Morphological characteristics

**Plants** with flowers 8-8.5 cm in height, single or forming clusters, heliophilous epiphyte, mesophytic. **Roots** present in the adult plant. **Rhizome** short, 4-10 cm long, simple, without lateral stems. **Leaves** 50-60, approx. 4-6 cm long, densely imbricate, generally curved; base of the leaf 0.8 to 1.4 cm wide, elliptical, slightly caniculate, fleshy, densely lepidote, asymmetrical absorbent trichomes, covering the

edge of the leaf. **Main stems** 2.5-6 cm long, equivalent to the size of the rosette leaf, delicate, slightly curved, glabrous; bracts of the main stem 3-4, upper ones 0.2 cm long, lower ones 3 cm long, nonlaminar, larger than the joints, imbricate, elliptical, pink in colour. **Paniculate inflorescence** 4 cm long, 3 cm in diameter, 4-12 branches, with 2-4 flowers, erect or slightly spreading. **Floral bracts** 0.8 to 1.5 cm long, extending beyond the sepals, 0.6 to 1.2 cm wide, elliptical, pointed, carinate, membranous, pinkish or reddish, densely lepidote. **Flowers** 1.8-2 cm long, sessile; **Sepals** 0.9 to 1.5 cm long, 0.3 cm wide, lanceolate, acuminate, free ends, scarcely lepidote, not carinate, but bearing the greenish or pinkish central nerve. **Petals** 1.6 to 2.2 cm long, 0.25 to 0.30 cm wide, elliptical, unbroken edge, blunt, reflexed at anthesis, forming an open corolla, upper part carmine red or dark red, part towards the base white. **Stamens** 1.5 to 1.8 cm long, almost matching the total length of the petals, included, filaments 1.3 to 1.5 cm long, flat, straight or slightly protruding under the anthera, white, antheras 0.2 cm long, 0.03 cm wide, linear, dorsifixed, not versatile, yellowish-brown in colour. **Ovary** 0.3 cm long, 0.2 cm in diameter, oval, style 0.8-1 cm long, white, red towards the apex, stigma 0.1 cm long, trilobate, simple, erect.

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

No data.

4.4 Population trends

No data.

4.5 Geographic trends

No data.

## 5. Threats

The Atlantic Forest of the State of Espíritu Santo has been degraded over the years as a result of agriculture and stock-raising. At the present time the State retains only about 10 % of the original forest. Many of the remaining well-preserved plants are located within protected areas or on rocky outcrops, which prevents their use and gathering by humans.

#### 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 "endangered with 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 the species has been included 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 Units of the National System of Nature Conservation Units (known by the Portuguese acronym SNUC) of the Environmental Protection Area of the Pico Goiapaba-Açu and the Augusto Ruschi Biological Reserve.

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. <u>References</u>

- CLARA P ESGARIO, ANDRÉ P FONTANA & ARY G SILVA. A flora vascular sobre rocha no Alto Misterioso, uma área prioritária para a conservação da Mata Atlântica no Espírito Santo, Sudeste do Brasil. Natureza on line 7 (2): 80-91. [on line].
- MARTINELLI, G., VIEIRA, C.M., GONZALEZ, M., LEITMAN, P., PIRATININGA, A., COSTA, A.F. & FORZZA, R.C. 2008. Bromeliaceae da Mata Atlântica brasileira: lista de espécies, distribuição e conservação. Rodriguésia 59(1):209-258
- MARTINELLI, G.; VIEIRA, C. M.; <u>LEITMAN, P.</u>; COSTA, A.; <u>FORZZA, R. C.</u> Bromeliaceae. Plantas da Floresta Atlântica. In: João Renato Stehmann; Rafaela Campostrini Forzza; Alexandre Salino; Marcos Sobral; Denise Pinheiro da Costa e Luciana H. Yoshino Kamino. (Org.). Plantas da Floresta Atlântica. 1 ed. Rio de Janeiro: Jardim Botânico do Rio de Janeiro, 2009, v. 1, p. 186-204.
- TARDIVO, R.C. INÉD. Revisão taxonômica de Tillandsia L. subgênero Anoplophytum (Beer) Baker (Bromeliaceae). Tese de doutorado, Universidade de São Paulo, São Paulo, 2002.
- VARASSIM, I.G. 2002. Estrutura espacial e temporal de uma comunidade de Bromeliaceae e seus polinizadores em Floresta Atlântica no Sudeste do Brasil. Tese de Doutorado. Universidade Estadual de Campinas, Campinas, São Paulo.
- 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, p. 103-114.