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BROMELIACEAE RIOGRANDENSES



INSTITUTO ANCHIETANO DE PESQUISAS

São Leopoldo — Praça João Pessoa, 35 — Rio Grande do Sul — BRASIL

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PESQUISAS

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BROMELIACEAE RIOGRANDENSES

B. R A M B O , S. J.

By the older authors, only passing mention is made of the Bromeliaceae in this southernmost State of Brazil. Mez (1891—1894) has 5 species; Lindman (1900) 14; Bornmüller (1935) 3.

From this time on, substantial progress has been arrived at by Mez (1934—1935), 13 species; and L. B. Smith (1955), 37.

The neighboring Republics of Uruguay and Argentina have been relatively well explored: for the first, Herter (1930) numbers 16 species; for the second, Castellanos (1945) 99.

Perhaps the best explored bromeliaceous flora in Brazil is that of Santa Catarina, northern bordering State to Rio Grande do Sul; already 1935 (Mez) 78 species were known from this State; L. B. Smith (1955) has 61; Reitz (1956) 83.

The Herbarium Anchieta (PACA 1931—1961), contains 266 collections of Bromeliaceae representing 43 species in 8 genera; the total number of the State may be about 50.

For an easier orientation, the following enumeration divides the State into four natural quadrants subdividing them into their natural regions:

- NEL -- northeastern Lowlands: Campos, swampy plains, dry granite and sandstone hills, forests, woodlets, gallery.
- NEC — northeastern sea coast: sand dunes, woodlets, swamps, dry Campos.
- NES — northeastern slopes of the Serra Geral: rain forest of subtropical character.

- NEH — northeastern Highlands: Campos, swamps, Araucaria forests.
 SEC — southeastern sea coast: dry plains, swamps, gallery, woodlets, granite hills.
 SEH — southeastern hill lands: dry Campos, woodlets, gallery.
 SW — southwestern Campos: dry plains, swamps, gallery, woodlets, sandstone hills.
 NWH — northwestern Highlands: partly rain forest, partly prairie.
 NWU — northwestern rain forest belt in the valley of the Uruguay River.
 CL — central Lowlands: Campos, swamps, forests, woodlets, gallery.
 CS — central slopes of the Serra Geral: subtropical rain forest.
 CH — central Highlands: Campos, woodlets, gallery.
 RGS — Rio Grande do Sul.
 SC — Santa Catarina.
 Ur — Uruguay.

If not otherwise, collecting has been made by B. Rambo SJ, determining by K. Emrich and B. Rambo SJ; generally, one or more samples of each species have been determined by L. B. Smith; nomenclature is that of this latter author (1955).

AECHMEA R. & P.

Aechmea bromeliifolia (Rudge) Baker

in Benth. et Hook. Gen. Plant. 3 (1883) 664; Castellanos, GSPA 3 (1945) 168, tab. 35. Smith, Brom. Braz. (1955) 225. — *Tillandsia bromeliifolia* Rudge, Guyan. (1807) 32. pl. 50. — *Aechmea tinctoria* (Mart.) Mez, FB 3,3 (1892) 373, tab. 73; PR IV 32 (1935) 166, fig. 43. — *Bromelia tinctoria* Mart., in Spix et Mart. Reise in Bras. 2 (1828) 554.

52792 RGS, Caaró p. S. Luiz, NWH, in silva campestri ad arbores, 24.11.1952, fr. semievoluto, det. L. B. Smith.

Habit: Well formed rosette, leaves about 70 cm long, floral stalk up to 100 cm.

Habitat: Epiphytic in Campos forest, about 5 m from soil.

Distribution in RGS: One only findplace in the northwestern Highlands.

General distribution: From Guatemala down to Amazonia, Paraguay, Misiones and RGS.

Aechmea calyculata (Morr.) Baker,

Journ. Bot. 17 (1879) 232; Mez, FB 3,3 (1892) 353; idem, PR 32 (1935) 159; Castellanos, GSPA 3 (1945) 166, tab. 34; Smith, Brom. Braz. (1955) 222. Reitz, Sellowia 7 (1956) 125. — *Hoplophytum calyculatum* Morr., Belg. Hort. 15 (1865) 162.

28567 RGS, Nonoai, NWU, in silva pluviali ad arborem, 3.1945, fl.

48191 RGS, Iraí, NWU, in silva pluviali ad arborem, 11.1949, fr. deciso, leg. K. Emrich.

Habit: Rosette rather irregular; leaves about 8 cm, stalk up to 1 m high.

Habitat: Interior of the dense rain forest, about 10 m from soil.

Distribution in RGS: Northwestern rain forest belt only.

General distribution: Sta. Catarina, RGS, Misiones.

Aechmea caudata Lindm.,

Sv. Akad. Handl. 24, n. 8 (1891) 29 pl. 6; Smith, Brom. Braz. (1955) 211; Reitz, Sellowia 7 (1956) 135. — *A. platzmannii* Wittm., Bot. Jahrb. 13, Beibl. 29 (1891) 2,12; Mez, FB 3,3 (1892) 318; idem, PR IV 32 (1935) 125.

29867 RGS, Kappesberg p. Montenegro, NES, ad arbores in silva, 21.5.1945, fl., leg. E. Friderichs SJ.

54241 RGS, P. Alegre, NEL, culta, 1953, fl.

Habit: Rosette, up to 70 cm high.

Habitat: Epiphytic in the rain forest.

Distribution in RGS: Northeastern rain forest and coastal strip.

General distribution: From Espírito Santo to RGS.

Aechmea distichantha Lem.,

Jard. Fleur. 3 (1853) plate 269; Mez, PR IV 32 (1934) 149, fig. 39; Castellanos, GSPA 3 (1945) 162, tab. 32; Smith, Brom. Braz. (1955) 213; Reitz, Sellowia 7 (1956) 126.

48347 SC, Figueiredo p. Bom Retiro, ad arborem in silva, 28.12.1949, fr. antiquo, leg. R. Reitz 3509, det. L. B. Smith.

51163 Paraná, Purunã p. Campo Largo, in rupestribus, 18.9.1949, fl., leg. G. Hatschbach 1566, det. L. B. Smith (var. *glaziovii* L. B. Smith).

60295 SC, Itapiranga ad fl. Uruguay, in rupestribus ad flumen, 3.1.1957, fl. (var. *distichantha*).

61256 SC, ibidem, ad arborem in silva, 7.10.1957, fl.

Habit: Rosette, up to 1 m high.

Habitat: Terrestrial, or epiphytic near the soil.

Distribution in RGS: Northwestern frontier only.

General distribution: With varieties, from Central Brazil to Uruguay; Bolivia, Paraguay, northern and northeastern Argentina.

***Aechmea gamosepala* Wittm.,**

Engl. Bot. Jahrb. 13, Beibl. 29 (1891) 13; Mez, FB 3,3 (1892) 324, tab. 67; idem, PR IV 32 (1935) 128; Smith, Brom. Braz. (1955) 213; Reitz, Sellowia 7 (1956) 126. — Chevalieria Thyrsigera (Speg.) Mez, PR IV 32 (1934) 95. — *Aechmea thyrsigera* Speg., Physis 3 (1917) 45.

31864 SC, Sombrio p. Aranguá, ad arbores in silva, 15.1.1945, fl., leg. R. Reitz 1222.

49446 RGS, Taimbesinho p. S. Francisco de Paula, NEH, ad arbores in araucarieto, 18.12.1950, fl.

50168 RGS, ibidem, 21.2.1951, fr. antiquo, det. L. B. Smith.

Habit: Rosette; leaves about 50 cm long, stalk up to 80 cm high.

Habitat: Epiphytic, near the soil.

Distribution in RGS: Northeastern coast and Highlands.

General distribution: From S. Paulo to RGS.

***Aechmea nudicaulis* (L.) Gris.**

Fl. Brit. West. Ind. 3,3 (1864) 503; Mez, FB 3,3 (1892) 356; idem, PR IV 32 (1935) 160; Smith, Brom. Braz. (1955) 219; Reitz, Sellowia 7 (1956) 126. — *Bromelia nudicaulis* L., Spec. Plant. (1753) 286.

49791 RGS, Lagoa dos Quadros p. Torres, NEC, ad arbores in silva paludosa, 18.1.1951, fr. submaturo, det. Smith (var. *cuspidata* Bak.).

Habit: Rosette, up to 40 cm high.

Habitat: Swampy, open forest, epiphytic.

Distribution in RGS: Northeastern sea coast.

General distribution: From Bahia to RGS.

***Aechmea recurvata* (Klotzsch) L. B. Smith,**

Contr. Gray Herb. 98 (1932) 5; Mez, PR IV 32 (1935) 194; Smith, Brom. Braz. (1955) 216. Reitz, Sellowia 7 (1956) 127. — *Macrochordium recurvatum* Klotzsch, Allgem. Gartenz. 24 (1856) 393. — *Aechmea legrelliana* Bak., Handb. Bromel. (1889) 19; Mez, FB 3,3 (1892) 349; Herter, Flor. Urug. (1930) 45.

- 93** RGS, Vila Manresa p. P. Alegre, NEL, ad rupes, 16.9.1932, fl.
6418 RGS, sine loco, sine die, ster.
7424 RGS, S. Leopoldo, NEL, ad rupes, 1907, fl., leg. F. Theissen SJ.
29450 RGS, Vila Manresa p. P. Alegre, NEL, in rupestribus dumosis ad rupes, 4.10.1945, fl.
31865 SC, Sombrio p. Araranguá, ad rupes in silvula, 3.9.1945, fl., leg. R. Reitz 1223.
33136 RGS, Vila Manresa p. P. Alegre, NEL, ad rupes in silvula, 12.12.1946, fl.
34112 RGS, ibidem, 1933, fl., leg. C. Orth SJ.
34628 RGS, Fazenda da Ronda p. Vacaria, NEH, in rupestribus apricis, 30-12-1946, fl.
39223 RGS, Chácara Weber p. Itapoan, NEL, ad rupes, 18.12.1948, fl.
48925 RGS, Granja Neugebauer p. Itapoan, NEL, ad rupes apricas, 11.10.1950, fl., det. L. B. Smith (var. recurvata).
52890 RGS, Fortaleza p. Montenegro, NEL, in rupestribus dumosis, 15.12.1952, fl.
58732 RGS, Estação de Silvicultura p. Sta. Maria, CL, ad arbores in silvula campestri, 3.2.1956, ster., leg. O. Camargo 214.
58737 RGS, ibidem, 3.2.1956, fl., leg. O. Camargo 206.
59687 RGS, Farroupilha, NEH, in silva ad arbores, 28.5.1956, fl., leg. O. Camargo 694.
62301 RGS, ibidem, 19.9.1957, fl., leg. O. Camargo 1810.
62838 RGS, Taquari, NEL, in silva ad arbores, 10.12.1957, fl., leg. O. Camargo 3043.

Habit: Rosette, up to 40 cm high; leaves reflexed.

Habitat: On rocks and at trees, often covering them in extense colonies.

Distribution in RGS: Very common throughout the whole of the area.

General distribution: From Paraná to Uruguay.

BILLBERGIA Thunb.

Billbergia distachya (Vell.) Mez,

FB 3,3 (1892) 417; idem, PR IV 32 (1935) 196; Smith, Brom. Braz. (1955) 240. Reitz, Sellowia 7 (1956) 128. — Tillandsia distachya Vell., F. Flum. 3 (1827) Tab. 141.

51283 RGS, Iraí, NWU, in silva ad arbores, culta in P. Alegre, 1950, fl., leg. O. Resch.

Habit: Rosette, about 60 cm high.

Habitat: Epiphytic in the rain forest.

Distribution in RGS: Upper Uruguay rain forest belt only.

General distribution: From Minas Gerais to RGS.

Billbergia nutans H. Wendl.,

ex Regel, Gartenfl. 18 (1869) 162, pl. 617; Mez, FB 3,3 (1892) 419; idem, PR IV 32 (1935) 197; Castellanos, GSPA 3 (1945) 171, tab. 36; Smith, Brom. Braz. (1955) 242; Reitz, Sellowia 7 (1956) 128.

2241 RGS, Kappesberg p. Montenegro, NES, in silva ad rupes, 13.6.1937, fl.

26771 RGS, Cêro Largo p. S. Luiz, NWH, in silva ab arbores, 1944, fl., leg. E. Friderichs SJ.

33684 Paraná, in silva ad arbores, 7.1945, fl., leg. G. Hatschbach.

35704 RGS, S. Leopoldo, NEL, in silva, epiphytica, 20.11.1946, fl., leg. E. Henz SJ.

42023 RGS, Reutersberg p. S. Leopoldo, NES, in silva ad rupes, 25.5.1949, fl., det. L. B. Smith (var. *nutans*).

42935 RGS, Schwabenschneis p. N. Hamburgo, NES, in silva ad arbores, 12.8.1949, fl.

43002 RGS, Pareci p. Montenegro, NEL, ad rupes in silvula, 17.8.1949, fl.

43077 RGS, Linha Bonita p. Montenegro, NES, ad rupes in silva, 24.8.1949, fl.

43155 RGS, Vila Oliva p. Caxias, NEH, in araucarieto ad arbores, 28.8.1949, fl.

43450 RGS, Kappesberg p. Montenegro, NEL, in silva ad arbores, 11.9.1949, fl.

47240 RGS, ibidem, 4.7.1950, fl.

47287 RGS, Vila Oliva p. Caxias, NEH, in araucarieto ad arbores, 12.7.1950, fl.

48022 RGS, Pinhal p. Montenegro, NES, in silva ad arbores, 20.5.1947, fl., leg. A. Sehnem SJ 2838.

48608 RGS, ibidem, 20.5.1947, fl., leg. A. Sehnem SJ 2839.

53340 Paraná, Cascavel, in silva ad arbores, 10.1.1953, fl.

58731 RGS, Estação de Silvicultura p. Sta. Maria, CL, in silva ad arbores, 3.2.1956, ster., leg. O. Camargo 215.

59658 RGS, Farroupilha, NEH, in araucarieto ad arbores, 26.9.1956, fl., leg. O. Camargo 814.

60442 RGS, Estação de Silvicultura p. Sta. Maria, CL, in silva, epiphytica, 10.4.1956, ster., leg. O. Camargo 469.

60869 RGS, Sta. Rita p. Farroupilha, NEH, in araucarieto ad arbores, 8.7.1957, fl., leg. O. Camargo 1644.

Habit: Rosette, leaves up to 75 cm long, hanging in their upper half.

Habitat: Interior of the rain forest, epiphytic or on rocks.

Distribution in RGS: Common throughout the whole of the rain forest area.

General distribution: From Rio de Janeiro to Uruguay; Paraguay, northeastern Argentina.

Billbergia zebrina (Herb.) Lindl.,

Bot. Reg. 13 (1827) tab. 1068; Mez, FB 3,3 (1892) 393; idem, PR IV 32 (1935) 184; Castellanos, GSPA 3 (1945) 173, tab. 37; Smith, Brom. Braz. (1955) 247; Reitz, Sellowia 7 (1956) 128. — *Bromelia zebrina* Herb., Bot. Mag. 53 (1826) tab. 2686.

1524 RGS, S. Leopoldo, NEL, in silva campestri ad arbores, 20.10.1934, fl., leg. C. Orth SJ.

25159 RGS, ibidem, 1907, fl., leg. F. Theissen SJ.

34109 RGS, ibidem, 1934, fl., leg. C. Orth SJ.

62839 RGS, Taquari, NEL, in silva, 10.12.1957, fl., leg. O. Camargo 3041.

Habit: Narrow rosette, often more than 1 m high.

Habitat: Epiphytic in the higher level of the rain forest.

Distribution in RGS: All collections from the northeastern Lowlands, where it is fairly common.

General distribution: From Minas Gerais to RGS; Misiones.

BROMELIA L.

Bromelia antiacantha Bertol.,

Virid Bonon. 4 (1824); Smith, Brom. Braz. (1955) 174; Reitz, Sellowia 7 (1956) 129. — *B. fastuosa* Lindl., Coll. fasc. (1821) pl. 1 (see Smith, l. c. 255); Mez, FB 3,3 (1892) 193; Herter, Flor. Urug. (1930) 45; Mez, PR IV 32 (1935) 30.

7425 RGS, S. Leopoldo, NEL, in silvula campestri subpaludosa, 1907, fl., leg. F. Theissen SJ.

31868 SC, Sombrio p. Araranguá, in silvula humida, 30.8.1945, fl., leg. R. Reitz 1188.

34111 RGS, Vila Manresa p. P. Alegre, NEL, in silvula campestri, 1933, fl., leg. C. Orth SJ.

42030 RGS, Fião p. S. Leopoldo, NEL, in silvula ad rivum, 21.5.1949, fr. maturo.

49201 RGS, Esteio p. S. Leopoldo, NEL, in silvula humida, 20.11.1950, fl., det. L. B. Smith.

56259 RGS, Vila Manresa p. P. Alegre, NEL, in campestribus dumosis, 19.11.1954, fl.

58985 RGS, Estação de Silvicultura p. Sta. Maria, CL, in humidis dumosis, 5.1.1956, folium, leg. O. Camargo 153.

59214 RGS, Vila Manresa p. P. Alegre, NEL, in humidis dumosis, 22.1.1955, fl.

62917 RGS, Taquari, NEL, in humidis dumosis, 10.12.1958, fl, leg. O. Camargo 3020

Habit: Large rosette, leaves up to 1,5 m long; terrestrial.

Habitat: Wet to swampy, shrubby Campos.

Distribution in RGS: Campos of the southern half of the State.

General distribution: From Rio de Janeiro to RGS and Uruguay.

Bromelia balansae Mez,

FB 3,3 (1891) 191; idem, PR IV 32 (1934) 29; Castellanos, GSPA 3 (1945) 147, tab. 25; Smith, Brom. Braz. (1955) 175.

52791 RGS, Palmeira, NWH, in silvula campestri, 19.1.1953, fl., det. L. B. Smith.

Habit: Same as the preceding.

Habitat: More or less dry, rocky Campos woodlets.

Distribution in RGS: Northwesternmost Highlands only, locally common.

General distribution: From Minas Gerais to RGS; Paraguay, northeasternmost Argentina.

DYCKIA Schult. f.

Dyckia maritima Bak.,

Handb. Brom. (1889) 136; Mez, FB 3,3 (1892) 499; Smith, Brom. Braz. (1955) 62; Reitz Sellowia 7 (1956) 130. — *Prionophyllum maritimum* (Bak.) Mez, in DC. Monogr. Phaner. 9 (1896) 542; idem, PR IV 32 (1935) 351.

1352 RGS, ad montem das Cabras p. S. Leopoldo, NEL, ad rupes apricas, 10.10.1934, fl.

10848 RGS, Nova Petrópolis, NES, ad rupes, 1.1943, fr. juvenili.

48185 RGS, Seberi p. Palmeira, NWH, in rupestribus, 27.11.1949, fr. juvenili, leg. K. Emrich.

56494 RGS, Torres, NEC, in rupestribus nudis, 19.1.1955, fl.

Habit: Rosette, leaves up to 50 cm long, very stiff and fleshy; stalk up to 2 m high.

Habitat: Bare rock.

Distribution in RGS: Through the whole of the northern half of the State, especially on bare rock outcrops of the Serra Geral.

General distribution: Sta. Catarina and RGS.

Dyckia distachya Hassl.,

Ann. Cons. Jard. Bot. Genève 20 (1919) 308; Mez, PR IV 32 (1935) 339; Castellanos, GSPA 3 (1945) 228, tab. 62; Smith, Brom. Braz. (1955) 68; Reitz, Sellowia 7 (1956) 130.

4643 RGS, Marcelino Ramos, NWU, ad rupes in flumine, 16.2.1941, fr.

34626 RGS, Fazenda da Ronda p. Vacaria, NEH, ad flumen in rupibus, 30.12.1946, fl.

51867 RGS, Passo da Guarda p. Bom Jesus, NEH, ad rupes pr. flumen, 15.1.1952, fr.

Habit: Stiff rosette, leaves about 30 cm long, stalk sometimes more than 1 m high.

Habitat: Bare rocks, sometimes in the rapids of the Uruguay River.

Distribution in RGS: Along the Upper Uruguay River only.

General distribution: SC and RGS; Paraguay; Misiones.

Dyckia remotiflora Otto et Dietr.,

Allg. Gartenz. 1 (1833) 129; Mez, FB 3,3 (1892) 499; Herter (1930) 45; Smith, Ostenia (1933) 360; Mez, PR IV 32 (1935) 335; Castellanos, GSPA 3 (1945) 237, tab. 66.

var. **montevidensis** (C. Koch) L. B. Smith,

Arq. Bot. Est. S. Paulo, n. ser. 1 (1943) 108; idem, Brom. Braz. (1955) 64. — *Pyckia montevidensis* C. Koch, Ind. sem. hort. berol. 1873, app. 4,4; Mez, FB 3,3 (1892) 489; Herter, Flor. Urug. (1930) 45; Mez, PR IV 32 (1935) 335; Castellanos, GSPA 3 (1945) 239, tab. 67.

10853 RGS, Vila Manresa p. P. Alegre, NEL, in saxosis dumosis, 9.1943, fl.

26164 RGS, Fazenda do Jarau p. Quaraí, S'W, in rupestribus dumosis.

26813 RGS, Vila Manresa p. P. Alegre, in saxosis alte graminosis, 10.1944, fl.

27918 RGS, Morro da Polícia p. P. Alegre, NEL, in saxosis alte graminosis, 10.1944, fl.

32793 RGS, Vila Manresa p. P. Alegre, NEL, in saxosis alte graminosis, 12.12.1945, fl.

35696 RGS, S. Leopoldo, NEL, in saxosis dumosis siccis, 20.11.1946, fl., leg. E. Henz SJ.

39224 RGS, Chácara Weber p. Itapoan, NEL, in saxosis alte graminosis, 18.12.1948, fl.

Habit: Stiff rosette; leaves up to 50 cm long, stalk up to 85 cm high.

Habitat: Dry, stony, grassy and shrubby Campos.

Distribution in RGS: Campos of the southern half of the State.

General distribution: RGS, Uruguay, Entrerrios.

Dyckia selloa (C. Koch) Bak.,

Handb. Bromel. (1889) 136; Smith, Bromel. Braz. (1955) 61. — *Priophyllum selloum* C. Koch, Ind. sem. hort. berol. 1873, app. 4,7; Mez, FB 3,3 (1892) 500, tab. 92; idem, PR IV 32 (1935) 349.

29986 RGS, Caracol, NEH, ad rupes apricas, 29.1.1936, ster., leg. K. Emrich.

33270 RGS, ibidem, ad rupes apricas, 23.2.1946, fl., leg. K. Emrich.

34113 RGS, ad montem das Cabras p. S. Leopoldo, NEL, ad rupes, 1934, fl., leg. C. Orth SJ.

37242 RGS, Chácara Freiersleben p. P. Alegre, NEL, ad rupes apricas, 13.12.1947, fl., leg. K. Emrich.

39976 RGS, Morro das Abertas p. P. Alegre, NEL, ad rupes nudas, 9.12.1948, fl.

40941 RGS, ad montem das Cabras p. S. Leopoldo, NEL, ad rupes, 8.4.1949, fl.

52805 RGS, Caracol p. Canela, NEH, ad rupes, 15.2.1953, fl., fr.

Habit: Same as *D. maritima* from which it is not easily distinguishable.

Habitat: Bare rock outcrops.

Distribution in RGS: Eastern half of Rio Grande do Sul.

General distribution: From RGS to Uruguay.

Dyckia vaginosa Mez,

FB 3,3 (1894) 490; idem, PR IV 32 (1935) 335; Smith, Brom. Braz. (1955) 65. Herter, Flor. Urug. (1930) 45.

55 RGS, Vila Manresa p. P. Alegre, NEL, in rupestribus subhumidis, 16.11.1933, fl.

30626 RGS, ibidem, 27.11.1945, fl.

34114 RGS, ibidem, 1935, fl., leg. C. Orth SJ.

37004 RGS, ad coemeterium p. P. Alegre, NEL, in siccis rupestribus, 30.10.1947, fl., leg. K. Emrich.

38728 RGS, Vila Manresa p. P. Alegre, NEL, in rupestribus temporaliter humidis, 1.12.1948, fl.

43682 RGS, Morro das Abertas p. P. Alegre, NEL, in rupestribus humidis, 3.10.1949, fl.

48832 RGS, Vila Manresa p. P. Alegre, NEL, in humidis rupestribus, 22.9.1950, fl. (Det. L. B. Smith: *D. choristaminea* Mez, quod videtur erroneum).

Habit: Rosette small and very dense, leaves about 10 cm long, stiff, reflexed, stalk 10–40 cm long.

Habitat: Bare, more or less wet rocks.

Distribution in RGS: Surroundings of P. Alegre only.

General distribution: From S. Paulo to Uruguay.

NIDULARIUM Lem.

Nidularium innocentii Lem.,

Ill. Hortic. 2 (1855) Misc. 13; Mez, FB 3,3 (1892) 215; idem, PR IV 32 (1935) 55; Smith, Brom. Braz. (1955) 167; Reitz, Sellowia 7 (1956) 131.

6432 SC, S. Ludgero p. Tubarão, in silva terrestris, 3.1.1941, fl., leg. C. Orth SJ.

30385 SC, Maracanã p. Araranguá, in silva terrestris et epiphytica, 11.3.1944, fl., leg. R. Reitz 1083, det. L. B. Smith.

31569 SC, Sombrio p. Araranguá, in silva humida terrestris, 3.2.1946, fl.

49790 RGS, Lagoa dos Quadros p. Torres, NEC, in silva terrestris et epiphytica, 18.1.1951, fl.

49790 RGS, ibidem, 28.1.1951, fl.

Habit: Rosette, about 50 cm high.

Habitat: Interior of wet forest, terrestrious or epiphytic at the basis of the trees.

Distribution on RGS: Northeastern coast strip only.

General distribution: From Espírito Santo to RGS.

Nidularium procerum Lind.,

Kongl. Sv. Vet. Ak. Handl. 24, n. 8 (1891) 16, tab. 1, fig. 1–7; Mez, PR IV 32 (1935) 61; Smith, Brom. Braz. (1955) 181; Reitz, Sellowia 7 (1956) 131. — *Nidularium prophyreum* Mez, FB 3,3 (1891) 219.

30384 SC, Peroba p. Araranguá, in silva, terrestris et epiphytica, 5.4.1944, fl., leg. R. Reitz 1079, det. L. B. Smith.

Habit: Rosette; stalk about 1 m high.

Habitat: Interior of the forest, terrestrious or epiphytic at the basis of the trunks.

Distribution in RGS: To be collected near the northeastern sea coast.

General distribution: From Espírito Santo to RGS.

TILLANDSIA L.

Tillandsia aeranthos (Lois.) L. B. Smith,

Lilloa 9 (1943) 200; Castellanos, GSPA 3 (1945) 286, tab. 88; Smith, Brom. Braz. (1955) 87; Reitz, Sellowia 7 (1956) 132. — *Pourretia aeranthos* Lois. In Mordant de Launay. Herb. Gen. Amat. 5 (1821) tab. 304. — *Tillandsia dianthoidea* Rossi, Cat. Modoet. 1825, 79, tab. 1; Mez FB 3,3 (1892) 604; Herter, Flor. Urug. (1930) 45; Mez, PR IV 32 (1935) 565.

631 RGS, Vila Manresa p. P. Alegre, NEL, ad arbores in silvula campestri, 5.9.1934, fl., leg. C. Orth SJ.

7415 RGS, S. Leopoldo, NEL, ad arbores in silvula, 1907, fl., leg. F. Theissen SJ.

29453 RGS, Vila Manresa p. P. Alegre, NEL, ad arbores in silvula, 4.10.1945, fl.

29713 RGS, Kappesberg p. Montenegro, NES, in silva ad arbores, 20.9.1945, fl., leg. A. Bruxel SJ.

30067 RGS, Vila Manresa p. P. Alegre, NEL, in silvula ad arbores, 6.1945, fl.

33522 RGS, S. Leopoldo, NEL, in silvula campestri ad arbores, 17.7.1946, fl., leg. E. Henz SJ.

33928 RGS, Vila Manresa p. P. Alegre, NEL, in silva campestri ad arbores, 18.9.1946, fl.

34115 RGS, ibidem, 1933, fl., leg. C. Orth SJ.

38104 RGS, ibidem, 20.9.1948, fl.

42611 RGS, Pareci p. Montenegro, NEL, in silva rupestri ad arbores, 18.7.1949, fl.

48770 RGS, Osório, NEC, in silvula arenosa ad arbores, 11.9.1950, fl., det. L. B. Smith.

52960 RGS, S. Francisco de Paula, NEH, in araucarieto aperto, 9.9.1952, fl.

Habit: In nests, stalk 10–30 cm high.

Habitat: Epiphytic in open forests and woodlets.

Distribution in RGS: Over the whole of the area.

General distribution: SC to RGS and Ur; Entrerrios, B. Aires.

Tillandsia crocata (E. Morr.) Bak.,

Jour. Bot. 25 (1887) 214; Mez, FB 3,3 (1894) 607; PR IV 32 (1935) 585; Castellanos, GSPA 3 (1945) 327, tab. 110; Smith, Brom. Braz. (1955) 90; — *Phytarrhiza crocata* E. Morr., Belg. Hort. 30 (1880) 87.

1630, RGS, ad montem Steinkopf p. S. Leopoldo, NEL, ad rupes in silvula, 13.9.1935, fl., leg. C. Orth SJ.

33621 Paraná, ad rupes, 4.1946, fl., leg. G. Hatschbach.

34079 RGS, Vila Manresa p. P. Alegre, NEL, in silvula campestri ad arbores, 1933, fl.

34116 RGS, ad montem Steinkopf p. S. Leopoldo, NEH, ad rupes apricas, 1933, fl., leg. C. Orth, SJ; det. L. B. Smith.

60533 RGS, Pelotas, NEC, ad arbores, 5.1950, leg. Gomes.

Habit: Growing in nests; individual plants 10–30 cm high.

Habitat: On rocks and trees, always in well exposed places.

Distribution in RGS: All findplaces in the eastern half of the State, but presence over the whole of the area probable.

General distribution: From Rio de Janeiro to RGS; Bolivia, Entrerrios, Uruguay.

***Tillandsia gardneri* Lindl.,**

Bot. Reg. 28 (1842) tab. 43; Mez, FB 3,3 (1892) 590; idem, PR IV 32 (1935) 568; Smith, Brom. Braz. (1955) 78; Reitz, Sellowia 7 (1956) 132.

30388 SC, Sombrio p. Araranguá, in silvula campestri ad arbores, 11.4.1944, fl., leg. R. Reitz 1076, det. L. B. Smith.

Habit: Growing in nests; individual plants about 20 cm high.

Habitat: Epiphytic.

Distribution in RGS: To be found at the northeasternmost sea coast.

General distribution: From Piauí to RGS.

***Tillandsia geminiflora* Brongn.,**

in Duperrey, Voy. Coq. Bot. (1829) 186; Mez, FB 3,3 (1892) 594; idem, PR IV 32 (1935) 569; Castellanos, GSPA 3 (1945) 289, tab. 90; Smith, Brom. Braz. (1955) 79; Reitz, Sellowia 7 (1956) 132.

54 RGS, Vila Manresa p. P. Alegre, in silvula epiphytica, 16.10.1933, fl., leg. C. Orth SJ.

7419 RGS, S. Leopoldo, NEL, in silvula epiphytica, 1907, fl., leg. F. Theissen SJ.

7420 RGS, ibidem, leg. F. Theissen SJ.

7423 RGS, ibidem, leg. F. Theissen SJ.

83266 RGS, Montserrat p. P. Alegre, NEL, in silvula epiphytica, 1941, fl., leg. K. Emrich.

30625 RGS, Vila Manresa p. P. Alegre, NEL, in silva epiphytica, 27.11.1945, fl.

- 34119** RGS, ibidem, 1933, fl., leg. C. Orth SJ.
- 35394** RGS, S. Leopoldo, NEL, in silva campestri, epiphytica, 27.9.1946, fl., leg. W. Weber SJ.
- 38541** RGS, Morro da Polícia p. P. Alegre, NEL, in silva campestri, epiphytica, 4.11.1948, fl., det. L. B. Smith (v. geminiflora).
- 43807** RGS, Pareci p. Montenegro, NEL, in silva rupestri ad arbores, 10.10.1949, fl.
- 48058** RGS, Kappesberg p. Montenegro, NES, in silva ad arbores, 1.11.1948, fl., leg. A. Sehnem 3528.
- 48626** RGS, Pareci p. Montenegro, NEL, in silva ad arbores, 15.10.1945, fl., leg. A. Sehnem SJ 1448, det. L. B. Smith (var. geminiflora).
- 56198** RGS, Fazenda do Arroio p. Osório, NEC, in silvula arenosa, epiphytica, 3.10.1954, fl.
- 57532** RGS, Vila Manresa p. P. Alegre, NEL, in silva ad arbores, 19.11.1955, fl.
- 62299** RGS, Montenegro, NEL, in silva ad arborem, 19.9.1957, fl., leg. O. Camargo 1808.
- 62694** RGS, P. Alegre, NEL, in silvula epiphytica, 2.11.1957, fl., leg. O. Camargo 2450.

Habit: Growing in dense nests; individual plants about 20 cm high.

Habitat: Campos woodlets and upper branches of the rain forest.

Distribution in RGS: All collections from the northeastern quadrant, but presence probable over the whole of the area.

General distribution: From Espírito Santo down to Uruguay; from Matogrosso and Paraguay to Misiones.

Tillandsia lorentziana Gris.,

Göft. Abh. 19 (1874) 271; Mez, PR IV 32 (1935) 529; Castellanos, GSPA 3 (1945) 262, tab. 78; Smith, Brom. Braz. (1955) 78.

1722 RGS, in summo monte Sapucaia p. S. Leopoldo, NEL, ad rupes apricas, 2.11.1934, fl., leg. C. Orth SJ.

34080 RGS, ibidem, 1933, fl., leg. C. Orth SJ, det. L. B. Smith.

52340 RGS, in summo monte Jarau p. Quaraí, SW, ad rupes apricas, 1.1945, fl., det. L. B. Smith.

Habit: Growing in extense patches; individual plants up to 40 cm high.

Habitat: On bare, exposed rocks.

Distribution in RGS: Southern half of the State, on widely separated stations.

General distribution: From Paraná to Uruguay; Matogrosso, Paraguay, Bolivia, northern Argentina.

Tillandsia mallemonitii Glaziou ap. Mez,

FB 3,3 (1894) 608, tab 14, fig. 1; idem, PR IV 32 (1935) 584; Smith, Brom. Braz. (1955) 90; Reitz, Sellowia 7 (1956) 133.

515 RGS, Vila Manresa p. P. Alegre, NEL, in silvula ad arbores, 5. 1.1933, fl., leg. C. Orth SJ.

760 RGS, ibidem, 5.1.1934, fl., leg. C. Orth SJ.

7422 RGS, S. Leopoldo, NEL, in silva ad ramos, 1907, fl., leg. F. Theissen SJ.

7609 SC, S. Ludgero p. Tubarão, in silva ad arbores, 3.1.1941, fr. aperto, leg. C. Orth SJ.

10847 RGS, Tannenwald p. S. Leopoldo, NES, in araucarieto ad ramos, 1.1943, fl.

25380 SC, Florianópolis, in silvula epiphytica, 1.3.1943, fl.

31083 RGS, Vila Oliva p. Caxias, NEH, in araucarieto ad ramos, 5. 1.1946, fl.

48020 RGS, Kappesberg p. Montenegro, NES, in silva ad ramos, 4. 1.1947, fl. leg. A. Sehnem SJ 2431.

49801 RGS, Lagoa dos Quadros p. Torres, NEC, in ripariis ad arbores, 18.1.1951, fl., det. L. B. Smith.

51770 RGS, Morro Grande p. Osório, NEC, ad arbores in silvula, 10. 1.1952, fl., det. L. B. Smith.

61909 RGS, Taquari, NEL, ad ramos in silva, 16.12.1957, fl., fr., leg. O. Camargo 2998.

Habit: Growing in large stands; individual plants up to 40 cm long; flowers blue.

Habitat: Preferably at high branches in rain forests and Araucaria woods.

Distribution in RGS: All findplaces in the northeastern quadrant.

General distribution: From Piauí to RGS.

Tillandsia pulchella Hook.,

Exot. Fl. (1825) tab. 154; Mez, FB 3,3 (1892) 601; idem, PR IV 32 (1935) 563; Castellanos, GSPA 3 (1945) 283, tab. 87; Smith, Brom. Braz. (1955) 84; Reitz, Sellowia 7 (1956) 133.

987 RGS, Vila Manresa p. P. Alegre, NEL, in silvula ad arbores, 4. 3.1934, leg. C. Orth SJ.

7417 RGS, S. Leopoldo, NEL, in silva ad arbores, 1907, fl., leg. F. Theissen SJ.

25182 RGS, ibidem, 1907, fl., leg. F. Theissen SJ.

- 30389** SC, Sombrio p. Araranguá, in silvula ad arbores, 27.7.1944, fl., leg. R. Reitz 1176, det. L. B. Smith.
- 31084** RGS, Vila Oliva p. Caxias, NEH, in araucarieto ad arbores, 5.1.1946, fr. aperto.
- 33049** RGS, Pareci p. Montenegro; NEL, in silva ad arbores, 28.12.1945, fl., leg. E. Henz SJ.
- 34117** RGS, Vila Manresa p. P. Alegre, NEL, ad arbores in silvula, 1933, fl., leg. C. Orth SJ.
- 36536** RGS, Cambará p. S. Francisco de Paula, NEH, in araucarieto ad arbores, 2.1948, fr.
- 54131** RGS, Fortaleza p. Montenegro, NEL, in silvula rupestri ad arbores, 15.12.1952, fl.
- 62345** RGS, Farroupilha, NEH, in silva ad arbores, 12.9.1958, fl., leg. O. Camargo 1691.

Habit: Growing in large nests; individual plants contorted, more or less hanging, up to 40 cm long.

Habitat: Epiphytic at the upper branches of the trees in rain and Araucaria forest; Camps woodlets.

Distribution in RGS: All collection from the northeastern quadrant.

General distribution: From the West Indies to RGS, Paraguay and northern Argentina.

var. **surinamensis** (Miq.) Mez,

FB 3,3 (1894) 603; Smith, Brom. Braz. (1955) 87; Reitz, Sellowia 7 (1956) 133. — *T. surinamensis* Miq., ex Mez in FB 3,3 (1894) 603 — *T. pulchella* Mez, FB 3,3 (1894); idem, PR IV 32 (1935) 565. — *T. firmula* Mez, FB 3,3 (1894) 603.

- 10850** RGS, S. Leopoldo, NEL, in silvula campestri ad arbores, 3.1941, fr. antiquo, leg et det. E. Leite 2609.
- 30387** SC, Peroba p. Araranguá, in silva ad arbores, 5.4.1944, fl., leg. R. Reitz 1080, det. L. B. Smith.
- 31570** SC, ibidem, 4.2.1946, fl.
- 34118** RGS, Vila Manresa p. P. Alegre, NEL, in silva compestri ad arbores, 1933, fl., leg. C. Orth SJ.
- 54200** RGS, ibidem, 1952, fl., leg. P. Buck SJ.
- 59474** RGS, Farroupilha, NEH, in araucarieto ad arbores, 6.9.1956, fl., leg. O. Camargo 748.
- 63571** RGS, Fazenda do Arroio p. Osório, NEC, in silva, 23.1.1958, fl.

Habit: Very similar to the precedent but apparently always smaller.

Habitat: Epiphytic in sunny places.

Distribution in RGS: All collections from the northeastern quadrant.

General distribution: Same as the type variety.

Tillandsia recurvata (L.) L.,

Spec. Plant. ed. 2 (1762); Mez, FB 3,3 (1892) 609; Herter, Flor. Urug. (1930) 45; Mez, PR IV 32 (1935) 591; Castellanos, GSPA 3 (1945) 345, tab. 115; Smith, Brom. Braz. (1955) 91 — *Renealmia recurvata* L., Spec. Plant. (1753) 287.

52 RGS, Vila Manresa p. P. Alegre, NEL, in silvula campestri ad ramos, 5.10.1932, fl., fr., leg. C. Orth SJ.

26119 RGS, Fazenda do Jarau p. Quarai, SW, in silvula campestri ad arbores, 1.1945, fl., fr., det. L. B. Smith.

34120 RGS, Vila Manresa p. P. Alegre, NEL, in silvula ad arbores, 1933, fl., fr., leg. C. Orth SJ, det. L. B. Smith.

41932 RGS, Esteio p. S. Leopoldo, NEL, in silva campestri ad ramos siccos, 11.6.1949, fr. aperto.

Habit: Growing in dense nests entirely covering the branches; individual plants 5–10 cm high.

Habitat: Epiphytic, preferably at the high branches in the rain and Araucaria forests.

Distribution in RGS: Over the whole of the area, locally not frequent.

General distribution: From southern USA to Uruguay, central Argentina and Chile.

Tillandsia stricta Sol.,

Bot. Mag. 37 (1813) tab. 1529; Mez, FB 3,3 (1892) 519; idem, PR IV 32 (1935) 561, fig. 106; Castellanos, GSPA 3 (1945) 280, tab. 85; Smith, Brom. Braz. (1955) 82; Reitz, Sellowia 7 (1956) 133.

56 RGS, Vila Manresa p. P. Alegre, NEL, in silvula ad arbores, 11.10.1933, fl., leg. C. Orth SJ.

7414 RGS, S. Leopoldo, NL, in silva campestri ad arbores, 1907, fl., leg. F. Theissen SJ.

8808 RGS, Bom Jesus, NEH, in araucarieto ad arbores, 15.1.1942, fl.

9680 RGS, Tupanciretan, NWH, in silva campestri ad arbores, 28.1.1942, fl.

10849 RGS, Sta. Maria, CL, in silvula ad arbores, 1943, fl., leg. A. Heidler SJ.

28795 RGS, Caracol p. Canela, NEH, in araucarieto ad arbores, 2.1945, fr. submaturo, leg. K. Emrich.

30689 RGS, Kapesberg p. Montenegro, NES, in silva ad arbores, 25.9.1945, fl., leg. E. Friderichs SJ.

31682 SC, Sombrio p. Araranguá, in silvula arenosa, fl.

32571 RGS, Pareci p. Montenegro, NEL, in silva pluviali ad ramos, 20.10.1945, fl., leg. E. Henz SJ.

32595 RGS, ibidem, 25.11.1945, fl., leg. E. Henz SJ.

- 34627** RGS, Fazenda da Ronda p. Vacaria, NEH, ad arbores in araucarieto, 30.12.1946, fl.
- 35380** RGS, S. Leopoldo, NEL, in silva campestri ad arbores, 1.19.1946, L. F. Toillier SJ.
- 48059** RGS, Kappesberg p. Montenegro, NES, in silva ad ramos altos, 15.11.1948, fl., leg. A. Sehnem SJ.
- 51527** RGS, Passo do Socorro p. Vacaria, in silva ad arbores, 26.12.1952, fl., det. L. B. Smith (v. stricta).
- 51744** RGS, Palmares ad Lagoa dos Patos, NEL, in silvula campestri ad arbores, 10.1.1952, fl., det. L. B. Smith (v. stricta).
- 52232** RGS, ibidem, 1.1952, fl., leg. E. Henz SJ.
- 52901** RGS, Fortaleza p. Montenegro, NEL, in silvula rupestri ad arbores, 15.12.1952, fl.
- 62938** RGS, Taquari, NEL, in silva ad arbores, 10.12.1957, fl., leg. O. Camargo 3062.

Habit: Growing in nests; individual plants 10–30 cm high.

Habitat: Epiphytic in sunny places.

Distribution in RGS: Over the whole of the area.

General distribution: From Trinidad to Uruguay, Paraguay and northeastern Argentina.

***Tillandsia tricholepis* Bak.,**

Journ. Bot. 16 (1878) 237; Mez, PR IV 32 (1935) 587; Castellanos, GSPA 3 (1945) 308, tab. 98. — *T. polytrichoides* E. Morr., Belg. Hortic. 30 (1880) 240; Mez, FB 3,3 (1894) 612, tab. 98; Smith, Brom. Braz. (1955) 91.

- 25995** RGS, S. Leopoldo, NEL, in silva campestri ad arbores, 21.11.1940, fl., fr. aperto, leg. E. Leite 1896.

Habit: Growing in dense colonies; individual plants up to 10 cm high.

Habitat: Epiphytic in Campos forests.

Distribution in RGS: Apparently rare.

General distribution: From Ceará to RGS; Bolivia, Paraguay, northern Argentina.

***Tillandsia usneoides* (L.) L.,**

Spec. Plant. ed. 2 (1762) 411; Mez, FB 3,3 (1892) 613; Herter, Flor. Urug. (1930) 45; Mez, PR IV 32 (1935) 534; Castellanos, GSPA 3 (1945) 349, tab. 121; Smith, Brom. Braz. (1955) 92; Reitz, Sellowia 7 (1956) 134. — *Renealmia usneoides* L., Spec. Plant. (1753) 287.

- 58** RGS, Esteio p. S. Leopoldo, NEL, ab arboribus pendens, 16.11.1932, ster.

- 4563** RGS, Fazenda Englert p. S. Francisco de Paula, in araucarieto, 8.2.1941, ster.

- 7418** RGS, S. Leopoldo, NEL, in silva, 1907, ster., leg. F. Theissen SJ.
- 7426** RGS, ibidem, 1907, ster., leg. F. Theissen SJ.
- 8558** RGS, Rio dos Touros p. Bom Jesus, NEH, in araucarieto, 13.1.1942, fl.
- 8888** RGS, ibidem, 15.1.1942, fl., det. L. B. Smith.
- 25648** RGS, Fazenda Sta. Cecília p. S. Gabriel, SW, in silvula campestri, 1.1944, ster.
- 26221** RGS, Fazenda do Jarau p. Quaraí, SW, in silva riparia, 1.1945, ster.
- 30890** RGS, Vila Oliva p. Caxias, NEH, in araucarieto, 1.1.1946, fl.
- 31660** RGS, Vila Manresa p. P. Alegre, NEL, in silva ad arbores 12.12.1945, fl.
- 35665** RGS, S. Leopoldo, NEL, in silva campestri, 26.12.1946, fl., leg. C. Ritter SJ.
- 36534** RGS, Cambará p. S. Francisco de Paula, NEH, in araucarieto, 2.1948, ster.
- 37094** Chile, Cajón in prov. Cautín, ad arbores, 26.3.1946, ster., leg. et det. H. Gunckel 15871.
- 49727** RGS, Lagoa dos Quadros, NEC, in silva, 18.1.1951, fl., fr.
- 50105** RGS, Tainhas p. S. Francisco de Paula, NEH, in silvula riparia, 21.2.1951, fl., det. L. B. Smith.
- 59708** RGS, Farroupilha, NEH, in silva, 16.5.1956, ster., leg. O. Camargo 637.
- 60958** RGS, ibidem, 5.6.1957, ster., leg. O. Camargo 1556.
- 61475** RGS, Taquari, NEL, in silva, 16.12.1957, ster., leg. O. Camargo 2995.
- 63410** RGS, Pelotas, SEC, in silva, 24.3.1958, fr., leg. J. Sacco 1080.
- 63612** RGS, Fazenda do Arroio p. Osório, NEC, in silva, 23.1.1958, fl.

Habit: Hanging from the trees.

Habitat: Shrubs and more especially high trees.

Distribution in RGS: Common over the whole of the area.

General distribution: From Florida to Uruguay, central Argentina and Chile.

VRIESIA Lindl.

Vriesia carinata Wawra,

Österr. Bot. Zeitschr. 12 (1862) 32, tab. 10—12, fig. 1; Mez, FB 3,3 (1892) 518; idem, PR IV 32 (1935) 374, fig. 84; Smith, Brom. Braz. (1955) 124; Sellowia 7 (1956) 134.

30391 SC, Maracanã p. Araranguá, in silva ad arbores, 31.5.1944, fl., leg. R. Reitz 1142, det. L. B. Smith.

59869 RGS, Estação de Silvicultura p. Sta. Maria, CL, ad arbores in silva, 3.2.1956, fl., leg. O. Camargo 196.

63704 SC, Spitzkopf p. Blumenau, in silva, 8.4.1958, fl., leg. Camargo.

Habit: Rosette; leaves 20 cm, stalk 30 cm long.

Habitat: Epiphytic in rain forest.

Distribution in RGS: Western slopes of the Serra Geral; to be found near the north-eastern sea coast.

General distribution: From Espírito Santo to RGS.

Vriesia corcovadensis (Britten) Mez,

FB 3,3 (1894) 532; Smith, Brom. Braz. (1955) 135; Reitz, Sellowia 7 (1956) 134. — *Tillandsia corcovadensis* Britten, Journ. Bot. 26 (1888) 172. — *V. ventricosa* (Wawra) Mez, in DC. Monogr. Phanerog. 9 (1896) 583; PR IV 32 (1935) 379. — *Tillandsia ventricosa* Wawra, Österr. Bot. Zeitschr. 30 (1880) 30.

2216 RGS, Kappesberg p. Montenegro, NES, in silva ad arbores, 21.12.1935, fl., leg. C. Orth SJ.

34081 RGS, ibidem, 1935, fl., leg. C. Orth SJ.

41937 RGS, Esteio p. S. Leopoldo, in silva paludosa ad arbores, 11.6.1949, fr. maturo.

Habit: Rosette; leaves 40, stalk 50 cm high.

Habitat: Epiphytic in rain forest.

Distribution in RGS: Northeastern rain forest belt only.

General distribution: Rio de Janeiro to RGS.

Vriesia erythroductylon E. Morr. ex Mez,

in DC. Monogr. Phanerog. 9 (1896) 569; Mez, PR IV 32 (1935) 373; Smith, Brom. Braz. (1955) 121.

30390 SC, Timbé p. Araranguá, terrestris in siccis dumosis, 22.1. 1944, fl., fr., leg. R. Reitz 878, det. L. B. Smith.

Habit: Rosette, 50 cm high.

Habitat: Epiphytic and terrestrial.

Distribution in RGS: To be found at the northeastern sea coast.

General distribution: From Espírito Santo to RGS.

Vriesia flammea L. B. Smith,

Arq. Bot. Est. S. Paulo, n. ser. 1 (1941) 59, tab. 79; idem, Brom. Braz. (1955) 134; Reitz, Sellowia 7 (1956) 136.

6646 SC, S. Ludgero p. Tubarão, in silva ad arbores, 3.1.1941, fl., leg. C. Orth SJ.

31511 SC, Sombrio p. Araranguá, in silva ad arbores, 4.2.1946, fl.

Habit: Rosette; stalk about 50 cm high.

Habitat: Epiphytic at trees in rain forest.

Distribution in RGS: To be collected at the northeastern coast.

General distribution: From S. Paulo to RGS.

Vriesia gigantea Gaud.,

Atl. Voy. Coq. Bonite (1846) tab. 70; Smith, Brom. Braz. (1955) 115; Reitz, Sellowia 7 (1956) 135. — *V. mosenii* Mez, FB 3,3 (1894) 558; idem, PR IV 32 (1935) 397.

944 RGS, Vila Manresa p. P. Alegre, NEL, in silva ad arbores, 5.1. 1934, fl., leg. C. Orth SJ.

34082 RGS, ibidem, 1934, fl., leg. C. Orth SJ.

41648 RGS, Esteio p. S. Leopoldo, NEL, in silva paludosa ad arbores, 18.5.1949, fr. maturo.

45608 RGS, Taimbêsinho p. S. Francisco de Paula, NEH, in araucarieto humido ad arbores, 30.1.1950, fl.

49806 RGS, Lagoa dos Quadros p. Tôrres, NEC, in silva ad arbores, 28.1.1951, fl.

49806 RGS, ibidem, 18.1.1951, fl., det. L. B. Smith.

Habit: Enormous rosette; leaves up to 75 cm, stalk 2,5 high.

Habitat: Epiphytic at trees in rain forest.

Distribution in RGS: Northeastern coast forests only.

General distribution: From Espírito Santo to RGS.

Vriesia neoglutinosa Mez,

PR IV 32 (1935) 636; Smith, Brom. Braz. (1955) 111.

61931 RGS, Taquari, NEL, in silva ad arbores, 16.12.1957, fl., leg. O. Camargo, 2993.

Habit: Rosette, about 50 cm high.

Habitat: Epiphytic at trees in rain forest.

Distribution in RGS: No other findplace.

General distribution: From Rio de Janeiro to RGS.

Vriesia philippo-coburgii Wrawra,

Österr. Bot. Zeitschr. 30 (1880) 219; Mez, FB 3,3 (1892) 560; idem, PR IV 32 (1935) 400; Smith, Brom. Braz. (1955) 116; Reitz, Sellowia 7 (1956) 137.

31566 SC, Sombrio p. Araranguá, ad arbores in silva, 4.2.1946, fl.

36537 RGS, Cambará p. S. Francisco de Paula, NEH, in araucarieto ad truncos, 2.1.1948, fl.

44922 RGS, S. Francisco de Paula, NEH, in araucarieto ad arbores, 18.12.1949, fl.

46043 RGS, Lagoa dos Quadros p. Tôrres, NEC, in silva paludosa epiphytica, 21.2.1950, fl.

49425 RGS, Taimbêsinho p. S. Francisco de Paula, NEH, in araucarieto ad arbores, 18.12.1950, fl., leg. L. B. Smith (cum?).

49793 RGS, Lagoa dos Quadros p. Tôrres, NEC, in silva paludosa ad arbores, 18.1.1950, fl., det. L. B. Smith (v. vagans L. B. Smith).

56586 RGS, Fazenda Englert p. S. Francisco de Paula, NEH, ad arbores in araucarieto.

63569 RGS, Fazenda do Arroio p. Osório, NEC, in silva, 23.1.1958, fl.

Habit: Large rosette; leaves about 75 cm; stalk up to 1,20 m high.

Habitat: Epiphytic in rain forest.

Distribution in RGS: Northeastern sea coast up to the Highlands.

General distribution: From Rio de Janeiro to RGS.

Vriesia platynema Gaud.,

Voy. Bonite, Atl. (1844–66) tab. 66; Mez, FB 3,3 (1892) 551; idem, PR IV 32 (1935) 395; Castellanos, GSPA 3 (1945) 253, tab. 72; Smith, Brom. Braz. (1955) 129; Reitz, Sellowia 7 (1956) 138.

- 51** RGS, Esteio p. S. Leopoldo, NEL, in silva paludosa ad arbores, 16.11.1932, fl., leg. C. Orth SJ.
- 2155** RGS, S. Leopoldo, NEL, in silva paludosa ad arbores, 10.11.1935, fl., leg. C. Orth SJ.
- 7421** RGS, ibidem, 1907, fl., leg. F. Theissen SJ.
- 34085** RGS, Vila Manresa p. P. Alegre, NEL, in silvula paludosa ad arbores, 1934, ster., leg. C. Orth SJ.
- 34625** RGS, Fazenda da Ronda p. Vacaria, NEH, in silva subpaludosa ad arbores, 30.12.1946, fr. submaturo.
- 44836** RGS, S. Francisco de Paula, NEH, in araucarieto, 18.12.1949, fr.
- 45531** RGS, Taimbêsinho p. S. Francisco de Paula, NEH, in araucarieto ad arbores, 30.1.1950, fr. maturo.
- 47937** RGS, Kappesberg p. Montenegro, NEL, in silva ad arbores, 3.11.1948, fl., leg. A. Sehnem SJ.
- 49435** RGS, Taimbêsinho p. S. Francisco de Paula, NEH, in araucarieto ad truncos, 18.12.1950, fl., det. L. B. Smith (var. *platynema*).
- 53976** RGS, ibidem, 20.2.1953, fl.
- 54472** RGS, ibidem, 13.11.1953, fr.

Habit: Rosette, about 60 cm high.

Habitat: Interior of the forest, epiphytic.

Distribution in RGS: All collections from the northeastern quadrant.

General distribution: From Mexico and the West Indies to RGS and Misiones.

***Vriesia platzmannii* E. Morr.,**

Belg. Hortic. 25 (1875) 349, tab. 23; FB 3,3 (1892) 546; idem, PR IV 32 (1935) 392; Smith, Brom. Braz. (1955) 134; Reitz, Sellowia 7 (1956) 138.

45242 RGS, Fazenda do Arroio p. Osório, NEC, in silvula paludosa ad arbores, 4.1.1950, fl.

63573 RGS, ibidem, 23.1.1958, fl.

Habit: Rosette up to 70 cm high.

Habitat: Swampy forest, epiphytic.

Distribution in RGS: Northeastern coastal forests only.

General distribution: From Paraná to RGS.

***Vriesia psittacina* (Hook.) Lindl.,**

Bot. Reg. 29 (1843) tab. 10; Mez, FB 3,3 (1892) 528; idem, PR IV 32 (1935) 378; Smith, Brom. Braz. (1955) 126; Reitz, Sellowia 7 (1956) 138. — *Tillandsia psittacina* Hook., Bot. Mag. 55 (1828) tab. 2841.

759 RGS, Vila Manresa p. P. Alegre, NEL, in silvula humida ad arbores, 10.7.1933, fl., leg. C. Orth SJ.

34084 RGS, ibidem, 1934, fl., leg. C. Orth SJ.

37568 RGS, Morro da Polícia p. P. Alegre, NEL, in silvula campestri, 21.8.1948, fr. maturo.

52896 RGS, Morro Fortaleza p. Montenegro, NEL, in silvula rupestri ad arbores, 15.12.1952, fl.

63570 RGS, Fazenda do Arroio p. Osório, NEC, in silvula paludosa ad arbores, 23.1.1958, fl.

Habit: Rosette about 50 cm high.

Habitat: Wet woodlets, epiphytic.

Distribution in RGS: Northeastern Lowlands and sea coast.

General distribution: From Espírito Santo to RGS; Paraguay.

Vriesia saundersii (Carr.) E. Morr.,

ex Mez in FB 3,3 (1894) 504; idem, PR IV 32 (1935) 383; Smith, Brom. Braz. (1955) 111. — *Encholirion saundersii* Carr., Rev. Hortic. 44 (1872) 300.

25996 RGS, ad montem Sapucaia p. S. Leopoldo, NEL, in silva ad arbores, 12.1941, fl., leg. E. Leite SJ, det. L. B. Smith.

52905 RGS, Fortaleza p. Montenegro, NEL, in silva rupestri ad arbores, 15.12.1952, fl.

Habit: Rosette leaves 40 cm long, stalk 75 cm and more.

Habitat: Epiphytic in rocky woodlets.

Distribution in RGS: Northeastern Lowlands.

General distribution: Rio de Janeiro; RGS.

Vriesia scalaris (Bak.) Morr.,

Belg. Hortic. 29 (1879) 301; Mez, PR IV 32 (1935) 377; Smith, Brom. Braz. (1955) 133; Reitz, Sellowia 7 (1956) 139. — *Tillandsia scalaris* Bak., Journ. Bot. 26 (1888) 108. — *Tillandsia simplex* Vell., Fl. Flum. (1825) 133; Ic. 3 (1835) pl. 130; Mez, FB 3,3 (1892) 526 (*T. simplex* Beer).

63459 RGS, Fazenda do Arroio p. Osório, NEC, in silvula paludosa ad arborem, 25.1.1958, fl.

Habit: Elegant rosette; leaves 15 cm long.

Habitat: Swampy woodlets, epiphytic.

Distribution in RGS: Northeastern coast.

General distribution: From Espírito Santo to RGS.

WITTROCKIA Lindm.

Wittrockia superba Lindm.,

Sv. Akad. Handl. 24, n. 8 (1891) 20, pl. 2, fig. 13—21; Smith, Brom. Braz. (1955) 185; Reitz, Sellowia 7 (1956) 139. — *Canistrum superbum* (Lindm.) Mez, FB 3,3 (1894) 620; idem, PR IV 32 (1935) 66.

30392 SC, Sombrio p. Araranguá, in silva ad arbores rupesque, 10. 4. 1944, fl., leg. R. Reitz 1092, det. L. B. Smith.

Habit: Very large rosette, leaves up to 1 m long.

Habitat: Rain forest, at trunks and on rocks.

Distribution in RGS: To be collected near the northeasternmost sea coast.

General distribution: Rio de Janeiro to RGS.

SPECIES CITED FOR RGS,

not in my Herbarium (9). After L. B. Smith, 1955.

Aechmea comata (Gaud.) Bak. (221): Tôrres, NEC.

Dyckia choristaminea Mez (65): P. Alegre (D. vaginosa Mez?).

Dyckia encholirioides (Gaud.) Mez (63): RGS, Sellow.

Dyckia leptostachya Bak. (62): P. Alegre, NEL; Tôrres, NEC.

Dyckia sellowiana Mez (71): RGS?

Tillandsia meridionalis Bak. (84): Caxias, NEH.

Tillandsia streptocarpa Bak. (89): RGS, Lindman.

Tillandsia xiphioides Ker. (78): Col. S. Pedro, NEC.

Vriesea friburgensis Mez var. **friburgensis** L. B. Smith (112): S. Salvador, NES; Pelotas, SEC. — Var. **tucumanensis** (Mez) L. B. Smith (113): S. Salvador, NES; Vale Veneto, CS.

R e s u m o

O autor enumera 43 espécies de Bromeliaceae em 8 gêneros, colecionadas no Rio Grande, e presentes em seu Herbário particular.

Zusammenfassung

Aus der Familie der Bromeliaceen werden 43 Arten in 8 Gattungen aufgezählt, die im brasilianischen Staate Rio Grande do Sul gesammelt worden sind und sich im Privatherbar des Verfassers vorfinden.

June 2, 1961.

LITERATURE

Note: The Bromeliaceae, as far as the present paper is interested in this Family, have received, in the last 70 years, no less than 4 monographic treatments: Mez in FB, 1891—1894; Mez in PR, 1934—1935; Castellanos in GSPA, 1945; L. B. Smith, 1955; it seems, therefore, of no much use to repeat the pertinent literature prior to 1955, which may be seen in the monographs mentioned (L. B. Smith has no index). Besides these monographs, I will content myself by citing some few publications of special interest for RGS.

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Herter, W.

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1952b — Lista atual das Bromeliáceas catarinenses. — An. Bot. Herb. Rodr. 4 (1952) 37—40.

1952c — Discussão sobre Bromeliáceas indicadas como existentes em Sta. Catarina. — An. Bot. Herb. Barb. Rodr. 4 (1952) 41—46.

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