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B. RAMBO, S. J.

EUPHORBIACEAE RIOGRANDENSES



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EUPHORBIACEAE RIOGRANDENSES.

B. Rambo, S.J.

Resumo: O presente trabalho é uma enumeração das Euphorbiaceae do Rio Grande do Sul assim como constam no herbário particular do autor. Até 1960, 64 espécies desta família, em 15 gêneros, tinham sido colhidas dentro dos limites dêsse Estado; a lista a seguir contém 109 espécies, com 56 novidades geográficas em 23 gêneros, mais 16 espécies cultivadas ou subespontâneas. O total provável é de 130 espécies nativas nesta parte mais austral do Brasil.

Zusammenfassung: Vorliegende Arbeit ist eine Aufzählung der Euphorbiaceen von Rio Grande do Sul, Sübrasiliien, so wie sie in der Privatsammlung des Verfassers vorhanden sind. Bis 1960 waren 64 Arten in 15 Gattungen aus diesem Staate bekannt; das folgende Verzeichnis enthält 109 Arten, darunter 56 geographische Neuheiten, in 23 Gattungen; dazu kommen 16 angepflanzte oder verwilderte Arten anderer Herkunft. Die wahrscheinliche Zahl aller einheimischen Euphorbiaceen in diesem südlichsten Teil Brasiliens dürfte in der Nähe von 130 liegen.

The Euphorbiaceae of Rio Grande do Sul, South Brazil, have never been the subject of a special treatment. Until 1960, only four authors, in their otherwise general works, give passing information about the family in this State:

J. Müller Argoviensis, Flora Brasiliensis 11, 2 (1874): 22 species.

C. A. M. Lindman, Vegetationen in Rio Grande do Sul, Stockholm 1900: 16 species.

F. Pax and K. Hoffmann, in their partial monographs of the family, Pflanzenreich (1910-1931) cite 18 species.

J. Bornmüller, Revista Sudamericana de Botánica 1, 1934: 23, species.

By combining these four sources, and adding three more species: Emrich 1937, Herter 1945, and Rogers 1951, we obtain the following catalogue:

- Acalypha* humilis Pax et K. Hoffm.: Bornmüller.
multicaulis Arg.: Pflanzenreich.
poiretii Spreng.: Planzenreich.
striolata Lingelsh. Bornmüller (Pflanzenreich: *A. gracilis* Spreng. var.)
Actinostemon concolor (Spreng.) M. Arg.: Lindman, Bornmüller.
Bernardia ambigua Pax et K. Koffm.: Pflanzenreich.
flexuosa Pax et K. Hoffm.: Pflanzenreich.
pulchella (Baill.) M. Arg.: Pflanzenreich, Bornmüller.
Caperonia cordata St. Hil.: Müller Argoviensis.
hystrix Pax et K. Hoffmann: Pflanzenreich.
Chropetalum tricoecum (Vell.) Chod. et Hassl.: Pflanzenreich.
Croton astrogynus Baill.: Müller Argoviensis, Lindman.
ericoides Baill.: Müller Argoviensis.
garckeana Baill.: Müller Argoviensis.
gaudichaudii Baill.: Müller Argoviensis.
glechomifolius M. Arg.: Bornmüller.
gnaphalii Baill.: Müller Argoviensis, Lindman.
grandivelum Baill.: Lindman.
helichrysum Baill.: Müller Argoviensis.

hilarii Baill.: Lindman.
isabellei Baill.: Müller Argoviensis.
julopsidium Baill.: Müller Argoviensis.
lanatus Lam.: Lindman, Bornmüller.
lanuginosus Baill.: Lindman.
laseguei M. Arg.: Müller Argoviensis.
montevidensis Spreng.: Müller Argoviensis.
myrianthus M. Arg.: Pflanzenreich.
nitrariifolius (Baill. em.) M. Arg.: Lindman, Bornmüller.
pycnocephalus M. Arg.: Müller Argoviensis.
serratifolius Baill.: Müller Argoviensis, Bornmüller.
tenuissimus M. Arg.: Müller Argoviensis.
thymelinus Baill.: Müller Argoviensis.
urucurana L.: Lindman.

Dalechampia adscendens M. Arg., var. *grüningiana* Pax (D. ulmifolia Chod. et Hassl., var. *grüningiana* Pax): Bornmüller.

Excocaria biglandulosa (Baill.) M. Arg. (*Sapium petiolare* (M. Arg.) Hub.) Lindman.

Euphorbia *coecorum* Mart.: Bornmüller.
chamaerrhodos Boiss.: Bornmüller.
erythrorrhiza Boiss.: Bornmüller.
hebegyne Pax et K. Hoffm.: Emrich, 1937.
hirtella Boiss.: Müller Argoviensis.
papillosa St. Hil.: Müller Argoviensis.
selloi Boiss.: Bornmüller.
setosa M. Arg.: Bornmüller.
spathulata Lam.: Bornmüller.

Jatropha *bornmülleri* Pax: Bornmüller.
isabellei M. Arg.: Müller Argoviensis, Pflanzenreich.
rigidifolia Pax et K. Hoffm.: Pflanzenreich.

Julocrotton *humilis* Diedr.: Bornmüller.

Phyllanthus *lathyroides* H. B. K.: Bornmüller.
niruri L.: Lindman.
ramillosum M. Arg.: Müller Argoviensis.
sellowianus M. Arg.: Bornmüller.

Sapium *marginatum* M. Arg.: Lindman.
montevicense Klotsch: Pflanzenreich.

Sebastiania *angustifolia* M. Arg.: Lindman.
brasiliensis Spreng.: Müller Argoviensis, Lindman, Pflanzenreich, Bornmüller.
hispida (Mart.) Pax: Bornmüller, Pflanzenreich.
klotzschiana (M. Arg.): M. Arg.: Müller Argoviensis, Lindman, Pflanzenreich, Bornmüller.
schottiana (M. Arg.) M. Arg.: Lindman.
serratata M. Arg.: Pflanzenreich.

Stillingia *oppositifolia* Baill.: Rogers, 1951.

Tragia *emrichii* Herter: Herter, 1945.
hastata (Klotzsch) M. Arg.: Pflanzenreich.
volubilis L.: Pflanzenreich.

The sum total of Riograndean Euphorbiaceae known until 1960 is

64.

The Herbarium Anchieta (1931-1960) contains, among 65.000 collections of phanerogams, 1.351 numbers belonging to the Euphorbiaceae; they represent, as far as my survey goes, 109 native species, and 16 cultivated or subspontaneous ones. In most cases, collecting has been done by the author; if not otherwise, determinations have been made by Karl Emrich and B. Rambo SJ.

In the subsequent list, the following abbreviations refer to the four natural quadrants of the State: SW = southwestern plains (campanha) covered with low grass steppe (campos) and narrow gallery woods along the watercourses; SE = southeastern hill lands occupied by campos, scrub, more or less impoverished rain forest in the valleys, and swampy or sandy plains along the Atlantic coast; NW = northwestern uplands with characteristic campos, scattered copses (capões), and well developed rain forests near the great bend of the Uruguay river; the northeastern quadrant = NE — is subdivided into its three natural landscapes: Lowlands — NEL — in the South, with steppe and forests; sea coast — NEC — in the East, with sandy plains, scrub, and sandy forests; highlands — NEH — in the North, with rain forests at the southern slope, Araucaria forests and campos in the highest and coldest quarters.

RGS = Rio Grande do Sul, C = the regions near the center of the State, SC = the neighboring State of Santa Catarina.

ACALYPHA L.

Nomenclature after Pax & K. Hoffmann, Pflanzenreich 4, 147, 16 (1924).

Acalypha brevipes M. Arg., FB 11, 2 (1874) 348; Pax et K. Hoffmann, PR 4, 147, 16 (1924) 40.

34780 RGS, Fazenda da Ronda p. Vacaria (NEH), in rupestribus dumosis, 3.1.1947, fl., fr.

Habit: Half-shrub, abundantly branched, 1 meter high.

Habitat: Rocky shrub campos.

Distribution in RGS: At the Pelotas River (uppermost Uruguay), near the frontier of Santa Catarina; one only findplace. — **Geographical novelty.**

General distribution: Brazil: Minas Gerais, RGS; Paraguay.

Acalypha communis M. Arg., Linnaea 34 (1865) 23; FB 11, 2 (1874) 349; Pax et K. Hoffmann, PR 4, 147, 16 (1924) 37; O'Donell et Lourteig, GSPPA 1 (1943) 213, tab. 88b.

3948 RGS, Morro Vigia p. Livramento (SW), in rupestribus dumosis, 12.1.1941, fl., fr.

3971 Uruguay, Cuñapirú p. Rivera, in campestribus dumosis, 12.1.1941, fl., fr.

9962 RGS, Ijuisinho p. Tupanciretan (NW), in campestribus siccis dumosis, 30.1.1942, fl.

25802 RGS, Fazenda Sta Cecília p. S. Gabriel (SW), in campestribus siccis subdumosis, 1.1944, fr.

26272 RGS, Estância do Jarau p. Quaraí (SW), in fissuris rupium, 1.1945, fr.

27048 RGS, Morro da Polícia p. P. Alegre (NEL), in campestribus siccis dumosis, 10.1944, fr.

28277 RGS, Nonoai ad fl. Uruguay superius (NW), in campestribus dumosis, 3.1945, fl.

28308 RGS, ibidem, 3.1945, fl., fr.

29641 RGS, Pareci p. Montenegro (NEL), in arenosis siccis subdumosis, 25.9.1945, fl., leg. E. Henz SJ.

- 39668 RGS, Aberta dos Morros p. P. Alegre (NEL), in rupestribus siccis subapertis, 9.1.1949, fl.
- 41039 RGS, Morro Agudo p. P. Alegre (NEL), in rupestribus dumosis, 13.1.1949, fr.
- 41279 RGS, ad flumen Cai inferius p. P. Alegre (NEL), in arenosiss subhumidis dumosis, 27.4.1949, fl., fr.
- 41357 RGS, Morretes p. P. Alegre (NEL), in arenosis dumosis, 2.5.1949, fr.
- 44455 RGS, Granja Neugebauer p. P. Alegre (NEL), in campestribus dumosis 19.11.1949, fl.
- 44941 RGS, Itapoan p. P. Alegre (NEL), in arenosis dumosis, 23.12.1949, fl., fr.
- 45114 RGS, Fazenda do Arroio p. Osório (NEC), in arenosis dumosis, 4.1.1950, fl.
- 46581 RGS, Itapoan p. P. Alegre (NEL), in campestribus siccis arenosis subdumosis, 3.4.1950, fl.
- 51350 RGS, Leprosário p. Itapoan (NEL), in campestribus dumosis, 14.12.1951, fl., fr.
- 53375 RGS, Caaró p. S. Luiz (NW), in campestribus siccis aperte dumosis, 24.11.1953, fl.
- 56140 RGS, Pestana p. Ijuí (NW), in campestribus siccis aperte graminosis, 19.2.1954, fl., fr., leg. J. Pivetta 569.
- 60305 RGS, S. Bernardo p. Ijuí (NW), in campestribus subapertis alte graminosis, 8.1.1957, fl., fr.
- 60512 RGS, Pelotas (SE), in campestribus siccis subdumosis, 3.2.1956, fl., leg. J. Sacco.
- 61344 RGS, Pestana p. Ijuí (NW), in campestribus dumosis, 7.2.1956, fl., leg. J. Pivetta 1188.

Habit: Half-shrub, rootstock sturdy, densely branched, branches up to 50 cm high.

Habitat: Dry and more less open, or rocky, steppe.

Distribution in RGS: Throughout the whole of the campos, except for the highest and coldest regions of the northeastern highlands. **Geographical novelty.** **General distribution:** With many varieties, from Minas Gerais and Goiás to RGS; Paraguay; northern and northeastern Argentina; Uruguay.

Acalypha gracilis Spreng., Cur.post. (1827) 315; Müller Argoviensis, FB 11, 2 (1874) 315; Pax et K. Hoffmann, PR 4, 147, 16 (1924) 84 (exc. var. *divaricata* (Baill.) P. et K. Hoffm.).

- 746 SC, Itapiranga ad fl. Uruguay superius, in silva pluviali, 15.2.1934, fl., det. L. B. Smith.
- 994 RGS, sine loco, sine die, fl.
- 1469 RGS, S. Leopoldo (NEL), in silva umbrosa, 14.6.1934, fl.
- 1804 RGS, S. Francisco de Paula (NEH), in araucarieto, 14.1.1937, fl.
- 2530 RGS, ibidem, 14.1.1937, fl.
- 4379 RGS, Taimbesinho p. S. Francisco de Paula (NEH), in araucarieto umbroso humido, 7.2.1941, fl.
- 4564 RGS, Fazenda Englert p. S. Francisco de Paula (NEH), in araucarieto, 8.2.1941, fl.
- 8171 RGS, sine loco, sine die, fl.
- 11623 RGS, Fazenda Englert p. S. Francisco de Paula, in araucarieto aperto, 1.1944, fl., leg. P. Buck SJ.
- 26248 RGS, Estância do Jarau p. Quaraí (SW), in silvula riparia, 1.1944, fl.

- 28900 RGS, Fazenda Sta Cecília p. S. Gabriel (SW), in silva campestri humida, 1.1944, fl.
- 31090 RGS, Vila Oliva p. Caxias (NEH), in araucarieto, 6.1. 1946, fl.
- 45615 RGS, S. Francisco de Paula (NEH), ad rivulum in araucarieto, 30.1.1950, fl.
- 46414 RGS, Gramado p. Canela (NEH), in araucarieto, 20.3.1950, fl., fr.
- 51153 Paraná, Garuva p. S. José dos Pinhais, in silva, 6.1.1950, fl., leg. G. Hatschbach 1712.
- 52121 RGS, Morrinhos p. S. Francisco de Paula (NEH), in araucarieto denso umbroso, 7.2.1952, fl.
- 53978 GS, Taimbesinho p. S. Francisco de Paula (NEH), in araucarieto humido, 20.2.1953, fl., fr.
- 55649 SC, Garcia p. Blumenau, in silva, 21.3.1952, fl., leg. R. Reitz 5997, det. L. B. Smith.
- 58360 SC, ibidem, 23.4.1953, fl., leg. R. Reitz 7467, det. L. B. Smith.
- 61132 SC, Lages, in araucarieto, 25.12.1956, fl., leg. J. Mattos.

Habit: Slender half-shrub, sparingly branched, erect or ascending, 20-100 cm high.

Habitat: Rain and Araucaria forests, copses and gallery woodlets of the steppe, always in shadowy and somewhat wet places.

Distribution in RGS: Throughout the whole of the forested parts of the State. **Geographical novelty.**

General distribution: From Minas Gerais, through southern Brazil, down to RGS and Uruguay.

Acalypha hassleriana Chod., Bull. Herb. Boiss. 2. sér. 5 (1905) 606; Pax et K. Hoffmann, PR 4, 147, 16 (1924) 41; O'Donell et Lourteig, GSPPA 1 (1943) 219, tab. 92b.

48180 RGS, Irai ad fl. Uruguay superius (NW), in silva pluviali, 11. 1949, fl., leg. K. Emrich.

49837 SC, Itapiranga ad fl. Uruguay, ad silvam pluviale in humidis, 6.2.1951, fl. (L. B. Smith: A. brasiliensis M. Arg., v. cordata M. Arg.)

53512 Paraná, Cascavel ad fl. Paraná, in silva pluviali, 10.1.1953, fl.

53612 Paraná, Salto do Iguassú, ad flumen in silva, 11.1.1953, fl.

53644 Paraná, ibidem, 11.1.1953, fl.

53727 SC, Itapiranga ad fl. Uruguay superius, in silva, 17.1.1953, fl.

61351 RGS, Horizontina p. Sta. Rosa (NW), in silva pluviali subhumida, 29.1.1956, fl., leg. J. Pivetta 1201.

Habit: Bushy half-shrub, 50-150 cm high.

Habitat: Interior of the rain forest, preferably in wet places.

Distribution in RGS: Northwestern rain forests only. **Geographical novelty.** **Generally distribution:** Paraguay, northeastern Argentina, northwestern RGS.

Acalypha multicaulis M. Arg., Linnaea 34 (1865) 53; FB 11, 2 (1874) 354; Pax et K. Hoffmann, PR 4, 147, 16 (1924) 87; O'Donell et Lourteig, GSPPA 1 (1943) 221, tab. 92a.

823 RGS, sine loco, sine die, fl.

8419 RGS, Charqueadas p. S. Jerônimo (NEL), in dumosis umbrosis, 8.1. 1942, fl.

9297 RGS, Toropí p. Jaguari (SW), ad viam in silva pluviali, 25.1. 1942, fl.

- 9301 RGS, ibidem, 25.1.1942, fl.
 25619 RGS, Fazenda Sta. Cecilia p. S. Gabriel (SW), in silvula campestri umbrosa, 1. 1944, fl.
 25636 RGS, ibidem, 1. 1944, fl.
 26525 RGS, Pareci p. Montenegro (NEL), ad viam in silva, 1944, fl., leg. E. Henz SJ.
 28656 RGS, ibidem, 4. 1945, fl., leg. P. Buck SJ.
 32498 RGS, ibidem, 13.9.1945, fl., leg. E. Henz SJ.
 32506 RGS, ibidem, 13.9.1945, fl., leg. E. Henz SJ.
 40138 RGS, Guaiba p. P. Alegre, (NEL) in silvula riparia humida, 24.1.1949, fl.
 41135 RGS, Ilha da Pintada p. P. Alegre, in umbrosis humidis, 20.4.1949, fl.
 42821 RGS, Morretes p. P. Alegre (NEL), in silvula campestri umbrosa, 10.8.1949, fl.
 43846 RGS, ad fl. Caí inferius p. P. Alegre (NEL), in umbrosis graminosis, 12.10.1949, fl.
 44360 RGS, ad. fl. Gravataí inferius p. P. Alegre (NEL), in ripariis dumosis humidis, 11.11.1949, fl.
 48651 RGS, Pareci p. Montenegro (NEL), ad silvam pluviale, 19.9.1945, fl., leg. A. Sehnem SJ 1534.
 49219 RGS, ibidem, 26.11.1950, fl.
 49849 SC, Itapiranga ad fl. Uruguay superius, ad silvam pluviale, 6.2.1951, fl. (L. B. Smith: A. gracilis Spreng.)
 59027 RGS, Estação de Silvicultura p. Sta. Maria (C), in dumosis subsiccis, 12.1.1956, fl., leg. O. Camargo 164.
 63446 RGS, Pelotas (SE), in umbrosis, 24.3.1958, fl., leg. J. Sacco 1092.
 63655 RGS, Taquari (NEL), in silva, 10.12.1957, fl., leg. O. Camargo.
 63726 RGS, Pelotas (SE), in silvula, 13.3.1958, fl., leg. J. Sacco 996.
 63735 RGS, ibidem, in humidis, 11.3.1958, fl., leg. J. Sacco 987.

Habit: Low half-shrub, main stem often rooting at the lower joints, half-prostrate, abundantly branched, branches 10-30 cm high.

Habitat: Glades and edge of the forest, preferably in grassy, shadowy, and wet places.

Distribution in RGS: Through the whole of the forested territory, with exception of the northeastern highlands.

General distribution: From Ceará, through central and southern Brazil, Paraguay, northeastern Argentina, down to Rio Grande do Sul and Uruguay.

Acalypha nitschkeana Pax et K. Hoffm., PR 4, 147, 16 (1924) 88; O'Donell et Lourteig, GSPPA 1 (1943) 222, tab. 93a.

- 7537 RGS, S. Leopoldo (NEL), in dumosis arenosis, 1907, fl., leg. F. Theissen SJ.
 35526 RGS, ibidem, 6.11.1946, fl., leg. U. Müller SJ.
 38494 RGS, ibidem, in eucalypteto subsiccio, 4.12.1948, fl.
 42041 RGS, Sapucaia p. S. Leopoldo (NEL), in dumosis, 18.6.1949, fr.
 51774 RGS, Morro Grande p. Osório (NEC), in dumosis arenosis, 10.1.1952, fl.
 61766 RGS, Legeado (NEL), in umbrosis, 4.12.1957, fl., leg. O. Camargo 2731.

Note: The only tangible difference between *A. multicaulis* and *A. nitschkeana* are the isolated female flowers of the latter.

Habit: Very similar to *A. multicaulis*, but somewhat stouter and higher.

Habitat: Edge of the forest, sandy woodlets.

Distribution in RGS: So far, northeastern lowlands and sea coast only.
Geographical novelty.

General distribution: Paraguay, northeastern Argentina, northeastern RGS.

Acalypha striolata Lingelsh., Mitt. Thür. Bot. Ver., neue Folge 24 (1912) 49. — *A. gracilis* Spreng. var. *divaricata* (Baill.) Pax et K. Hoffm., PR 4, 147, 16 (1924) 84; O'Donell et Lourteig, GSPP 1 (1943) 218, tab. 94b.

1462 SC, Itapiranga ad fl. Uruguay superius, ad silvam, 15.2.1934, fl.

1465 SC, ibidem, 15.2.1934, fl. (A. B. Smith: *A. gracilis* Spreng.)

1467 RGS, S. Leopoldo (NEL), in silva pluviali, 14.11.1934, fl.
 2254 RGS, Kappesberg p. Montenegro (NEH), in silva pluviali, 21.12.1935, fl.

2787 RGS, ad montem Ferrabraz p. Novo Hamburgo (NEL), ad silvam pluviale, 14.10.1936, fl.

6685 RGS, Sta. Clara p. Lajeado (NEL), ad silvam, 18.11.1940, fl.,

6685 RGS, Sta. Clara p. Lajeado (NEL), ad silvam, 18.11.1940, fl., fr.

8393 RGS, Nova Petrópolis (NEH), in silva pluviali cum Araucariis intermixta, 26.10.1941, fl.

9300 RGS, Toropí p. Jaguari (SW), in silva pluviali, 25.1.1942, fl.

11077 RGS, Kappesberg p. Montenegro (NEH), ad silvam pluviale, 1. 1943, fr., leg. E. Schmidt SJ.

11093 RGS, Cérro Largo (NW), in silva, 1. 1943, fl., leg. P. Buck SJ.

26687 RGS, ibidem, 8. 1944, fl., leg. E. Friderichs SJ.

26765 RGS, ibidem, 8. 1944, fl., leg. E. Friderichs SJ.

30684 RGS, Kappesberg p. Montenegro (NEH), in silva pluviali, 17.10.1945, fl., leg. E. Friderichs SJ.

30828 RGS, Vila Oliva p. Caxias (NEH), ad rivum in araucarieto, 31.1.1946, fr.

32516 RGS, Pareci p. Montenegro (NEL), ad silvam, 22.9.1945, fl., leg. E. Henz SJ.

34350 RGS, Cérro Largo (NW), in silva pluviali, 31.10.1946, fl., leg. Irm. Augusto Duflot.

34772 RGS, Fazenda da Ronda p. Vacaria (NEH), in araucarieto, 3.1.1947, ster.

34776 RGS, ibidem, 3.1.1947, fl.

35481 RGS, Dois Irmãos p. S. Leopoldo (NEL), in silva pluviali, 10.10.1946, fl., leg. E. Henz SJ.

35798 RGS, Kappesberg p. Montenegro (NEH), in silva pluviali, 27.12.1946, fl., leg. E. Henz SJ.

36217 RGS, Cambará p. S. Francisco de Paula (NEH), in araucarieto, 3.2.1948, fl.

39966 RGS, ad montem Ferrabraz p. Novo Hamburgo (NEL), in silva pluviali, 12.1.1949, fl.

39985 RGS, Linha Bonita p. Montenegro (NEH), in silva, 19.1.1949, fl., fr.

42166 RGS, Schwabenschneis p. Novo Hamburgo (NEL), in silva secundaria, 25.6.1949, fl.

42354 RGS, ad montem Ferrabraz p. Novo Hamburgo (NEL), in silva pluviali, 5.7.1949, fl.

42582 RGS, Pareci p. Montenegro (NEL), in silva, 18.7.1949, fl.

42902 RGS, Schwabenschneis p. N. Hamburgo (NEL), ad silvam pluviale, 12.8.1949, fl.

43031 RGS, ibidem, 22.8.1949, fl.

- 43081 RGS, Linha Bonita p. Montenegro (NEH), in silva pluvial, 24.8.1949, fl.
- 43098 RGS, ibidem, 24.8.1949, fl.
 - 43154 RGS, Vila Oliva p. Caxias (NEH), in araucarieto, 28.8.1949, fl.
 - 43231 RGS, ad montem Ferrabraz p. Novo Hamburgo (NEH), ad silvam pluvialem, 29.4.1949, fl.
 - 43453 RGS, Kappesberg p. Montenegro (NEH), in silva, 11.9.1949, fl.
 - 43768 RGS, Morro do Sabiá p. P. Alegre (NEL), in silvula riparia, 5.10.1949, fl.
 - 44804 RGS, S. Francisco de Paula (NEH), in araucarieto, 18.12.1949, fl.
 - 44931 RGS, Schwabenschneis p. Novo Hamburgo (NEL), in silva pluviali, 12.8.1949, fl.
 - 47498 RGS, S. Leopoldo (NEL), in silva campestri, 1943, fl. fr., leg. E. Schmidt SJ.
 - 48221 RGS, Iraí ad fl. Uruguay superius (NW), 11.1949, fl., leg. K. Emrich.
 - 48445 RGS, Kappesberg p. Montenegro (NEH), in silva pluviali, 20.9.1946, fl., leg. A. Sehnem SJ 2151.
 - 48558 RGS, Pareci p. Montenegro (NEL), in silva pluviali, 3.10.1945, fl., fr., leg. A. Sehnem SJ 1553.
 - 49596 SC, Lages, in araucarieto denso, 10.1.1951, fl. L. B. Smith: A. gracilis Spreng.)
 - 49930 SC, Itapiranga ad fl. Uruguay superius, in silva pluviali densa, 6.2.1951, fl.
 - 51685 RGS, Passo do Socorro p. Vacaria (NEH), in araucarieto denso, 28.12.1951, fl.
 - 59096 RGS, Pestana p. Ijui (NW), in silva, 15.8.1953, fl., leg. J. Pivetta 924.
 - 59592 RGS, Farroupilha (NEH), in araucarieto cum silva pluviali intermixto, 28.9.1956, fl., leg. O. Camargo 775.
 - 59697 RGS, ibidem, 30.10.1956, fl., leg. O. Camargo 903.
 - 61172 SC, Itapiranga ad fl. Uruguay superius, in silva, 7.10.1957, fl.
 - 61537 RGS, Farroupilha (NEH), in araucarieto, 25.11.1957, fl., leg. O. Camargo 2657.
 - 61834 RGS, Garibaldi (NEH), in silva cum Araucariis intermixta, 29.10.1957, fl., leg. O. Camargo 2240.
 - 62178 RGS, Farroupilha (NEH), in araucarieto, 4.10.1957, fl., leg. O. Camargo 1854.
 - 62279 RGS, ibidem, 15.9.1957, leg. O. Camargo 1686.
 - 62883 RGS, ibidem, 2.1.1958, fl., leg. O. Camargo 3106.

Note: In my opinion, Lingelsheim is right in separating this species from A. gracilis; A. striolata is at least thrice as high as A. gracilis, always erect and more branched, with large inflorescences.

Habit: Half-shrub, perfectly woody at the base, abundantly branched, up to 2 meters high.

Habitat: Interior and edge of the rain forest and the Araucaria woods.

Distribution in RGS: Very common throughout the whole of the forested regions of the northern half of the State; apparently absent from the southern gallery woodlets.

General distribution: In Brazil, from Minas Gerais and Goiás, down to RGS; northeastern Argentina; Uruguay.

9095 RGS, Jarí p. Tupanciretan (NW), in campestribus siccis sub-dumetosis, 25.1.1942, fl.

9200 RGS, ibidem, 26.1.1942, fl.

9470 RGS, ibidem, 26.1.1942, fl.

Note: In its general habit and habitat, this species is in close kinship with *A. communis*; but the terminal inflorescences are always androgynous, the male section occupying one third to one half of the length. N. 9470 has one separated purely male inflorescence. These characters do no fit into the description of any known species.

ACTINOSTEMON (Spreng.) M. Arg.
Nomenclature after Pax, PR 4, 147,5 (1912).

Actinostemon concolor (Spreng.) M. Arg., DC. Prodr. 15,2 (1866) 1193; FB 11,2 (1874) 593; Pax, PR 4, 147,5 (1912) 75; O'Donell et Lourteig, GSPP 1 (1943) 178, tab. 126. — *Gussonia concolor* Spreng., Neue Entd. 2 (1821) 120.

177 RGS, Vila Manresa p. P. Alegre (NEL), in silva pluviali, 11.10.1932, fl.

7534 RGS, S. Leopoldo (NEL), in silva campestri, 1907, fl., leg. F. Theissen SJ.

7535 RGS, ibidem, 1907, ster., leg. F. Theissen SJ.

9552 RGS, Jarí p. Tupanciretan (NW), in silva campestri, 26.1.1924, ster.

9696 RGS, Tupanciretan (NW), in silva campestri, 28.1.1942, fl.

11072 RGS, Kappesberg p. Montenegro (NEH), in silva pluviali, 1.1943, fr. maturo, leg. E. Schmidt SJ.

25272 RGS, S. Leopoldo (NEL), in silva, 1907, fl., leg. F. Theissen SJ.

26587 RGS, Pareci p. Montenegro (NEL), in silva pluviali, 1944, fl., leg. E. Henz SJ.

26688 RGS, Cérro Largo p. S. Luiz (NW), in silva pluviali, 8.1944, fl., leg. E. Friderichs SJ.

26689 RGS, ibidem, 8. 1944, leg. E. Friderichs SJ.

27114 RGS, Vila Manresa p. P. Alegre (NEL), in silva, 10.1944, fl.

27619 RGS, Pareci p. Montenegro (NEL), in silva pluviali, 1944, ster., leg. E. Henz SJ.

28499 RGS, Nonoai ad fl. Uruguay superius (NW), in silva pluviali, 3. 1945, fl.

28977 RGS, Vila Manresa p. P. Alegre (NEL), in silva, 15.8.1945, fl.

29914 RGS, Kappesberg p. Montenegro (NEH), in silva pluviali, 22.8.1945, fl., leg. E. Friderichs SJ.

33066 RGS, Pareci p. Montenegro (NEL), in silva pluviali, 15.1.1946, fl., leg. A. Strieder SJ.

34202 RGS, Kappesberg p. Montenegro (NEH), in silva pluviali, 1946, fl., leg. E. Friderichs SJ.

37439 RGS, Vila Manresa p. P. Alegre (NEL), in silva, 18.7.1949, fr. maturo.

37727 RGS, ibidem, 22.9.1948, fl.

40017 RGS, Linha Bonita p. Montenegro (NEH), in silva pluviali, 19.1.1949, fl.

40019 RGS, ibidem, 19.1.1949, ster.

41727 RGS, Schwabenschneis p. Novo Hamburgo (NEL), in silva pluviali, 25.5.1949, ster.

- 43302 RGS, Estação Azevedo p. Montenegro (NEL), in silva campestri, 5.9.1949, fl.
- 43387 RGS, Kappesberg p. Montenegro (NEH), in silva caedua, 11.9.1949, fl.
- 43534 RGS, Portão p. S. Leopoldo (NEL), in silva campestri, 23.9.1954, fl.
- 43739 RGS, Morro do Sabiá, p. P. Alegre (NEL), in silva riparia, 5.10.1949, fl.
- 47313 RGS, Campina p. Sta. Rosa (NW), in silva pluviali, 1. 1949, ster., leg. A. Spies.
- 47467 RGS, S. Leopoldo (NEL), in silva campestri, 1943, fr. submature, leg. E. Schmidt SJ.
- 47656 SC, Brusque, in silva pluviali, 16.9.1947, fl., leg. R. Reitz 2807, det. L. B. Smith.
- 47840 RGS, Campestre p. Montenegro (NEH), ad rivum in silva pluviali, 17.11.1949, fr. submature, leg. A. Sehnem SJ 4067.
- 48526 RGS, Kappesberg pr. Montenegro (NEH), in silva pluviali, 9.9.1946, fl., leg. A. Sehnem SJ 2074.
- 50499 RGS, ibidem, 21.9.1949, fl., leg. A. Sehnem SJ 3870.
- 53518 Paraná, Cascavel ad fl. Paraná, in silva pluviali, 10.1.1953, fl.
- 57761 RGS, Pestana p. Ijuí (NW), in silva pluviali, 16.8.1953, fl., leg. J. Pivetta 800.
- 58491 SC, Morro da Fazenda p. Brusque, in silva pluviali, 12.8.1954, fl., leg. R. Reitz 9273, det. L. B. Smith.
- 58498 SC, Brusque, in silva pluviali, 26.9.1950, fl., leg. R. Reitz 4582, det. L. B. Smith, E. Asplund.
- 58499 SC, ibidem, 15.9.1950, fl., leg. R. Reitz 4583, det. L. B. Smith.
- 58505 SC, Jacinto Machado p. Turvo, in silva pluviali, 6.11.1951, fl., leg. R. Reitz 6566, det. E. Asplund.
- 58624 RGS, Estação de Silvicultura p. Sta. Maria (C), in silva pluviali, 14.1.1956, ster., leg. O. Camargo 9.
- 60576 RGS, Farroupilha (NEH), in silva pluviali cum Araucariis intermixta, 12.4.1957, ster., leg. O. Camargo 1301.
- 61864 RGS, Passo Fundo (NW), in silva campestri, 20.10.1957, fr. juvenili, leg. O. Camargo 2187.

Habit: Small to middle-sized tree, up to 10 meters high.

Habitat: Typical tree of the middle story of the rain forest, incapable of thriving in open sunlight.

Distribution in RGS: Very common in the subtropical rain forests of the northern half of the State, except for the Araucaria woods in the highest and coldest quarters of the northeastern highlands; apparently absent from the South.

General distribution: From the Antilles, through the rain forests of the whole of cis-Andean South America, down to northeastern Argentina, Rio Grande do Sul, and Uruguay.

ALCHORNEA Swartz

Nomenclature after Pax, PR 4, 147,7 (1914).

Alchornea sidifolia M. Arg., Linnaea 34 (1865) 169; FB 11,1 (1874) 377; Pax, PR 4, 147,7 (1914) 233.

3089 SC, in Insula Florianópolis, in silva pluviali, 6. 1938, fl. masc. (L. B. Smith: A. iricurana Casar.)

11092 RGS, Cérro Largo (NW), in silva pluviali, 1. 1943, fr. submature, leg. P. Buck SJ.

37302 Paraná, Pirapó, in silva pluviali, 2.5.1938, fl., leg. G. Tessmann 1025.

- 48127 Paraná, Campininha p. Piraquara, in silva pluviali, 9.12.
 1948, fl. masc., leg. G. Hatschbach 1141.
 48178 RGS, Iraí ad fl. Uruguay superius (NW), in silva pluviali,
 11. 1949, ster., leg. K. Emrich.
 53491 Paraná, Cascavel ad fl. Paraná, in silva pluviali, 10.1.1953,
 fl. masc.
 53520 Paraná, ibidem, 10.1.1953, fl. fem.
 57716 RGS, Horizontina p. Sta. Rosa (NW), in silva pluviali,
 26.12.1953, fl., leg. J. Pivetta 694.

Habit: Tall tree.

Habitat: Subtropical rain forest.

Distribution in RGS: Northwestern rain forest belt near the great bend of
 the Uruguay River. Geographical novelty.

General distribution: From Minas Gerais, through southern Brazil, down
 to northwestern RGS.

Alchornea triplinervia (Spreng.) M. Arg., DC. Prodr. 15,2 (1866)
 909; FB 11, 2 (1874) 379; Pax, PR 4, 147, 7 (1914) 227; O'Donell et
 Lourteig, GSPPA 1 (1943) 203, tab. 83a. — *Antidesma triplinervia*
 Spreng., Neue Entd. 2 (1821) 116.

- 771 RGS, Vila Manresa p. P. Alegre (NEL), in silva, 16.11.1933,
 fl. fem.
 11071 RGS, Kappesberg p. Montenegro (NEH), in silva pluviali,
 1.1943, fl. masc., leg. E. Schmidt SJ.
 11085 RGS, S. Leopoldo (NEL), in silva campestri, 1943, ster.,
 leg. E. Schmidt SJ.
 11706 RGS, Montserrat p. P. Alegre (NEL), in silva campestri,
 7.11.1943, fl. fem., leg. K. Emrich.
 27451 RGS, Vila Manresa p. P. Alegre (NEL), in silva pluviali,
 1944, fr. submature, leg. P. Buck SJ.
 29221 RGS, ibidem, 3.10.1945, fl. masc.
 31555 SC, Sombrio p. Araranguá, in silvula arenosa, 3.2.1946,
 ster., det. L. B. Smith.
 34319 RGS, Kappesberg p. Montenegro (NEH), in silva pluviali,
 1946, fl. masc., leg. E. Friderichs SJ.
 38439 RGS, Vila Manresa p. P. Alegre (NEL), in silva, 1.12.1948,
 fl. fem.
 38479 RGS, ibidem, 1.12.1948, fl. masc.
 38596 RGS, ad montem das Cabras p. S. Leopoldo (NEL), in silva
 campestri, 7.12.1948, fl.
 39417 RGS, Lamí p. Itapoan (NEL), in silva, 3.1.1949, fl. fem.
 45152 RGS, Fazenda do Arroio p. Osório (NEC), in silvula sub-
 paludosa, 4.1.1950, ster.
 47482 RGS, S. Leopoldo (NEL), in silva campestri, 1942, fl. masc.,
 leg. E. Schmidt SJ.
 47508 RGS, ibidem, 1942, fl. masc., leg. E. Schmidt SJ.
 48669 RGS, Vila Manresa p. P. Alegre (NEL), in silva, 31.7.1950,
 f. fem.
 49708 RGS, Lagoá dos Quadros p. Torres (NEC), in silva riparia,
 18.1.1951, fr. semievoluta.
 49740 RGS, ibidem, 18.1.1951, fl. masc.
 51103 RGS, Kappesberg p. Montenegro (NEH), in silva pluviali,
 23.1.1951, fl. masc., leg. A. Sehnem SJ 5561.
 51190 Paraná, Garuva p. S. José dos Pinhais, ad flumen in silva,
 7.1.1950, fl. masc., leg. G. Hatschbach 1732, det. L. B. Smith.

- 51820 RGS, Morro Grande p. Osório (NEC), in silva arenosa, 10.1.1952, fr. semievoluto.
 55602 SC, Brusque, in secundariis altis, 2.12.1949, fl. masc., leg. R. Reitz 5155, det. A. Lourteig.
 55888 RGS, Fazenda do Arroio p. Osório (NEC), in silvula arenosa, 3.10.1954, fl. masc.
 56024 RGS, Vila Manresa p. P. Alegre (NEL), in silva campestris, 19.11.1954, fl. masc.
 58477 SC, Massiambú p. Florianópolis, in silvula litoranea, 5.2.1953, fr., leg. R. Reitz 7027, det. E. Asplund.
 58494 SC, ibidem, 20.1.1950, fr., leg. R. Reitz 4539, det. L. B. Smith.
 58495 SC, Azambuja p. Brusque, in silva, 30.12.1949, fl., leg. R. Reitz 4540, det. L. B. Smith.
 58510 SC, S. Pedro p. Brusque, in silva, 13.1.1950, fl., leg. R. Reitz 4538, det. L. B. Smith.
 64110 Paraná, Rio Boguassú p. Guaratuba, in silvula litoranea, 11.12.1957, fl. masc., leg. G. Hatschbach 4312, det. L. B. Smith.

Note: The specimens collected near the sea coast are smaller in all their parts, but there is no definite distinction against those from the subtropical rain forest.

Habit: Middle-sized to tall tree in the forest, small and densely branched treelet near the sea coast.

Habitat: Subtropical rain forest, copses and gallery woodlets of the northern and central campos, thickets near the coast.

Distribution in RGS: All collections are from the northeastern lowlands, sea coast, and rain forest belt a the southern slope of the highlands. **Geographical novelty.**

General distribution: From Venezuela, Peru, and Amazonas, through the whole of forested cis-Andean South America, down to northeastern Argentina and northern RGS.

BERNARDIA Müll. Arg.

Nomenclature after Pax, PR 4,147,7 (1914).

Bernardia caperoniifolia (Baill.) M. Arg., DC. Prodr. 15,2 (1866) 920; FB 11, 2 (1874) 393; Pax, PR 4, 147, 7 (1914) 393. — *Adelia caperoniifolia* Baill., Adansonia 4 (1864) 376, tab. 11.

1442 RGS, Vila Manresa p. P. Alegre (NEL), in campestribus dumosis, 13.1.1933, fl.

11088 RGS, ibidem, 1943, fl.

32565 RGS, Pareci p. Montenegro (NEL), in campestribus siccis subdumosis, 10.10.1945, fl., leg. E. Henz SJ.

41256 RGS, ad fl. Caí inferius p. P. Alegre (NEL), in sabulosis siccis, 27.4.1949, fl., fr.

Habit: Small woody shrub, single or branched from a rootstock, 20-50 cm high.

Habitat: Dry and more or less open campos. **Geographical novelty.**

Distribution in RGS: Northeastern lowlands only.

General Distribution: Paraguay, RGS, Uruguay.

Bernardia lorentzii M. Arg., Journ. Bot. 12 (1874) 229; Pax, PR 4, 147, 7 (1914) 39, fig. 5 A-D; O'Donell et Lourteig, GSPPA 1 (1943) 194, tab. 80a.

2898 RGS, Caaró p. S. Luiz (NW), in campestribus siccis, 28.1.1938, fl.

4189 RGS, Rio Caneleira p. Uruguaiana (SW), in campestribus siccis graminosis, 14.1.1941, fl.

10155 RGS, Jari p. Tupanciretan (NW), in campestribus siccis subdumosus, 26.1.1942, fr. deciso.

28280 RGS, Nonoai ad fl. Uruguay superius (NW), in campestribus siccis aperte dumosis, 3.1945, fl.

28624 RGS, ibidem, 3.1945, fl., fr.

53311 RGS, Caaró p. S. Luiz (NW), in campestribus siccis apertis, 24.11.1952, fr.

56117 RGS, Pestana p. Ijuí (NW), in campestribus, 19.2.1954, fr., leg. J. Pivetta 569.

Habitat: Small woody shrub, sparingly branched from a rootstock, branches ascending-erect, 30-75 cm high.

Habitat: Dry, more or less open campos.

Distribution in RGS: Western campos only. **Geographical novelty.**

General distribution: Northern Argentina, Paraguay, western RGS.

Bernardia multicaulis M. Arg., Linnaea 34 (1865) 177; FB 11, 2 (1874) 400, tab. 57; Pax, PR 4, 147, 7 (1914) 39.

112 RGS, Vila Manresa p. P. Alegre (NEL), in campestribus siccis aperte dumosis, 17.1.1933, fl., fr.

2872 RGS, Montserrat p. P. Alegre (NEL), in campestribus siccis subapertis, 1942, fl., fr., leg. K. Emrich.

3747 RGS, Ijuisinho p. Tupanciretan (NW), in campestribus siccis graminosis, 30.1.1942, ster.

6729 RGS, Montserrat p. P. Alegre (NEL), in campestribus siccis, 1941, fr., leg. K. Emrich.

10918 RGS, ibidem, 8.1941, fl., fr., leg. K. Emrich.

11786 RGS, Vila Manresa p. P. Alegre (NEL), in siccis, 1943, fr.

27064 RGS, ibidem, 10.1944, fl.

32853 RGS, Montserrat p. P. Alegre (NEL), in siccis subdumosus, 7.12.1945, fl., fr., leg. K. Emrich.

33142 RGS, Vila Manresa p. P. Alegre (NEL), in siccis, 12.12.1945, fl., fr.

39013 RGS, Steinkopf p. S. Leopoldo (NEL), in rupestribus parce dumosis, 30.12.1948, fl., fr.

39144 RGS, Espírito Santo p. P. Alegre (NEL), in campestribus siccis saxosis, 24.12.1948, fl.

39397 RGS, Lami p. Itapoan (NEL), in campestribus arenosis siccis subdumosus, 3.1.1949, fl.

39641 RGS, Aberta dos Morros p. P. Alegre (NEL), in rupestribus parce graminosis, 9.1.1949, fl.

40300 RGS, Morro da Polícia p. P. Alegre, in campestribus siccis dumosis, 5.3.1949, fl., fr.

40658 RGS, Vila Manresa p. P. Alegre (NEL), in campestribus graminosis, 26.3.1949, fl.

40886 RGS, Granja Neugebauer p. Itapoan (NEL), in campestribus siccis subapertis, 3.4.1949, fl.

41046 RGS, Morro Agudo p. P. Alegre (NEL), in campestribus apertis, 13.4.1949, fl., fr.

46063 RGS, Vila Manresa p. P. Alegre (NEL), in siccis, 3.3.1950, fl., fr.

63548 RGS, Fazenda do Arroio p. Osório (NEC), in sabulosis siccis subdumosus, 23.1.1958, fl.

Habit: Small woody shrub, densely branched from a rootstock, branches ascending-erect, 20-50 cm high.

Habitat: Dry, stony, rocky, or sandy, more or less open, campos.

Distribution in RGS: All collections but one (3747) are from the surroundings of P. Alegre.

General distribution: From Minas Gerais, through southern Brazil, down to RSG and Uruguay.

Bernardia pulchella (Baill.) M. Arg., FB 11, 2 (1874) 392; Pax, PR 4, 147, 7 (1914) 31, fig. 4; O'Donell et Lourteig, GSPPA 1 (1943) 197, tab. 81. — *Adelia pulchella* Baill., Adansonia 4 (1864) 374.

1468 RGS, S. Leopoldo (NEL), in silva campestris, 14.11.1934, fl. masc.

2104 RGS, sine loco, sine die, fl. masc.

2267 RGS, Kappesberg p. Montenegro (NEH), in silva pluviali, 21.12.1935, fl. masc.

4382 RGS, Taimbesinho p. S. Francisco de Paula (NEH), in araucarieto, 7.2.1941, fl. masc.

4997 RGS, sine loco, sine die, fl. masc.

7543 RGS, S. Leopoldo (NEL), in silva campestris, 1907, fl. masc., leg. F. Theissen SJ.

9026 RGS, Bom Jesus (NEH), in araucarieto, 16.1.1942, ster.

28048 RGS, Vila Oliva p. Caxias (NEH), in araucarieto, 2.1945, fl. masc., leg. P. Buck SJ.

28614 RGS, Nonoai ad fl. Uruguay superius (NW), in silva pluviali, 3.1945, fl. masc.

28743 RGS, Caracol p. Canela (NEH), in araucarieto, 1.3.1945, fr. deciso, leg. K. Emrich.

29580 RGS, Parecí p. Montenegro (NEL), ad silvam pluviale, 12.9.1945, fl. masc., leg. E. Henz SJ.

29985 RGS, Caracol p. Canela (NEH), in araucarieto, 18.1.1936, fl. masc., leg. K. Emrich.

31090 RGS, Vila Oliva p. Caxias (NEH), in araucarieto, 6.1.1946, fl.

32922 RGS, Kappesberg p. Montenegro (NEH), ad silvam pluviale, 2.10.1945, fl. masc., leg. E. Friderichs SJ.

33293 RGS, Caracol p. Canela (NEH), ad viam in silva pluviali cum Araucariis intermixta, 26.2.1946, fl. masc. et fem., leg. K. Emrich.

33652 RGS, Paraná, in silva, 17.3.1946, fl. masc., leg. G. Hatschbach.

35739 RGS, Kappesberg p. Montenegro (NEH), in silva pluviali, 27.12.1946, fl. masc., leg. E. Henz SJ.

38176 RGS, Sapucaia p. S. Leopoldo (NEL), in silva campestris, 22.11.1948, fl. masc.

38579 RGS, ad montem das Cabras p. S. Leopoldo (NEL), in silvula campestris, 7.12.1948, fr. maturo.

38652 Rio dos Sinos p. S. Leopoldo (NEL), in silvula campestris, 10.12.1948, fr. maturo.

38853 RGS, S. Leopoldo (NEL), in silva campestris, 17.12.1948, fl. masc.

39881 RGS, ad montem Ferrabraz p. Novo Hamburgo (NEL), ad silvam pluviale, 12.1.1949, fr. maturo.

39968 RGS, ibidem, in silvula secundaria, 12.1.1949, fl. masc.

40271 RGS, Farroupilha (NEH), in silvula secundaria, 28.1.1949, fr. deciso.

40291 RGS, ibidem, in araucarieto, 28.1.1949, fl. masc.

40914 RGS, ad montem das Cabras p. S. Leopoldo (NEL), ad silvam pluviale, 7.4.1949, fl. masc.

- 41595 RGS, ad montem Ferrabraz p. Novo Hamburgo (NEL), in dumosis secundariis, 16.5.1949, fl. masc.
- 43144 RGS, Vila Oliva p. Caxias (NEH), in araucarieto, 28.8.1949, fl. masc.
- 43191 RGS, ad montem Ferrabraz p. Novo Hamburgo (NEL), in silvula secundaria, 2.9.1949, fl. masc. nondum evoluto.
- 43247 RGS, Estação Azevedo p. Montenegro (NEL), in silva campestri, 5.9.1949, fl. masc. nondum evoluto.
- 43248 RGS, ibidem, 5.9.1948, fl. masc. nodum evoluto.
- 44654 RGS, Vila Oliva p. Caxias (NEH), in araucarieto, 3.12.1949, fl. masc.
- 44790 RGS, Gramado p. Canela (NEH), in araucarieto, 26.12.1949, fl. masc.
- 44893 RGS, S. Francisco de Paula (NEH), in araucarieto, 18.12.1949, fl. masc.
- 45697 RGS, Farroupilha (NEH), in araucarieto, 7.2.1950, fl. masc.
- 45698 RGS, ibidem, 7.2.1950, fr. maturo.
- 47326 RGS, Campinas p. Sta Rosa (NW), in silva pluviali, 2.1949, fl. fem., leg. A. Spies.
- 49674 SC, Lages, in araucarieto, 10.1.1951, fl. masc.
- 49907 SC, Itapiranga ad fl. Uruguay superius, in silva pluviali, 6.2.1951, fl. masc., det. L. B. Smith.
- 49914 SC, ibidem, in silva pluviali, 6.2.1951, fr. maturo, det. L. B. Smith.
- 50452 RGS, Gramado p. Canela (NEH), in araucarieto, 28.12.1949, fl. masc., leg. A. Sehnen SJ 4161.
- 51499 RGS, Passo do Socorro p. Vacaria (NEH), in araucarieto, 26.12.1951, fr. maturo.
- 53063 RGS, Cérro Largo (NW), in silva secundaria, 20.12.1952, fr.
- 53682 SC, Itapiranga ad fl. Uruguay superius, in silva pluviali, 17.1.1953, fl. masc.
- 54883 RGS, Vila Oliva p. Caxias (NEH), in araucarieto, 24.2.1954, fl. masc.
- 56545 RGS, Passo do Inferno p. Canela (NEH), in campestribus dense dumosis, 9.1.1955, fl. masc.
- 56600 RGS, Vila Oliva p. Caxias (NEH), in dumosis, 8.2.1955, fr. maturo.
- 56747 RGS, ibidem, in araucarieto, 8.2.1955, fl. masc.
- 59392 RGS, Farroupilha (NEH), in araucarieto, 11.11.1956, fl., leg. O. Camargo 1004.
- 59393 RGS, ibidem, 15.11.1956, fr., leg. O. Camargo 1005.
- 59437 RGS, ibidem, 15.11.1956, fl. masc., leg. O. Camargo 929.
- 60450 RGS, ibidem, 12.4.1957, fr., leg. O. Camargo 1290.
- 60601 RGS, ibidem, 7.5.1957, ster., leg. O. Camargo 1342.
- 60980 RGS, ibidem, 18.5.1957, fl. masc., leg. O. Camargo 1484.
- 61311 RGS, Horizontina p. Sta Rosa (NW), in silva pluviali, 24.1.1956, fl., leg. J. Pivetta 1200.
- 61312 RGS, ibidem, 29.1.1956, ad silvam, fr., leg. J. Pivetta 1199.
- 61553 RGS, Farroupilha (NEH), ad araucarietum, 22.11.1957, fr., leg. O. Camargo 2679.
- 61829 RGS, Garibaldi (NEH), in silva pluviali cum Araucariis intermixta, 29.10.1957, fl., leg. O. Camargo 2253.
- 62153 RGS, Bento Gonçalves (NEH), in silva, 6.10.1957, fl., leg. O. Camargo 1981.
- 62198 RGS, Garibaldi (NEH), in araucarieto, 13.10.1957, fl., leg. O. Camargo 2055.
- 62245 RGS, ibidem, 13.10.1957, fl., leg. O. Camargo 2038.

Habit: Woody shrub, abundantly branched, up to 3 meters high.

Habitat: Interior and edge of the rain and Araucaria forests, secondary brushwood, campestrian copses and gallery woodlets.

Distribution in RGS: Through the whole of the forested area of the northern half of the State.

General distribution: From Minas Gerais and Paraguay, down to northeastern Argentina and RGS.

Bernardia sp., Sectio 4, *Phyllopassaea*, Pax, PR 4, 147, 7 (1914) 36.

34773 RGS, Fazenda da Ronda p. Vacaria (NEH), in *campestribus siccis saxosis dumosis*, 3.1.1947, fl. masc. *deciso*.

Closely allied to *B. sellowii* M. Arg., but leaves much longer (7x4 cm), male inflorescences 5-6 cm, stems almost white with a slight glaucous hue and very few retrorse hairs; female stems lacking.

Apparently an undescribed species.

CAPERONIA St. Hil.

Nomenclature after Pax, PR 4, 147, 6 (1912).

Caperonia buettneriacea M. Arg., FB 11, 2 (1874) 320, tab. 47; Pax, PR 4, 147, 6 (1912) 48, det. L. B. Smith.

33937 SC, Sombrio p. Araranguá, in *paludosis alte dumosis*, 2.2.1946, fl. fr.

41201 RGS, Ilha das Flores p. P. Alegre (NEL), in *paludosis dense dumosis*, 22.4.1949, fl., fr.

50649 RGS, Montenegro (NEL), in *paludosis dumosis*, 28.12.1949, fl., fr., leg. A. Sehnem SJ 4452.

Habit: Weak half-shrub, sparingly branched, up to 1 meter high.

Habitat: Swamps, densely covered with brush, high Gramineae, Cyperaceae, etc.

Distribution in RGS: Northeastern lowlands and sea coast. **Geographical novelty.**

General distribution: Minas Gerais, S. Paulo, Sta Catarina, and RGS.

Caperonia hystrix Pax et K. Hoffm., PR 4, 147, 6 (1912) 41.

412 RGS, Esteio p. P. Alegre (NEL), in *subpaludosis alte dumosis*, 16.11.1932, fl.

25862 RGS, Fazenda Sta. Cecília p. S. Gabriel (SW), in *paludosis alte dumosis*, 1.1944, fl., fr.

35358 RGS, S. Leopoldo (NEL), in *paludosis dense dumosis*, 10.10.1946, fl., leg. E. Henz SJ.

53247 RGS, Caaró p. S. Luiz (NW), in *paludosis dumosis*, 20.11.1952, fl., fr.

Habit: Weak half-shrub, up to 1 meter high.

Habitat: Swampy thickets.

Distribution in RGS: Northeastern lowlands, western highlands, southwestern plains; rare.

General distribution: So far, Rio Grande do Sul only.

CHIROPETALUM Juss.

Nomenclature after Pax, PR 4, 147, 6 (1912).

Chiropetalum gymadenium (M. Arg.) Pax et K. Hoffm., PR 4, 147, 6 (1912) 91. — *Argyrothamnia gymadenia* M. Arg., FB 11, 2 (1874) 316.

8165 RGS, sine loco, sine die, fl., fr.

26498 RGS, Pareci p. Montenegro (NEL), in silva pluviali umbrosa, 1944, fl., fr., leg. E. Henz SJ.

42413 RGS, ibidem, 7.7.1949, fl., fr.

42954 RGS, ibidem, 18.8.1949, fl., fr.

43834 RGS, ibidem, 7.10.1949, fl., fr.

48181 RGS, Iraí ad. fl. Uruguay superius (NW), in silva pluviali umbrosa, 11.194, fl., leg. K. Enrich.

48210 RGS, ibidem, 11.1949, fl., leg. K. Enrich.

49241 RGS, Pareci p. Montenegro (NEL), in silva pluviali umbrosa, 26.11.1950, fl., fr.

52774 RGS, ibidem, 7.1952, fl., fr.

60191 SC, Campo dos Padres p. Bom Retiro, in dumosis rupes-tribus, 23.1.1957, fl., fr.

Habit: Weak half-shrub, sparingly branched, up to 1 meter high.

Habitat: Interior of the subtropical rain forest; wet rocky thickets (60191 at 1700 meters above sea level).

Distribution in RGS: Northeastern and northwestern rain forests. **Geographical novelty.**

General distribution: Minas Gerais, Sta. Catarina, Rio Grande do Sul.

Chiropetalum intermedium Pax et K. Hoffm., PR 4, 147, 6 (1912) 91.

32511 RGS, Pareci p. Montenegro (NEL), ad rivum in silva pluviali, 31.10.1945, fl., fr., leg. E. Henz SJ.

36212 RGS, Cambará p. S. Francisco de Paula (NEH), ad rivum in araucarieto, 2.1948, fl., fr.

37169 RGS, Cérro Largo (NW), ad rivulum in dumosis, 1947, fl., leg. Irm. Augusto Duflot.

39986 RGS, Linha Bonita p. Montenegro (NEH), ad rivum in silva pluviali, 19.1.1949, fl. fr.

42308 RGS, Langschneis p. Montenegro (NEL), ad rivulum in silva pluviali, 2.7.1949, fl., fr.

43059 RGS, Linha Bonita p. Montenegro (NEH), ad rivum in silva pluviali, 24.8.1949, fl., fr.

49345 RGS, Taimbesinho p. S. Francisco de Paula (NEH), ad ri- vum in araucarieto, 18.12.1950, fl., fr.

Habit: Woody shrub, abundantly branched, up to 1,5 meters high.

Habitat: Rain and Araucaria forests, preferably in more or less open places along creeks.

Distribution in RGS: Northeastern and northwestern highlands, northeastern lowlands. **Geographical novelty.**

General distribution: Rio Grande do Sul and Uruguay.

Chiropetalum molle Klotzsch, Wieg. Arch. 7 (1841) 199; Pax, PR 4, 147, 6 (1912) 87, fig. 17. — *Argyrothamnia mollis* (Klotzsch) M. Arg., FB 11, 2 (1874) 313.

56207 RGS, Torres (NEC), in graminosis brevissime dumosis, 12.11.1954, fl., fr.

Habit: Dwarf-shrub, 15 cm high.

Habitat: Among grasses and other dwarf-shrubs on the landward slope of the «Torre do Sul».

Distribution in RGS: No other findplaces. **Geographical novelty.**

General distribution: «Southern Brazil, Sellow 3030», which means Caçapava — Encruzilhada — Sta. Barbara in central RGS.

Chiropetalum tricoccum (Vell.) Chod. et Hassl., Bull. Herb. Boiss., 2. sér. 5 (1905) 502; Pax, PR 4, 147, 6 (1912) 90; O'Donell et Lourteig, GSPPA 1 (1943) 189, tab. 79. — *Desfontainea tricocca* Vell., Fl. Flum. (1825) 95, II. (1827) tab. 146.

4134 RGS, Rio Garopá p. Quaraí (SW), ad rivum in dumosis, 12. 1.1941, fl.

36002 RGS, Quaraí (SW), ad rivum in dumosis, 12.1.1941, fl.

Habit: Slender half-shrub, sparingly branched, up to 1 meter high.

Habitat: Wet, more or less shrubby places at the edge of watercourses.

Distribution in RGS: Southwestern plains only.

General distribution: From Paraguay, to southwestern Rio Grande do Sul and Uruguay.

COLLIGUAYA Molina

Nomenclature after Pax, PR 4, 147, 5 (1912)

Colliguaya brasiliensis M. Arg., Linnaea 32 (1863) 126); FB 11,2 (1874) 631, tab. 85, fig. 2; Pax, PR 4, 147,5 (1912) 267.

9410 RGS, Tupanciretan (NW), in silva campestri, 28.1.1942, fr.

9579 RGS, ibidem, 27.1.1942, fr.

60826 RGS, Farroupilha (NEH), ad rivulum in dumosis, 8.7.1957, fl., leg. O. Camargo 1664.

62171 RGS, ibidem, 4.10.1957, fl., leg. O. Camargo 1861.

62371 RGS, ibidem, 1.9.1957, fl., leg. O. Camargo 1678.

62779 RGS, ibidem, 10.11.1957, fl., fr., leg. O. Camargo 2508.

Habit: Small tree, up to 5 meters high.

Habitat: Edge of campos cosses, stream banks in secondary brushwood. **Distribution in RGS:** Northeastern and northwestern highlands, apparently rare. **Geographical novelty.**

General distribution: Southern Brazil and Uruguay.

CROTON L.

Nomenclature and determinations after Müller Argoviensis, FB 11, 2 (1874). A thorough revision is desired.

Croton adenodontus (M. Arg.) M. Arg., FB 11, 2 (1873) 267. — *C. glandulosus* (L. em.) M. Arg., var. *adenodontus* M. Arg., DC. Prodr. 15,2 (1845) 684.

9385 RGS, Tupanciretan (NW), in rupestribus siccis parce graminosis, 26.1.1942, fl.

9669 RGS, Jari p. Tupanciretan (NW), in rupestribus siccis parce graminosis, 26.1.1942, fl.

- 9881 RGS, ibidem, in campestribus siccis, 29.1.1942, fl.
 28257 RGS, Nonoai ad fl. Uruguay superius (NW), in siccis, 3.1945, fr.
 53006 RGS, Sto. Angelo (NW), in campestribus graminosis, 17.11.1953, fl., fr.
 56143 RGS, Cruz Alta (NW), in campestribus siccis graminosis 3.1.1954, fl., leg. J. Pivetta 553.
 60326 RGS, S. Bernardo p. Ijuí (NW), in siccis graminosis, 8.1.1957, fl., fr.

Habit: Small half-shrub, sparingly branched from a rootstock, branches 10-30 cm high.

Habitat: Dry, grassy, open, campos.
Distribution in RGS: Northwestern highlands. **Geographical novelty.**
General distribution: Rio de Janeiro, northwestern Rio Grande do Sul.

Croton buxifolius M. Arg., DC. Prodr. 15,2 (1945) 676; FB 11,2 (1873) 251.

4264 RGS, Serra da Rocinha p. Bom Jesus (NEH), in campestribus dumosiss, 12.2.1941, fl.

8264 RGS, ibidem, in silvula nebulari, 14.1.1942, fl.

32425 RGS, ibidem, 28.2.1946, fl.

35238 RGS, ibidem, in silvula nebulari, 14.2.1947, fl.

45352 RGS, ibidem, 18.1950, fl.

50413 RGS, ibidem, in campestribus dumosis, 19.1.1950, fl., leg.

A. Sehnem 4297.

50543 RGS, ibidem, 18.1.1950, fl., leg. A. Sehnem 4240.

53795 RGS, ibidem, 3.2.1953, fl. masc.

53855 RGS, ibidem, 3.2.1953, fl.

53879 RGS, ibidem, 3.2.1953, fl. fem.

53911 RGS, ibidem, 3.2.1953, fl. fem.

Habit: Shrub, densely branched, 1-1.5 meters high, very similar to *C. myrianthus* M. Arg., but leaves constantly elliptic to almost rounded.

Habitat: Edge of the Araucaria forest, campestrian thickets, cloud forests. (1200 meters above sea level, abrupt eastern rim of the highlands).

Distribution in RGS: No other findplaces. **Geographical novelty.**

General distribution: Mountainous area of Minas Gerais and Rio de Janeiro, eastern rim of the Riograndean highlands.

Croton campestris St. Hil., Plant. us. Brés., (1824) tab. 9; Müller Argoviensis, FB 11,2 (1873) 166.

37007 RGS, Cérro Largo (NW), in campestribus dumosis, 1946, fl., leg. Irm. Augusto Duflot.

48037 RGS, ad fl. Ijuí p. S. Luiz (NW) in campestribus dumosis, 4.2.1949; fl., leg. A. Sehnem SJ 3610.

64262 SC, Lages, in campestribus dumosis, 17.2.1958, fl., leg. J. Mattos.

64263 SC, ibidem, 17.2.1958, fl., leg. J. Mattos.

64264 SC, ibidem, 16.2.1958, fl., leg. J. Mattos.

Habit: Shrub, 1-1.5 meters high, indument very variable, from greyish brown to rusty red.

Habitat: Edge of the campos copses, thickets.

Distribution in RGS: Northern campos area of the State. **Geographical novelty.**

General distribution: From Bahia and Minas Gerais, through southern Brazil, down to northeastern Argentina, and Rio Grande do Sul.

Croton ceanothifolius Baill., Rec. Obs. Bot. 4 (1864) 295; Müller Argoviensis, FB 11,2 (1873) 247.

- 49522 SC, Lages, in campestribus dumosis, 10.1.1951, fl., det. L. B. Smith.
 49539 SC, ibidem, 10.1951, fl.
 61066 SC, ibidem, 25.14.1956, fr., leg. J. Mattos.

Habit: Shrub, 1-1.5 meters high, densely branched.

Habitat: Edge of the Araucaria forests, campestrian thickets.

Distribution in RGS: So far, not yet found in this area proper; but the findplace is only 70 km distant from the northeastern frontier of this State, and has perfectly the same ecological features. **Geographical novelty.**

General distribution: Mountainous area of Minas Gerais and S. Paulo; highlands of Santa Catarina.

Croton celtidifolius Baill., Rec. Obs. Bot. 4 (1864) 331; Müller Argoviensis, FB 11,2 (1873) 98.

- 30512 SC, Sanga do Eugênio p. Cressuma, in silvula, 30.11.1943, fl. masc., leg. R. Reitz 1017.
 32111 SC, Praia Grande p. Araranguá, in silvula montana, 14.2.1946, fl. deciso.
 45441 RGS, Serra da Rocinha p. B. Jesus (NEH), in silvula montana, 18.1.1950, fl.
 47906 SC, Pinheiral p. Nova Trento, ad silvam pluviale, 13.1.1948, fl., leg. A. Sehnem SJ 3057, det. L. B. Smith.

Habit: Shrub or small tree, very similar to *C. urucurana* Baill.

Habitat: Wet rocky shrubwood.

Distribution in RGS: Northeastern precipitous rim of the highlands only; common on the coastal mountain ridges of Sta. Catarina.

General distribution: Mountainous area of Minas Gerais and S. Paulo, down to northeastern Rio Grande do Sul.

Croton chloroleucus M. Arf., Linnaea 34 (1865) 106; FB 11,2 (1873) 141.

- 60711 SC, S. Joaquim, in campestribus dumosis, 2.1954, fl., leg. J. Mattos.

Habit: Shrub, 1 meter high.

Habitat: Campos thickets.

Distribution in RGS: To be found in the northeastern highlands; the findplace is distant less than 50 km from the exactly similar campos of this area.

Geographical novelty.

General distribution: S. Paulo, southern Brazil, central highlands of Sta Catarina.

Croton cneorifolius M. Arg., DC. Prodr. 15,2 (1845) 676; FB 11,2 (1873) 253.

- 50076 RGS, Taimbesinho p. S. Fr. de Paula (NEH), in campestribus dumosis, 21.2.1951, fl., fr.
 50106 RGS, ibidem, 21.2.1951, fl.
 50160 RGS, ibidem, 21.2.1951, fl.
 50161 RGS, ibidem, 21.2.1951, fl.
 50164 RGS, ibidem, 21.2.1951, fl.

C. **Habit:** Shrub, 1-1,5 meters high, densely branched, of the close kinship of *C. buxifolius-ceanothifolius-myrianthus*.

Habitat: Edge of the Araucaria forests, campos thickets.

Distribution in RGS: No other findplace. **Geographical novelty.**

General distribution: Mountainous area of Minas Gerais, eastern rim of the Riograndean highlands.

Croton ericoides Baill., Rec. Obs. Bot. 4 (1864) 293; Müller Argoviensis, FB 11, 2 (1873) 251.

110 RGS, Tramandaí (NEC), in arenosis siccis graminosis, 13.2.1933, fl.

45186 RGS, Fazenda do Arroio p. Osório (NEC), (typical find-place of St. Hilaire!), in sabulosis siccis breviter dumosis, 4.1.1950, fl. masc.

46768 RGS, ibidem, 14.4.1950, fl. masc.

48773 RGS, ibidem, 11.9.1950, fl. fem.

48799 RGS, ibidem, 11.9.1950, fl. masc.

54764 RGS, Torres (NEC), in arenosis breviter dumosis, 11.2.1954, fl. masc.

54824 RGS, ibidem, 11.2.1954, fl. fem.

55886 RGS, Fazenda do Arroio p. Osório (NEC), in arenosis, 3.10.1954, fl. masc.

55887 RGS, ibidem, 3.10.1954, fl. fem.

61458 RGS, ibidem, 9.1957, fl. masc.

61459 RGS, ibidem, 9.1957, fl. fem.

Habit: Slender woody shrub, densely branched, prostrate to ascending.

Habitat: Dry sandy patches between sanddunes.

Distribution in RGS: Northeastern sea coast only.

General distribution: Apparently endemic in Rio Grande do Sul.

Croton gaudichaudii Baill., Rec. Obs. Bot. 4 (1864) 293; Müller Argoviensis, FB 11, 2 (1873) 249.

4293 RGS, sine loco, sine die, fl.

6806 SC, Lages, in campestribus dumosis, 1935, fls. leg. A. Bruxel SJ. (L. B. Smith: Cr. tenuissimus Baill.)

6821 SC, ibidem, 1935, fl., leg. A. Bruxel. (L. B. Smith: Cr. tenuissimus Baill.)

36210 RGS, Cambará p., S. Francisco de Paula, (NEH), in campestribus dumosis, 2. 1948, fl.

50767 SC, Morro da Igreja p. S. Joaquim, in campestribus dumosis, 3.1. 1949, fl. leg. R. Reitz 3637, (L. B. Smith: C. dichrous M. Arg.)

50949 RGS, Taimbesinho p. S. Francisco de Paula (NEH), in campestribus dumosis, 19.12.1950, fl., leg. A. Sehnem SJ 5139.

52027 RGS, Jaquirana p. S. Francisco de Paula (NEH), in campestribus dumosis, 20.2.1952, fl. fem.

C. **Habit:** Shrub, 1,5 meters high, densely branched; another member of the myrianthus group.

Habitat: Dry campos thickets.

Distribution in RGS: Northeastern highlands only.

General distribution: Southern Brazil, Rio Grande do Sul.

Croton glechomifolius M. Arg., Linnaea 34 (1865) 126; FB 11,2 (1873) 224.

3047 RGS, Cruz Alta (NW), in campestribus siccis graminosis, 16.12.1937, ster.

28099 RGS, Nonoai ad fl. Uruguay superius (NW), in campestribus siccis graminosis, 3.1945, fl., fr.

61005 SC, Lages, in campestribus siccis graminosis, 25.12.1956, fl., fr., leg. J. Mattos.

Habit: Half-shrub, prostrate to ascending, branches 15-30 cm long.

Habitat: Dry grassy campos.

Distribution in RGS: Northwestern campos only.

General Distribution: S. Paulo, southern Brazil, Rio Grande do Sul.

Croton gnaphalii Baill., Adansonia 4 (1864) 359; Müller Argoviensis, FB 11, 2 (1873) 129.

107 RGS, Vila Manresa p. P. Alegre (NEL), in campestribus siccis subdumosis, 19.11.1932, fl.

2515 RGS, ibidem, 16.8.1942, fl.

11955 RGS, ibidem, 1943, fl.

28165 RGS, ibidem, 10.1944, fl.

29001 RGS, ibidem, 15.8.1945, fl. fem.

37338 RGS, Morro da Polícia p. P. Alegre, in campestribus siccis alte graminosis, 16.7.1948, fl. masc.

39168 RGS, Espírito Santo p. P. Alegre (NEL), in campestribus siccis dumosis, 12.2.1948, fl. masc.

43333 RGS, Morro da Polícia p. P. Alegre (NEL), in subrupestribus siccis parce graminosis, 9.9.1949, fr.

44163 RGS, Morro Santana p. P. Alegre (NEL), in campestribus subdumosis, 2.11.1949, fl. fem.

46745 RGS, Viamão p. P. Alegre (NEL), in siccis, 10.4.1950, fl. fem.

47092 RGS, Vila Manresa p. P. Alegre (NEL), in campestribus dense et alte graminosis, 15.5.1950, fl. masc.

48802 RGS, ibidem, 22.9.1950, fl. fem.

48806 RGS, Granja Neugebauer p. Itapoan (NEL), in campestribus siccis subnudis, 22.9.1950, fl. masc.

48838 RGS, ibidem, 27.9.1950, fl. masc.

48880 RGS, ibidem, 27.9.1950, fl., fr.

50563 RGS, Vila Manresa p. P. Alegre, in siccis graminosis, 3.3.1950, fl., leg. A. Sehnem SJ 4411.

54425 RGS, ibidem, 12.11.1953, fl. masc.

54464 RGS, ibidem, 12.11.1953, fl. fem.

61456 RGS, Fazenda do Arroio p. Osório (NEC), in sabulosis siccis durnetosis, 9.1957, fl. masc.

61457 RGS, ibidem, 9.1957, fl. fem.

62127 RGS, ad Pôrto Alegre (NEL), in campestribus, 1.10.1957, fl., fr., leg. O. Camargo 1832.

64311 RGS, ibidem, 28.10.1957, fl., leg. J. Mattos.

Habit: Shrub, up to 1 meter high, densely branched.

Habitat: Dry, rocky sandy or stony campos.

Distribution in RGS: Surroundings of P. Alegre and northeastern sea coast only.

General distribution: Apparently endemic in Rio Grande do Sul.

Croton garckeanaus Baill., Rec. Obs. Bot. 4 (1864) 308; Müller Argoviensis, FB 11, 2 (1873) 196.

26013 RGS, Fazenda do Jarau p. Quarai (SW), in rupestribus dumosis, 1.1945, fl.

Habit: Small shrub, abundantly branched, 1 meter high.

Habitat: More or less bare sandstone outcrops.

Distribution in RGS: Southwestern plains only.

General distribution: Rio Grande do Sul and Uruguay.

Croton helichrysum Baill., Obs. Bot. 4 (1864) 358; Müller Argoviensis, FB 11, 2 (1873) 130.

38610 RGS, ad montem das Cabras p. S. Leopoldo, (NEL) in rupestribus dumosis, 7.12.1948, fl. fem.

39005 RGS, Steinkopf p. S. Leopoldo (NEL), in rupestribus parce graminosis, 20.12.1948, fl. masc.

39052 RGS, ibidem, 20.12.1948, fl.

40811 RGS, Granja Neugebauer p. Itapoan (NEL), in campestribus siccis parce dumosis, 3.4.1949, fl. masc.

40863 RGS, ibidem, 3.4.1949, fl.

40864 RGS, ibidem, 3.4.1949, fl.

40956 RGS, ad montem das Cabras p. S. Leopoldo (NEL), in sabulosis siccis subdumosis, 8.4.1949, fl. fem.

44507 RGS, Granja Neugebauer p. Itapoan (NEL), in campestribus siccis alte graminosis, 19.11.1949, fl.

45290 RGS, in summo monte Itacolomí p. Gravataí (NEL), in rupestribus dumosis, 11.1.1950, fl. masc.

45815 RGS, Fazenda do Arroio p. Osório (NEC), in sabulosis siccis sparse dumosis, 4.1.1950, fl. masc.

46765 RGS, ibidem, 14.4.1950, fl. fem.

47006 RGS, Osório (NEC), in arenosis dumosis, 1.5.1950, fl. fem.

48752 RGS, ibidem, 11.9.1950, fl. fem.

48753 RGS, ibidem, 11.9.1950, fl. masc.

48835 RGS, Granja Neugebauer p. Itapoan (NEL), in campestribus siccis dumosis, 27.9.1950, fl. masc.

48877 RGS, ibidem, 27.9.1950, fl. masc.

49280 RGS, Gravataí p. P. Alegre (NEL), in arenosis dumosis siccis, 1.12.1950, fl. fem.

49290 RGS, ibidem, 1.12.1950, fl. masc.

50574 RGS, ibidem, 25.1.1950, fl. masc., leg. A. Sehnem SJ 4391.

51528 RGS, Passo do Socorro p. Vacaria (NEH), in campestribus siccis dumosis, 27.12.1951, fl., fr.

51544 RGS, ibidem, 26.12.1951, fl. masc.

55893 RGS, Fazenda do Arroio p. Osório (NEC), in arenosis dumosis, 3.10.1954, fl. fem.

55917 RGS, ibidem, 3.10.1954, fl. masc.

Habit: Woody shrub, 0,5-1 meter high.

Habitat: Dry rocky or sandy, more or less open, places.

Distribution in RGS: Dry rocky hills near P. Alegre and S. Leopoldo (NEL), and northeastern sea coast (typical findplace of St. Hilaire).

General distribution: Seemingly endemic in Rio Grande do Sul.

Croton isabellei Baill., Rec. Obs. Bot. 4 (1864) 318; Müller Argoviensis, FB 11, 2 (1873) 254.

1457 RGS, S. Leopoldo (NEL), in campestribus dumosis, 15.4.1934, fl.

- 29735 RGS, Pareci p. Montenegro (NEL), in arenosis dumosis, 30.5.1945, fl., leg. E. Henz SJ.
 38593 RGS, ad montem das Cabras p. S. Leopoldo (NEL), in sabulosis dumosis, 7.12.1948, fl.
 39004 RGS, Steinkopf p. S. Leopoldo (NEL), in dumosis siccis, 20.12.1948, fl.
 49279 RGS, Gravataí p. P. Alegre (NEL), in dumosis siccis, 1.12.1950, fl.
 50569 RGS, ibidem, 12.2.1950, fl., leg. A. Sehnem SJ 4396.

Habit: Slender woody shrub, 1-2 meters high.

Habitat: Dry sandy or rocky brushwood.

Distribution in RGS: Northeastern lowlands only.

General distribution: Apparently endemic in RGS.

Croton julopsidium Baill., Rec. Obs. Bot. 4 (1864) 318; Müller Argoviensis, FB 11, 2 (1873) 273.

- 4735 RGS, Toca p. Canela (NEH), in campestribus alte dumosis, 10.2.1941, fl.
 47400 RGS, Passo do Inferno p. Canela (NEH), in araucarieto valde sparsio, 8.1949, fl., leg. A. Spies.
 47797 RGS, Kappesberg p. Montenegro (NEH), in alte dumosis, 26.10.1949, fl., leg. A. Sehnem SJ 3950.
 51114 RGS, ibidem, 20.11.1950, fl., leg. A. Sehnem 5056.

Habit: Slender woody shrub, 1, 5-2 meters high.

Habitat: Dry brushwood.

Distribution in RGS: Southern rim of the northeastern highlands.

General distribution: Apparently endemic in RGS.

Croton lanatus Lam., Enc. méth. 2 (1786) 211; Müller Argoviensis, FB 11, 2 (1873) 257.

- 2211 RGS, Kappesberg p. Montenegro (NEH), in dumosis, 21.12.1935, fl.
 28463 RGS, Nonoai ad fl. Uruguay superius, (NW), in campestribus dumosis, 3.1945, fl., fr.
 34774 RGS, Fazenda da Ronda p. Vacaria (NEH), ad araucarietum in dumosis, 3.1.1947, fl.
 35642 RGS, Kappesberg p. Montenegro (NEH), in dumosis, 15.12.1946, fl., fr., leg. E. Henz SJ.
 36220 RGS, Cambará p. S. Francisco de Paula (NEH), ad araucarietum in dumosis, 2.1948, fl.
 47612 SC, Bom Retiro, in dumosis, 8.1.1948, fl., leg. R. Reitz 2856.
 48073 RGS, Kappesberg p. Montenegro (NEH), ad silvam pluvialem, 3.11.1948, fl., leg. A. Sehnem 3464.
 48165 RGS, Iraí ad fl. Uruguay superius (NW), ad viam in silva pluviali, 10.1949, fl., leg. K. Emrich.
 49993 *RGS, Palmeira (NW), ad araucarietum, 12.2.1951, fl.
 51418 RGS, Passo do Socorro p. Vacaria, in araucarieto, 26.12.1951, fl. fr.
 62597 RGS, Farroupilha (NEH), in dumosis, 15.10.1957, fl., fr., leg. O. Camargo 2103.

Habit: Shrub, 1, 5-2 meters high.

Habitat: Edge and glades of the Araucaria forest.

Distribution in RGS: Northern highlands.

General distribution: Minas Gerais, Santa Catarina, RGS, Uruguay.

Croton laseguei M. Arg., FB 11, 2 (1873) 154.

104 RGS, Morro S. José p. P. Alegre (NEL), in campestribus siccis graminosis, 17.1.1933, fl.

106 RGS, Morro da Polícia p. P. Alegre (NEL), in campestribus siccis graminosis, 12.3.1931, fl.

33144 RGS, Vila Manresa p. P. Alegre, in campestribus, 12.12.1945, fl.

37492 RGS, ibidem, 1.9.1948, fl.

40888 RGS, Granja Neugebauer p. Itapoan (NEL), in arenosis siccis subdumosis, 3.4.1949, fl.

41054 RGS, Morro Agudo p. P. Alegre (NEL), in campestribus siccis apertis, 13.4.1949, fl.

42409 RGS, Pareci p. Montenegro (NEL), in arenosis dumosis, 17.7.149, fl.

42968 RGS, ibidem, 17.8.1949, fl.

43830 RGS, ibidem, 7.10.1949, fl.

44432 RGS, Granja Neugebauer p. Itapoan (NEL), in arenosis dumosis, 19.11.1949, fl.

44535 RGS, Osório (NEC), in arenosis dumosis, 24.11.1949, fl. fr.

45211 RGS, Fazenda do Arroio p. Osório (NEC), in arenosis dumosis, 4.1.1950, fl.

46770 RGS, ibidem, 14.4.1950, fl.

46958 RGS, Osório (NEC), in arenosis dumosis, 1.5.1950, fr.

48745 RGS, ibidem, 11.9.1950, fl.

48846 RGS, Granja Neugebauer p. P. Alegre (NEL), in arenosis subdumosis, 27.9.1950, fl. fr.

61460 RGS, Fazenda do Arroio p. Osório (NEL), in arenosis, 9.1957, fl.

63559 RGS, ibidem, 23.1.1958, fl.

Habit: Half-shrub, 0.5-1 meter high.

Habitat: Dry rocky or sandy, more or less open, places.

Distribution in RGS: Northeastern lowlands and sea coast.

General distribution: Rio Grande do Sul und Uruguay.

Croton lobatus (L. emend.) M. Arg., FB 11, 2 (1873) 237. — *C. lobatus* L., Sp. Pl. (1753) 1005 (var. *genuinus* M. Arg., l.c.239).

2896 RGS, S. Miguel p. S. Luiz (NW), in incultis, 29.1.1938, fl., fr.

2958 RGS, S. Borja (SW), in ruderatis, 1942, ster., leg. F. Baldione.

8294 RGS, P. Alegre (NEL), in incultis, 18.11.1942, fl.

11099 RGS, Cérro Largo (NW), in incultis, 1.1943, fl., fr., leg. P. Buck SJ.

26838 RGS, P. Alegre (NEL), in incultis, 4.1944, fl., fr., leg. K. Emrich.

28376 RGS, Nonoai ad fl. Uruguay superius (NW), in incultis, 3.1945, fl., fr.

36031 RGS, Campina p. Sta Rosa (NW), ad viam, 2.1947, fl., fr., leg. A. Spies.

47505 RGS, S. Leopoldo (NEL), in incultis, 1942, fr., leg. E. Schmidt SJ.

47505 RGS, S. Leopoldo (NEL), in incultis, 1942, fr., leg. E. Schmidt SJ.

57939 RGS, Pestana p. Ijuí (NW), in incultis, 26.12.1955, fl. fr., leg. J. Pivetta 1120.

Habit: Herbaceous, up to 50 cm high.

Habitat: Wet places, roadsides, cultivated land; weedy; probably not native in southern Brazil.

Distribution in RGS: Through most of the State. **Geographical novelty.**

General distribution: With many varieties, from the Antilles and Mexico, through the whole of cis-Andean South America, down to northern Argentina, Rio Grande do Sul, and Uruguay.

Croton myrianthus M. Arg., DC. Prodr. 15, 2 (1845) 675; FB 11.2 (1873) 205.

1185 RGS, S. Francisco de Paula (NEH), in campestribus, 14.1.1937, fl.

2540 RGS, ibidem, 14.1.1937, fl.

4316 RGS, Taimbesinho p. S. Francisco de Paula (NEH), in campestribus dumosis, 8.2.1941, fl.

4330 RGS, ibidem, 7.2.1941, fl.

4567 RGS, Fazenda Englert p. S. Francisco de Paula (NEH), in campestribus dumosis, 8.2.1941, fl.

4831 RGS, Passo do Inferno p. S. Francisco de Paula (NEH), in campestribus sparse dumosis, 10.12.1941, fl.

4990 RGS, Gramado p. Canela (NEH), ad araucarietum, 10.1.1941, fl.

8496 RGS, Rio dos Touros p. Bom Jesus (NEH), ad araucarietum, 13.1.1942, fl.

11549 RGS, Fazenda Englert p. S. Francisco de Paula (NEH), ad silvulam campestrem, 1.1944, fl., leg. P. Buck SJ.

11636 RGS, ibidem, 1.1944, fl., leg. P. Buck SJ.

28750 RGS, Caracol p. Canela (NEH), in campestribus dumosis, 3.1945, fl., leg. K. Emrich.

31088 RGS, Vila Oliva p. Caxias (NEH), 6.1.1946, fl.

32203 RGS, Taimbesinho p. S. Francisco de Paula, in araucarieto valde aperto, 14.2.1946, fl.

34765 RGS, Fazenda da Ronda p. Vacaria (NEH), in campestribus dumosis, 3.1.1947, fl.

35760 RGS, Agua Azul p. Caxias (NEH), ad rivulum in dumosis, 3.1.1947, ster., leg. E. Henz SJ.

43128 RGS, Vila Oliva p. Caxias (NEH), ad araucarietum, 28.8.1949, fl. nondum aperto.

44903 RGS, S. Francisco de Paula (NEH), in campestribus, 18.12.1949, fl.

45539 RGS, Taimbesinho p. S. Francisco de Paula (NEH), ad rivulum in dense dumosis, 30.1.1950, fl.

45656 RGS, S. Francisco de Paula (NEH), in dumosis, 31.1.1950, fl.

46285 RGS, ibidem, 13.3.1950, fl.

47176 RGS, Agua Azul p. Caxias (NEH), in campestribus, 26.6.1950, fl. nondum aperto.

49354 RGS, Taimbesinho p. S. Francisco de Paula (NEH), ad araucarietum, 18.12.1950, fl.

49407 RGS, ibidem, 18.2.1950, fl.

50066 RGS, ibidem, 21.2.1951, fl.

52787 RGS, ibidem, 9.8.1952, fl. masc.

- 52967 RGS, S. Francisco de Paula (NEH), in campestribus, 9.9. 1952, fl. masc.
 52969 RGS, ibidem, 9.9.1952, fl. fem.
 53968 RGS, Taimbesinho p. S. Francisco de Paula (NEH), in arau-
 carieto aperto, 20.2.1953, fl. masc.
 53975 RGS, ibidem, 20.2.1953, fl. fem.
 55050 RGS, Vila Oliva p. Caxias (NEH), in dumosis, 24.2.1954,
 fl. masc.
 55051 RGS, ibidem, 24.2.1954, fl. fem.
 56267 RGS, Fazenda Englert p. S. Francisco de Paula (NEH), ad
 silvulam campestrem cum Araucariis intermixtam, 2.1.1955, fl., fr.
 56757 RGS, Vila Oliva p. Caxias (NEH), in campestribus, 8.2.
 1955, fl.
 57365 RGS, Passo Fundo (NEH), in campestribus dumosis, 12.
 1955, fr., leg. P. Freddiani.
 61691 RGS, Farroupilha (NEH), ad araucarietum, 18.11.1957, fl.,
 fr., leg. O. Camargo 2578.
 62596 RGS, Passo Fundo (NW), in campestribus dumosis, 20.10.
 1957, fl., fr., leg. O. Camargo 2200.
 64216 SC, S. Joaquim, in campestribus, 10.1.1958, fl., leg. J. Mattos.
 64326 SC, ibidem, 10.2.1958, fl., leg. J. Mattos.

Note: The group, *C. myrianthus-buxifolius-ceanothifolius-cneorifolius-gaudi-chaudii*, and perhaps some more species described by Müller Argoviensis in FB, in a future revision, probably will be subsumed under one and the same variable species.

Habit: Woody shrub, densely branched, 0.5-1.5, meters high.

Habitat: More or less wet campos thickets, edge of watercourses and Arau-
 caria forests.

Distribution in RGS: But for two only collections (57365, 62596), restricted
 to the northeastern highlands.

General distribution: Southern Brazil: Sta Catarina and Rio Grande do Sul.

Croton nitrariifolius (Baill. emend.) M. Arg., DC. Prodr. 15, 2
 (1845) 563; FB 11, 2 (1873) 131. — *C. nitrariifolius* Baill., Rec. Obs.
 Bot. 4 (1864) 351 (var. *genuinus* M. Arg., l.c. 132).

- 102 RGS, Vila Manresa p. P. Alegre (NEL), in campestribus siccis
 dumosis, 16.10.1932, fl.
 2517 RGS, ibidem, 16.8.1942, fl.
 27180 RGS, ibidem, 10.1944, fl.
 29125 RGS, ibidem, 12.9.1945, fl., fr.
 37737 RGS, Morro da Policia p. P. Alegre (NEL), in campestris-
 bus siccis sparse dumosis, 16.7.1948, fl.
 43356 RGS, ibidem, 9.9.1949, fl. masc.
 43718 RGS, Morro de Sta Teresa p. P. Alegre (NEL), in campes-
 tribus dumosis, 3.10.1949, fl.
 44139 RGS, Morro da Policia p. P. Alegre (NEH), in campestris-
 bus dumosis, 31.10.1949, fl.
 45823 RGS, ibidem, 16.2.1950, fl.
 48801 RGS, Vila Manresa p. P. Alegre (NEL), in campestribus
 sparse dumosis siccis, 22.9.1950, fl.
 57285 RGS, ibidem, 24.9.1955, fl.
 57290 RGS, ibidem, 24.10.1955, fl.

Habit: Woody shrub, densely branched, up to 2 meters high.

Habitat: Dry shrub campo.

Distribution in RGS: Granitic hills of P. Alegre only. (Bornmüller: Boi Pre-

to near Palmeira (NW), which determination, like some others in this author's catalogue, I consider as doubtful.

General distribution: Rio Grande do Sul and Uruguay.

Croton pallidulus Baill., Rec. Obs. Bot. 4 (1864) 296; Müller Argoviensis, FB 11, 2 (1873) 248.

51550 RGS, Passo do Socorro p. Vacaria (NEH), ad araucarietum, 26.12.1951, fl. fem.

Habit: Woody shrub, 1 meter high.

Habitat: Edge of the Araucaria forest.

Distribution in RGS: No other findplace. **Geographical novelty.**

General distribution: S. Paulo, northeastern Rio Grande do Sul.

Croton pycnocephalus M. Arg., DC. Prodr. 15, 2 (1845) 568; FB 11, 2 (1873) 136.

9878 RGS, Tupanciretan (NW), in siccis dumosis, 29.1.1942, fl.
9907 RGS, ibidem, 24.1.1942, fl., fr.

Habit: Slender woody shrub, scarcely branched near the top.

Habitat: Dry, stony and grassy, more or less open, campos.

Distribution in RGS: Northwestern campos area.

General distribution: Rio Grande do Sul and Uruguay.

Croton stenotrichus M. Arg., Linnaea 34 (1865) 105; FB 11, 2 (1873) 143.

105 RGS, Canoas p. P. Alegre (NEL), in subpaludosis graminosis sparse dumosis, 6.10.1932, fl.

44349 RGS, ad fl. Gravataí inferius p. P. Alegre (NEL), in subpaludosis dumosis gregatim, 11.11.1949, fl.

Habit: Woody shrub, abundantly branched towards the upper half, 1.5 meters high.

Habitat: Wet grassy marshes.

Distribution in RGS: Northeastern lowlands near P. Alegre only. **Geographical novelty.**

General distribution: «Southern Brazil. Sellow»: Rio Grande do Sul.

Croton urucurana Baill., Rec. Obs. Bot. 4 (1864) 335; Müller Argoviensis, FB 11, 2 (1873), 111, tab. 22.

1730 SC, Itapiranga ad fl. Uruguay superius, ad flumen in dumosis, 16.2.1934, fl., det. L. B. Smith.

7620 Paraná, Pôrto União, ad silvam ripariam, 28.12.1938, fl., leg. C. Orth SJ.

53667 Paraná, Salto do Iguassú, ad flumen in dupestribus, 11.1.1953, fl. fr.

Habit: Shrub to small tree, up to 5 meters high.

Habitat: Half-high vegetation at the edge of rivers.

Distribution in RGS: Northwestern rain forest belt only. (N. 1730 has been collected at the Sta. Catarina side of the Uruguay, but the species has frequently been observed south of the river).

General distribution: From Minas Gerais, through southern Brazil, down to northwestern RGS, northeastern Argentina, and Uruguay.

Croton uruguayensis Baill., Rec. Obs. 4 (1864) 292; Müller Argoviensis, FB 11, 2 (1873) 250.

25756 RGS, Fazenda Sta Cecilia p. S. Gabriel (SW), in campestribus dumosis, 1.1944, fl.

Habit: Woody shrub, 1 meter high. Another member of the *C. myrianthus* group, but sufficiently distinct by its very narrow leaves.

Habitat: Dry shrub campo.

Distribution in RGS: Southwestern plains only. **Geographical novelty.**

General distribution: Rio Grande do Sul and Uruguay.

Croton verbenifolius M. Arg., Linnaea 34 (1865) 140; FB 11, 2 (1873) 272.

4799 RGS, Passo do Inferno p. Canela (NEH), in aperte dumosis, 10.2.1941, fl.

4842 RGS, ibidem, 10.2.1941, fl.

8991 RGS, Bom Jesus (NEH), ad araucarietum, 16.1.1942, fl.

28711 RGS, Caracol p. Canela (NEH), ad araucarietum in dumosis apertis, 2.1945, fl., legit K. Emrich.

28797 RGS, ibidem, 2.1945, fl., fr., leg. K. Emrich.

29982 RGS, ibidem, 20.1.1936, fl., leg. K. Emrich.

31092 RGS, Vila Oliva p. Caxias (NEH), ad araucarietum, 6.1.1946, fl., leg. K. Emrich.

33343 RGS, Caracol p. Canela (NEH), in silva aperta, 10.2.1946, fl. l. K. Emrich.

33664 Paraná, in campestribus, 4.3.1946, fl., leg. G. Hatschbach.

34779 RGS, Fazenda da Ronda p. Vacaria (NEH), ad araucarietum in graminosis, 3.1.1947, fl.

35848 RGS, Caracol p. Canela (NEH), in dumosis, 13.2.1947, fl., fr., leg. K. Emrich.

44968 RGS, Gramado p. Canela (NEH), in campestribus dumosis, 26.12.1949, fl.

49594 SC, Lages, ad silvulam campestrem, 10.1.1951, fl. (L. B. Smith: Cr. glandulosus L., v. hirta (L'Hérit.) M. Arg.).

50942, ibidem, 10.1.1951, fl., leg. A. Sehnem SJ 5492. (L. B. Smith: C. glandulosus L., v. hirta (L'Hérit.) M. Arg.).

51512 RGS, Passo do Socorro p. Vacaria (NEH), ad araucarietum in graminosis subdumosis, 26.2.1951, fl.

51913 RGS, Passo da Guarda p. Bom Jesus (NEH), in campestribus sparse dumosis, 15.1.1952, fl.

54975 RGS, Vila Oliva p. Caxias (NEH), ad araucarietum, 24.2.1954, fl.

56074 RGS, Pestana p. Ijuí (NW), ad silvam campestrem, 19.2.1954, fl., fr., leg. J. Pivetta 567.

56139 RGS, ibidem, 19.2.1954, fl., fr., leg. J. Pivetta 566.

56553 RGS, Passo do Inferno p. Canela (NEH), in campestribus sparse dumosis, 9.1.1955, fl.

62782 RGS, Farroupilha (NEH), ad araucarietum in dumosis, 10.11.1957, fl., fr., leg. O. Camargo 2491.

63031 Paraguay, Primavera p. Asunción, in dumosis, 5.7.1957, fl., leg. A. Woolston 313B, fl.

64325 SC, Lages, in campestribus, 17.2.1958, fl., leg. J. Mattos.

Habit: Half-shrub, densely branched from a rootstock, secondary branches dichotomous, prostrate-ascending, 20-50 cm.

Habitat: Preferably at the edge of Araucaria forests, campos thickets.

Distribution in RGS: All collections but two (56074, 56139) from the north-eastern highlands. **Geographical novelty.**

General distribution: Minas Gerais, southern Brazil, northeastern Rio Grande do Sul.

Croton sp., Eucroton-Cleodora-Arkyrodendron.

51692 RGS, Passo do Socorro p. Vacaria (NEH), in araucarieto aperto, 28.12.1951, fr. maturo.

Habitually very similar to *C. strenotrichus*, but without glandules at the basis of the leaves; apparently undescribed.

Croton sp., Eucroton-Lasiogyne-Gonocladium.

1450 RGS, S. Leopoldo (NEL), in campestribus siccis subdumosisis, 15.5.1934, fl.

Closely allied to *C. nitrariifolius*, but apparently different and undescribed.

Croton sp., Eucroton-Decarinum-Lamprocroton.

45985 RGS, Lagoa dos Quadros p. Torres (NEC), in siccis arenosis dumosis, 21.2.1950, fl. fem.

48970 RGS, Granja Neugebauer p. Itapoan (NEL), in campestribus siccis, 11.10.1950, fl. masc. deciso.

51753 RGS, Morro Grande p. Osório (NEC), in arenosis siccis subdumosis, 10.2.1952, fl. fem.

Belongs to the *C. myrianthus* group, but apparently an undescribed species.

Croton sp., Eucroton-Cleodora-Medea.

1198 RGS, Sto Angelo (NW), in campestribus breviter dumosis, 1.1.1943, fl., fr.

57598 RGS, Pestana p. Ijuí (NW), in campestribus siccis dumosis, 14.2.1954, fl. masc., leg. J. Pivetta 638.

61409 RGS, ibidem, 7.2.1956, fl. masc., leg. J. Pivetta 1122.

In close kinship with *C. hieronymi* Gris., but leaves sessile.

DALECHAMPIA L.

Nomenclature after Pax & K. Hoffm., PR 4, 147, 12 (1919).

Dalechampia sellowiana M. Arg., DC. Prodr. 15, 2 (1845) 1237; FB 11, e (1874) 653; Pax et K. Hoffmann, PR 4, 147, 12 (1919) 23.

1440 RGS, Tramandai (NEC), in arenosis siccis prostrata, 4.3.1933, fl. L. B. Smith; *D. micromeria* M. Arg.

31787 SC, Sombrio p. Araranguá, in sabulosis siccis prostrata, 7.2.1946, fl.

45952 RGS, Lagoa dos Quadros p. Torres (NEC), in arenosis dumosis siccis subscandens, 21.2.1950, fl., fr.

46112 RGS, Fazenda do Arroio p. Osório (NEC), in arenosis prostrata, 6.3.1950, fl., fr.

51766 RGS, Morro Grande p. Osório (NEC), in arenosis, 10.1.1952, fl., fr.

54771 RGS, Torres (NEC), prope litus in arenosis, 11.2.1954, fl., fr.

63579 RGS, Fazenda do Arroio p. Osório (NEC), 23.1.1958, fl., fr.

Habit: Prostrate, or low climber.

Habitat: Dry sandy, more or less open, places.

Distribution in RGS: Northeastern sea coast only. **Geographical novelty.**

General distribution: S. Paulo, Sta Catarina, Rio Grande do Sul.

Dalechampia stenosepala M. Arg., DC. Prodr. 15, 2 (1845) 1241; FB 11, 2 (1874) 651; Pax et K. Hoffmann, PR 4, 147, 12, (1919) 18; O'Donell et Lourteig, GSPPA 1 (1943) 243, tab. 106.

1448 RGS, S. Leopoldo (NEL), ad silvam scandens, 6.11.1922, fl.

1449 RGS, ibidem, 15.5.1934, fl.

1455 SC, Itapiranga ad fl. Uruguay superius, ad silvam pluviale scandens, 16.2.1934, fl. (L. B. Smith: D. micromeria M. Arg.)

2223 RGS, Kappesberg p. Montenegro (NEH), ad silvam scandens, 21.12.1935, fl.

2687 RGS, Montserrat p. P. Alegre (NEL), in silvula campestri scandens, 2.5.1942, fl., leg. K. Emrich.

2688 RGS, ibidem, 2.5.1942, fl., leg. K. Emrich.

3642 RGS, Piedade p. Caí (NEL), in dumosis scandens, 23.12.1940, ster.

3812 RGS, Bohnental p. Caí (NEL), ad silvam scandens, 4.1.1941, fl.

3814 RGS, ibidem, 4.1.1941, fl.

3985 Uruguay, Cuñapirú p. Livramento (RGS), in dumetosis, 12.1.1941, juvenilis.

4889 RGS, Sta Clara p. Lageado (NEL), in silva secundaria, 18.11.1940, fl.

4890 RGS, ibidem, 18.11.1950, fl.

4902 RGS, Teutonia p. Estrela (NEL), ad silvam scandens, 16.11.1940, fl.

6722 RGS, Sta Clara p. Lageado (NEL), ad silvam scandens, 18.1.1940, fl.

7531 RGS, S. Leopoldo (NEL), ad silvam scandens, 1907, fl., leg. F. Theissen SJ.

10187 RGS, Montserrat p. P. Alegre (NEL), in silvula campestri scandens, 24.1.1942, fl., leg. K. Emrich.

11090 RGS, Cérro Largo (NW), ad silvam pluviale scandens, 1.1943, fl., leg. P. Buck SJ.

29616 RGS, Pareci p. Montenegro (NEL), in silva secundaria scandens, 26.9.1945, fl., leg. E. Henz SJ.

32586 RGS, ibidem, 31.10.1945, fl., leg. E. Henz SJ.

32754 RGS, ibidem, 26.10.1945, fr., leg. E. Henz SJ.

33362 RGS, S. Leopoldo (NEL), in silva campestri scandens, 15.9.1946, fl., leg. E. Simas SJ.

34265 RGS, prope P. Alegre (NEL), in silvula campestri scandens, 25.1.1947, fr., leg. K. Emrich.

34781 RGS, Fazenda da Ronda p. Vacaria (NEH), in campestribus dumosis, 3.1.1947, fl.

35359 RGS, S. Leopoldo (NEL), in silvula scandens, 10.10.1946, fl., leg. C. Ritter SJ.

36088 RGS, Campina p. Sta Rosa (NW), ad silvam pluvialem scandens, 2.1947, fl., leg. A. Spies.

37522 RGS, Galópolis p. Caxias, in secundariis scandens, 8.9.1948, fl., fr.

38372 RGS, ad montem Sapucaia p. S. Leopoldo (NEL), in silvula secundaria scandens, 29.11.1948, fl.

38999 RGS, ad montem Steinkopf p. S. Leopoldo (NEL), in rupestribus dumosis scandens, 20.12.1948, fl., fr.

39739 RGS, Parecí p. Montenegro (NEL), ad silvam scandens, 14.1.1949, fl.

40110 RGS, Linha Bonita p. Montenegro (NEH), ad silvam pluvialem scandens, 19.1.1949, fl.

56116 RGS, Pestana p. Ijuí (NW), in dumosis scandens, 4.10.1953, fr., leg. J. Pivetta 565.

61182 SC, Itapiranga ad fl. Uruguay superius, ad silvam pluvialem scandens, 7.10.1957, fl., fr.

Habit: Low climber.

Habitat: Edge of the rain forest, secondary brushwood, campestrian copses, gallery woodlets.

Distribution in RGS: Through the whole of the forested area. **Geographical novelty.**

General distribution: Panama, central and southern Brazil, Rio Grande do Sul, northeastern Argentina, Uruguay.

Dalechampia stipulacea M. Arg., DC. Prodr. 15,2 (1846) 1242; FB 11, 2 (1874) 656, tab. 88; O'Donell et Lourteig, GSPPA 1 (1943) 244, tab. 107a.

28186 RGS, Montserrat p. P. Alegre (NEL), in silvula campestri scandens, 28.7.1945, fl., fr., leg. K. Emrich.

30513 SC, Serra da Pedra p. Araranguá, ad silvam pluvialem scandens, 27.11.1943, fl., leg. R. Reitz 813.

51579 RGS, Montserrat p. P. Alegre (NEL), in silva campestri scandens, 28.7.1945, ster., leg. K. Emrich.

32741 RGS, Parecí p. Montenegro (NEL), ad silvam scandens, 31.10.1945, fr., leg. E. Henz SJ.

34340 RGS, Montserrat p. P. Alegre (NEL), in silva campestri scandens, 26.10.1946, fr., leg. K. Emrich.

53566 Paraná, Cascavel p. fl. Paraná, ad silvam pluviale, 10.1.1953, fl.

61352 RGS, Horizontina p. Sta Rosa (NW), ad silvam pluvialem scandens, 29.1.1956, fl., fr., leg. A. Spies.

61701 RGS, Taquari (NEL), ad silvam ripariam scandens, 10.12.1957, fl., fr., leg. O. Camargo 2874.

62895 RGS, prope P. Alegre (NEL), in silva campestri scandens, 24.12.1957, fl., leg. O. Camargo 3081.

Habit: Medium climber.

Habitat: Glades and edge of the rain forest, secondary brushwood, campos coves.

Distribution in RGS: Subtropical rain forest zone in the northern half of the State. **Geographical novelty.**

General distribution: From Bahia and Peru, through the cis-Andean rain forest area, down to northeastern Argentina, and Rio Grande do Sul.

Dalechampia ulmifolia Chod. et Hassl., Bull. Herb. Boiss. 2 sér. 5 (1905) 608; Pax et K. Hoffmann, PR 4, 147, 12 (1919) 54; O'Donell et Lourteig, GSPPA 1 (1943) 246, tab. 107b.

28131 RGS, Nonoai ad fl. Uruguay superius (NW), in campestribus siccis graminosis, 3.1945, fl.

53018 RGS, Sto Angelo (NW), in campestribus siccis graminosis, 17.11.1952, fl.

61382 RGS, Pestana p. Ijuí (NW), in campestribus siccis saxosis subnudis, 16.2.1956, fl., leg. J. Pivetta 1173.

Note: There is no reason, on the basis of the leaves, to establish a var. genuina Pax, and a var. grüningiana (Pax) Pax, PR, l.c.; n. 61382 has, out of 11 leaves, two irregularly bilobed, two slightly trilobed, and seven undivided; n. 53018, at one branch, all leaves undivided, typical for var. genuina, at the neighboring, three entire, one irregularly divided, and two perfectly trilobed until near the base.

Habit: Prostrate to ascending, branches 20-40 cm long.

Habitat: Dry grassy campos.

Distribution in RGS: Northwestern campos area only.

General distribution: Paraguay, northeastern Argentina, Rio Grande do Sul.

DITAXIS Vahl ex.Juss.

Nomenclature after Pax, PR 4, 147, 6 (1912).

Ditaxis acaulis Herter, Ann. Mus. Mont. ser. 2, 1, 3 (1911) 79; Pax, PR 4, 147, 6 (1912) 75; O'Donell et Lourteig, GSPPA 1 (1943) 174, tab. 73b.

3922 RGS, Morro Vigia p. Livramento (SW), in rupestribus siccis parce humosis subnudis, 12.1.1941, fl.

Habit: Low rosette appressed to the ground.

Habitat: Dry, rocky, bare campo.

Distribution in RGS: Southwestern campos area only. **Geographical novelty.**

General distribution: Paraguay, Rio Grande do Sul, Uruguay, and northeastern Argentina.

EUPHORBIA L.

Nomenclature and determinations after Müller Argoviensis, FB 11, 2 (1874).

Euphorbia brasiliensis Lam., Enc. méth. 2 (1786) 423; Müller Argoviensis, FB 11, 2 (1874) 676.

60772 RGS, Uruguiana (SW), in campestribus, 1957, fl., fr., leg. A. Spies.

61343 RGS, Pestana p. Ijuí (NW), in campestribus siccis, 16.2.1956, fl., fr., leg. J. Pivetta 1186.

Habit: Herbaceous, erect, 20-50 cm high.

Habitat: Apparently on dry campo.

Distribution in RGS: Western campos area. **Geographical novelty.**

General distribution: With several varieties, from Cuba and the Antilles, through the whole of cis-Andean South America, down to western Rio Grande do Sul and Uruguay.

Euphorbia coecorum Mart. apud Boiss., Euph. Ic. (1856) tab. 23; Müller Argoviensis, FB 11, 2 (1874) 675, tab. 92.

3806 RGS, Ijuisinho p. Tupanciretan (NW), in campestribus siccis graminosis, 30.1942, fl.

9917 RGS, Tupanciretan (NW), in campestribus siccis, 24.1.1952, ster.

48238 Paraná, Engenheiro Bley p. Lapa, in campestribus graminosis siccis, 26.9.1948, fl., leg. G. Hatschbach 1002.

Habit: Herbaceous, slender, erect, densely branched at the upper half.

Habitat: Dry, grassy campos.

Distribution in RGS: Northwestern campos only.

General distribution: From Bolivia and Bahia, through central and southern Brazil, down to RGS and Uruguay.

Euphorbia elodes Boiss., DC. Prodr. 15, 2 (1866) 103; Müller Argoviensis, FB 11, 2 (1874) 698.

2250 RGS, Kappesberg p. Montenegro (NEH), in agro humido, 21.12.1935, fl., fr.

7543 RGS, S. Leopoldo (NEL), in humidis umbrosis, 1907, fl., leg. F. Theissen SJ.

11073 RGS, Kappesberg p. Montenegro (NEH), in humidis subumbrosis, 1.1943, fl., fr., leg. E. Schmidt SJ.

30152 RGS, S. João p. P. Alegre (NEL), in humidis, 10.11.1945, fl., fr., leg. K. Emrich.

30578 RGS, Campo do Varejão p. P. Alegre (NEL), in umbrosis humidis, 24.10.1945, fl., fr., leg. K. Emrich.

32836 RGS, Butterberg p. Montenegro (NEH), in pascuo humido subumbroso, 17.12.1945, fl., fr.

37533 RGS, Kappesberg p. Montenegro (NEH), in humidis subumbrosis, 8.9.1948, fl., fr.

43417 RGS, ibidem, 11.9.1949, fl., fr.

47136 RGS, Butterberg p. Montenegro (NEH), in pascuo humido, 22.5.1950, fl., fr.

47203 RGS, Kappesberg p. Montenegro (NEH), in agro humido, 4.7.1950, fl., fr.

47499 RGS, ibidem, 1.1943, fl., fr., leg. E. Schmidt SJ.

50648 RGS, ibidem, 21.10.1949, fl., fr., leg. A. Schinem SJ 3912.

52939 RGS, Butterberg p. Montenegro (NEH), in agro inculto humido, 22.12.1952, fl., fr.

59481 RGS, Farroupilha (NEH), in incultis humidis, 25.5.1956, fl., fr., leg. O. Camargo 690.

59937 RGS, ibidem, 28.5.1956, fr., leg. O. Camargo 726.

Habit: Herbaceous, erect, slender, pale green, 20-40 cm high.

Habitat: Wet places, preferably on cultivated land; somewhat weedy.

Distribution in RGS: Northeastern lowlands and highlands. **Geographical novelty.**

General distribution: From Minas Gerais, through southern Brazil, down to Rio Grande do Sul and Uruguay.

Euphorbia geniculata Ort., Dec. 18 (1800). — Müller Argoviensis, E. prunifolia Jacq., var. genuina M. Arg., FB 11, 2 (1874) 694.

123 RGS, Alto Feliz p. Caí (NEH), in incultis, 6.3.1933, fl., fr.

1444 RGS, S. Leopoldo (NEL), in ruderatis, 11.11.1922, fl.

1453 RGS, ibidem, 15.5.1945, fl.

10179 RGS, P. Alegre (NEL), in incultis, 1.1942, fl., fr., leg. K. Emrich.

- 11079 RGS, S. Leopoldo (NEL), in horto, 3.1942, fr., leg. E. Schmidt SJ.
- 11096 RGS, Marcelino Ramos ad fl. Uruguay superius (NW), in agro, 1. 1943, fl., leg. E. Friderichs SJ.
- 25554 RGS, Sta Maria (C), in incultis, 1943, fl., leg. A. Heidler SJ.
- 28901 RGS, P. Alegre (NEL), in horto, 16.5.1943, fr., leg. K. Emrich.
- 44248 RGS, Pareci p. Montenegro (NEL), in incultis, 6.12.1945, fl., leg. E. Henz SJ.
- 33675 RGS, sine loco, sine die, fl.
- 33803 RGS, P. Alegre (NEL), in ruderatis, 1.7.1946, fl., fr., leg. K. Emrich.
- 38925 RGS, S. Leopoldo (NEL), in incultis, 17.12.1948, fl., fr.
- 40359 RGS, Sto Antônio p. Bagé (SW), in incultis, 22.1.1949, fl., fr., leg. P. Capparelli.
- 47468 RGS, S. Leopoldo (NEL), in incultis, 1.1943, fl., fr., leg. E. Schmidt SJ.
- 57802 RGS, Pestana p. Ijuí (NW), in incultis, 22.1.1954, fl., fr., leg. J. Pivetta 805.
- 59896 RGS, Farroupilha (NEH), in agro derelicto, 25.3.1957, fl., fr., leg. O. Camargo 1183.
- 60276 RGS, ibidem, 14.1.1957, fl., fr., leg. O. Camargo 1081.
- 63144 RGS, Uruguaiana (SW), in incultis, 1957, fl., fr., leg. A. Spies.
- 63500 SC, S. Joaquim, in incultis, 10.1.1958, fl., fr., leg. J. Mattos.
- 63654 RGS, Farroupilha (NEH), in horto, 25.5.1958, fl., fr., leg. O. Camargo.
- 63765 RGS, Pelotas (SE), in incultis, 12.3.1958, fl., fr., leg. J. Sacco.

Habit: Herbaceous, erect, 0.5-1.5 meters high.

Habitat: On modified ground; weedy.

Distribution in RGS: Through the whole of the cultivated area; probably not native. Geographical novelty.

General distribution: From Mexico and Cuba, through most of tropical South America, down to Rio Grande do Sul.

Euphorbia hebegyne Pax et K. Hoffm., Rev. Sudam. Bot. 4 (1937) 83, fi.

- 126 RGS, ad montem Sapucaia p. S. Leopoldo (NEL) in campes-tribus siccis graminosis, 13.5.1933, fl.
- 127 RGS, Vila Manresa p. P. Alegre (NEL), in siccis graminosis, 16.12.1932, fl.
- 4089 RGS, Quaraí (SW), in campestribus siccis graminosis, 14.1.1941, fl.
- 4208 RGS, Barra do Quaraí p. Uruguaiana (SW), in campestri-bus siccis sparse dumosis, 15.1.1941, fl.
- 8475 RGS, Arroio dos Ratos p. S. Jeronimo (NEL), in campes-tribus siccis graminosis, 8.1.1942, fl.
- 9244 RGS, Jarí p. Tupanciretan (NW), in siccis graminosis, 26.1.1942, fl.
- 10124 RGS, Ijuisinho p. Tupanciretan (NW), in campestribus siccis dumosis, 30.1.1942, fl.
- 11078 RGS, Zimmerberg p. Montenegro (NEL), in arenosis siccis graminosis, 4.1942, fl.
- 26026 RGS, Estância do Jarau p. Quaraí (SW), in campestribus siccis saxosis sparse graminosis, 1.1945, fl.

- 27075 RGS, Vila Manresa p. P. Alegre (NEL), in graminosis siccis subdumosis, 10.1944, fl.
 29243 RGS, ibidem, 3.10.1945, fl.
 29473 RGS, Sapucaia, p. S. Leopoldo (NEL), in siccis subnudis, 5.9.1945, fl.
 35674 RGS, S. Leopoldo (NEL), in siccis arenosis graminosis, 12.12.1946, fl., leg. L. Vier SJ.
 37860 RGS, Morro da Polícia p. P. Alegre (NEL), in campestribus siccis graminosis, 6.11.1948, fl.
 38382 RGS, Sapucaia p. S. Leopoldo (NEL), in campestribus siccis, 29.11.1948, fl.
 38820 RGS, Conceição p. Cai (NEL), in arenosis siccis graminosis, 14.2.1948, fl.
 47474 RGS, S. Leopoldo (NEL), in campestribus arenosis graminosis, 1943, fl., leg. E. Schmidt SJ.
 53036 RGS, Sto. Angelo (NW), in campestribus siccis subsaxosis, 17.12.1952, fl., fr.
 53449 RGGS, Caaró p. S. Luiz (NW), in campestribus graminosis siccis, 24.11.1952, fl., fr.
 61342 RGS, Pestana p. Ijuí (NW), in campestribus siccis graminosis, 7.2.1956, fl., fr., leg. J. Pivetta.

Note: In its extreme forms, this material simulates a well distinct species; but there is a broad belt of transition to *E. selloi* which, in my opinion, would justify cancelling *E. hegegyne*.

Habitat: Herbaceous, erect or prostrate to ascending, 10-20 cm high, with a thick, knotty, and fleshy root remembering that of *Manihot*.

Habitat: Dry, sandy or rocky soil on open campo.

General distribution: Rio Grande do Sul and Uruguay.

Euphorbia hirtella Boiss., Cent. Euph. (1856) 7; Müller Argoviensis, FB 11,2 (1874) 678.

- 1452 RGS, S. Leopoldo (NEL), ad viam ferream, 20.5.1934, fl.
 9213 RGS, Jari p. Tupanciretan (NW), in campestribus subdumosis, 26.1.1942, fl.
 10016 RGS, Ijuisinho p. Tupanciretan (NW), in campestribus siccis graminosis, 30.1.1942, fl.
 28414 RGS, Nonoai ad fl. Uruguay superius (NW), in campestribus siccis graminosis, 3.1945, fl.
 29463 RGS, Sapucaia p. S. Leopoldo (NEL), in arenosis siccis, 5.9.1945, fl., fr.
 38194 RGS, ibidem ad viam ferream, 22.11.1948, fl.
 38412 RGS, ibidem, 29.11.1948, fl.
 38866 RGS, S. Leopoldo (NEL), ad viam ferream, 17.12.1948, fl.
 39761 RGS, Pareci p. Montenegro (NEL), in incultis, 14.1.1949, fl.
 42577 RGS, ibidem, 18.7.1949, fl.
 46209 RGS, Cristo Rei p. S. Leopoldo (NEL), in incultis, 10.3.1950, fl.
 58731 RGS, Pestana p. Ijuí (NW), in graminosis, 25.1.1954, fl., leg. J. Pivetta. 811.
 58956 RGS, Estação de Silvicultura p. Sta. Maria (C), in subdumosis, 26.1.1956, fl., fr., leg. O. Camargo 109.
 59222 RGS, ad montem Sapucaia p. S. Leopoldo (NEL), in humidis apertis, 3.2.1956, fl., fr.

Habit: Herbaceous, erect, slender, sparingly branched, 20-50 cm high.

Habitat: More or less wet places, apparently always on disturbed soil; weedy, probably not native.

Distribution in RGS: Through most of the cultivated area of RGS.

General distribution: From Minas Gerais, through southern Brazil, down to Rio Grande do Sul and Uruguay.

Euphorbia ovalifolia Engelmann ap. Klotzsch et Garcke, Tricocae (1860) 26; Müller Argoviensis, FB 11,2 (1874) 683.

- 128 RGS, Alto Feliz p. Caí (NEH), in agro, 7.3.1933, fl., fr.
- 1447 RGS, Vila Manresa p. P. Alegre (NEL), in incultis, 21.10.1932, fl.
- 2252 RGS, Kappesberg p. Montenegro (NEH), in agro, 21.12.1935, fl., fr.
- 2288 RGS, ibidem, 21.12.1935, fl.
- 2299 RGS, ibidem, 21.12.1935, fl., fr.
- 2793 RGS, Steinkopf p. S. Leopoldo (NEL), ad viam, 10.6.1936, fl., fr.
- 3877 RGS, Morro Vigia p. Livramento (SW), in tritis, 12.1.1942, fl., fr.
- 4147 RGS, ad. fl. Garopá p. Quarai (SW), ad viam, 14.1.1941, fl.
- 4172 RGS, ibidem, 14.1.1941, fl., fr.
- 4908 RGS, Sta. Clara p. Lageado (NEL), in agro, 18.11.1940, fl., fr.
- 4910 RGS, ibidem, 18.11.1940, fl., fr.
- 11068 RGS, Kappesberg p. Montenegro (NEH), in agro, 1.1943, fl., fr., leg. E. Schmidt SJ.
- 11069 RGS, ibidem, 1.1943, fl., fr., leg. E. Schmidt.
- 11094 RGS, Marcelino Ramos ad. fl. Uruguay superius (NW), in incultis, 1.1943, fl., fr. leg. E. Friderichs SJ.
- 11100 RGS, Cérro Largo p. S. Luiz (NW), in agro derelicto, 1.1943, fl., fr., leg. P. Buck SJ.
- 25556 RGS, Fazenda Sta. Cecilia p. S. Gabriel (SW), in tritis ad viam, 1.1944, fl., fr.
- 25828 RGS, ibidem, 1.1944, fl., fr.
- 26091 RGS, Estância do Jarau p. Quarai (SW), in tritis, 1.1945, fl.
- 28189 RGS, Nonoai ad fl. Uruguay superius (NW), in graminosis, 1.1945, fr.
- 29308 RGS, Vila Manresa p. P. Alegre (NE), in via, 10.10.1945, fl., fr.
- 32689 RGS, Pareci p. Montenegro (NEL), in agro, 25.11.1945, fl., fr., leg. E. Henz SJ.
- 34768 RGS, Fazenda da Ronda p. Vacaria (NEH), in tritis, 3.1.1947, fl., fr.
- 35676 RGS, S. Leopoldo (NEL), in agro, 15.1.1947, fl., fr., leg. E. Henz SJ.
- 38183 RGS, Sapucaia p. S. Leopoldo (NEL), ad viam ferream, 22.11.1948, fl., fr.
- 38195 RGS, ibidem, 22.11.1948, fl., fr.
- 39823 RGS, Pareci p. Montenegro (NEL), in incultis, 14.1.1949, fl., fr.
- 39978 RGS, Linha Bonita p. Montenegro (NEH), in agro, 19.1.1949, fl., fr.
- 40028 RGS, ibidem, 19.1949, fl., fr.
- 41346 RGS, Morretes p. P. Alegre (NEL), ad viam, 2.5.1949, fl. fr.

- 42984 RGS, Pareci p. Montenegro (NEL), in agro, 17.8.1949, fl., fr.
 47477 RGS, S. Leopoldo (NEL), in incultis, 1.1.1943, fl., fr., leg. E. Schmidt SJ.
 54478 RGS, ibidem, 1.1943, fl., fr., leg. E. Schmidt SJ.
 44479 RGS, ibidem, 1.1943, fl., fr., leg. E. Schmidt SJ.
 57764 RGS, Pestana p. Ijuí (NW), in tritis, 6.2.1954, fl., fr., leg. J. Pivetta 808.
 58972 RGS, Estação de Silvicultura p. Sta. Maria (C), in incultis, 25.1.1956, fl., fr., leg. O. Camargo 93.
 60755 RGS, Passo Fundo (NW), in incultis, 4.1957, fl., fr. leg. P. Freddiani.

Note: It seems to be of no use to establish «varieties» in this extremely variable species; no hard and fast line of distinction can be drawn between the several descriptive units in FB, the same being valid for *E. ovalifolia* and *E. serpens* H. B. K.

Habit: Herbaceous, prostrate.

Habitat: Always on modified soil.

Distribution in RGS: Throughout the whole of the cultivated area, probably not native. **Geographical novelty.**

General distribution: Chile, Argentina, Uruguay, and Rio Grande do Sul.

Euphorbia papillosa St. Hil., Pl. us. Brés. (1824-1828) tab. 18; Müller Argoviensis, FB 11.2 (1874) 697.

- 129 RGS, S. Leopoldo (NEL), in campestribus arenosis siccis, 16.11.1932, fl., fr.
 4528 RGS, Fazenda Englert p. S. Francisco de Paula (NEH), in campestribus graminosis, 8.2.1941, fl.
 7533 RGS, S. Leopoldo (NEL), in arenosis, 1907, fl., leg. F. Theissen SJ.
 7538 RGS, ibidem, 1907, ster., leg. F. Theissen SJ.
 9887 RGS, Tupanciretan (NW), in campestribus siccis graminosis, 29.1.1942, fl.
 9927 RGS, ibidem, 24.1.1942, fl., fr.
 26473 RGS, Pareci p. Montenegro (NEL), in campestribus arenosis subdumosisis, 1944, fl., leg. E. Henz SJ.
 27555 RGS, ibidem, 1944, fl., leg. E. Henz SJ.
 28390 RGS, Nonoai ad fl. Uruguay superius (NW), in campestribus apertis graminosis, 3.1945, fl.
 29571 RGS, Pareci p. Montenegro (NEL), in arenosis siccis graminosis, 3.10.1945, fl., fr., leg. E. Henz SJ.
 30514 SC, Sombrio p. Araranguá, in arenosis siccis, 27.9.1944, ster., leg. R. Reitz 1240.
 31086 Vila Oliva p. Caxias (NEH), in campestribus, 7.1.1946, fl.
 31375 RGS, ibidem, 25.2.1946, fl.
 31785 SC, Sombrio p. Araranguá, in sabulosis, 7.2.1946, fl.
 32189 RGS, Taimbesinho p. S. Francisco de Paula (NEH), in campestribus subdumosisis, 14.2.1946, fl.
 34769 RGS, Fazenda da Ronda p. Vacaria (NEH), in campestribus siccis subdumosisis, 3.1.1947, fl.
 35406 RGS, S. Leopoldo (NEL), in campestribus siccis subdumosisis, 6.11.1946, fl., leg. C. Ritter SJ.
 37940 RGS, Sapucaia p. S. Leopoldo (NEL), in arenosis, 10.11.1948, fls.
 38015 RGS, Barra do Ribeiro p. P. Alegre (NEL), in graminosis, 14.11.1948, fl.

- 38251 RGS, Sapucaia p. S. Leopoldo (NEL), in arenosis subdumosis, 22.11.1948, fl., fr.
- 38644 RGS, Julio de Castilhos (NW), in campestribus siccis graminosis, 11.1948, fl., leg. P. Capparelli.
- 39277 RGS, Varejão p. P. Alegre (NEL), in arenosis, 29.12.1948, fl.
- 39393 RGS, Lamí p. Itapoan (NEL), in arenosis graminosis, 3.1.1949, fl.
- 39826 RGS, Pareci p. Montenegro, in siccis graminosis, 14.1.1949, fl.
- 41221 RGS, ad fl. Caí inferius p. P. Alegre (NEL), in arenosis siccis, 27.4.1949, fl.
- 42595 RGS, Pareci p. Montenegro (NEL), in graminosis, 18.7.1949, fl.
- 43551 RGS, Portão p. S. Leopoldo (NEL), in siccis arenosis, 23.9.1949, fl.
- 45174 RGS, Fazenda do Arroio p. Osório (NEC), in arenosis subhumidis graminosis, 4.1.1950, fl., fr.
- 45378 RGS, Serra da Rocinha p. Bom Jesus (NEH), in campestribus subhumidis graminosis, 18.1.1950, fl., fr.
- 46515 RGS, Lagoa da Pinguela p. Osório (NEC), in arenosis siccis graminosis, 27.3.1950, fl.
- 46555 RGS, Itapoan p. P. Alegre (NEL), in arenosis siccis, 3.3.1950, fl.
- 46600 RGS, Barra do Ribeiro p. P. Alegre (NEL), in campestribus subsiccis, 5.4.1950, fl.
- 48452 RGS, Pareci p. Montenegro (NEL), in campestribus siccis graminosis, 10.10.1945, fl., leg. A. Sehnem 1657.
- 48742 RGS, Osório (NEC), in arenosis subnudis, 11.9.1950, fl.
- 50001 RGS, Palmeira (NW), in graminosis siccis, 12.2.1951, fl.
- 50504 RGS, Montenegro (NEL), ad viam ferream, 28.10.1949, fl., leg. A. Sehnem 3904.
- 52210 RGS, Taimbesinho p. S. Francisco de Paula (NEH), in humidis subdumosis, 14.4.1952, fl., fr.
- 52219 RGS, ibidem, 14.4.1952, fl., fr.
- 53203 RGS, Cérro Largo (NW), in pascuo subsicco, 20.11.1952, fl., fr.
- 53368 RGS, Caaró p. S. Luiz (NW), in siccis graminosis, 24.11.1952, fl., fr.
- 54589 RGS, Fazenda Englert p. S. Francisco de Paula (NEH), in graminosis subhumidis, 1.1.1954, fl., fr.
- 54661 RGS, ibidem, 1.1.1954, fl., fr.
- 54761 RGS, Torres (NEC), in arenosis subnudis, 11.2.1954, fl., fr.
- 55017 RGS, Vila Oliva p. Caxias (NEH), in campestribus subsiccis, 24.2.1954, fl., fr.
- 56429 RGS, Fazenda Englert p. S. Francisco de Paula (NEH), in campestribus graminosis, 2.1.1955, fl., fr.
- 56485 RGS, Torres (NEC), prope litus in arenosis, 19.1.1955, fl., fr.
- 56602 RGS, Vila Oliva p. Caxias (NEH), in graminosis siccis, 8.2.1955, fl., fr.
- 57121 RGS, Esteio p. S. Leopoldo (NEL) in graminosis siccis, 1.14.11.1955, fl., fr.
- 57733 RGS, Cruz Alta (NW), in campestribus graminosis, 3.1.1954, fl. leg. J. Pivetta 807.
- 57765 RGS, ibidem, 4.1.1954, fl., leg. J. Pivetta 810.

60324 RGS, S. Bernardo p. Ijuí (NW), in campestribus subdumosis siccis, 8.1.1957, fl., fr.

61267 RGS, Pelotas (SE), in graminosis, 21.11.1957, fl., leg. J. Sacco 694.

61620 RGS, Taquari (NEL), in campestribus siccis subdumosis, 8.12.1957, fl., leg. O. Camargo 2734.

62456 RGS, Passo Fundo (NW), in campestribus subsiccis, 20.10.1957, fl., fr., leg. O. Camargo 2230.

62673 RGS, ad P. Alegre (NEL), in siccis graminosis, 1.11.1957, fl., leg. O. Camargo 2427.

63046 RGS, Pelotas (SE), in arenosis graminosis, 8.3.1956, fl., fr., leg. Schlichting.

Note: *E. erythrorrhiza* Boiss., as far as can be collected from its description (FB 11, 2, 697), seems not to be really different from the present species.

Habitat: Herbaceous, erect, 20-75 cm high.

Habitat: Dry open places.

Distribution in RGS: Throughout the whole of the campos area.

General distribution: Santa Catarina, Rio Grande do Sul, Uruguay.

Euphorbia paranensis Dusén, Ark. f. Bot. 9, n. 15 (1910) 7, fig. 1.

45716 RGS, Sta. Rita p. Farroupilha (NEH), in dumosis secundariis deustis, 7.2.1950, fl., fr.

49619 SC, Lages, in araucarieto aperto, 10.1.1951, fl., fr., det. L. B. Smith.

51680 RGS, Passo do Socorro p. Vacaria (NEH), in campes-tribus sparse dumosis, 28.12.1951, fl., fr.

Habitat: Half-shrub, densely branched from a rootstock, 20-40 cm high.

Habitat: Campos thickets, secondary brushwood.

Distribution in RGS: Northeastern highlands only. **Geographical novelty.**

General distribution: Paraná, Sta. Catarina, northeastern Rio Grande do Sul.

Euphorbia peperomoides Boiss., Cent. Euphorb. (1856); 17; Müller Argoviensis, FB 11,2 (1874) 691.

8497 RGS, Rio dos Touros p. Bom Jesus (NEH) in graminosis subhumidis, 13.1.1942, fl.

8735 RGS, Serra da Rocinha p. Bom Jesus, in humidis graminosis, 14.1.1942, fl., fr.

32136 RGS, Serra do Fachinal p. S. Francisco de Paula (NEH), in humidis graminosis, 14.2.1946, fl., fr.

32204 RGS, Taimbésinho p. S. Francisco de Paula (NEH), ad araucarietum in graminosis subhumidis, 14.2.1946, fl., fr.

32417 RGS, Serra da Rocinha p. Bom Jesus (NEH), in humidis graminosis, 22.2.1946, fl., fr.

35186 RGS, ibidem, in silvula nebulari, 14.2.1947, fl., fr.

36211 RGS, Cambará p. S. Francisco de Paula (NEH), in arau- carieto aperto, 2.1948, fl.

45474 RGS, Serra da Rocinha p. Bom Jesus, in subhumidis den- se graminosis, 18.1.1950, fl., fr.

45635 RGS, S. Francisco de Paula (NEH), ad araucarietum, 31.1.1950, fl.

53860 RGS, Serra da Rocinha p. Bom Jesus, NEH), in humidis graminosis, 3.2.1953, fls., fr.

54722 RGS, Fazenda Englert p. S. Francisco de Paula (NEH), in campestribus graminosis, 1.1.1954, fl., fr.

60120 SC, Campo dos Padres p. Bom Retiro, in graminosis sub-dumosis humidis, 23.1.1957, fl., fr.

Habit: Herbaceous, prostrate, abundantly branched, branches 20-40 cm.

Habitat: Wet marshes and campos on highly acid soil; peat bogs.

Distribution in RGS: Northeastern highlands only. **Geographical novelty.**

General distribution: Southern Brazil, Rio Grande do Sul.

Euphorbia pilulifera L., Spec. Plant. (1753) 454; Müller Argoviensis, FB 11,2 (1874) 684.

124 RGS, Alto Feliz p. Caí (NEH), in agro, 6.3.1933, fl., fr.

1464 RGS, S. Leopoldo (NEL), in agro, 20.3.1934, fl., fr.

3691 RGS, Piedade p. Caí (NEL), in agro, 23.1.1940, fl., fr.

3809 RGS, ibidem, 23.12.1940, fl.

4079 Uruguay, Três Fornos p. Rivera, ad viam, 12.1.1941, fl.

4925 RGS, Sta. Clara p. Lageado (NEL), in agro derelicto, 18.11.1940, fl.

7545 RGS, S. Leopoldo (NEL), in incultis, 1907, fl., fr., leg. F. Theissen SJ.

11070 RGS, Kappesberg p. Montenegro (NEH), in agro derelicto, 1.1942, fl., fr., leg. E. Schmidt SJ.

11095 RGS, Lagoa Vermelha (NEH), ad viam, 1.1943, fl., fr., leg. E. Friderichs SJ.

31374 RGS, Vila Oliva p. Caxias (NEH), in incultis, 25.2.1946, fl., fr.

33262 RGS, Caracol p. Canela (NEH), in incultis, 2.1946, fl., fr., leg. K. Emrich.

36213 RGS, Cambará p. S. Francisco de Paula (NEH), in incultis, 2.1948, fr.

38863 RGS, S. Leopoldo (NEL), in agro, 17.12.1948, fl., fr.

40040 RGS, Linha Bonita p. Montenegro (NEH), in incultis, 19.1.1949, fl., fr.

45863 RGS, Lagoa dos Quadros p. Torres (NEC), in incultis, 21.2.1950, fr.

46215 RGS, Cristo Rei p. S. Leopoldo (NEL), in agro, 10.3.1950, fl., fr.

47497 RGS, S. Leopoldo (NEL), in incultis, 1.1942, fl., fr., leg. E. Schmidt SJ.

49821 SC, Itapiranga ad fl. Uruguay superius, in agro, 6.7.1951, fl., fr. L. B. Smith: E. hirta L.

fl., fr. leg. K. Emrich.

50217 RGS, Caracol p. Canela (NEH), in incultis, 22.2.1951,

57804 RGS, Pestana p. Ijuí (NW), in agro, 15.1.1954, fl., fr., leg. J. Pivetta 813.

60722 Paraguay, Primavera p. Assunción, in incultis, 2.3.1957, fl., fr., leg. A. Woolston 189.

Habit: Herbaceous, prostrate, branches 10-20 cm long.

Habitat: Always on modified soil; probably not native.

Distribution in RGS: Throughout the whole of the cultivated area. **Geographical novelty.**

General distribution: Pantropical; throughout the whole of tropical and subtropical South America, down to Rio Grande do Sul and Uruguay.

Euphorbia prostrata Ait. Hort. Kew. 2 (1810-1813) 139; Müller Argoviensis, FB 11,2 (1874) 683.

25348 SC, Florianópolis, in incultis, 25.2.1942, fl., fr., leg. A. Rohr SJ.

30150 RGS, P. Alegre (NEL), in via publica inter petras, 10. 11.1945, fl., fr., leg. K. Emrich.

47476 RGS, S. Leopoldo (NEL), in agro, 1.1943, fl., fr., leg. E. Schmidt SJ.

53324 SC, Brusque, in incultis, 14.2.1950, fl., fr., leg. R. Reitz 5004.

Habit: Herbaceous, prostrate, abundantly branched, branches 10-40 cm.

Habitat: On modified soil only; probably not native.

Distribution in RGS: Northeastern lowlands only, rare. **Geographical novelty.** **General distribution:** Africa; through the whole of tropical and subtropical America, down to RGS.

Euphorbia rhabdodes Boiss., Cent. Euph. 30; Müller Argoviensis, FB 12,2 (1874) 699.

45175 RGS, Fazenda do Arroio p. Osório (NEC), in paludosis alte dumosis, 4.1.1950, fl.

46786 RGS, ibidem, 14.4.1950, fl.

Habit: Suffruticose, slender, shortly branched near the top, up to 1,5 meters high.

Habitat: Swamps, densely covered with shrubs, high grasses, and Cyperaceae.

Distribution in RGS: Northeastern sea coast only. **Geographical novelty.** **General distribution:** «Facenda de Ilama», Sellow, probably southern Brazil.

Euphorbia sciadophila Boiss., DC. Prodr. 15,2 (1866) 57; Müller Argoviensis 11,2 (1874) 187, tab. 97.

28102 RGS, Nonoai ad fl. Uruguay superius (NW), ad silvam in umbrosis, 3.1945, fl.

48184 RGS, Irai ad fl. Uruguay superius (NW), ad silvam pluviale in umbrosis, 11.1949, fl., fr., leg. K. Emrich.

53489 Paraná, Larangeiras (W), in silva ad viam, 9.1.1953, fl., fr.

Habit: Herbaceous or suffruticose, abundantly branched, 0, 2-1 meter high.

Habitat: Edge of the rain forest.

Distribution in RGS: Northwestern rain forest only. **Geographical novelty.** **General distribution:** From Goiás and Minas Gerais, down to Rio Grande do Sul.

Euphorbia selloi Boiss., Euph. Ic. (1856) tab. 22; Müller Argoviensis, FB 11,2 (1874) 672.

1463 RGS^{*} S. Leopoldo (NEL), in siccis graminosis, 10.3.1934, fl.

26622 RGS, Parécí p. Montenegro (NEL), in campestribus siccis,

1944, fl., leg. E. Henz SJ.

27241 RGS, Vila Manresa p. P. Alegre (NEL), in graminosis siccis, 10.1944, fl.

29568 RGS, Parécí p. Montenegro (NEL), in siccis graminosis, 3.10.1945, fl., leg. E. Henz SJ.

- 32550 RGS, ibidem, 10.10.1945, fl.
 38735 RGS, Rios dos Sinos p. S. Leopoldo (NEL), in arenosis graminosis, 10.12.1948, fl.
 39604 RGS, Cachoeirinha p. Gravataí (NEL), in siccis, 7.1.1949, fl.
 39664 RGS, Aberta dos Morros p. P. Alegre, in subrupestribus parce humosis, 9.1.1949, fl.
 39822 RGS, Parecí p. Montenegro (NEL), in siccis graminosis, 14.1.1949, fl.
 51266 RGS, S. Leopoldo (NEL), in campestribus graminosis, 1950, fl., leg. A. Steffen SJ.
 57245 RGS, Vila Manresa p. P. Alegre (NEL), in graminosis, 15.10.1955, fl.
 57732 RGS, Sta. Maria (C), in graminosis, 23.1.1953, fl., leg. J. Pivetta 814.
 58479 SC, Brusque, in incultis, 3.3.1950, fl., fr., leg. R. Reitz 7294, (det. L.B. Smith: E. hirta L.).
 59202 RGS, Esteio p. S. Leopoldo (NEL), in siccis graminosis, 29.1.1956, fl., fr.
 61769 RGS, Taquarí (NEL), in campestribus, 8.12.1957, fl., fr., leg. O. Camargo 2682.

Note: See *E. hebegyne* Pax et K. Hoffm.! I do not know what is meant by *E. setosa* (Boiss.) M. Arg., l.c., and *E. chamaerrhodos* Boiss.; but I suspect they are all the same as the present species.

Habit: Herbaceous, ascending or erect, more or less abundantly branched from a thick, knotty root.

Habitat: Dry campos.

Distribution in RGS: Throughout the whole of the campos area.

General distribution: Santa Catarina, Rio Grande do Sul, Uruguay.

Euphorbia spathulata Lam., Enc. méth. 2 (1786) 428; Müller Argoviensis, FB 11,2 (1874) 701.

- 6604 RGS, Nova Petropolis (NEH), in pascuo, 10.11.1940, fl., fr.
 9018 RGS, Bom Jesus (NEH), in campestribus graminosis, 15.1.1942, fl., fr.
 30173 Uruguay Juan Jackson p. Soriano, in humidis, 10.1943, fl., fr., B. Rosengurtt, det. L. Croizat.
 34368 RGS, Cerro Largo (NW), in incultis, 17.10.1946, fl., fr., leg. Irm. Augusto Duflot.
 34771 RGS, Fazenda da Ronda p. Vacaria (NEH), in campestribus subhumidis, 3.1.1947, fl., fr.
 44803 RGS, S. Francisco de Paula (NEH) in humidis, 18.12.1942, fl., fr.
 53429 RGS, Caaró p. S. Luiz (NW), in graminosis, 24.1.1952, fl., fr.
 55334 SC, Campo dos Padres p. Bom Retiro, in humidis graminosis, 22.12.1948, fl., fr., leg. R. Reitz 4902.
 57766 RGS, Pestana p. Ijuí (NW), in campestribus, 17.9.1953, fl., leg. J. Pivetta 809.
 60068 SC, Campo dos Padres p. Bom Retiro, ad viam in humidis, 23.1.1957, fl., fr.
 64300 SC, S. Joaquim, in humidis, 10.1.1958, fl., fr., leg. J. Mattos.

Habit: Herbaceous, pale green, 20-40 cm high; very similar to, but well distinct from, *E. elodes* Boiss.

Habitat: Generally on disturbed soil; probably not native.

Distribution in RGS: Through the whole of the cultivated area.

General distribution: RGS, Uruguay.

Euphorbia stenophylla Boiss., DC. Prodr. 15,2 (1866) 104; Müller Argoviensis, FB 11,2 (1874) 699.

2900 RGS, S. Borja (NW), in campestribus graminosis, 20.1.1938, fl.

8835 RGS, Bom Jesus (NEH), in siccis graminosis, 15.1.1942, fl.

30654 RGS, Vila Manresa p. P. Alegre (NEL), in graminosis, 27.11.1945, fl.

31093 RGS, Vila Oliva p. Caxias (NEH), in siccis graminosis, 6.1.1946, fl., fr.

31744 SC, Sombrio p. Araranguá, in graminosis, 7.2.1946, fl.

34153 RGS, Vila Manresa p. P. Alegre (NEL), in graminosis, 16.10.1946, fl.

34770 RGS, Fazenda da Ronda p. Vacaria (NEH), in campestribus saxosis graminosis, 3.1.1947, fl.

36221 RGS, Cambará p. S. Francisco de Paula (NEH), in dense graminosis, 2.1948, fl.

37858 RGS, Morro da Polícia p. P. Alegre (NEH), in campestribus siccis subdumetosis, 5.11.1948, fl.

38040 RGS, Vila Manresa p. P. Alegre (NEL), in graminosis, 17.11.1948, fl.

49578 SC, Lages, in siccis graminosis, 10.1.1951, fl., det. L. B. Smith.

51556 RGS, Passo do Socorro p. Vacaria (NEH), in campestribus dense graminosis, 26.12.1951, fl., fr.

54889 RGS, Vila Oliva p. Caxias (NEH), in graminosis, 24.2.1954, fl., fr.

57803 RGS, Cruz Alta (NW), in campestribus siccis, 2.1.1954, fl., fr., leg. J. Pivetta 812.

Habit: Herbaceous, erect, short branches crowded near the top, or unbranched, 10-30 cm high.

Habitat: Dry campos, preferably in stony places.

Distribution in RGS: Through the whole of the campos area. **Geographical novelty.**

General distribution: S. Paulo, Rio Grande do Sul.

***Euphorbia* sp., Anisophyllum.**

58904 RGS, Estação de Silvicultura p. Sta. Maria (C), in campestribus siccis subnudis, 3.2.1956, ster., leg. O. Camargo 190.

Herbaceous, prostrate, branched from a rootstock, branches slender, 30 cm long; leaves strictly opposite, dorsiventral, very asymmetrical and protracted at the lower side, 2x1, 5 cm, distinctly serrate.

Although sterile, the material is evidently distinct from all other species described for Rio Grande do Sul.

HIERONYMA Fr. All.

Nomenclature and determination after Müller Argoviensis, FB 11,2 (1873) 24.

Hyeronyma alchorneoides Fr. All., Dis. Trab. Soc. Vell. Rio de Janeiro 1848, cum icono; Müller Argoviensis, FB 11,2 (1873) 24.

32107 SC, Praia Grande p. Araranguá, in silva montana, 14.2.1946, fl., det. L. B. Smith.

32581 SC, ibidem, in silva pluviali, 14.2.1946, fr. submaturo, det. L. B. Smith.

48131 Paraná, Estação Marumbí p. Morretes, in silva pluviali montana, 12.12.1948, fl., leg. G. Hatschbach 1119.

58484 SC, Ibirama, in silva pluviali, 23.11.1953, fl., leg. R. Reitz 8829, det. L. B. Smith.

58489 SC, Heering p. Blumenau, in silva pluviali, 25.10.1954, fl., leg. R. Reitz 9266, det. L. B. Smith.

58498 SC, Hoffmann p. Brusque, in silva pluviali, 5.5.1950, fl., leg. R. Reitz 4563, det. L. B. Smith.

58597 SC, ibidem, 15.12.1949, fl., leg. R. Reitz 4562, det. L. B. Smith.

63634 RGS, Fazenda do Arroio p. Osório (NEC), in silva pluviali paludosa, 23.1.1958, ster.

Habitat: Tall hardwood.

Habitat: Subtropical rain forest.

Distribution in RGS: Near the northeastern sea coast only. **Geographical novelty.**

General distribution: Amazonas, Pará, Rio de Janeiro, Sta. Catarina, north-eastern Rio Grande do Sul.

JATROPHA L.

Nomenclature after Pax, PR 4,147,4 (1910).

Jatropha isabellei M. Arg., FB 11,2 (1874) 489; Pax, PR 4,147,4 (1910) 71; O'Donell et Lourteig, GSPPA 1 (1943) 254, tab. 113a.

3001 RGS, Cruz Alta (NW), in campestribus siccis, 16.12.1937, fl., fr.

9663 RGS, Tupanciretan (NW), in campestribus subdumosis, 28.1.1942, fl., fr.

10006 RGS, Ijuisinho p. Tupanciretan (NW), in campestribus siccis apertis, 30.1.1942, fl.

10150 RGS, ibidem, 30.1.1942, fl.

52996 RGS, Soledade (NW), in campestribus siccis apertis, 26.11.1952, fl., fr.

Habitat: Subherbaceous to suffruticose, erect, sparingly branched from a stout rootstock, branches 20-60 cm high.

Habitat: Dry open campo.

Distribution in RGS: Northwestern campos only.

General distribution: Paraguay, northeastern Argentina, northwestern Rio Grande do Sul.

Jatropha rigidifolia Pax et K. Hoffm., 4,147,17 (1924) 192.

2046 RGS, S. Borja (NW), in campestribus siccis, 1942, ster., leg. F. Baglione.

11763 RGS, Rio Turvo p. Três Passos (NW), in campestribus subdumosis, 3.1943, fr., leg. A. Schulz.

57367 RGS, S. Borja (NW), in campestribus, 1.1956, fr., leg F. Baglione.

Habit: Herbaceous to suffruticose, erect, sparingly branched from a stout rootstock, 20-40 cm high.

Habitat: Dry campos; sometimes a weed on cultivated soil.

Distribution in RGS: Northwestern campos only.

General distribution: Rio Grande do Sul.

JULOCROTON Mart.

Nomenclature and determinations after Müller Argoviensis, FB 11,2 (1873).

Julocroton humilis F. Dieder. Plant. nonnull. Mus. Univ. Hafn. (1857) 10; Müller Argoviensis, FB 11,2 (1873) 280.

1784 RGS, Cruz Alta (NW), in campestribus siccis, 16.12.1937, ster.

3823 RGS, Ijuisinho p. Tupanciretan (NW), in campestribus, 30. 1.1942, fl.

10123 RGS, ibidem, 30.1.1942, fl.

11097 RGS, Caaró p. S. Luiz (NW), in siccis graminosis, 1.1943, fl., leg. P. Buck SJ.

28458 RGS, Nonoai ad fl. Uruguay superius (NW), in campestribus siccis subdumosis, 3.1945, fl.

34430 Paraná, Florestal p. Piraquara, in campestribus siccis apertis, 29.9.1946, fl., leg. G. Hatschbach.

51943 RGS, Palmeira (NW), in campestribus siccis, 30.1.1952, fl.

53015 RGS, Sto Angelo (NW), in campestribus siccis, 17.11.1952, fl.

53466 RGS, Caaró p. S. Luiz (NW), in campestribus, 24.11.1952, fl., fr.

57808 RGS, Tupanciretan (NW), in campestribus graminosis aper-tis, 26.1.1954, fl., leg. J. Pivetta 820.

Habit: Half-shrub, erect, single or scarcely branched from a rootstock, 30-50 cm high.

Habitat: Dry open campos.

Distribution in RGS: Northwestern campos only.

General distribution: From Minas Gerais, through southern Brazil, down to northwestern Rio Grande do Sul.

Julocroton montevidensis Baill., Étude Gén. Euph. (1858) 376; Müller Argoviensis, FB 11,2 (1873) 277.

26358 RGS, Estância do Jarau p. Quaraí (SW), in campestribus siccis subdumosis, 1.1945, fl.

Habit: Half-shrub, sparingly branched, 0.5 meter high.

Habitat: Dry campos.

Distribution in RGS: Southwestern campos area. **Geographical novelty.**

General distribution: Southwestern Rio Grande do Sul and Uruguay.

60769 RGS, Uruguaiana (SW), in campestribus, 1957, fl., fr., leg. A. Spies.

Habit: Half-shrub, branches from a rootstock, 10-15 cm high.

Habitat: Dry campos.

Distribution in RGS: Southwestern campos. **Geographical novelty:**

General distribution: Northeastern Argentina, western Rio Grande do Sul.

Julocroton solanaceus (M. Arg.) M. Arg., FB 11, 2 (1873) 279. —
J. humilis F. Diedr. var. solanaceus M. Arg., DC. Prodr. 15, 2 (1866) 701.

3000 RGS, Cruz Alta (NW), in siccis graminosis, 16.12.1937, fl.
10147 RGS, Ijuisinho p. Tupanciretan (NW), in campestribus siccis subdumosis, 30.1.1942, fr.

30039 RGS, Passo Fundo (NW), in campestribus siccis, 2.1942, fl.

5000 RGS, Palmeira (NW), in campestribus apertis, 12.2.1951, fl.

57717 RGS, Cruz Alta (NW), in campestribus siccis apertis, 3.1.1954, fl., leg. J. Pivetta 693.

57809 RGS, Pestana p. Ijuí (NW), in campestribus siccis subdumosis, 19.2.1954, fl., leg. J. Pivetta 819.

60298 RGS, S. Bernardo p. Ijuí (NW), in campestribus, 8.1.1957, fl.

Habit: Half-shrub, sparingly branched from a rootstock, 0,5 meter high.

Habitat: Dry, open campos.

Distribution in RGS: Northwestern campos only.

General distribution: S. Paulo, northwestern Rio Grande do Sul. **Geographical novelty:**

Note: Although tolerably well characterized, the four preceding species are evidently variations on the same motive and may be, in a future revision, subsumed under one and the same species.

Julocroton triquierter (Lam.) M. Arg., FB 11, 2 (1873) 284, tab. 41. — Croton triquierter Lam., Enc. méth. 2 (1786) 214 (var. genuinus M. Arg.).

26830 Paraná, Paranaí p. Imbuial, ad viam in silva, 25.4.1947, fr., leg. G. Hatschbach 721.

28161 RGS, Nonoai ad fl. Uruguay superius (NW), in silvam pluvialem in dumosis, 3.1945, fl.

28162 RGS, ibidem, 3.1945, fl., fr.

48190 RGS, Iraí ad fl. Uruguay superius (NW), in silva pluviali aperta, 11.1949, fl., leg. K. Emrich.

49824 SC, Itapiranga ad fl. Uruguay superius, ad silvam pluvialem in dumosis secundariis, 6.2.1951, fl. (L. B. Smith: J. ramboi Smith et Downs).

53591 Paraná, Cascavel ad fl. Paraná, in silva pluviali aperta, 10.1.1953, fl., fr.

53719 SC, ad fl. Uruguay superius, ad silvam, 17.1.1953, fl.

61009 SC, Lages, in araucarieto, 25.12.1956, fl., leg. J. Mattos.

61925 RGS, Taquarí (NEL), in dumosis ripariis, 16.12.1957, fl., fr., leg. O. Camargo 2997.

Habit: Shrub, 1-2 meters high.

Habitat: Edge and glades of the rain forest.

Distribution in RGS: Northwestern rain forest zone; northeastern lowlands (rare). **Geographical novelty:**

General distribution: With varieties, from Bahia, through central and southern Brazil, down to northwestern Rio Grande do Sul.

MANIHOT Miller.

Nomenclature after Pax, PR 4, 147, 4 (1910).

Manihot tweedieana M. Arg., FB 11, 2 (1874) 340; Pax, PR 4, 147, 4 (1910) 56, fig. 19; D'Donell et Lourteig, GSPPA 1 (1943) 274, t. 124.

1460 SC, Itapiranga ad fl. Uruguay superius, ad silvam pluviale, 15.2.1934, fl. (L. B. Smith: *M. grahamii* Hook.)

3651 RGS, sine loco, sine die, ster.

3717 RGS, S. José do Hortênsio p. Caí (NEL), ad silvam, 4.1.1941, fl.

4010 Uruguay, Cuñapirú p. Rivera, in silvula campestris, 12.1.1941, fl. fr.

9672 Tupanciretan (NW), in silvula campestris, 28.1.1942, ster.

11103 RGS, Cérro Largo (NW), ad silvam pluviale, 1.1943, fr. maturo, leg. P. Buck SJ.

25700 RGS, Fazenda Sta Cecilia p. S. Gabriel (NW), in silvula riparia, 1.1944, fr. semievoluta.

25874 RGS, P. Alegre (NEL), culta, 12.1943, fl., leg. K. Emrich.

25950 RGS, Cérro Largo (NW), ad silvam pluviale, 9.1944, fl. leg. E. Friderichs SJ.

26152 RGS, Estância do Jarau p. Quarai, (SW) in silva riparia, 1.1945, fl.

28527 RGS, Nonoai ad fl. Uruguay superius (NW), ad silvam pluviale in dumosis, 3.1945, fr. maturo.

31287 RGS, Vila Oliva p. Caxias (NEH), ad silvam pluviale, 21.3.1946, fl.

37304 Paraná, in silva, 1.1937, fl., leg. G. Tessmann 878.

45076 RGS, Gramado p. Canela (NEH), in silva pluviali cum Araucariis intermixta, 26.12.1949, fl., leg. K. Emrich.

47938 RGS, Cérro Largo (NW), ad silvam pluviale, 17.12.1948, fl., leg. A. Sehnem SJ 3548.

51423 RGS, Passo do Socorro p. Vacaria (NEH), in araucario, 26.12.1951, fl.

53156 RGS, Cérro Largo (NW), in secundariis, 20.12.1952, fl.

53493 Paraná, Cascavel ad fl. Paraná, in silva, 10.1.1953, ster.

54630 RGS, Fazenda Englert p. S. Francisco de Paula (NEH), ad silvam pluviale, 1.1.1954, fl.

57805 RGS, Pestana p. Ijuí (NW), in silva pluviali, 29.11.1953, fl., leg. J. Pivetta 815.

Habit: Shrub to small tree, up to 5 meters high.

Habitat: Edge and glades of the subtropical rain forest, campos woodlets, secondary brushwood.

Distribution in RGS: Through the whole of the forested area. **Geographical novelty.**

General distribution: From Paraguay, through southern Brazil and north-eastern Argentina, down to Rio Grande do Sul and Uruguay.

PACHYSTROMA M. Arg.

Nomenclature and determination after Pax, PR 4, 147, 2 (1910).

Pachystroma ilicifolium Müll. Arg., Linnaea 34 (1865) 178; FB 11, 2 (1874) 388, tab. 54; Pax, PR 4, 147, 2, (1910) 99.

1732 RGS, Morro Santana p. P. Alegre (NEL), in silva campestris,

- 18.11.1932, fl.
 7550 RGS, S. Leopoldo (NEL), in silva campestri, 1907, ster., leg.
 F. Theissen SJ.
 11076 RGS, Kappesberg p. Montenegro (NEH), in silva pluviali,
 1.1943, fl., leg. E. Schmidt SJ.
 27568 RGS, Pareci p. Montenegro (NEL), in silva, 1944, ster.
 31554 SC, Sombrio p. Araranguá, in silva pluviali, 3.2.1946, ster.
 34373 RGS, Espírito Santo p. P. Alegre (NEL), in silva riparia,
 14.11.1946, fl., leg. K. Emrich.
 35661 RGS, Kappesberg p. Montenegro (NEH), in silva pluviali,
 20.12.1946, fl., leg. L. Stahl SJ.
 38503 RGS, S. Leopoldo (NEL), in silva campestri, 4.12.1948, fl.
 40564 RGS, Sapucaia p. S. Leopoldo (NEL), in silva campestri,
 17.3.1949, fr. submature.
 44220 RGS, Morro Santana p. P. Alegre (NEL), in silva, 2.11.1949,
 fr. mature.
 44253 RGS, Sapucaia p. S. Leopoldo (NEL), in silva campestri,
 5.11.1949, fl.
 45247 RGS, ad montem Itacolomí p. Gravataí (NEL), in silva
 pluviali, 11.1.1950, fl.
 47502 RGS, S. Leopoldo (NEL), in silva campestri, 1942, fl., leg.
 E. Schmidt SJ.
 47883 RGS, Kappesberg p. Montenegro (NEH), in silva pluviali,
 2.1.1947, fl., leg. A. Sehnem SJ 2433.
 52196 RGS, ibidem, 11.1951, fl. subaperto.
 58507 SC, Morro da Gávea p. Turvo, in silva pluviali, 6.11.1951,
 fl., leg. R. Reitz 7029, det. E. Asplund (L. B. Smith: P. longifolium
 (Nees) M. Arg.).
 62328 RGS, Montenegro (NEL), in silva, 19.9.1957, ster., leg. O.
 Camargo 1784.

Habitat: Tall tree, up to 25 meters high.

Habitat: Subtropical rain forest.

Distribution in RGS: Rain forest belt of eastern Rio Grande do Sul. Geographical novelty.

General distribution: From Minas Gerais to Rio Grande do Sul.

PERA Mutis

Nomenclature and determination after Müller Argoviensis, FB 11,2 (1874).

Pera glabrata (Schott) Baill., Ét. Gén. Euph. (1858) 434; Müller Argoviensis, FB 11,2 (1874) 429, tab. 61. — *Peridium glabratum* Schott, in Spreng. Cur. post. 410.

- 31824 SC, Sombrio p. Araranguá, in silva pluviali, 9.2.1946, fl.
 32080 SC, Praia Grande p. Araranguá, in silva pluviali, 13.2.1946,
 fl., det. L. B. Smith.
 47919 SC, Florianópolis, in silva, 20.1.1948, fl., leg. A. Sehnem
 SJ 3033.
 55650 SC, Rio Tavares in insula Florianópolis, in silva, 13.3.1952,
 fl., leg. R. Reitz 5996, det. L. B. Smith.
 58483 SC, Ibirama, in silva, 23.11.1953, fl., leg. R. Reitz 8828, det.
 L. B. Smith.

58487 SC, Cunhas p. Itajaí, in silva, 10.3.1955, fl., leg. R. Reitz 9261, det. L. B. Smith.

58504 SC, S. Francisco, in silva, 22.2.1951, fr., leg. R. Reitz 6565, det. E. Asplund, L. B. Smith.

Habit: Small tree, up to 6 meters high.

Habitat: Interior of the subtropical rain forest.

Distribution in RGS: So far, only at the southernmost frontier of Sta. Catarina, near the sea coast. **Geographical novelty.**

General distribution: From Trinidad, through eastern South America, down to northeastern Rio Grande do Sul.

PHYLLANTHUS L.

Nomenclature after Müller Argoviensis, FB 11,2 (1873).

Phyllanthus lathyroides H. B. K., Nov. Gen. et Spec. Pl. 2 (1817) 87; Müller Argoviensis, FB 11,2 (1873) 51; O'Donell et Lourteig, GSPPA 1 (1943) 154, tab. 65.

120 RGS, Vila Manresa p. P. Alegre (NEL), in umbrosis graminosis, 4.12.1932, fl., fr.

2101 RGS, S. Leopoldo (NEL), in graminosis umbrosis, 27.4.1933, fl., fr.

3601 Rio de Janeiro, in umbrosis, 5.2.1940, ster.

7542 RGS, S. Leopoldo (NEL), in umbrosis, 1907, fl., fr., leg. F. Theissen SJ.

9303 RGS, Toropí (SW), ad viam in silva, 25.1.1942, ster.

11083 RGS, Kappesberg p. Montenegro (NEH), in umbrosis graminosis, 1.1942, fl., leg. E. Schmidt SJ.

11084 RGS, S. Leopoldo (NEL), in graminosis, 11.1941, fl., fr., leg. E. Schmidt SJ.

11523 RGS, Fazenda Englert p. S. Francisco de Paula (NEH), in silva caedua, 1.1944, fl., leg. P. Buck SJ.

11947 RGS, Vila Manresa p. P. Alegre (NEL), in umbrosis, 1943, fl., fr.

25345 SC, Florianópolis, in horto, 2.4.1942, fl., leg. A. Rohr SJ. (L. B. Smith: Ph. tenellus Roxb.)

28526 RGS, Nonoai, in horto, 3.1945, fl., fr.

29064 RGS, Vila Manresa p. P. Alegre (NEL), in graminosis, 25.8.1945, fl.

29749 RGS, Kappesberg p. Montenegro (NEH), in incultis, 22.8.1945, fl., leg. A. Bruxel SJ.

31262 RGS, Vila Oliva p. Caxias (NEH), ad rivum, 21.2.1946, fl., fr.

32623 RGS, Pareci p. Montenegro (NEL), ad silvam in umbrosis, 11.11.1945, fl., leg. E. Henz SJ.

33413 RGS, S. Leopoldo (NEL), in agro, 17.7.1946, fl., leg. E. Schmidt SJ.

33661 Paraná, in umbrosis, 17.3.1946, fl., fr., leg. G. Hatschbach.

35702 RGS, S. Leopoldo (NEL), in umbrosis graminosis, 20.11.1946, fl., fr., leg. E. Henz SJ.

35861 RGS, Caracol p. Canela (NEH), in umbrosis graminosis, 132.1947, fl., fr., leg. K. Emrich.

37440 RGS, Vila Manresa p. P. Alegre (NEL), in graminosis, 5.7.1948, fl.

38480 RGS, ibidem, 1.12.1958, fl., fr.

- 38498 RGS, S. Leopoldo (NEL), in dumosis, 4.12.1948, fl., fr.
 39016 RGS, ad montem Steinkopf p. S. Leopoldo (NEL), in umbrosis graminosis, 20.12.1948, fl., fr.
 41797 RGS, Esteio p. S. Leopoldo (NEL), in umbrosis, 11.6.1949, fl.
 43058 RGS, Linha Bonita p. Montenegro (NEH), in agro, 24.8.1949, fl., fr.
 43397 RGS, Kappesberg p. Montenegro (NEH), ad silvam, 11.9.1949, fl.
 46371 RGS, Gramado p. Canela (NEH), ad araucarietum, 20.3.1950, fl., fr.
 47510 RGS, S. Leopoldo (NEL), ad silvam campestrem in graminosis, 1941, fl., fr., leg. E. Schmidt SJ.
 48594 RGS, Kappesberg p. Montenegro (NEH), ad viam in silva, 1.9.1949, fl., fr., leg. A. Sehnem SJ 3782.
 49848 SC, Itapiranga ad fl. Uruguay superius, in agro, 6.2.1951, fl., fr. (L. B. Smith: Ph. niruri L.)
 51059 RGS, Campestre p. Montenegro (NEH), in dumosis secundariis, 18.10.1950, fl., fr., leg. A. Sehnem SJ 4961.
 53134 RGS, Cérro Largo p. S. Luiz (NW), in agro, 20.11.1952, fl., fr.
 54328 SC, Brusque, ad viam, 12.2.1950, fl., fr., leg. R. Reitz 5009.
 57220 RGS, Vila Manresa p. P. Alegre (NEL), in umbrosis, 15.10.1955, fl., fr.
 57754 RGS, Pestana p. Ijui (NW), in umbrosis graminosis, 31.8.1953, fl., fr., leg. J. Pivetta 851.
 58325 SC, Rio Negrinho, in graminosis, 24.1.1953, fl., fr., leg. R. Reitz 1026, det. E. Asplund.
 58647 RGS, Estação de Silvicultura p. Sta. Maria (C), in umbrosis graminosis, 20.1.1956, fl., fr., leg. O. Camargo 73.
 59020 RGS, ibidem, 12.2.1956, fl., fr., leg. O. Camargo 171.
 58953 RGS, Farroupilha (NEH), in umbrosis ad silvam, 18.3.1957, fl., fr., leg. O. Camargo 1175.
 62365 RGS, Montenegro (NEL), in incultis, 19.9.1957, fl., fr., leg. O. Camargo 1737.

Note: The whole of the material has been carefully examined in order to discover Ph. niruri L., frequently cited for this State; but although this species can easily be told from the present by its seeds, no trace of it was found. So I am inclined to believe that the older citations are based on a mistake.

Habit: Herbaceous, somewhat woody at the base, erect, slender, 20-75 cm.

Habitat: Preferably in grassy and shadowy places at the edge of the forest; somewhat weedy.

Distribution in RGS: Throughout the whole of the area.

General distribution: From Texas, throughout the whole of cis-Andean South America, down to middle Argentina, Rio Grande do Sul, and Uruguay.

Phyllanthus montevidensis M. Arg., Linnaea 32 (1863) 37; FB 11,2 (1873) 46; O'Donell et Lourteig, GSPPA 1 (1943) 157, tab. 68b.

- 121 RGS, Juca Batista p. P. Alegre (NEL), ad flumen in rupestribus, 3.1.1933, fl., fr.
 4700 RGS, Salto Mucunan in fl. Uruguay superiore (NW), in fissuris rupium, 10.3.1941, fl.
 28402 RGS, Nonoai ad fl. Uruguay superius (NW), ad flumen in saxosis, 3.1945, fl., fr.
 32009 SC, Curralinhos p. Sombrio, ad flumen in rupestribus, 7.12.1944, fl., leg. R. Reitz 872.
 38010 RGS, Ponta Grossa (NEL), ad flumen in rupestribus, 14.11.1948, fl., fr.

39252 RGS, Morro do Sabiá p. P. Alegre, ad flumen in saxosis, 28.12.1948, fl., fr.

43734 RGS, ibidem, 5.10.1949, fl., fr.

Habit: Shrub, abundantly branched from a stout rootstock, branches 20-50 cm high.

Habitat: Rocky places at the edge of the water.

Distribution in RGS: Northeastern lowlands, northwestern rain forest zone. **Geographical novelty:**

General distribution: Northeastern Argentina, Rio Grande do Sul, and Uruguay.

Phyllanthus ramillosus M. Arg., Linnaea 32 (1863) 36; FB 11, 2 (1873) 59.

8965 RGS, Bom Jesus (NEH), ad rivum in dumosis, 15.1.1942, fl. masc.

31986 SC, Sombrio p. Araranguá, in dumosis siccis, 20.8.1945, fl., leg. R. Reitz 1177, det. L. B. Smith.

32184 RGS, Taimbesinho p. S. Francisco de Paula (NEH), in graminosis umbrosis, 14.2.1946, ster.

36216 RGS, Cambará p. S. Francisco de Paula (NEH), ad arauacrietum in dumosis, 2.1948, ster.

48108 RGS, Passo do Inferno p. Canela (NEH), in campestribus dumosis, 8.1949, fl., leg. A. Spies.

54069 RGS, Taimbesinho p. S. Francisco de Paula (NEH), in campestribus humidis alte graminosis, 20.2.1953, fl.

54518 RGS, ibidem, 13.11.1953, ad rivum in rupestribus, fl., fr.

64237 SC, S. Joaquim, in dumosis, 21.1.1958, fl., leg. J. Mattos.

Habit: Woody shrub, abundantly branched, 0.2-1 meter high.

Habitat: More or less wet places.

Distribution in RGS: Northeastern highlands only.

General distribution: Sta Catarina, Rio Grande do Sul.

Phyllanthus rosellus (M. Arg.) M. Arg., FB 11, 2 (1873) 53; tab. 6, 1. — **Ph. lathyroides** H. B. K. var. **genuinus** M. Arg., Linnaea 32 (1863) 42.

30912 RGS, Vila Oliva p. Caxias (NEH), in paludosis, 2.1.1946, fl., fr.

32271 RGS, Tainhas p. S. Francisco de Paula (NEH), in paludosis alte graminosis, 16.2.1946, fl., fr.

34767 RGS, Fazenda da Ronda p. Vacaria (NEH), in paludosis, 3.1.1947, fl., fr.

36218 RGS, Cambará p. S. Francisco de Paula (NEH), in paludosis subapertis, 2.1948, fl., fr.

52014 RGS, Jaquirana p. S. Francisco de Paula (NEH), in paludosis herbosis, 20.2.1952, fl., fr.

Habit: Herbaceous or half-woody, densely branched, 10-30 cm high.

Habitat: Swamps, peat bogs.

Distribution in RGS: Northeastern highlands only. **Geographical novelty:**

General distribution: Mountainous area of Minas Gerais, highlands of Sta Catarina and Rio Grande do Sul.

Phyllanthus sellowianus M. Arg., Linnaea 32 (1863) 37; FB 11, 2 (1873) 39; O'Donell et Lourteig, GSPPA 1 (1943) 1959, tab. 68a.

- 1454 SC, Itapiranga ad fl. Uruguay superius, ad flumen in rupestribus, 15.2.1934, fl., det L. B. Smith.
- 2879 RGS, P. Alegre (NEH), ad flumen in dumosis, 29.11.1937, fl.
- 4694 RGS, Salto Mucunam in fl. Uruguay superiore (NW), in rupestribus dumosis, 10.3.1941, fl.
- 10131 RGS, Ijuisinho p. Tupanciretan (NW), ad flumen in rupestribus, 30.1.1942, fl.
- 11082 RGS, Kappesberg p. Montenegro (NEH), ad rivum in dumosis, 1.1942, fl., leg. E. Schmidt SJ.
- 26349 RGS, Estância-do Jaraú p. Quaraí (SW), in silvula riparia, 1.1945, ster.
- 28346 RGS, Nonoai ad fl. Uruguay superius (NW), ad rivum, 3.1945., fl.
- 28800 RGS, Caracol p. Canela (NEH), ad rivum in rupestribus, 2.1945, fr. maturo, leg. K. Emrich.
- 31265 RGS, Vila Oliva p. Caxias (NEH), ad flumen in silva pluviali, 21.2.1946, fl., fr.
- 32724 RGS, Pareci p. Montenegro (NEL), ad flumen in dumosis, 14.10.1945, fl., leg. E. Henz SJ.
- 32882 RGS, Kappesberg p. Montenegro (NEH), ad rivum in silva, 24.10.1945, fl., leg. E. Friderichs SJ.
- 33286 RGS, Caracol p. Canela (NEH), ad flumen, 9.3.1946, fr., leg. K. Emrich.
- 34766 RGS, Fazenda da Ronda p. Vacaria (NEH), ad rivum in araucarieto, 3.1.1947, ster.
- 38022 RGS, Ponta Grossa p. P. Alegre (NEL), in silvula riparia, 14.11.1948, fl.
- 44748 RGS, Lagoa dos Barros p. Osório (NEC), ad lacum in dumosis, 14.12.1949, ster.
- 47495 RGS, S. Leopoldo (NEL), ad flumen in dumosis, 1941, fl., leg. E. Schmidt SJ.
- 47843 RGS, Forromeco p. Cai, ad rivum in dumosis, 15.11.1949, fl., leg. A. Sehnem SJ 4047.
- 48447 RGS, Pareci p. Montenegro (NEL), ad flumen, 3.10.1945, fl., leg. A. Sehnem SJ 1555.
- 48485 SC, Ibirama, ad flumen, 26.11.1953, fl., leg. R. Reitz 9044, det. L. B. Smith.
- 48609 RGS, Campestre p. Montenegro (NEH), ad flumen in silvula, 18.10.1946, fl., leg. A. Sehnem SJ 2229.
- 49207 RGS, Pareci p. Montenegro (NEL), ad flumen, 26.11.1950, fl.
- 55642 SC, Encano p. Indaial, ad flumen in dumosis, 14.12.1950, fl., leg. R. Reitz 6013, det. L. B. Smith.
- 56571 RGS, Passo do Inferno p. Canela (NEH), ad flumen in rupestribus sparse dumosis, 9.1.1955, ster.
- 56922 RGS, Caracol p. Canela (NEH), ad rivum in rupestribus, 1.1955, fl., leg. K. Emrich.
- 61574 RGS, Farroupilha (NEH), ad rivum, 18.11.1957, fl., leg. O. Camargo 2554.
- 63339 Pelotas (SE), in ripariis, 2.12.1957, fl., leg. J. Sacco 766.
- 63413 RGS, ibidem, 24.3.1958, fl., leg. J. Sacco 1102.

Habitat: Shrub with long, slender branches, up to 4 meters high.

Habitat: Bank of streams and rivers.

Distribution in RGS: Throughout the whole of the State.

General distribution: From central Brazil, down to northeastern Argentina, Rio Grande do Sul, and Uruguay.

SAPIUM Jacq.

Nomenclature after Pax, PR 4, 147, 5 (1912).

Sapium haematospermum M. Arg., Linnaea 34 (1865) 217; Pax, PR 4, 147, 5 (1912) 219; O'Donell et Lourteig, GSPPA 1 (1943), 293, tab. 134a. *Excoecaria haematosperma* M. Arg., FB 11, 2 (1874) 623.

2897 RGS, Caaró p. S. Luiz (NW), in silvula campestris, 28.1.1938, fl., fr. immaturo.

4110 RGS, ad flumen Mancarrão p. Quaraí (SW), in silvula campestris, 14.1.1941, fr. maturo.

25773 RGS, Fazenda Sta Cecília p. S. Gabriel (SW), in silva campestris, 1.1944, fl. immaturo.

26327 RGS, Estância do Jarau p. Quaraí (SW), in silvula rupestris, 1.1945, fr.

26350 RGS, ibidem, 1.1945, fr.

53385 RGS, Caaró p. S. Luiz (NW), in silvula, 24.11.1952, fl.

Habit: Small to medium tree, 4-10 meters high.

Habitat: Campos copses, park formations.

Distribution in RGS: Western campos area only. **Geographical novelty.**

General distribution: Paraguay, southern Brazil, western Rio Grande do Sul, Uruguay, northern and middle Argentina.

Sapium petiolare (M. Arg.) Huber, Bull. Herb. Boiss. 2. sér. 6 (1906) 434, fig. 25; Pax, PR 4, 147, 5 (1912) 226. — *Excoecaria biglandulosa* (Baill.) M. Arg. var. *petiolaris* M. Arg., FB 11, 2 (1874) 621.

772 RGS, Vila Manresa p. P. Alegre (NEL), in silva campestris, 16.11.1933, fl.

4527 RGS, Fazenda Englert p. S. Francisco de Paula (NEH), in araucarieto, 8.2.1941, fl.

9644 RGS, Tupanciretan (NW), in silva campestris, 28.1.1942, ster.

11075 RGS, Kappesberg p. Montenegro (NEH), sin silva pluviali, 1.1942, fr., leg. E. Schmidt SJ.

11086 RGS, Tannenwald p. S. Leopoldo (NEH), in araucarieto, 12.1942, ster.

26568 Estância do Jarau p. Quaraí (SW), in silva campestris, 1.1945, fl.

28523 RGS, Nonoai ad fl. Uruguay superius (NW), in silva campestris, 3.1945, ster.

27056 RGS, P. Alegre (NEL), in silva campestris, 1944, ster., leg. K. Emrich.

27522 RGS, Pareci p. Montenegro (NEL), in silva, 1944, ster., leg. E. Henz SJ.

29441 RGS, Vila Manresa p. P. Alegre (NEL), in silva, 15.11.1945, fl.

30515 SC, Cangicas p. Araranguá, in silvula prope litus, 10.12.1943, fr., leg. R. Reitz 262.

30692 RGS, Kappesberg p. Montenegro (NEH), in silva pluviali, 17.10.1945, fl., leg. E. Friderichs SJ.

31094 RGS, Vila Oliva p. Caxias (NEH), in araucarieto, 6.1.1946, fl.

41497 SC, Sombrio p. Araranguá, in silvula sabulosa, 2.2.1946, fr.

32100 RGS, Serra do Fachinal p. S. Francisco de Paula (NEH), in silvula nebulari rupestris, 14.2.1946, fr.

- 32561 RGS, Pareci p. Montenegro (NEL), in silva campestri, 14.10.1945, fl., leg. E. Henz SJ.
- 35904 RGS, Caracol p. Canela (NEH), in araucarieto, 23.2.1947, ster., leg. K. Emrich.
- 36215 RGS, Cambará p. S. Francisco de Paula (NEH), in araucarieto, 2.1948, fr.
- 36935 Paraná, Piraquara, in silva, 27.12.1947, fl., leg. G. Hatschbach 822.
- 37968 RGS, ad montem Sapucaia p. S. Leopoldo (NEL), in silva campestri, 10.11.1949, fl.
- 38095 RGS, Vila Manresa p. P. Alegre (NEL), in silva, 17.11.1948, fl.
- 38702 RGS, Rio dos Sinos p. S. Leopoldo (NEL), in campestribus solitaria, 10.12.1948, fl., fr. immaturo.
- 44133 RGS, Barreto Vianna p. S. Leopoldo (NEL), in silvula campestri, 24.10.1949, fl.
- 44410 RGS, Esteio p. S. Leopoldo (NEL), in silva, 14.11.1949, fl.
- 44680 RGS, Vila Oliva p. Caxias (NEH), in araucarieto, 3.12.1949, fl.
- 44751 RGS, Lagoa dos Barros p. Osório (NEC), in silvula riparia, 14.11.1949, fl.
- 44854 RGS, S. Francisco de Paula (NEH), in araucarieto, 18.2.1949, fl.
- 44930 RGS, Itapoan p. P. Alegre (NEL), in silvula sabulosa, 23.12.1949, fr.
- 45201 RGS, Fazenda do Arroio p. Osório (NEC), in silvula arenosa, 4.1.1950, fl., fr.
- 47500 RGS, S. Leopoldo (NEL), in silva campestri, 1942, fr. immaturo, leg. E. Schmidt SJ.
- 48405 RGS, Pareci p. Montenegro (NEL), in silva campestri, 31.10.1945, fl., leg. A. Sehnem SJ 1506.
- 49252 RGS, ibidem, 26.11.1950, fl.
- 49432 RGS, Taimbésinho p. S. Francisco de Paula (NEH), in araucarieto, 18.12.1950, fl.
- 49685 RGS, Lagoa dos Quadros p. Torres (NEC), in silvula, 18.1.1951, fr.
- 50764 SC, Riosinho p. Bom Retiro, in silva, 24.12.1948, fl., fr. immaturo, leg. R. Reitz 2733, det. L. B. Smith.
- 54729 RGS, Fazenda Englert p. S. Francisco de Paula (NEH), in araucarieto, 1.1.1954, fl.
- 55914 Fazenda do Arroio p. Osório (NEC), in silvula sabulosa, 3.10.1954, fl.
- 56438 RGS, Fazenda Englert p. S. Francisco de Paula (NEH), in araucarieto, 2.1.1955, fr. semievoluto.
- 57801 RGS, Pestana p. Ijuí (NW), in silva campestri, 22.10.1953, fl., leg. J. Pivetta 804.
- 59890 RGS, Farroupilha (NEH), in araucarieto, 12.4.1957, ster., leg. O. Camargo 1253.
- 60648 RGS, ibidem, 8.5.1957, fr., leg. O. Camargo 1417.
- 61010 SC, Lages, in araucarieto, 25.12.1956, fl., leg. J. Mattos.
- 61115 SC, ibidem, 25.12.1956, fl., leg. J. Mattos.
- 61140 SC, ibidem, 25.12.1956, fl., leg. J. Mattos.
- 61669 RGS, Taquarí (NEL), in silva riparia, 10.12.1957, fl., leg. O. Camargo 2847.
- 62915 RGS, ibidem, 10.12.1957, fl., leg. O. Camargo 3022.

Note: The varieties of *Excoecaria biglandulosa* (Baill.) M. Arg. have been given status of species by Huber, which procedure has been followed by Pax,

and O'Donell & Lourteig (*Sapium longifolium* (M. Arg.) Huber, *S. klotzschianum* (M. Arg.) Huber, *S. montevideense* Klotzsch, and others); but, on close examination, it proves impossible to establish any hard and fast line of separation. In my opinion, there exists only one variable species with very variable leaves.

Habit: Small to medium tree, up to 15 meters high.

Habitat: Subtropical rain forest, Araucaria woods, campos woodlets.

Distribution in RGS: Throughout the whole of the forested area.

General distribution: From Minas Gerais and Goiás, through southern Brazil, Paraguay, northern Argentina, down to Rio Grande do Sul and Uruguay.

SEBASTIANIA Spreng.

Nomenclature after Pax, PR 4, 147, 5 (1912).

Sebastiania argutidens Pax et K. Hoffm., PR 4, 147, 5 (1912) 129.

35398 RGS, S. Leopoldo (NEL), in silva campestris, 2.10.1946, fl., leg. E. Henz SJ.

40026 RGS, ad montem Ferrabraz p. Novo Hamburgo (NEL), in silvula secundaria, 12.1.1949, ster.

42933 RGS, Schwabenschneis p. Novo Hamburgo (NEL), in silva pluviali, 12.8.1949, fr.

58486 SC, Cunhas p. Itajai, in silva, 14.4.1955, fr., leg. R. Reitz 9256, det. L. B. Smith.

58490 SC, ibidem, fl., 24.9.1954, leg. R. Reitz 9271, det. L. B. Smith.

58508 SC, ibidem, 1.9.1950, fl., leg. R. Reitz 7030, det. L. B. Smith.

58509 SC, ibidem, 11.12.1951, fr., leg. R. Reitz 9256, det. L. B. Smith.

Habit: Shrub with long, slender branches, up to 4 meters high.

Habitat: Subtropical rain forest.

Distribution in RGS: Northeastern rain forest belt only. **Geographical novelty.**

General distribution: Eastern Sta Catarina, northeastern Rio Grande do Sul.

Sebastiania brasiliensis Spreng., Neue Entd. 2 (1821) 118, tab. 3; Müller Argoiensis, FB 11, 2 (1874) 584, tab. 80, fig. 2; O'Donell et Lourteig, GSPPA 1 (1943) 280, tab. 127.

115 RGS, Morro S. José p. P. Alegre (NEL), in silva, 10.2.1942, fl.

1470 RGS, Cérro do Umbú p. Osório (NEC), in silva pluviali, 31.12.1934, fl.

2164 RGS, Gramado p. Canela (NEH), in araucarieto, 27.3.1937, fl.

4414 RGS, Fazenda Englert p. S. Francisco de Paula (NEH), in araucarieto, 8.2.1941, fl.

6598 RGS, Nova Petrópolis (NEH), in silva, 10.11.1940, ster.

9341 RGS, Jari p. Tupanciretan (NW), in silva campestris, 26.1.1942, ster.

9782 RGS, Tupanciretan (NW), in silvula campestris, 29.1.1942, ster.

11081 RGS, Kappesberg p. Montenegro (NEH), in silva pluviali, 1.1942, fl., leg. E. Schmidt SJ.

11087 RGS, Nova Petrópolis (NEH), in araucarieto, 1.1943, ster.

11101 RGS, Sta Maria (C), in silva, 1943, fl., leg. A. Heidler SJ.

11102 RGS, Cérro Largo (NW), in silva, 1.1943, fl., leg. P. Buck SJ.

11876 RGS, Antônio Prado (NEH), in silva pluviali, 25.6.1932, fl., leg. Irm. Augusto Duflot.

- 25641 RGS, Fazenda Sta Cecília p. S. Gabriel (SW), in silva riparia, 1.1944, fl.
- 25645 RGS, ibidem, 1.1944, fl.
- 25824 RGS, ibidem, 1.1944, fl.
- 26726 RGS, Cérro Largo (NW), ad rivum in silva pluviali, 9.1944, fl., leg. E. Friderichs SJ.
- 28078 RGS, Vila Oliva p. Caxias (NEH), in araucarieto, 2.1945, fl. leg. P. Buck SJ.
- 28702 Caracol p. Canela (NEH), in silva pluviali cum Araucariis intermixta, 2.1945, fl., leg. K. Emrich.
- 28807 RGS, ibidem, 2.1945, fl., leg. K. Emrich.
- 29118 RGS, Vila Manresa p. P. Alegre (NEL), in silva, 12.9.1945, ster.
- 31089 RGS, Vila Oliva p. Caxias (NEH), in araucarieto, 5.1.1956, fl.
- 34181 RGS, Cérro Largo (NW), ad rivum in secundariis, 3.10.1946, fl., leg. Irm. Augusto Duflot.
- 34354 RGS, ibidem, 31.10.1947, fl., leg. Irm. Augusto Duflot.
- 34764 RGS, Fazenda da Ronda p. Vacaria (NEH), in araucarieto, 3.1.1947, fl.
- 35691 RGS, S. Leopoldo (NEL), in silva campestri, 28.12.1946, fl., leg. H. Simas SJ.
- 37903 RGS, Morro da Polícia p. P. Alegre (NEL), in silva, 8.11.1948, fr. maturo.
- 38790 RGS, ad fl. Caí inferius p. P. Alegre (NEL), in silvula, 16.12.1948, fl.
- 38841 RGS, S. Leopoldo (NEL), in silva subhúmida, 17.12.1948, fl.
- 39181 RGS, Morro da Polícia p. P. Alegre (NEL), in silva, 27.12.1948, fl.
- 39396 RGS, Lamí p. Itapoan (NEL), in silva campestri, 3.1.1948, fl.
- 39571 RGS, Cachoeirinha p. Gravataí (NEL), in silva subpaludosa, 7.1.1949, fr.
- 39783 RGS, Parecí p. Montenegro (NEL), in silva pluviali, 14.1.1949, ster.
- 40282 RGS, Farroupilha (NEH), in araucarieto, 28.1.1949, fl.
- 41837 RGS, Canoas p. P. Alegre (NEL), in silva humida, 3.6.1949, fr. maturo.
- 43171 RGS, Vila Oliva p. Caxias (NEH), in araucarieto, 28.8.1949, fr. submat.
- 43293 RGS, Estação Azevedo p. Montenegro (NEL), in silva, 5.9.1949, fr.
- 43418 RGS, Kappesberg p. Montenegro (NEH), in silva, 11.9.1949, fr.
- 45537 RGS, Taimbesinho p. S. Francisco de Paula (NEH), in araucarieto humido, 30.1.1950, fl.
- 47996 RGS, Kappesberg p. Montenegro (NEH), in silva pulviali, 4.1.1947, fl., leg. A. Sehnem 2445.
- 48044 RGS, Cérro Largo (NW), in silva pluviali, 4.2.1949, fl., leg. A. Sehnem SJ.
- 48118 Paraná, S. José dos Pinhais p. Curitiba, in silva, 23.1.1949, fl., leg. G. Hatschbach 1156.
- 48528 RGS, Cérro Largo (NW), in dumetosis ad rivum, 4.2.1949, fl., leg. A. Sehnem SJ 3601.
- 48542 RGS, Kappesberg p. Montenegro (NEH), in silva pluviali, 17.3.1949, fr. submaturo, leg. A. Sehnem SJ 3737.
- 49458 RGS, Mato Leitão p. Venâncio Aires (NEL), in silva, 1.1.1951, fl.

- 49517 SC, Lages, in araucarieto, 10.1.1951, fl., det. L. B. Smith.
 49749 RGS, Lagoa dos Quadros p. Torres (NEC), in silva, 18.11.1951, fl.
 49946 SC, Itapiranga ad fl. Uruguay superius, in silva pluviali densa, 6.2.1951, fl., det. L. B. Smith.
 50896 Paraná, Tunas p. Bocaiuva, in silva, 4.2.1950, fl., leg. G. Hatschbach 1809.
 51537 RGS, Passo do Socorro p. Vacaria (NEH), in araucarieto, 26.12.1951, fl.
 52061 RGS, Jaquirana p. S. Francisco de Paula (NEH), in araucarieto, 20.2.1952, fl.
 52143 RGS, Morrinhos p. S. Francisco de Paula (NEH), in araucarieto, 7.2.1952, fl.
 52866 RGS, Caracol p. Canela (NEH), in araucarieto, 25.1.1953, fl., leg. K. Emrich.
 53155 RGS, Cérro Largo (NW), ad rivum in silva, 20.11.1952, fr.
 55093 RGS, Vila Oliva p. Caxias (NEH), in araucarieto, 24.2.1954, fl.
 55648 SC, Dionísio Cerqueira, in silva, 22.1.1952, fl., leg. R. Reitz 5998, det. L. B. Smith.
 56541 RGS, Passo do Inferno p. Canela (NEH), ad flumen in durosis, 9.1.1955, fl.
 56682 RGS, Vila Oliva p. Caxias (NEH), in araucarieto, 8.3.1955, fl.
 57374 RGS, Estação de Silvicultura p. Sta Maria (C), in silva, 23.12.1955, ster., leg. O. Camargo 44.
 57763 RGS, Pestana p. Ijuí (NW), in silva campestri, 13.9.1953, fl., leg. J. Pivetta, 803.
 59590 RGS, Farroupilha (NEH), in araucarieto, 28.9.1956, fr., leg. O. Camargo 777.
 59669 RGS, ibidem, 22.10.1956, fr., leg. O. Camargo 840.
 59838 RGS, ibidem, 2.4.1957, ster., leg. O. Camargo 1231.
 60002 RGS, ibidem, 26.1.1956, fl., leg. O. Camargo 1139.
 61873 RGS, Passo Fundo (NW), in silva campestri, 20.10.1957, ster., leg. O. Camargo 2177.
 62024 RGS, Farroupilha (NEH), in silva pluviali cum Araucariis intermixta, 4.10.1957, fr. semievoluto, leg. O. Camargo 1855.
 62056 RGS, Bento Gonçalves (NEH), in silva, 6.10.1957, fr., leg. O. Camargo 1947.
 62109 RGS, Garibaldi (NEH), in silva cum Araucariis intermixta, 13.10.1957, fr., leg. O. Camargo 2017.
 62205 RGS, ibidem, 13.10.1957, fl., leg. O. Camargo 2053.
 62262 Farroupilha (NEH), in silva pluviali, 10.10.1957, fr., leg. O. Camargo 1904.
 63417 RGS, Pelotas (SE), in ripariis, 24.3.1958, fl., leg. J. Sacco 1050.
 63486 SC, S. Joaquim, in araucarieto, 10.1.1958, fl., leg. J. Mattos.
 63492 SC, ibidem, 10.1.1958, ster., leg. J. Mattos.
 63730 RGS, Pelotas (SE), in silva, 11.3.1958, fr. maturo, leg. J. Sacco 966.
 63731 RGS, ibidem, 11.3.1958, ster., leg. J. Sacco 967.

Habit: Small tree, up to 6 metres high.

Habitat: Interior of the subtropical rain forest and the campos woodlets.

Distribution in RGS: Throughout of the whole of the forested area.

General distribution: With varieties, from Bahia and Goiás, through southern Brazil, Paraguay, northern Argentina, down to Rio Grande do Sul and Uruguay.

Sebastiania hispida (Mart.) Pax, PR 4, 147, 5 (1912) 105; O'Donell et Lourteig, GSPPA 1 (1943) 283, tab. 130a. — *Cnemidostachys hispida* Mart., Nov. Gen. Spec. Plant. 1 (1824-1829) 71 — *S. corniculata* M. Arg., var., *hispida* (Mart.) M. Arg. FB 11, 2 (1874) 560.

1451 RGS, S. Leopoldo (NEL), in arenosis siccis dumosis, 15.5. 1934, fl., fr.

1461 RGS, in summo monte das Cabras p. S. Leopoldo (NEL), in rupestribus siccis dumosis.

2102 RGS, in summo monte Sapucaia p. S. Leopoldo (NEL), in rupestribus siccis breviter dumosis, 1.5.1935, fl., fr.

10025 RGS, Ijuisinho p. Tupanciretan (NW), in campestribus, 30. 1.1942, fl.

10046 RGS, ibidem, 30.1.1942, ster.

10122 RGS, ibidem, 30.1.1942, fl., fr. immaturo.

26294 RGS, Estância do Jarau p. Quaraí, (NW), in campestribus saxosis siccis breviter graminosis, 1.1945, fr. maturo.

28232 RGS, Nonoai ad fl. Uruguay superius, in campestribus siccis dumosis, 3.1945, fl.

38609 RGS, ad montem das Cabras p. S. Leopoldo (NEL), in sabulosis siccis, sparse dumosis, 7.12.1948, fl., fr. submastro.

40843 RGS, Granja Neugebauer p. Itapoan (NEL), in campestribus siccis dumosis, 3.4.1949, fr. maturo.

40939 RGS, in summo monte das Cabras p. S. Leopoldo (NEL), in rupestribus dumosis, 8.4.1949, ster.

44425 RGS, Granja Neugebauer p. Itapoan (NEL), in arenosis dumosis, 19.11.1949, fl.

46903 RGS, Lombas p. Viamão (NEL), in arenosis dumosis, 17. 4.1950, fr. maturo.

47027 RGS, Lagoa da Pinguela p. Osório (NEC), in arenosis breviter dumosis, 8.5.1950, fl., fr.

51776 RGS, Morro Grande p. Osório (NEC), in arenosis dumosis, 14.1.1952, fl., fr.

51938 RGS, Palmeira (NW), in campestribus, 31.1.1952, fl., fr.

55647 SC, Campo Erê p. Chapecó, in campestribus siccis dumosis, 24.1.1952, fl., fr., leg. R. Reitz 6002, det. L. B. Smith.

57527 RGS, Estação de Silvicultura p. Sta Maria (C), in campestribus siccis, 25.11.1955, fl., fr., leg. O. Camargo 62.

58960 RGS, ibidem, 26.1.1956, fr., leg. O. Camargo 105.

Note: Sensu Pax, the cited material would belong to var. *graciliramea* (Pax et K. Hoff.) Pax et K. Hoffm., l.c. 107; but there remains a heavy doubt as to whether a subdivision as that of Pax is of any real use in such variable a species.

Habit: Half shrub, half-prostrate to ascending or erect, abundantly branched, 0. 5-1 meter high.

Habitat: Dry, rocky or sandy places.

Distribution in RGS: Over the whole of the campestrian area, except for the northeastern highlands.

Sebastiania klotzchiana (M. Arg.) M. Arg., DC. Prodr. 15.2 (1866) 1178; FB 11, 2 (1874) 573, tab. 78; Pax, PR 4, 147, 5 (1912); O'Donell et Lourteig, GSPPA 1 (1943) 284, tab. 131. — *Gymnanthes klotzschiana* M. Arg., Linnaea 32 (1863) 98.

1459 SC, Itapiranga ad fl. Uruguay superius, ad flumen in dumosis, 15.2.1934, fl., det. L. B. Smith.

4058 Uruguay, Tres Fornos p. Rivera, in silvula campestri, 12.1. 1941, fl.

- 4223 RGS, Barra do Quaraí p. Uruguaiana (SW), in campestribus dumosis, 15.1.1941, fl.
- 8169 RGS, sine loco, sine die, fl.
- 9056 RGS, Bom Jesus (NEH), in silvula riparia, 16.1.1942, ster.
- 9243 RGS, Jarí p. Tupanciretan (NW), in silvula campestri, 26.1.1942, ster.
- 9650 RGS, Tupanciretan (NW), ad silvam campestrem, 28.1.1942, fl.
- 9783 RGS, ibidem, 29.1.1942, ster.
- 10141 RGS, Ijuisinho p. Tupanciretan (NW), in silvula, 30.1.1942, fl.
- 26292 RGS, Estância do Jarau p. Quaraí (SW), in rupestribus dumosis, 1.1945, fl.
- 26783 RGS, Cérro Largo (NW), in silvula campestri, 9.1944, fl., leg. E. Friderichs SJ.
- 28542 RGS, Nonoai ad fl. Uruguay superius (NW), in silvula, 3.1945, ster.
- 31087 RGS, Vila Oliva p. Caxias (NEH), ad araucarietum, 6.1.1946, ster.
- 31272 RGS, ibidem, ad flumen in dumosis, 21.2.1946, fl.
- 33265 RGS, Caracol p. Canela (NEH), in silva aperta, 20.2.1946, fl., leg. K. Emrich.
- 34408 Paraná, Vila Velha p. Ponta Grossa, in rupestribus dumosis, 8.9.1946, fl., leg. G. Hatschbach 367.
- 34763 RGS, Fazenda da Ronda p. Vacaria (NEH), in dumosis, 3.1.1947, fr. maturo.
- 36057 RGS, Campina p. Sta Rosa (NW), in dumosis campestribus, 2.1947, fl., leg. A. Spies.
- 36908 Paraná, S. José dos Pinhais p. Curitiba, ad silvam campestrem, 7.3.1947, fl., leg. G. Hatschbach 634.
- 37190 RGS, Sobradinho (NW), ad silvam campestrem, 1.1948, ster., leg. J. Becker.
- 43259 RGS, Estação Azevedo p. Montenegro (NEL), in silvula, 5.9.1949, fl.
- 50755 SC, Urubici p. S. Joaquim, in silva campestri, 30.12.1948, fl., leg. R. Reitz 3675, det. L. B. Smith.
- 50813 SC, Riosinho p. Bom Retiro, in silvula, 23.12.1948, fr., leg. R. Reitz 3692, det. L. B. Smith.
- 53126 RGS, Cérro Largo (NW), ad rivum in dumosis, 20.11.1952, fr.
- 53291 RGS, Caaró p. S. Luiz (NW), ad silvam, 24.11.1952, fr.
- 57329 RGS, Vila Manresa p. P. Alegre (NEL), in silvula, 18.9.1955, fl.
- 57392 RGS, Estação de Silvicultura p. Sta Maria (C), in silvula campestri, 23.12.1955, fl., leg. O. Camargo 59.
- 57762 RGS, Pestana p. Ijuí (NW), in dumosis, 24.8.1953, fl., leg. J. Pivetta 802.
- 58480 SC, Laguna, in dumosis, 5.6.1952, fl., leg. R. Reitz 8814, det. L. B. Smith.
- 59565 RGS, Farroupilha (NEH), ad araucarietum, 24.9.1956, fl., leg. O. Camargo 763.
- 61543 RGS, ibidem, 20.11.1957, fr., leg. O. Camargo 2614.
- 61573 RGS, ibidem, 18.11.1957, fr. maturo, leg. O. Camargo 2557.
- 62103 RGS, ibidem, 8.10.1957, fl., leg. O. Camargo 1989.
- 62460 RGS, Passo Fundo (NEW), in silvula campestri, 20.10.1957, fl., leg. O. Camargo 2225.
- 62462 RGS, ibidem, 20.10.1957, fl., leg. O. Camargo 2222.
- 62475 RGS, ibidem, 20.10.1957, fr., leg. O. Camargo 2197.
- 62538 RGS, ibidem, 20.10.1957, fr., leg. O. Camargo 2163.

Habit: Shrub to small tree, 3-5 meters high, very densely branched.

Habitat: Campos thickets, edge of the rain forest.

Distribution in RGS: Over the whole of the forested area.

General distribution: From Minas Gerais, through Paraguay and southern Brazil, down to northern and northeastern Argentina, Rio Grande do Sul, and Uruguay.

Sebastiania schottiana (M. Arg.) M. Arg., DC. Podr. 15, 2 (1866) 1176; FB 2 (1874) 568, tab. 77; Pax, PR 4, 147, 5 (1912) 126; O'Donell et Lourteig, GSPPA 1 (1943) 286, tab. 132. — *Gymnanthes schottiana* M. Arg., Linnaea 32 (1863) 96.

3776 RGS, sine loco, sine die, fl.

4170 RGS, Rio Garopá p. Quarai (SW), ad flumen, 14.1.1941, ster.

4633 RGS, Estreito p. Marcelino Ramos (NW), ad flumen in rupestribus, 16.2.1941, ster., det. L. B. Smith.

4647 RGS, ibidem, 16.2.1941, ster.

4691 RGS, Salto Mucunan in flumine Uruguay superiore (NW), in rupestribus, 10.3.1941, fl.

25823 RGS, Fazenda Sta Cecilia p. S. Gabriel (SW), in silvula riparia, 1.1944, ster.

28699 RGS, Caracol p. Canela (NEH), ad rivum in dumosis, 16.2.1945, fl., leg. K. Emrich.

29678 RGS, Pareci p. Montenegro (NEL), ad flumen in dumosis, 30.9.1945, fl., fr., leg. E. Henz SJ.

29876 RGS, Kappesberg p. Montenegro (NEH), ad rivum, 28.8.1945, fl., leg. E. Friderichs SJ.

38026 RGS, Barra do Ribeiro p. P. Alegre (NEL), ad flumen in silvula, 14.11.1948, fr. maturo.

39268 RGS, Morro do Sabia p. P. Alegre (NEL), in ripariis, 28.12.1948, fl.

40130 Guaiaba p. P. Alegre (NEL), ad flumen, 24.1.1949, fl.

43851 RGS, ad fl. Cai inferius p. P. Alegre (NEL), in ripariis dumosis, 12.10.1949, fr. maturo.

44352 RGS, ad fl. Gravatai inferius (NEL), ad flumen in dumosis, 11.11.1949, fr. maturo.

58140 SC, Ibirama, ad flumen, 26.11.1953, fl., leg. R. Reitz 9049, det. L. B. Smith.

63283 RGS, Pelotas (SE), ad rivum, 27.11.1957, fr., leg. J. Sacco 708.

63424 RGS, ibidem, 24.3.1958, ster., leg. J. Sacco 1101.

Habit: Shrub to small tree, branches slender, 3-4 meters long.

Habitat: Together with *Phyllanthus sellowianus* M. Arg. along river banks.

Distribution in RGS: Through the whole of the forested area of the State.

General distribution: From Goias and Minas Gerais, through southern Brazil

and northeastern Argentina, down to Rio Grande do Sul and Uruguay.

Sebastiania serrata M. Arg., FB 11, 2 (1874) 576; Pax, PR 4, 147, 5, (1912) 132.

114 RGS, Vila Manresa p. P. Alegre (NEL), in silvula, 13.10.1932, fl.

1439 RGS, Esteio p. S. Leopoldo (NEL), ad silvam campestrem, 5.11.1931, fl.

7539 RGS, S. Leopoldo (NEL), in silvula, 1907, ster., leg. F. Theissen SJ.

- 7540 RGS, ibidem, in silva campestri, 1907, fl., leg. F. Theissen SJ.
 7548 RGS, ibidem, ad silvam campestrum, 1907, fl., leg. F. Theissen SJ.
 8168 RGS, sine loco, sine die, fl.
 9057 RGS, Bom Jesus (NEL), in silvula campestri, 16.1.1942, ster.
 11080 RGS, ad montem Steinkopf p. S. Leopoldo (NEL), in dumosis rupestribus, 11.1941, fr. maturo, leg. E. Schmidt SJ.
 11756 RGS, ad P. Alegre, in silvula, 1943, fl., leg. K. Emrich.
 26443 RGS, Fazenda das Almas p. Palmares (NEC), in silvula sabulosa, 1.1945, fl., leg. P. Buck SJ.
 27195 RGS, Vila Manresa p. P. Alegre (NEL), in silvula, 10.1944, fl.
 27537 RGS, Pareci p. Montenegro (NEL), ad silvam pluviale, 1944, ster., leg. E. Henz SJ.
 29173 RGS, Vila Manresa p. P. Alegre (NEL), in dumosis, 12.9.1945, fl.
 31987 RGS, Sombrio p. Araranguá, in silvula sabulosa, 28.8.1945, fl., leg. R. Reitz 1178.
 32502 RGS, Pareci p. Montenegro (NEL), in silvula secundaria, 18.11.1945, fl., leg. E. Henz SJ.
 37486 RGS, Vila Manresa p. P. Alegre (NEL), in silvula, 1.9.1948, fl.
 39577 RGS, Cachoeirinha p. Gravataí (NEL), in silvula, 7.1.1949, fl.
 39735 RGS, sine loco, sine die, fl.
 40372 RGS, Vila Manresa p. P. Alegre (NEL), ad silvam, 3.3.1949, fl.
 41633 RGS, Esteio p. S. Leopoldo (NEL), in silvula, 18.5.1949, fr.
 43480 RGS, Vila Manresa p. P. Alegre (NEL), in dumosis, 20.9.1949, fl.
 47496 RGS, S. Leopoldo (NEL), ad silvam, 1941, fl., leg. E. Schmidt SJ.
 48636 RGS, Pareci p. Montenegro (NEL), in silvula secundaria, 7.11.1945, fl., leg. A. Schmem SJ 1451.
 48803 RGS, Vila Manresa p. P. Alegre (NEL), in silvula, 22.9.1950, fl.
 63607 RGS, Fazenda do Arroio p. Osório (NEL), in silvula sabulosa, 23.1.1958, fl.

Habit: Very similar to, but well distinct from, *S. klotzschiana*.

Habitat: Campos woodlets, edge of the rain forest.

Distribution in RGS: Northeastern lowlands, sea coast, and highlands.

General distribution: From Minas Gerais, through southern Brazil and Paraguay, down to Rio Grande do Sul and Uruguay.

STILLINGIA Garden.

Nomenclature after Rogers, Ann. Miss. Bot. Gard. 38 (1951).

Stillingia oppositifolia Baill., Ét. Gén. Euph. (1858) 513, tab. 5, fig. 24; Müller Argoviensis, FB 11, 2 (1874) 538, tab. 76, fig. 2; Pax, PR 4, 147, 5 (1912) 191; Rogers, Ann. Miss. Bot. Gard. 38 (1951) 220.

- 2278 RGS, Kappesberg p. Montenegro (NEH), in araucarieto, 21.12.1935, fl.
 4818 RGS, Passo do Inferno p. Canela (NEH), in araucarieto, 10.2.1941, fl., conf. Rogers.

- 4824 RGS, ibidem, 10.2.1941, fl., conf. Rogers.
 6575 RGS, Nova Petrópolis (NEH), in araucarieto, 10.11.1940, fl.,
 conf. Rogers.
 28353 RGS, Nonoai ad fl. Uruguay superius (NW), in araucarieto,
 3.3.1945, fl., conf. Rogers.
 28809 RGS, Caracol p. Canela (NEH), in araucarieto, 2.1945, fl.,
 leg. K. Emrich.
 32938 RGS, Kappesberg p. Montenegro (NEH), in araucarieto,
 17.10.1945, fr. deciso, conf. Rogers.
 34775 RGS, Fazenda da Ronda p. Vacaria (NEH), in araucarieto,
 5.1.1947, flore deciso, conf. Rogers.
 43136 RGS, Vila Oliva p. Caxias (NEH), in araucarieto, 28.8.1949,
 fr. maturo, conf. Rogers.
 43828 RGS, Kappesberg p. Montenegro (NEH), in araucarieto,
 11.9.1949, fl.
 44661 RGS, Vila Oliva p. Caxias (NEH), in araucarieto, 3.12.
 1949, fl.
 44828 RGS, S. Francisco de Paula (NEH), in araucarieto, 18.12.
 1949, fl., conf. Rogers.
 44985 RGS, Gramado p. Canela (NEH), in araucarieto, 26.12.1949,
 fl., conf. Rogers.
 46236 RGS, S. Francisco de Paula (NEH), in araucarieto, 13.4.
 1950, fl., conf. Rogers.
 54640 RGS, Fazenda Englert p. S. Francisco de Paula (NEH), in
 araucarieto, 1.1.1954, fl.
 56358 RGS, ibidem, 2.1.1955, fl.
 61538 RGS, Farroupilha (NEH), in silva cum Araucariis inter-
 mixta, 22.11.1957, fl., leg. O. Camargo 2655.
 61885 RGS, Garibaldi (NEH), in araucarieto, 29.10.1957, fl., leg.
 O. Camargo 2274.
 62246 RGS, ibidem, 13.10.1957, fl., leg. O. Camargo 2036.
 62688 RGS, Farroupilha (NEH), in araucarieto, 5.11.1957, fl., leg.
 O. Camargo 2434.

Habit: Shrub or small tree, up to 4 meters high.

Habitat: Araucaria forests.

Distribution in RGS: All collections but one (28353) from the northeastern
 highlands.

General distribution: Minas Gerais, southern Brazil, northeastern and north-
 western Rio Grande do Sul (Araucaria zone).

TETRORCHIDIUM Poepp. et Endl.

Nomenclature and determination after Pax, PR 4, 147, 4 (1912).

Tetrorchidium rubrivenium (Poepp. et Endl. emend.) M. Arg.,
 DC. Prodr. 15, 2 (1866) 1133; FB 11, 2 (1874) 512, tab. 71, fig. 2 (var.
 genuinum M. Arg.). — *T. rubrivenium* Poepp. et Endl., Nov. Gen.
 Spec. 3 (1842) 23, tab. 227.

Var. *trigynum* Baill., Rec. Obs. Bot. 5 225; Müller Argoviensis,
 1.c. Pax, PR 4, 147, 4 (1912) 31, fig. 9

1731 RGS, S. Leopoldo (NEL), in silva campestri, 5.11.1934, fl.
 masc.

11684 RGS, ibidem, 1943, fl. fem., leg. E. Leite SJ.

33783 RGS, ibidem, 31.8.1946, fl. fem., leg. A. Steffen SJ.

34325 RGS, ibidem, 12.1946, fr. semievoluto, leg. A. Steffen SJ.

- 34358 RGS, ibidem, 11.1946, fl. masc., leg. A. Steffen SJ.
 35443 RGS, ibidem, 27.9.1946, fl. masc., leg. A. Steffen SJ.
 35989 RGS, ibidem, 1.1947, fr. maturo, leg. A. Steffen SJ.
 37127 RGS, ibidem, 1947, fr. maturo, leg. A. Steffen SJ.
 47466 RGS, ibidem, sine die, fl. masc., leg. E. Schmidt SJ.

Habit: Middle-sized to tall tree, up to 15 meters high.

Habitat: Dry, more or less open, campos forests.

Distribution in RGS: All collections from the surroundings of S. Leopoldo, northeastern lowlands, where it is fairly frequent; nowhere else collected or observed. **Geographical novelty.**

General distribution: From Central America and the West Indies, through cis-Andean tropical South America, down to northeastern Rio Grande do Sul, probably the southernmost end of its range.

TRAGIA L.

Nomenclature ad determinations after Pax, PR 4, 147, 4-11 (1919).

Tragia arechavaletae Hert., An. Mus. Mont. ser. 2, 1 (1910) 82;
 Pax, PR 4, 147, 9-11 (1919) 58.

26039 RGS, Estâncio do Jarau p. Quaraí (SW), in campestribus siccis graminosis, 1.1945, fl.

Habit: Suffruticose, erect, 20 cm high.

Habitat: Very dry and stony campos.

Distribution in RGS: Southwestern campos area only. **Geographical novelty.**

General distribution: Uruguay, southwestern RGS.

Tragia emiliae Pax et K. Hoffm., PR 4, 147, 9-11 (1919) 43; O'Donnell et Lourteig, GSPPA 1 (1943) 229, tab. 47.

4530 RGS, Fazenda Englert p. S. Francisco de Paula (NEH), in dumosis scandens, 8.2.1941, fl.

31332 RGS, Vila Oliva p. Caxias (NEH), in silva caedua, 24.2.1946, fl.

34778 RGS, Fazenda da Ronda p. Vacaria (NEH), in silva scandens, 3.1.1947, fl.

42925 RGS, sine loco, sine die, fl.

48296 Paraná, Vila Velha p. Ponta Grossa, ad silvam scandens, 13.2.1948, fl., leg. G. Tessmann 2893.

49811 SC, Itapiranga ad fl. Uruguay superius, in silva pluviali scandens, 6.2.1951, fl. (L. B. Smith: Tr. polyandra Vell.)

Habit: Low climber.

Habitat: Subtropical rain forest from where it radiates into the neighboring Araucaria woods.

Distribution in RGS: Northeastern highlands, and forest belt at the upper Uruguay River. **Geographical novelty.**

General distribution: Paraguay, northeastern Argentina, Riograndean highlands.

Tragia emrichii Hert., Rev. Sud. Bot. 8, n. 1 (1945) 26, cum figura.

2856 RGS, Montserrat p. P. Alegre (NEL), in campestribus siccis graminosis, 2.5.1942, fl., leg. K. Emrich.

- 4220** RGS, Barra do Quaraí p. Uruguaiana (SW), in campestribus dumosis subapertis, 15.1.1941, fl., fr.
- 8444** RGS, Arroio dos Ratos p. S. Jerônimo (NEL), in siccis aperte graminosis, 8.1.1942, fl., fr.
- 9101** RGS, Jari p. Tupanciretan (NW), in graminosis, 25.1.1942, fl., fr.
- 9399** RGS, ibidem, 26.1.1942, fl., fr.
- 9992** RGS, Ijuisinho p. Tupanciretan (NW), in siccis, 30.1.1942, fl.
- 11104** RGS, Montserrat p. P. Alegre (NEL), in graminosis, 26.1.1943, fl., fr., leg. K. Emrich.
- 26201** RGS, Estância do Jarau p. Quaraí (SW), in siccis graminosis, 1.1945, fl.
- 26959** RGS, Vila Manresa p. P. Alegre (NEL), in campestribus, 10.1944, fl.
- 27085** RGS, ibidem, 10.1944, fl.
- 28153** RGS, Nonoai ad fl. Uruguay superius (NW), in saxosis, 3.1945, fl.
- 29271** RGS, Vila Manresa p. P. Alegre (NEL), in graminosis, 10.10.1945, fl. fr.
- 35678** RGS, S. Leopoldo (NEL), in arenosis siccis sparse graminosis, 11.12.1946, fl., leg. E. Henz SJ.
- 38142** RGS, Morro da Polícia p. P. Alegre (NEL), in campestribus siccis graminosis, 20.11.1948, fl., fr.
- 38690** RGS, Rio dos Sinos p. S. Leopoldo (NEL), in arenosis subsiccis, 10.12.1948, fl., fr.
- 38824** Conceição p. Cai (NEL), in arenosis graminosis, 14.12.1948, fl.
- 39456** Teresópolis p. P. Alegre (NEL), in campestribus siccis saxosis sparse graminosis, 4.1.1949, fl., fr.
- 39696** RGS, Aberta dos Morros p. P. Alegre, in campestribus graminosis, 9.1.1949, fl.
- 40684** RGS, Vila Manresa p. P. Alegre (NEL), in campestribus, 26.3.1949, fl.
- 40837** RGS, Granja Neugebauer p. Itapoan (NEL), in campestribus siccis graminosis, 3.4.1949, f., fr.
- 46052** RGS, Vila Manresa p. P. Alegre (NEL), in graminosis, 3.3.1950, fl., fr.
- 47504** RGS, S. Leopoldo (NEH), in campestribus siccis graminosis, 1943, fl., leg. E. Schmidt SJ.
- 63641** RGS, Fazenda do Arroio p. Osório (NEC), in arenosis siccis graminosis, 23.1.1958, fl., fr.

Habit: Suffruticose, erect, 10-20 cm high.

Habitat: Dry, grassy campos.

Distribution in RGS: Through the whole of the campos area, except for the northeastern highlands.

General distribution: Rio Grande do Sul and Uruguay.

Tragia paraguariensis Pax et K. Hoffm., PR 4, 147, 9-11 (1919) 53; O'Donell et Lourteig, GSPPA 1 (1943) 235, tab. 101.

25925 RGS, Nonoai ar fl. Uruguay superius (NW), in campestribus graminosis siccis, 3.1945, fl.

53017 RGS, Sto Angelo (NW), in campestribus siccis, 17.11.1952, fl., fr.

56138 RGS, Pestana p. Ijuí (NW), in campestribus saxosis siccis, 19.2.1954, fl., leg. J. Pivetta 563.

60328 RGS, S. Bernardo p. Ijuí (NW), in campestribus siccis graminosis, 8.1.1957, fl.

Habit: Suffruticose, erect, 10-20 cm high.

Habitat: Dry, grassy campos.

Distribution in RGS: Northwestern highlands only. **Geographical novelty.**

General distribution: Paraguay, southern Brazil, northeastern Argentina, Rio Grande do Sul (NW).

Tragia uberabana M. Arg., FB 11, 2 (1919) 58; Pax et K. Hoffmann, PR 4, 147, 9-11 (1919) 58.

8906 RGS, Bom Jesus (NEH), in campestribus graminosis, 15.1.1942, fl.

28152 RGS, Nonoai ad fl. Uruguay superius (NW), in campestribus siccis graminosis, 3.1945, fl., fr.

34777 RGS, Fazenda da Ronda p. Vacaria (NEH), in campestribus saxosis, 3.1.1947, fl., fr.

36219 RGS, Cambará p. S. Francisco de Paula (NEH), in campestribus siccis subdumosis, 2.1948, fl., fr.

38630 RGS, Morro da Polícia p. P. Alegre (NEL), in campestribus graminosis apertis, 20.11.1948, fl., fr.

40836 RGS, Granja Neugebauer p. Itapoan (NEL), in campestribus siccis saxosis, 3.4.1949, fl., fr.

51459 RGS, Passo do Socorro p. Vacaria (NEH), in campestribus siccis graminosis, 26.12.1951, fl., fr.

53016 RGS, Sto Angelo (NW), in campestribus siccis, 17.11.1952, fl., fr.

55049 RGS, Vila Oliva p. Caxias (NEH), in graminosis siccis, 24.2.1954, fl.

56114 RGS, Pestana p. Ijuí (NW), in campestribus saxosis graminosis, 19.2.1954, fl., fr., leg. J. Pivetta 561.

56115 RGS, ibidem, 19.7.1954, fl., leg. J. Pivetta 562.

Habit: Suffruticose, erect, 15-30 cm high.

Habitat: Dry, grassy, open or more or less shrubby, campos.

Distribution in RGS: Northern campos area. **Geographical novelty.**

General distribution: Minas Gerais, Paraguay, Rio Grande do Sul.

Tragia volubilis L., Spec. Plant. (1753) 980; Müller Argoviensis, FB 11, 2 (1874) 412; Pax et K. Hoffmann, PR 4, 147, 9-11 (1919) 47; O'Donell et Lourteig, GSPPA 1 (238, tab. 104).

963 RGS, Vila Manresa p. P. Alegre (NEL), in silva scandens, 4.11.1932, fl. fr.

2518 RGS, ibidem, 16.8.1942, fl.

2759 RGS, ad montem Ferrabraz p. Novo Hamburgo (NEL), ad silvam pluviale scandens, 15.10.1936, fl., fr.

3815 RGS, Bohnental p. Caí (NEL), ad silvam scandens, 4.1.1941, fl.

6698 RGS, Sta Clara p. Lageado (NEL), in silva scandens, 18.11.1940, fl.

8161 RGS, sine loco, sine die, fl.

9179 RGS, Jarí p. Tupanciretan (NW), in silvula, 26.1.1942, fl.

11074 RGS, Kappesberg p. Montenegro (NEH), in silva pluviali scandens, 1943, ster., leg. E. Schmidt SJ.

11963 RGS, Vila Manresa p. P. Alegre (NEL), in silva scandens, 1943, fl.

- 25316 RGS, S. Leopoldo (NEL), in silva campestri scandens, 1907, fl., fr., leg. F. Theissen SJ.
- 27201 RGS, Vila Manresa p. P. Alegre (NEL), in silvula, 10.1944, fl.
- 28297 RGS, Nonoai ad fl. Uruguay superius (NW), in silvula pluviali scandens, 3.1945, fl.
- 28298 RGS, ibidem, 3.1945, fl.
- 29007 RGS, Vila Manresa p. P. Alegre (NEL), in silvula campestri scandens, 15.8.1945, fl.
- 31104 RGS, Vila Oliva p. Caxias (NEH), in secundariis scandens, 7.1.1946, fl.
- 31346 RGS, ibidem, 25.2.1946, fl.
- 34154 RGS, Vila Manresa p. P. Alegre (NEL), in silvula, 16.10.1946, fl., fr.
- 35921 RGS, Caracol p. Canela (NEH), in araucarieto scandens, 21.2.1947, fl., fr., leg. K. Emrich.
- 36214 RGS, Cambará p. S. Francisco de Paula (NEH), in araucarieto scandens, 2.1948, juvenilis.
- 38371 RGS, Sapucaia p. S. Leopoldo (NEL), in silva, 29.11.1948, fl.
- 42122 RGS, Schwabenschneis p. Novo Hamburgo (NEL), ad silvam pluviale scandens, 23.6.1949, fl.
- 42818 RGS, Morretes p. P. Alegre (NEL), in dumosis, 18.8.1949, fl.
- 42898 RGS, Schwabenschneis p. Novo Hamburgo (NEL), in silva pluviali scandens, 12.8.1949, fr. maturo.
- 42952 RGS, Pareci p. Montenegro (NEL), ad silvam scandens, 17.8.1949, fl.
- 43046 RGS, Schwabenschneis p. Novo Hamburgo (NEL), in silvula secundaria scandens, 22.8.1949, fl.
- 43102 RGS, Linha Bonita p. Montenegro (NEH), in silva pluviali scandens, 24.8.1949, fl.
- 43169 RGS, Vila Oliva p. Caxias (NEH), in araucarieto, 28.8.1949, fl.
- 43169 RGS, Vila Oliva p. Caxias (NEH), in araucarieto, 28.8.1949, fl.
- 43441 RGS, Kappesberg p. Montenegro (NEH), in silva pluviali scandens, 11.9.1949, fl.
- 45746 RGS, Farroupilha (NEH), in secundariis scandens, 7.2.1950, fl.
- 47300 RGS, sine loco, sine die, fl.
- 47415 RGS, Campinas p. Sta. Rosa (NW), in silva pluviali scandens, 2.1950, fl., fr., leg. A. Spies.
- 47501 RGS, S. Leopoldo (NEL), in silva campestri scandens, 1943, fl., leg. E. Schmidt SJ.
- 49842 SC, Itapiranga ad fl. Uruguay superius, in silva caedua scandens, 6.2.1941, fl., det. L. B. Smith.
- 51127 RGS, Kappesberg p. Montenegro (NEH), in silva pluviali scandens, 11.10.1950, fl., fr., leg. A. Sehnem SJ 4985.
- 51178 Paraná, Cérro Azul, in silva pluviali scandens, 2.10.1949, fl., leg. G. Hatschbach 1477.
- 52149 RGS, Morrinhos p. S. Francisco de Paula (NEH), in araucarieto scandens, 7.2.1952, fl., fr.
- 53214 RGS, Cérro Largo (NW), in silva caedua scandens, 20.11.1952, fl., fr.
- 54244 RGS, Caracol p. Canela (NEH), in araucarieto scandens, 20.3.1954, fl., fr., leg. K. Emrich.
- 56606 RGS, Vila Oliva p. Caxias (NEH), in dumosis secundariis scandens, 8.2.1955, fl., fr.

58492 SC, Cunhas p. Itajaí, in silva scandens, 10.3.1955, fl., leg. R. Reitz 9274, det. L. B. Smith.

61008 SC, Lages, in araucarieto, 25.12.1956, fl., fr., leg. J. Mattos.

60017 RGS, Farroupilha (NEH), in araucarieto scandens, 18.3.1957, fl., fr., leg. O. Camargo 1161.

61210 SC, Itapiranga ad fl. Uruguay superius, ad silvam pluviale scandens, 7.10.1957, fl., fr.

61531 RGS, Farroupilha (NEH), ad silvam scandens, 22.11.1947, fl., leg. O. Camargo 2668.

61838 RGS, Garibaldi (NEH), ad silvam scandens, 29.10.1957, fl., leg. O. Camargo 2237.

62082 RGS, Bento Gonçalves (NEH), in silva pluviali cum Araucariis intermixta scandens, 6.10.1957, fl., leg. O. Camargo 1964.

Habit: Low to medium climber.

Habitat: Interior and edge of the rain forest, secondary brushwood, campos and gallery woodlets.

Distribution in RGS: Through the whole of the forested area.

General distribution: From Mexico and the Antilles, through the whole of cis-Andean tropical and subtropical South America, down to northern Argentina, Rio Grande do Sul, and Uruguay. Western Africa.

Tragia sp., Eutragia.

31103 RGS, Vila Oliva p. Caxias (NEH), in campestribus siccis graminosis, 5.1.1946, fl.

Suffruticose, erect, densely branched from a stout rootstock, branches 30 cm high; nearly related to *T. arechavaletae* Herter and *T. uberabana* M. Arg.; apparently undescribed.

Tragia sp., Eutragia.

7546 RGS, S. Leopoldo (NEL), in dumosis scandens, 1907, fl., leg. F. Theissen SJ.

38329 RGS, Esteio p. S. Leopoldo (NEL), in silvula campestri scandens, 24.11.1948, fl., fr.

41343 RGS, Morretes p. P. Alegre (NEL), in arenosis graminosis, 2.5.1949, fl., fr.

42849 RGS, ibidem, in dumosis arenosis subscandens, 10.1949, fl.

48660 RGS, S. Leopoldo (NEL), in dumosis subscandens, 1946, fl., fr., leg. E. Schmidt SJ.

Suffruticose, erect or prostrate and somewhat climbing; in near kinship to *T. emrichii* Hert., but different and apparently undescribed.

Cultivated or subspontaneous.

Acalypha wilkesiana M. Arg.: 1445.

Aleurites fordii Hemsley: 6437, 11736, 27213, 29903 37229, 58810.

Aleurites moluccana (L.) Willd.: 2836, 6478, 25904.

Codiaeum variegatum Blume: 3316, 26896.

Euphorbia heterophylla L.: 7536.

Euphorbia lathyris L.: 31321.

Euphorbia marginata Pursh: 60562.

Euphorbia pulcherrima Willd: 54195.

Euphorbia splendens Boyer: 25502.

- Euphorbia tirucalli* L.: 2715.
Jatropha curcas L.: 2865.
Jatropha podagrica Hook.: 27368.
Manihot dulcis (J. F. Gmelin) Pax.
Manihot utilissima Pohl: 123, 7549.
Phyllanthus nivosus Bull.: 34268.
Ricinus communis L.: 113, 3781, 9607, 26633, 28378, 28969, 31421,
 33901, 35429, 42615, 58763, 61487.

Cited for Rio Grande do Sul, not in my herbarium.

- Acalypha poiretii* Spreng.: Reineck & Czermak 118.
Bernardia ambigua Pax et K. Hoff.: Sta. Maria, Malme 710.
Bernardia flexuosa Pax et K. Hoffm.: Rio Grande, Malme 264.
Caperonia cordata St. Hil.: S. Borja, Belém (?).
Croton astrogynus Baill.: RGS, Sellow, Gaudichaud.
Croton grandivulum Baill.: Sellow.
Croton serratifolius Baill.: Palmeira, Bornmüller 223.
Croton thymelinus Baill.: Gaudichaud.
Euphorbia chamaerrhodos Boiss.: Rio Jacuizinho, Bornmüller 639.
Euphorbia erythrorrhiza Boiss.: P. Alegre, Reineck et Czermak 58.
Euphorbia setosa M. Arg.: Panambi, Bornmüller 252; Glória p. p. P.
 Alegre, Bornmüller 13.
Jatropha bornmülleri Pax: Estância S. Luiz, Bornmüller 766.
Sapium montevidense Klotzsch: P. Alegre, Reineck & Czermak 50.
Tragia hastata (Klotzsch) M. Arg.: RGS, Lindman 1399.

Species to be found in Rio Grande do Sul.

- Acalypha brasiliensis* M. Arg.: Sta. Catarina, Misiones.
Acalypha senilis Baill.: Northern Uruguay.
Alchornea iricurana Casar.: Sta. Catarina, Misiones.
Adelia spinosa (Chot. et Hassl.) Pax et K. Hoffm.: Paraguay,
 northeastern Argentina, northern Uruguay.
Bernardia sellowii M. Arg.: Southern Brazil (Sellow 3258), Uruguay
Croton hilarii Baill.: Uruguay.
Sebastiania pachystachys M. Arg.: Sta. Catarina, Uruguay.
Tragia fallacina Pax et K. Hoffm.: Uruguay.
Tragia geraniifolia Baill.: Southern Brazil, Uruguay, northeastern
 Argentina.
Tragia incana Baill.: Southern Brazil, Uruguay.
Tragia pinnata (Poir.) Juss.: Southern Brazil, Uruguay, north-
 eastern Argentina.

SUMMARY

The present list contains 109 Riograndean native Euphorbiaceae, 100 determined, (56 geographical novelties) and 9 undetermined. There are 14 more species cited for Rio Grande do Sul, but absent from my herbarium; besides, 11 species occurring near the northern, eastern, or southern frontiers of the State, are to be found, in all probability, within this area. Thus, the sum total of all Euphorbiaceae in this southernmost State of Brazil centers around 130 native species.

The number of cultivated or subspontaneous species is 16.

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Note: This paper was already going to printing when I received two recent papers on the Euphorbiaceae of Santa Catarina, in which my own numbers collected in this State are cited: Lyman B. Smith an Robert E. Downs, **Notulae Euphorbiacearum** (*Sellowia* 11, 1959, 149-154); and, by the same authors, **Resumo preliminar das Euforbiáceas de Santa Catarina** (*ibidem*, 155-231, 34 pl.). All I could do, for the time being, was to add their determinations to my numbers, without giving any personal opinion about their value when divergent.

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