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Supplementary Notes on the American Species of *Strychnos*-IV

por

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**Supplementary Notes on the American Species
of Strychnos-IV**

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Supplementary Notes on the American Species of *Strychnos*-IV

Extensive collections of *Strychnos* from the States of Amazonas and Pará, Brazil, recently became available to us. These were mostly of recent collection by Sr. R. Froes and they were sent to us through the courtesy of Dr. F. C. de Camargo, Diretor of the Instituto Agronômico do Norte. We have also been able to examine specimens deposited in the three European herbaria mentioned below. The collections extend our knowledge of certain species previously known to us from incomplete material and extensions of ranges are noted for a considerable number of species. It is particularly satisfactory to extend our knowledge of the species that occur in the French and Dutch Guianas as well as in the basins of certain rivers such as Jutahy (State of Amazonas), Guamá (State of Pará), and Pindaré (State of Maranhão), which were up to the present date represented in herbaria only by a very limited number of collections.

The species noted in this supplement are arranged in the same order, and the place of deposit of specimens is shown by the same abbreviations as in our previous papers on

Strychnos (1, 2, 3, 4). The following additional abbreviations are used:

BM: British Museum (Natural History), London.
 IAN: Instituto Agronomico do Norte, Pará, Brazil.
 P: Museum d'Histoire Naturelle, Paris.
 Utr: Botanisch Museum en Herbarium, Utrecht.

2. *Strychnos ramentifera* Ducke.

Brazil: Pará: *Froes 20822* ("Estrada de Ferro de Bragança, Km. 18").

4. *Strychnos rondeletioides* Spruce.

Venezuela: Bolivar: Quebrada O-paru-má, *Steyermark 60441*. Amazonas: Cassiquiare, *Froes 21498, 21513*. Brazil: Amazonas: basin of Rio Negro, *Froes 21283a* ("margem Rio Papury, Jauareté"), *21286* ("Vaupés"), *21295*, ("Janucú, ilha da Bacaba, Vaupés"); basin of Rio Solimões, Igarapé Belém, *Froes 20907, 20927, 20931, 20932*; basin of Rio Jutahy, *Froes 20654* ("Mata do Chinelo, Fonte Boa").

Local names: "Cumarawa-yek" (Venezuela).

The collector's note on *Steyermark 60441* reads: "roots used for arrow poison; boil all day for juice to get thick".

4a. *Strychnos macrophylla* Barb. Rodr.

Brazil: Amazonas: basin of Rio Negro, *Froes 20488* ("estrada central do Aleixo"), *20566* ("estrada do Crespo").

5. *Strychnos Barnhartiana* Krukoff.

Brazil: Amazonas: basin of Rio Negro, *Froes 21319* ("Rio Aiary, cachoeira Uapuhy, Içana"), *21326* ("Rio Aiary, Uapuhy, Içana"); basin of Rio Içá, *Froes 20830* ("estrada S. Francisco, St. Antonio do Içá"), *20838* ("Santo Antonio do Içá").

The first record of the species from the basins of Rio Negro and Rio Içá.

6. *Strychnos brachiata* Ruiz & Pav.

Venezuela: "Haut Apure". *Geau s. n.* (1893-4) (P).

Geau's specimen is the first examined by us from Venezuela.

8. *Strychnos trinervis* (Vell.) Mart.

Brazil: *Weddell s. n.* (P); Minas Geraes: *A. Saint-Hilaire 48* (P); Rio de Janeiro: *A. Saint-Hilaire 200* (P).

9. *Strychnos panamensis* Seem.

Panama: Taboga, *Barclay 966* (BM). Venezuela: near Barbacoas, *G. Hagis s. n.* (Feb. 15, 1861) (BM). Colombia: Antioquia: near Vijagual, 30 km. south of Turbo, *Oscar Haught 4557*.

11. *Strychnos divaricans* Ducke.

French Guiana: "frequens in umbrosis sylvae la Gabriëlle", *Martin s. n.* (P). Brazil: State of Maranhão: basin of Rio Pindaré, *Froes 20359* ("Alto Rio Pindaré, Município Monção").

13. *Strychnos toxifera* Rob. Schomb.

Venezuela: "Haut Orénoque; rives élevées du Rio Cataniapo près Atures", *Gaillard 220* (P). British Guiana: *Rob. Schomburgk 769* (P); Essequibo: *Rob. Schomburgk; 770* (P). French Guiana: *Sagot 1307* ("Acarouany"; P. Utr). Brazil: *Glaziou 9942* (P); Maranhão: basin of Rio Pindaré, *Froes 20342* ("Alto Rio Carú").

Local names: Cipó pagé (State of Maranhão, Brazil).

The first record of this species from French Guiana and from the State of Maranhão, Brazil. Gaillard states on the label: "Sert à la prépar. du Curare (l'écorce)". The local name for the plant indicates that apparently it was used by the Indian "Medicine men" in the basin of Rio Pindaré, in the State of Maranhão.

14. *Strychnos tomentosa* Benth.

British Guiana: *Schomburgk 722* (P). Surinam: basin of the Corantijne River, *Herb. B. M. 3659* (Utr). Brazil: Pará: *Ducke s. n.* (Apr. 1946) (vicinity of Belém, secondary forest), Belém *1711* ("loco Catu silva non inundabili").

The first record of the species from Surinam. Corolla-tube on *Ducke 1711* is 2 cm. long, the longest we have yet seen.

15. *Strychnos diaboli* Sandw.

British Guiana: *Altson 487* (P). Demerara: basin of the Demerara River, *Forest Dept. 3413* (Siba Creek). Brazil: Amazonas: basin of Rio Negro, *Froes 20534* ("estrada do Aleixo, Manaus"), *21216a* ("Jauareté"), *21546* ("Porto Curucuhy, São Gabriel"), basin of Rio Solimões, *Froes 20935* ("Igarapé Belém, São Paulo de Olivença"), *20799*; basin of Rio Içá, *Froes 20847* ("Sto. Antonio do Içá, estrada central"), Bahia: *Froes 20033* and *20034* ("Entre Bom Gosto e Olivença, Ilhéos"), *19930* ("Ilhéos").

The first record of the species from the basin of Rio Içá.

17. *Strychnos solimoesana* Krukoff.

Brazil: Amazonas: basin of Rio Solimões, *Froes 20923* ("Igarapé Belém, São Paulo de Olivença"), basin of Rio Negro ("terras baixas, adjacencias da Serra de Santana"), *Froes 21527*.

The sterile specimen (*Froes 21527*) with mature coriaceous leaves obviously from an old bush-rope is placed here with reservation. In certain respects the leaves resemble those of *S. Peckii*.

18. *Strychnos Jobertiana* Baillon.

Venezuela: Territorio Federal Amazonas: forest near Base River (Caño Negro), at southeastern base of Cerro Duida, alt. 215 meters, *Steyemærk 57910*. Brazil: Amazonas: basin of Rio Negro, *Froes 20473* ("estrada central do Aleixo, Manáus"), *21215* ("margem Rio Papury, Jauareté"), *21216a* ("Jauareté, Vaupés"), *21234* ("Jauareté, Vaupés"), basin of Rio Solimões, *Froes 20810* ("Tapará, São Paulo de Olivença").

The first record of the species from Venezuela.

21. *Strychnos amazonica* Krukoff.

Brazil: Amazonas: basin of Rio Negro, *Froes 20538* ("estrada do Aleixo, Manáus"); basin of Rio Maués, *Murça Pires & Black 1173*.

22. *Strychnos Peckii* B. L. Robinson.

French Guiana: *Martin s. n.* (P). Brazil: Amazonas: basin of Rio Negro, *Froes 21256* ("Jauareté, Vaupés"), *21270* ("Jauareté, Vaupés"), *21185* ("Rio Papury, Vaupés"), *21214* ("Rio Papury, Vaupés"); *21301* ("Cachoeira Piriquito, Vaupés"); *21336* ("Rio Arary, Içana"); basin of Rio Jutahy, Igarapé Juruema, *Froes 21007*; basin of Rio Içá, *Froes 20831*. Maranhão: *Froes 21578* ("Estrada da Maioba"), *20357* ("Alto Rio Pindaré, Rio Carú"). Bahia: *Froes 19931* ("Ilhéos").

The first record of the species from French Guiana and from the basins of Rio Jutahy and Rio Içá in Brazil.

24. *Strychnos Erichsonii* Rich. Schomb.

British Guiana: Essequibo: Kamuni creek, *Maguire & Fanshawe 22875*. Surinam: *Herb. M. W. 248* (Utr); *Plasschaert s. n.* (1908) (Utr); *Herb. B. W. 5983* ("Lelydorp, Javaweg") (Utr); *Herb. B. W. 358* ("Sectie O") (Utr); *Herb. B. W. 5568* (Upper Cassipoura creek) (Utr); *Herb. B. W. 4361* (Litanie) (Utr). French Guiana: *Barbier s. n.* (P); *Louis Claude Richard s. n.* (P). Brazil: Amazonas: basin of Rio Negro, *Froes 21386* ("Rio Cuiary e Içana"), basin of Rio Solimões, *Froes 20909* ("Igarapé Belém, Lourenço Gaspar"), *20929* ("Igarapé Belém, São Paulo de Olivença"); Pará: basin of Rio Guamá, *Froes 20266, 20361, 20412, 20414, 20418, 20419*.

Local names: Doberdwa or Dobberdoewa or Dubbeldoewa or Konni-konnibieta or Crepita-bita (Negro-English, Surinam); oeralidan or Olariedan or Oelari-lan or Oerlalieda (Caribs, Surinam); Oeraliballi or Double toea (Arawaks, Surinam).

The first record of the species from French Guiana, also from the State of Pará and from the basin of Rio Negro in the State of Amazonas, Brazil.

Mr. Sandwith called our attention to *Maguire & Fanshawe 22875* which was cited through error under *S. pedunculata* in 3:66.

25. *Strychnos Gardneri* A. DC.

Brazil: Bahia: *Froes 20192* ("entre Ibiquara e Mucugê").

27. *Strychnos pedunculata* (A. DC.) Benth.

British Guiana: Essequibo: Roraima, *Rob. Schomburgk 482* type coll., P).

28. *Strychnos Mitscherlichii* Rich. Schomb.

French Guiana: *Melinon* 201 (P), 430 (type coll. of *S. Solerederi*, P). British Guiana: Essequibo: basin of the Essequibo River, *Forest Dept.* 3433 (Makauria Creek), 3672 (Keriti Creek). Brazil: Amazonas: basin of Rio Negro, *Froes* 21130 ("Porto Curucuhy, São Gabriel"), *Froes* 21140 (São Gabriel"), *Froes* 21227 ("Vaupés"), *Froes* 21271 ("Jauareté, Vaupés"), *Froes* 21278 ("Jauareté, Vaupés"), *Froes* 21312 ("Mata entre Rio Vaupés e Rio Aiary"; IAN), *Froes* 21323 ("Rio Aiary, cachoeira Uapuhy, Içana"); basin of Rio Jutahy, *Froes* 20990 ("Rio Juruema, Igarapé Central, Fonte Bôa"), *Froes* 21029 ("Fonte Bôa"), *Froes* 21024 ("Riosinho Juruema"); Bahia: *Froes* 19932 ("Ilhéos").

The first record of the species from the basin of Rio Jutahy.

28a. *Strychnos Mitscherlichii* var. *pubescentior* Sandw.

Brazil: Amazonas: basin of Rio Jutahy ("Rio Juruema"), *Froes* 20973, 20976, 20978, 20997, 20999, 21001.

The first record of the variety from the basin of Rio Jutahy.

29. *Strychnos darienensis* Seem.

Brazil: Amazonas: basin of Rio Jutahy, *Froes* 20950 and 20956 ("Copatana, igapô"), 21064 ("Copatana, Tambaquy"). Bahia: *Froes* 19974 ("Salobinho, Itambé").

The first record of the species from the basin of Rio Jutahy.

30. *Strychnos guianensis* (Aubl.) Mart.

British Guiana: Essequibo: basin of the Essequibo River, *Forest Dept.* 5262. Surinam: *Kappler* 96 (Utr). Brazil: Amazonas: basin of Rio Solimões, *Froes* 20904 ("Lourenço

Gaspar, Igarape Belém”), 20628 (“Fonte Bôa”), 20974 (“Fonte Bôa”), basin of Rio Jutahy, *Froes* 20958 (“Igarapé do Arraial, Copatana”), 21031 (“Riozinho, Juruema”); basin of Rio Negro, *Froes* 21092 (“Adjacencia Curicuriary”), 21291 (“Carurú, beira Rio Vaupés”), 21292 (“Caapoama, Vaupés”), 21526 (“Santana, Içana”), 21327 (“Rio Aiary”), 21361 (“Rio Aiary, Içana”).

The first record of the species from the basin of Rio Jutahy.

30a. *Strychnos glabra* Sagot.

French Guiana: *Melinon s. n.* (“Maroni, 1862”; P), 45 “1845”; P); *Crevaux s. n.* (“riviere de Kourou, 1877”; P); *Benoist* 1680 (“Gourdonville”; P); *Priur* 243 (P). Brazil: Amazonas: basin of Rio Negro, *Froes* 21281 (“Jauareté, Vaupés”), 21517 (“Cucui”), *Froes* 21528 (“Santana, Içana”), 20483 (“estrada central do Aleixo). Para: *Froes* 20597 (“beira do Rio Guamá”), 20776 (“Mata do Utinga”), 20403 (“Rio Guamá, beira do Rio”).

The collector states on the label of 21528: “unico usado pelos Indios Baniuas para o veneno “Irary” ”.

31. *Strychnos subcordata* Spruce.

Brazil: Amazonas: basin of Rio Negro, *Froes* 20474 (“estrada central do Aleixo, Manaus”), 21153 (“entre Taracua e Urubuquara”); basin of Rio Solimões, *Froes* 20798 (“Tapará, São Paulo de Olivença”).

Local names: Catuniá (Tucanos, Rio Negro, Brazil).

The first record of the species from the basin of the Upper Solimões.

32. *Strychnos bicolor* Prog.

Brazil: *Glaziou s. n.* (P).

33. *Strychnos panurensis* Sprague & Sandw.

Venezuela: the Upper Orinoco, *Gaillard 16* (P).

The collector states on the label: "On le nomme ici 'Curare simple'; c'est un des elements du curare. Puerto-Perico, et tout le long du Raudal d'Atures".

34. *Strychnos hirsuta* Spruce.

Brazil: Amazonas: Maués, *Murça Pires & Black 1189*.

35. *Strychnos cogens* Benth.

Brazil: Amazonas: basin of Rio Negro, *Froes 21261* ("Juareté, Vaupés"), *21325* ("Rio Aiary, Uapuhy, Içana").

36. *Strychnos Melinoniana* Baillon.

French Guiana: *Melinon s. n.* (type coll. P). British Guiana: Essequibo: basin of the Pomeroon River, *Forest Dep. 2286* (Mairaka).

37. *Strychnos parviflora* Spruce.

Brazil: Amazonas: basin of Rio Negro, *Froes 21269* ("Jauareté, Vaupés"), *21461* ("Serra Cabara, 500 met., alto da serra"); basin of Rio Jutahy, Igarape Juruema, *Froes 20980, 21023*.

The first record of the species from the basin of Rio Jutahy.

38. *Strychnos Castelnæana* Wedd.

Brazil: *Crevaux s. n.* (P). Amazonas: basin of Rio Solimões, ("Igarapé Belém, São Paulo de Olivença"), *Froes 20572, 20934, 20936*; basin of Rio Japura, *collector undesignated s. n.* (BM).

Crevaux states on the label: "Plante appelée Ramon pour les ind. Pebas et employée pour la fab. du Curare dans le Javari & le Rio Içá".

On the label of the specimen deposited in the British Museum is stated: "Plantae in paeparatione veneni usitatae ab Indis Miranha dictis fluvii Japura ripas sylvaticas habitantibus".

39. *Strychnos rubiginosa* DC.

Brazil: Sta. Catharina: *Gaudichaud s. n.* (P).

40. *Strychnos Fendleri* Sprague & Sandw.

Venezuela: Lara: near Santa Inés, east of Aguarda Grande, alt. 420 meters, *Steyermark 55559*; Bolivar: between Upata and Altagracia, alt. 700 meters, *Steyermark 57680*.

The first record of the species from the State of Lara.

41. *Strychnos acuta* Prog.

Brazil: *J. Bowie & A. Cunningham 115* (BM); Rio de Janeiro: *Gaudichaud s. n.* (1831-33) type coll., Pl.

42. *Strychnos parvifolia* DC.

Brazil: Ceará: Fortaleza, *Ducke 1961*.

45. *Strychnos nigricans* Prog.

Brazil: Amazonas: basin of Rio Solimões ("Paraná da Freguezia, Fonte Bôa"), *Froes 20634*.

46. *Strychnos Poeppigii* Prog.

Brazil: Amazonas: basin of Rio Solimões, *Froes 20806*.

48. *Strychnos tarapotensis* Sprague & Sandw.

Perú: San Martin: basin of Rio Huallaga, *Spruce 4889* (type coll., P).

49. *Strychnos brasiliensis* (Spreng.) Mart.

Brazil: *Weddell 483* ("Serra d'Estrella"; P), *Glaziou s. n.* (P); Minas Geraes: *Schwacke 13519* (P); Argentina: Corrientes: *Bonpland 986* (P).

The first record of the species from the province of Corrientes. Sr. Leite in his letter to us stated that *Leite 3594* (cited in 4) was collected in Campos do Jordão, São Paulo, Brazil at the altitude of 1500-2000 meters.

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