

## Supplementary Material

### Morphological cladistic analysis resolves the generic limits of the Neotropical potter wasp genera *Minixi* Giordani Soika and *Pachyminixi* Giordani Soika (Hymenoptera : Vespidae : Eumeninae)

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Additional Material examined (‘’ indicates different labels, and \ different lines of the label).

#### *Monobia angulosa* de Saussure, 1852

**Brazil, Minas Gerais:** two females (UFLA), ‘Brazil, Minas Gerais\ Lavras, Res. Biol\ Boqueirão 21°20’47”S\44°59’27”W, 14.II. 2013\ Ragi. A. A. M’; one male (UFLA), ‘Brazil, Minas Gerais\ Lavras, Res. Biol\ Boqueirão 21°20’47”S\44°59’27”W, 14.II.2013\ Ragi. A. A. M’. **Paraguay, Boqueron:** one male (UFLA), ‘Paraguay. Boquerón,\ Parque Nacional Teniente\ Enciso. Administración\ 213 m, 4.II.2007\ 21°12’38”S 61°39’20”W\ M. G. Hermes coll.’

#### *Alphamenes campanulatus* (Fabricius, 1804)

**Brazil, Mato Grosso:** one male (UNESP), ‘*Alphamenes campanulatus*\ (Fabricius) ♂\ Y. C. Grandinete det. 2011’ ‘Paranaíba – MS – Brazil\ Faz. Prata\ 11/iv/2010\ Grandinete, Y. C. col’. **Brazil, Pará:** one male (UFPR), ‘1376/ 1/ 79’ (handwritten label)\ Brazil, Pará, Marabá,\ Nova Marabá, 18. Vii. 1991,\ C. Melo & F. Melo,\ 15h, em flores’ ‘*Alphamenes campanulatus*’ (handwritten label). **French Guiana, Montsinery:** one female (IBNPY- INVERT), ‘FRENCH GUIANA\ Montsinery\ 4° 55, 995’ N 52° 29, 689’ w\ leg. V. Soon 23. 01. 2003’ ‘*Alphamenes* ♀\ *campanulatus*\ B. Garcete det. 2005 (F.)’ (partially handwritten label) ‘IBNPY- INVERT\ 000000003941’. **Paraguay, Itapua:** one male (MHNHPY), ‘PARAGUAY:\ITAPUA: Alto Verá,\ Estancia Mendieta, 9\ - 11.II.1999, B.\ Garcete’ ‘*Alphamenes*\ *campanulatus*\ (Fabricius)\ det. B. Garcete 2000’ (handwritten label).

#### *Alphamenes incertus* (de Saussure, 1875)

**Brazil, Espirito Santo:** one male (UFPR), ‘*Alphamenes*\ *incertus* (Sauss.) \ B. Garcete det. 2007’ (handwritten label) ‘SANTA TERESA – ES\ BRAZIL – 13/ 1/ 1996\ C. T. & C. Elias’ ‘DPT° ZOO\ UF – PARANÁ’.

*Minixi arechavaletae* (Brèthes, 1903)

**Argentina, Buenos Aires:** one female (AMNH), 'ARG. – B. AIRES\ MORENO- XII. 71\ FRITZ col.' 'Pachymini xi\ arechavaletae\ (Brethes)♀\ Fritz det. 89' (partially handwritten label). **Argentina, Corrientes:** one female (AMNH), 'ARG. – CORRIENTES/ ITUZAINGO\ Fritz – IX. 79' 'Pachymini xi\ arechavaletae\ (Brethes)♀\ Fritz det. 89' (partially handwritten label); one male, (AMNH), 'ARG. – CORRIENTES\ PELLEGRINI\ Fritz – X 11. 74' 'PACHYMENES\ ARECHAVALETAE\ ♂\ (BRETH.)\ M. A. Fritz det. 75' (partially handwritten label). **Argentina, Entre Rios:** one female (AMNH), 'ARG. – E. RIOS\ Liebig\ Zelich'; one female (AMNH), 'ARG. – E. RIOS\ PALMAR COLON\ ZELICH COL. -1.74' (handwritten label) 'PACHYMENES ♀\ ARECHAVALETAE\ (BRETH.)\ M. A. Fritz det. 75' (partially handwritten label); one male (AMNH), 'ARG. – E. RIOS\ SALTO GRANDE\ FRITZ\ - 4.78' (handwritten label) 'Pachymini xi\ arechavaletae\ (Brethes)♂\ Fritz det. 89' (partially handwritten label). **Brazil, Amazonas:** one female (UNESP), 'BRAZIL, AM, Manaus,\ Reserva F. Adolpho Ducke\ 04- 11. x. 2010\ Somavilla, A., et al. Leg.' 'Grade do PPBio\ NS3 (L05/L06)\ *Vespidae – Eumeninae*' 'Pachymini xi\ Somavilla, A. 2011 (det.)' (partially handwritten label) 'Pachymini xi\ arechavaletae\ (Brèthes, 1903) ♀\ Y. C. Grandinete det. 2013' 'INPA0002' (back of the label). **Brazil, Paraná:** one female (UFLA), 'Brazil, Paraná, Campo Magro\ 25° 20' 52" S 49° 21' 43" W\ 05. iv. 2008 – 1070 m\ P. C. Grossi col.'; one female (UFLA), 'Brazil, PR, Tibagi\ P. E. Guartelá\ 02. XI. 2009 Grossi &\ Parizotto cols.'; one female (AMNH), 'BRAZIL, PARANÁ:\ Vila Velha\ February 9, 1974' 'J. G. Rozen\ F. C Thompson\ J. S. Moure\ Collectors' 'Pachymini xi\ arechavaletae\ ♀ (Brethes)\ det. J. v. d. Vecht 1979' (partially handwritten label); one male (UFLA), 'Brazil, Paraná, São\ José dos Pinhais,\ Aeroporto, 19. i. 2005;\ Aguiar'; one female (UFLA), 'Brazil, Paraná, 8 km ao\ S de Palmas, 1140m,\ 26°33'S 51°59'W,\ 20. Xi. 2009, G. Melo,\ K. Ramos & V. Kanamura' 'Pachymini xi ♀\ B. Garcete det. 2009' (partially handwritten label); one male (UFLA), 'Brazil, PR, Tibagi\ P. E. Guartelá\ 02. XI. 2009 Grossi &\ Parizotto cols.'. **Brazil, São Paulo:** two females (UFLA), 'Brazil, SP, 10 Km a SW\ de S. J. Barreiro, Serra\ da Bocaina, 1560m,\ 22. 721°S 44.625°W,\ 24. x. 2011. M. G. Hermes'; one female (AMNH), 'BRAZIL- S. P. – 11.57\ CAMPOS do JORDAO' (handwritten label) 'Pachymenes\ arechavaletae\ Br\ Giordani Soika det. 1972' (partially handwritten label); one male (UFLA), 'BOCAINA – SP\ RECANTO DA FLORESTA\ 23/ x / 2011\ G. A. R. Melo' (handwritten label).; **Brasil, Minas Gerais:** one female (UFLA), 'Brasil, Minas Gerais,\ Parque Estadual Serra do\ Papagaio 22°12'S\ 44°47'W, 26. i. 2014\ L. Martins col.'; one female (UFLA), 'Brasil, Minas Gerais,\ Parque Estadual Serra do\ Papagaio 22° 12'S\ 44°47'W, 19. iv. 2014\ L. Martins col.'; one female (UFLA), 'Brasil, Minas Gerais,\ Parque Estadual Serra do\ Papagaio 22°12'S\ 44°47'W, 29. i. 2014\ L. Martins col.'; one male (UFLA), 'Brasil, Minas Gerais,\ Parque Estadual Serra do\ Papagaio 22°12'S\ 44°47'W, 26. i. 2014\ J. Batista col.'.

*Minixi bifasciatum* (von Schulthess, 1904)

**Argentina, Salta:** one male (AMNH), 'Arg. – SALTA\ Altures Amblayo\ 3200 m – XII. 86\ Fritz' 'Pachymini xi\ bifasciatum ♂\ (Schulthess)\ Carpenter det 89' (partially handwritten label); one female (AMNH), 'Arg. – SALTA\ Cuesta Obispo\ 3.000 mts.\ Fritz- 11. 85' 'Pachymini xi\ bifasciatum ♀\ (Schulthess)\ Carpenter det 89' (partially handwritten label). **Peru, Cuzco:** one male (AMNH), 'PERU: Lucre,\ Cuzco II - 2 -1968 A.

Garcia & C. Porter' (partially handwritten label) 'Pachyminixi bifasciatum Giordani Soika det. 1978' (partially handwritten label).

***Minixi brasilianum*** (de Saussure, 1875)

**Brazil, Amazonas:** one female (UNESP), 'Brazil, AM, Iranduba\ Ramal do Caldeirão\ -3.2615; -60.2207' '17-18.xi.2011\ Oliveira, Tonon,\ Somavilla & Azevedo leg.'. **Brazil, Paraná:** one male (UFLA), 'Brazil, Paraná Altamira do\ Paraná, Estrada d'Água da\Bota, 24°52'S 52°42'W\ 22.iii.2011, G. Weiss & P.\ Grossi'; one female (UFLA), 'Brazil, Paraná Altamira do\ Paraná, Estrada d'Água da\Bota, 24°52'S 52°42'W\ 22.iii.2011, G. Weiss & P.\ Grossi'. **Brazil, São Paulo:** one female (UNESP), '*Minixi brasilianum*' (de Saussure) ♀\ M. G. Hermes det. 2011' 'Pindorama – EEP\ Estação Experimental de\ Pindorama\ 26/VII/2010\ Coleta ativa\ CAPUSSO, O.L. Col.'; one female (UNESP), '*Minixi brasilianum*' (de Saussure) ♀\ M. G. Hermes det. 2011' 'Pindorama – EEP\ 06/VIII/2009\ Coleta ativa\ CAPUSSO, O.I. Col.'; one male (UNESP), 'Bebedouro\ Faz. Córrego dos Bois\ 21/XII/2010\ Coleta ativa\ CAPUSSO, O. I. Col.'; one female (UNESP), 'Magda-SP-Brazil\ 19/ vi/ 2007\ BIOTA-FAPESP'; one male (UNESP), 'Magda-SP-Brazil\ 19/vi/2007\ *Minixi brasilianum*' (de Saussure) ♂\ R. B. Lopes det. 2013'; one female (UNESP), 'Icém-SP-Brazil\ 2/ x/ 2011\ Grandinete, Y. C. col.' '*Minixi brasilianum compactum* (Fox, 1899)\ ♀\ Y. C. Grandinete det. 2013'; one female (UNESP), 'Macaubal-SP-Brazil\ 19/xi/2007\ BIOTA-FAESP'; one female (UNESP), 'Matão-SP-Brazil\ 03/viii/2007\ BIOTA-FAPESP'; one female (UNESP), 'Icém-SP-Brazil\ 2/ x/ 2011\ Grandinete, Y. C. col.' '*Minixi Brazilianum compactum* (Fox, 1899)\ ♀\ Y. C. Grandinete det. 2013'; one female (UNESP), '*Minixi Brazilianum*' (de Saussure) ♀\ M. G. Hermes det. 2011' 'Pindorama – EEP\ 02/II/2010\ Coleta ativa\ CAPUSSO, O.I. Col.'; one female (UNESP), 'Planalto-SP-Brazil\ 19/xi/2007\ *Minixi* sp. ♀'; one female (UNESP), '*Minixi Brazilianum*' (de Saussure) ♀\ M. G. Hermes det. 2011' 'Barretos\ Faz. Vista Bonita\ 15/XII/2009\ Coleta ativa\ CAPUSSO, O.L. Col.'; one female (UNESP), '*Minixi tricoloratum*' (Zavattari) ♀\ Y. C. Grandinete det. 2013' 'Paulo de Faria-SP-Brazil\ 17/ii/2005\ Gomes, B. col.'. **Paraguay, Concepción:** two males (UFLA), 'Paraguay, Concepción\ Horqueta, Estancia Don\ Carlos, 230m, 11.ii.2007\ 23°24'13''S 56°31'18''W\ M. G. Hermes coll.'; three females (UFLA), 'Paraguay, Concepción\ Horqueta, Estancia Don\ Carlos, 230m, 11.ii.2007\ 23°24'13''S 56°31'18''W\ M. G. Hermes coll.'. **Paraguay, San Pedro:** two females (AMNH), 'PARAGUAY – 2.79\ SAN PEDRO – CORORO\ RIO YPANE – Fritz'; two females (AMNH), 'PARAGUAY: San\ Pedro. Rio Ypane\ Cororo\ XII. 1983\ M. A. Fritz' (partially handwritten label); two males (AMNH), 'PARAGUAY: San\ Pedro. Rio Ypane\ Cororo\ XII. 1983\ M. A. Fritz' (partially handwritten label). **Suriname, Raleigh Vallen:** two males (AMNH), 'SURINAME: Raleigh\ Vallen-Voltzberg Res\ Foengoe 4° 43', 56° 12'\ 26 Jan.-15 Feb. 1982\ J. Carpenter & D. Trail' 'MINIXI BRASILIANUM (SAUSS.)\ Det. J. M. Carpenter 82' (partially handwritten label). **Labels without locality:** one female (AMNH), 'Oucatopi Isd.\ S. M. Klages,\ C. M. Acc. 6178' 'Minixi\ brasilianum\ Giordani Soika det. 1978'.

***Minixi brethesi*** (Bertoni, 1927)

**Paraguay, Itanará:** one male (MNHPY), 'Itanará\ 18.IV.20' 'Nortoni\ bertonii\ Brths.' 'MNHPY\ A. W. Bertoni\ D. 41\ Garcete rev.' 'IBNPY-INVERT\ 000000007366' 'Pachyminixi\ brethesi\ (Bertoni)\ det. B. Garcete 2000'. **Paraguay, Vista Alegre:** one female (MNHPY), 'Vista Alegre\ ...'\ 25.IV.20' (partially

handwritten label) 'Nortonia\ Bertoni\ Brth.' (handwritten label) 'MNHNP\ A. W. Bertoni\ D. 158\ Garcete rev.' 'IBNPY-INVERT\ 000000007373' 'Pachyminixi\ brethesi\ (Bertoni)\ det. B. Garcete 2000' (partially handwritten label); one female (MNHPY), 'Vista Alegre\ IV.1920' (handwritten label) 'Nortonia\ Bertoni\ Brth.' (handwritten label) 'MNHNP\ A. W. Bertoni\ D. 9\ Garcete rev.' 'IBNPY-INVERT\ 000000007367' 'Pachyminixi\ brethesi\ (Bertoni)\ det. B. Garcete 2000'; one female (MNHPY), 'V. Alegre\ 26.IV.20' (handwritten label) 'Parazumia\ Bertonii\ Breth' (handwritten label) '0212' (back of the label) 'MNHNP\ A. W. Bertoni\ D. 45\ Garcete rev.' 'IBNPY-INVERT\ 000000006772' 'Pachyminixi\ brethesi\ (Bertoni)\ det. B. Garcete 2000'; one female (MNHPY), '2.IV.1920\ A. W. Bertoni' (handwritten label) 'Vista Alegre\ Ag. guani' (handwritten label) 'Parazumia\ Bertonii\ Breth' (handwritten label) 'MNHNP\ A. W. Bertoni\ D. 22\ Garcete rev.' 'IBNPY-INVERT\ 000000007374' 'Pachyminixi\ brethesi\ (Bertoni)\ det. B. Garcete 2000'; one female (MNHPY), '58' (handwritten label) 'V. Alegre\ 16.IV.20' 'Pachyminixi\ brethesi\ (Bertoni)\ det. B. Garcete 2000' 'IBNPY-INVERT\ 000000007370' 'MNHNP\ A. W. Bertoni\ B. 56\ Garcete rev.'; one male (MNHPY), 'V. Alegre\ III.20' (handwritten label) 'Nortonia\ alegresis\ Brths' (handwritten label) 'MNHNP\ A. W. Bertoni\ D. 26\ Garcete rev.' 'IBNPY-INVERT\ 000000007369' 'Pachyminixi\ brethesi\ (Bertoni)\ det. B. Garcete 2000'.

***Minixi joergenseni*** (Schrottky, 1909)

**Argentina, Mendoza:** one female (MNHNPY), 'Ch. Coxia\ 4.IV.07\ Mendoza' (handwritten label) 'MNHNP\ A. W. Bertoni\ B. 81\ Garcete rev.' '0215' (back of the label) 'IBNPY-INVERT\ 000000008185' 'Pachyminixi\ joergenseni\ (Schrottky)\ det. B. Garcete 1997' (partially handwritten label); one male (MNHNPY), 'Ch. Coxia\ 4.IV.07\ Mendoza' (handwritten label) 'MNHNP\ A. W. Bertoni\ B. 171\ Garcete rev.' '0222' (back of the label) 'IBNPY-INVERT\ 000000008186' 'Pachyminixi\ joergenseni\ (Schrottky)\ det. B. Garcete 2000' (partially handwritten label); one male (MNHNPY), 'Mendoza\ R. A. 11' (handwritten label) '3018' (handwritten label) 'Pachymenes\ joergenseni ♂\ Schr' 'MNHNP\ A. W. Bertoni\ B. 171\ Garcete rev.' '0224' (back of the label) 'IBNPY-INVERT\ 000000008183' 'Pachyminixi\ joergenseni\ (Schrottky)\ det. B. Garcete 2000' (partially handwritten label); one male (MNHNPY), 'Mendoza\ Argentina' 'Eumenes\ argentina' (handwritten label) 'Pachymenes ♂\ joergenseni\ forma típica' (handwritten label) 'MNHNP\ A. W. Bertoni\ B. 126\ Garcete rev.' '0214' (back of the label) 'IBNPY-INVERT\ 000000008182' 'Pachyminixi\ joergenseni\ (Schrottky)\ det. B. Garcete 1997' (partially handwritten label); one female (MNHNPY), '...' (unreadable label) 'cotype' (handwritten label) '3018' (handwritten label) '...' (unreadable label) 'MNHNP\ A. W. Bertoni\ B. 158\ Garcete rev.' '0213' (back of the label) 'IBNPY-INVERT\ 000000008179' 'Pachyminixi\ joergenseni\ (Schrottky)\ det. B. Garcete 1997' (partially handwritten label), 'Ch. Coria\ Mendoza' (handwritten label) 'Pachymenes ♀\ joergenseni\ Schr. var.' 'MNHNP\ A. W. Bertoni\ F. 127\ Garcete rev.' '0221' (back of the label) 'IBNPY-INVERT\ 000000008184' 'Pachyminixi\ joergenseni\ (Schrottky)\ det. B. Garcete 2000' (partially handwritten label). **Argentina, Rio Negro:** one male (AMNH), 'ARG – RIO NEGRO\ LUIS BELTRAN\ Fritz' 'Pachyminixi\ jorgenseni\ bicingulatus\ (Brethes) ♂\ Fritz det. 89'; one male (AMNH), 'ARG. – RIO NEGRO\ Darwin\ Fritz – VII.84' 'Pachyminixi\ jorgenseni\ bicingulatus\ (Brethes) ♂\ Fritz det. 89'; one male (AMNH), 'ARG. – RIO NEGRO\ Darwin – 12.84\ Fritz col.' 'Pachyminixi\ jorgenseni\ bicingulatus\ (Brethes) ♂\ Fritz det. 89'. **Argentina, Salta:** one female (UNESP), 'ARG. – SALTA\ Rosario Lerma\ Fritz – XI 92' 'Pachyminixi\ jorgenseni\ bicingulatum\ (Zav, 1912)' 'AMNH 0012'; one male (AMNH), 'ARG. – SALTA\ Rosario Lorma\ Fritz – 10.92' 'Pachyminixi\ jorgenseni\ bicingulatus\ (Brethes)\ Fritz det.';

one female (AMNH), 'ARG. – SALTA\ La Viña\ Fritz – 2.85' 'Pachyminixi\ joergenseni\ bicingulatus ♀\ (Brethes)\ Fritz det. 89'. **Argentina, San Juan:** one female (AMNH), 'Nr. Calingasta\ San Juan, ARGENT.\ Feb. 13, '66\ C. C. Porter' 'Pachyminixi\ joergenseni\ bicingulatum (Zav.)\ Det. J. M. Carpenter' (partially handwritten label). **Argentina, San Lu s:** one female (AMNH), 'ARG. – SAN LUIS\ SAN LUIS – 2.74\ FRITZ – H. MARTINEZ' 'PACHYMENES\ JOERSENSENI ♀\ (BR.)\ M. A. Fritz det. 75' (partially handwritten label); one female (AMNH), 'Pachyminixi\ joergenseni\ bicingulatus ♀\ (Brethes)\ Fritz det. 89' 'ARG. – SAN LUIS\ SAN JERONIMO\ Fritz – 2.80'; one female (AMNH), 'ARG-SAN LUIS\ SAN LUIS 3.74\ H. MARTINEZ – FRITZ' 'PACHYMENES\ JOERGENSENI\ BICINGULATUS ♀\ (BR.)\ M. A. Fritz det. 75'. **Argentina, Santa F :** one female (MNHNPY), 'Sta. F \ R. A.' (handwritten label) '3091\ Bertoni' (handwritten label) '...' (unreadable label) 'Eumenes\ arachaevaletae ♀?' (handwritten label) 'MNHN\ A. W. Bertoni\ F. 159\ Garcete rev.' '0220' (back of the label) 'IBNPY-INVERT\ 000000008180' 'Pachyminixi\ joergenseni\ (Schrottky)\ det. B. Garcete 2000' (partially handwritten label). **Chile, Santiago:** one female (MNHN), 'MUSEUM PARIS\ PROV. DE SANTIAGO\ DEL ESTERO\ BORDS DE RIO SALADO\ ENV. DICA O\ E. R. WAGNER 1909' 'Pachyminixi\ joergenseni\ bicingulatus\ Giordani Soika det. 197'; one female (MNHN), 'MUSEUM PARIS\ CHACO DE SANTIAGO\ DEL ESTERO\ ENVIORONS DICA O \ GUARDA ESCOLTA\ E. R. WAGNER 1909' 'Pachyminixi\ joergenseni\ bicingulatus\ Giordani Soika det. 197' '3 ex missing: van\ der Vecht 1975'; one male (MNHN), 'MUSEUM PARIS\ PROV. DE SANTIAGO\ DEL ESTERO\ BORDS DE RIO SALADO\ ENV. DICA O\ E. R. WAGNER 1909' 'Zavattari\ det. 1912' (handwritten label) 'Eumenes\ joergenseni\ Schrott\ Var. bicingulatus\ Zavatt.' (handwritten label) 'Pachyminixi\ joergenseni\ ssp. bicingulatum (Zav.)\ det. J. v. d. Vecht 1980'; one female (MNHN), 'MUSEUM PARIS\ PROV. DE SANTIAGO\ DEL ESTERO\ BORDS DE RIO SALADO\ ENV. DICA O\ E. R. WAGNER 1909' '...' (unreadable label) 'Pachyminixi ♀\ joergenseni\ bicingulatum\ var. (Zav.)\ det. J. v. d. Vecht 1979'.

***Minixi mariachii* Hermes & Oliveira, sp. nov.**

**Holotype female: Mexico, Morelos** (AMNH), 'MEXICO: Morelos\ 2,5 km N, 4 km, O Hualutla\ Estaci n CEAMISH\ 9-VII-1996\ Alt. 940 m\ 18 27'.671 N 99 02'.475 O\ sobre suelo h medo\ Col. A. Rodr guez' 'Minixi\ ♀ Sp.\ Det. A. Rodr guez, 1997' (partially handwritten label).

**Paratypes: Mexico, Morelos:** one male (AMNH), 'MEXICO: Morelos\ 2,5 km N, 4 km, O Hualutla\ Estaci n CEAMISH\ 7-X-1996 Alt. 940 m\ 18 27.671 N 99 02'.475 O\ Col. B. Rodr guez 186 RA'; one male (AMNH), 'MEXICO: Morelos\ 2,5 km N, 4 km, O Hualutla\ Estaci n CEAMISH\ 10-VII-1996 Alt. 940 m\ 18 27'.671 N 99 02'.475 O\ sobre suelo h medo\ Col. M. E. Guardado'; one male (AMNH), 'MEXICO: Morelos\ 2,5 km N, 4 km, O Hualutla\ Estaci n CEAMISH\ 9-X-1996 Alt. 940 m\ 18 27'. 671 N 99 02'.475 O\ Col. C. Uribe 200 RA' 'Minixi\ ♂ Sp\ Det. A. Rodr guez, 1997'; one male (AMNH), 'MEXICO: Morelos\ 2,5 km O Ajuchitl n\ 16-III-1996 Alt. 950 m\ 18 28'.065 N 98 59'. 546 O\ sobre suelo h medo\ Col. A. Rodr guez'; one male (AMNH), 'MEXICO: Morelos\ 2,5 km N, 4 km, O Hualutla\ Estaci n CEAMISH\ 9-VII-1996 Alt. 940 m\ 18 27'. 671 N 99 02'.475 O \ Col. A. Mar n'; one female (AMNH), 'MEXICO: Morelos\ 2,5 km N, 4 km, O Hualutla\ Estaci n CEAMISH\ 16-XI-1995 Alt. 940 m\ 18 27'. 671 N 99  02'. 475 O\ Col. E. Ramirez'; one female (AMNH), 'MEXICO: Morelos\ 2,5 km O Ajuchitl n\ 18-XI-1995 Alt. 950 m\ 18 28'.065 N 98 59'.546 O\ Col. F. A. Noguera'; one female (AMNH), 'MEXICO: Morelos\ 2,5 km N, 4 km, O Hualutla\ Estaci n

CEAMISH\ 12-VII-1996 Alt. 940 m\ 18°27'.671 N 99°02'.475 O\ Col. M. E. Guardado'; one female (AMNH), 'MEXICO: Morelos\ 2,5 km N, 4 km, O Hualutla\ Estación CEAMISH\ 10-V-1996 Alt. 940 m\ 18°27'.671 N 99°02'.475 O \ Col. B. Rodríguez 95 RA'.

*Minixi mexicanum* (de Saussure, 1857)

**United States, Texas:** one female (AMNH), 'TEXAS: HIDALGO COUNTY\ BENTSEN RIO GRANDE\ VALLEY ST. PARK\ 16- III- 82\ C. PORTER' (partially handwritten label) 'Minixi/ MEXICANUM/ (Saussure)/ ♀ det. J. M. Carpenter/ 1984' (partially handwritten label) 'Minixi/ n. sp./ det. J. M. Carpenter' (partially handwritten label).

*Minixi suffusum* (Fox, 1899)

**Brazil, São Paulo:** one male (UNESP), '*Minixi suffusum* (fox) ♀\ M. G. Hermes det 2011' 'Onda Verde\ Faz. Fischer\ 21/I/2011\ Coleta ativa\ CAPUSSO, O. I. Col.'; two males (UNESP), '*Minixi suffusum* (fox) ♀\ M. G. Hermes det. 2011' 'Bebedouro\ Faz. Córrego dos Bois\ 21/XII/2010\ Coleta ativa\ CAPUSSO, O. I. Col.'; one female (UNESP), '*Minixi suffusum* (fox) ♀\ M. G. Hermes det. 2011' 'Bebedouro\ Faz. Córrego dos Bois\ 21/XII/2010\ Coleta ativa\ CAPUSSO, O. I. Col.'; one female (UNESP), '*Minixi suffusum* (fox) ♀\ M. G. Hermes det. 2011' 'Pindorama – EEP\ 08/VII/2010\ Coleta ativa\ CAPUSSO, O.I. Col.'; one female (UNESP), 'Jundiaí-SP-Brazil\ Serra do Japi\ 14/x/2008\ *Minixi* sp'; one male (UNESP), 'Matão-SP-Brazil\ 30/vi/2009\ *Minixi* sp. ♀'; one male (UNESP), 'Matão-SP-Brazil\ 17/ xii /2007\ BIOTA-FAPESP' '*Minixi suffusum*\ (Fox) ♀\ Y. C. Grandinete det. 2013'; one female (UNESP), 'Minixi ♀\ suffusum (Fox)' (handwritten label) 'Matão, SP, Brazil\ 03/VIII/07\ Ativa – ~~interior~~\ Eumeninae\ SP 8' (partially handwritten label); one female (UNESP), 'Matão-SP-Brazil\ 18/ii/2009\ *Minixi suffusum* (Fox)\ ♀\ R. G. Lopes det 2013'; one female (UNESP), '*Minixi suffusum* (fox) ♀\ M. G. Hermes det. 2011' 'Barretos\ Faz. Vista Bonita\ 27/I/2011\ Coleta ativa\ CAPUSSO, O. I. Col.'; one female (UNESP), '*Minixi suffusum* (fox) ♀\ M. G. Hermes det. 2011' 'Barretos\ Fazenda Vista Bonita\ 15/XII/2009\ Coleta ativa\ CAPUSSO, O. I. Col.'; one female (UNESP), 'Sales-SP-Brazil\ 24/x/2007 – Malaise\ *Minixi suffusum* (Fox)\ ♀\ M. G. Hermes det. 2011'; one female (UNESP), 'Barretos-SP-Brazil\ 23/x/2008\ *Minixi suffusum* (Fox)\ ♀\ R. G. Lopes det. 2013'; one female (UNESP), 'Barretos-SP-Brazil\ 08/v/2009\ *Minixi* sp'. **Paraguay, Concepción:** one male (UFLA), 'Paraguay, Concepción,\ Horqueta Estancia Don\ Carlos, 203 m, 11.ii.2007\ 23°24'13''S 56°31'18''W\ M. G. Hermes coll.'; four females (UFLA), 'Paraguay, Concepción,\ Horqueta Estancia Don\ Carlos, 203 m, 11.ii.2007\ 23°24'13''S 56°31'18''W\ M. G. Hermes coll.'. **Paraguay, Paraguari:** one female (UFLA), 'Paraguay, Paraguari,\ Monumento Natural\ Macizo Acahay,\ 169 m, 8.ii.2007\ 25°52'01''S 57°08'41''W\ M. G. Hermes coll.'. **Paraguay, San Pedro:** one male (AMNH), 'PARAGUAY – 2.79\ SAN PEDRO – CORORO\ RIO YPANE – Fritz'.

*Minixi sumichrasti* (de Saussure, 1875)

**Argentina, Buenos Aires:** one female (AMNH), 'ARG.-B. AIRES\ MORENO\ Fritz – 12.81' 'Pachyminixi\ sumichrasti ♀\ (Saussure)\ Carpenter det 89'. **Argentina, Catamarca:** one female (AMNH), 'Arg. –CATAMARCA\ Santa Maria\ 4.1.91 – Fritz' 'Pachyminixi\ sumichrasti ♀\ (Saussure)\ Fritz det. 91'; one

female (AMNH), 'ARG – CATAMARCA\ PUNTA BALASTO\ Fritz – 2.88' 'Pachyminixi\ sumichrasti ♀ (Saussure)\ Carpenter det 89'. **Argentina, Jujuy:** one male (AMNH), 'ARGENT.: Jujuy,\ Huacalera\ III-24-27-69\ C. C. Porter' 'Pachyminixi\ sumichrasti (Sc)\ Giordani Soika det. 1978' (partially handwritten label). **Argentina, Mendoza:** one female (AMNH), 'Potrerillos\ Mendoza, ARGENT.\ Feb.20 66\ O. O. Porter' 'Pachyminixi\ sumichrasti (ss)\ = argentinus (B.)\ Giordani Soika det. 1979' (partially handwritten label); one female (MNHNPY), 'Ch. Coxia\ hh.07\ Mendoza' (handwritten label) 'MNHN\ A. W. Bertoni\ C. 206\ Garcete rev.' '0219' (back of the label) 'IBNPY-INVERT\ 000000008189' 'Pachyminixi\ sumichrasti\ (Saussure)\ det. B. Garcete 1997' (partially handwritten label); one female (MNHNPY), 'Ch. Coxia\ 4.IV.07\ Mendoza' (handwritten label) 'MNHN\ A. W. Bertoni\ C. 207\ Garcete rev.' '0218' (back of the label) 'IBNPY-INVERT\ 000000008190' 'Pachyminixi\ sumichrasti\ (Saussure)\ det. B. Garcete 1997' (partially handwritten label); one female (MNHNPY), 'Ch. Coxia\ 10.I.07\ Mendoza' (handwritten label) 'MNHN\ A. W. Bertoni\ B. 88\ Garcete rev.' '0217' (back of the label) 'IBNPY-INVERT\ 000000008191' 'Pachyminixi\ sumichrasti\ (Saussure)\ det. B. Garcete 1997' (partially handwritten label); one female (MNHNPY), 'Sta. Fé\ 3017a' '326\ 24.XII.910\ S. Fé\ barranco' 'Eumenes\ argentina (Berq)' 'MNHN\ A. W. Bertoni\ C. 209\ Garcete rev.' '0216' (back of the label) 'IBNPY-INVERT\ 000000008195' 'Pachyminixi\ sumichrasti\ (Saussure)\ det. B. Garcete 1997' (partially handwritten label); one male (MNHNPY), 'Mendoza\ argentina' '3017' 'Eumenes\ argentina (Berq)' 'MNHN\ A. W. Bertoni\ C. 204\ Garcete rev.' '0226' (back of the label) 'IBNPY-INVERT\ 000000008194' 'Pachyminixi\ sumichrasti\ (Saussure)\ det. B. Garcete 2000' (partially handwritten label); one male (MNHNPY), '3017' 'Eumenes\ argentina' 'Mendoza' 'MNHN\ A. W. Bertoni\ C. 203\ Garcete rev.' '0227' (back of the label) 'IBNPY-INVERT\ 000000008192' 'Pachyminixi\ sumichrasti\ (Saussure)\ det. B. Garcete 2000' (partially handwritten label); one male (MNHNPY), 'Mendoza\ R. Arg.' '3017' 'Eumenes ♂\ argentina Berq' 'MNHN\ A. W. Bertoni\ C. 205\ Garcete rev.' '0225' (back of the label) 'IBNPY-INVERT\ 000000008193' 'Pachyminixi\ sumichrasti\ (Saussure)\ det. B. Garcete 2000' (partially handwritten label). **Argentina, Rio Negro:** one female (AMNH), 'Arg. –RIO NEGRO\ Choele-Choel\ U. Fritz – I. 91' 'Pachyminixi sumichrasti (Saussure) ♀ Fritz det. 91'; one female (AMNH), 'ARG. –RIO NEGRO\ Choele Choel\ Fritz-5.XII.89' 'Pachyminixi\ sumichrasti\ (Sauss.) ♀ Fritz 90' (handwritten label); one male (AMNH), 'ARG. –RIO GRANDE\ LUIS BELTRAN\ Fritz – I.77' 'Pachyminixi\ sumichrasti\ (Saussure) ♂\ Carpenter det89'. **Argentina, Salta:** one female (AMNH), 'ARGENTINA: Salta\ 29 Km N Cafayate\ Quebrada Cafayate\ 16 Jan. 1989 1600m\ Carpenter & Bowers' 'Pachyminixi\ det. J. M. Carpenter'; one female (AMNH), 'ARG. – SALTA\ La Viña\ Fritz – 2.85'; 'Pachyminixi\ sumichrasti ♀ (Saussure)\ Carpenter det 89'; one female (AMNH), 'ARGENTINA: Salta\ 2km.S Cnel Moldes\ 25°16'S 65°29'W\ 23 Jan. 1989 1150m\ James M. Carpenter'; one female (AMNH), 'ARG.-SALTA\ El Maray\ Fritz – 3.97'; one female (AMNH), 'ARG-SALTA\ CHORRILLO. 4.70\ RUTASI-KM-48\ EASAL COL.' (handwritten label) 'Pachyminixi\ argentinus (Ber.)\ Giordani Soika det. 1972' (partially handwritten label); one female (AMNH), 'ARG.- SALTA\ El Maray\ Fritz- 1.98' (partially handwritten label); one female (AMNH), 'ARG. – SALTA\ Sumalao\ Fritz I.90' 'Pachyminixi\ sumichrasti ♀ (Sauss.)\ Fritz 90' (handwritten label); one female (AMNH), 'ARG. – SALTA\ El Alisal 2.90\ Fritz-2 . 200m' (partially handwritten label) 'Pachyminixi\ sumichrasti ♀ (Sauss.)\ Fritz 90' (handwritten label); one male (AMNH), 'ARGENTINA: Salta\ 29 Km N Cafayate\ Quebrada Cafayate\ 16 Jan. 1989 1600m\ Carpenter & Bowers'; one male (AMNH), 'ARG. –SALTA\ La Viña\ Fritz-3.92'; one male (AMNH), 'ARG. – SALTA\ Quebr. Escolpa\ Fritz – 1.91' 'Pachyminixi\ sumichrasti\ Sauss. ♂\ Fritz det. 91'; one male (AMNH), 'ARGENTINA: Salta\ Cuesta del

Obispo\ 31Km. W. Chicoana\ 22 Jan. 1989 2100m\ James M. Carpenter'; one male (AMNH), 'ARGENTINA: Salta\ Cachí, 2400m\ at Rio Calchaqui\ 17 January 1989\ Carpenter & Bowers'. **Argentina, San Luis:** one female (AMNH), 'ARG. –SAN LUIS\ SAN JERONIMO\ Fritz – 2.80' 'Pachyminixi\ sumichrasti ♀\ (Saussure)\ Carpenter det89'. **Argentina, Tucumán:** four males (AMNH), 'ARGENTINA, Tucumán\ Amaichá det. Valle\ 26°36'S.65°55'W\ 14 January 1989\ Carpenter & Bowers'.

***Minixi tricoloratum*** (Zavattari, 1911)

**Argentina, São Pedro:** one male (AMNH), 'S. Pedro Colalao\ Tucuman, ARGENT.\ XII- 15/19- 64\ O. O. Porter' '...' (unreadable label); one female (UFMG), 'BRA, MG, Serra do\ Salitre, RPN Cachoeira\ do Campo 23–26.x.2009,\ A. F. Kumagai; R. B. Lopes;\ A. R. Lima leg.\UFMG IHY\ 1522449' 'Minixi\ tricoloratum' (handwritten label); one male (UFMG), 'BRA, MG, Serra do\ Salitre, RPN Cachoeira\ do Campo 23–26.x.2009,\ A. F. Kumagai; R. B. Lopes;\ A. R. Lima leg.\UFMG IHY\ 1522450'; one male (UFMG), 'BRA, MG, Serra do\ Salitre, RPN Cachoeira\ do Campo 23–26.x.2009,\ A. F. Kumagai; R. B. Lopes;\ A. R. Lima leg.\UFMG IHY\ 1522451'.

***Minixi uruguayense*** (de Saussure, 1855)

**Holotype female:** **Uruguay, Montevideo** (MNHN), 'MUSEUM PARIS\ MONTEVIDEO\ D' ORBIGNY 1834' '...' (unreadable label) 'TYPE' (red handwritten label) 'Eumenes\ uruguayensis\ Sauss.\ type.\ H. DE SAUSSURE DET.' (partially handwritten label) ' 1♀ Type (Without abdomen)\ is missing – (borrowed by\ Van der Vecht 1975).' (yellow handwritten label).

**Argentina, Salta:** one female (AMNH), 'ARG. – SALTA\ Rosario Lerma\ Fritz –XI. 93'.