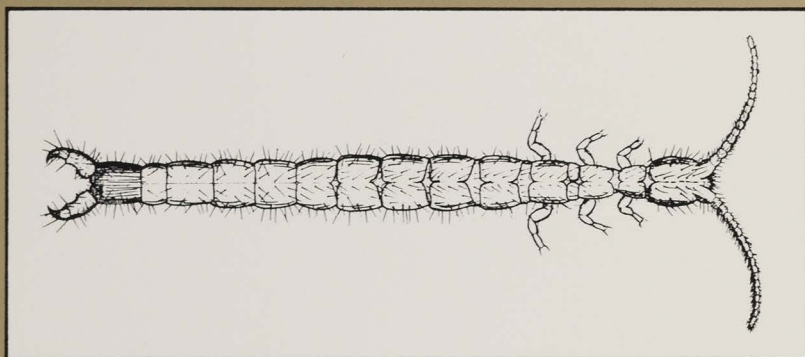


NUMBER 42
PEARCE-SELLARDS
SERIES

A Checklist and Bibliography
of the
IAPYGOIDEA (*Insecta: Diplura*)
of
South America

JAMES R. REDDELL



SEPTEMBER, 1985
TEXAS MEMORIAL MUSEUM, THE UNIVERSITY OF TEXAS AT AUSTIN

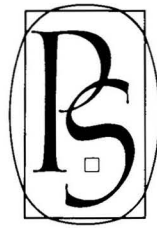
Cover: *Parajapyx isabellae* (Grassi) (after Zimmerman, 1948)

Pearce-Sellards Series

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The Pearce-Sellards Series is an occasional, miscellaneous series of brief reports of Museum and Museum-associated field investigations and other research. All manuscripts are subjected to extramural peer review before being accepted. The series title commemorates the first two directors of Texas Memorial Museum, both now deceased: Dr. J. E. Pearce, Professor of Anthropology, and Dr. E. H. Sellards, Professor of Geology, The University of Texas at Austin.

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ABSTRACT

Complete records, synonymies, and bibliographic citations are given for the 61 species and seven varieties of iapygoid diplurans described from South America. Also included are all published records for species determined only to the generic level. The South American fauna includes representatives of the families Iapygidae, Dinjapygidae, and Parajapygidae. The original spellings of the genus *Iapyx* and the family-group name Iapygidae are used in preference to *Japyx* and Japygidae to comply with the Rule of Priority. *Typhlolabia* Scudder is resurrected to include the following species previously included in *Teljapyx* Silvestri: *T. bidentatus* (Schäffer), *T. costala* (González and Smith), *T. hirsuta* (González and Smith), *T. larva* (Philippi) (type-species), *T. megalocera* (Silvestri), *T. profunda* (Smith), *T. riestrae* (Silvestri), and *T. talcae* (Smith).

ABBREVIATIONS

CAS	California Academy of Sciences, San Francisco
FMNH	Field Museum of Natural History, Chicago
IEAUN	Istituto di Entomologia dell'Universita di Napoli, Portici
ISB	Institut royal des Sciences naturelles de Belgique, Bruxelles
UC	Universidad de Chile, Santiago
USNM	National Museum of Natural History, Smithsonian Institution, Washington
YU	Peabody Museum of Natural History, Yale University, New Haven
ZIM	Zoologisches Institut und Zoologisches Museum, Hamburg
ZMB	Zoologisches Museum der Humboldt-Universität, Berlin

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INTRODUCTION

This is the second in a series of reports summarizing knowledge of the dipluran superfamily Iapygoidea. The first report (Reddell, 1983) covered the fauna of North America, Central America, and the West Indies. The present paper treats the fauna of South America, including Trinidad and Tobago.

The Iapygoidea is represented in the South American soil fauna by a diverse, yet still poorly known, assemblage of species. All three families presently recognized (Iapygidae, Dinjapygidae, Parajapygidae) are present in the fauna, with a total of 61 species and seven varieties having been described. Despite the diversity of the known fauna, however, this must represent a minute percentage of the species which occur in this vast and ecologically diverse continent. With the exception of small areas of Argentina, Brazil, and Chile the fauna remains essentially unstudied and the total number of species can be expected to greatly increase with further study.

The first iapygoid dipluran to be described was *Forficula? larva* Philippi (1863) from Chile, believed to be an earwig (Dermaptera). With the exception of descriptions of single, new species by Schäffer (1897), Verhoeff (1903), Ewing and Fox (1942), and Paclt (1977) all of the taxonomic work on the South American iapygoid fauna has been by F. Silvestri, L. M. Smith, and R. H. González R. The only comprehensive study of the iapygoids of South America was by Silvestri (1948a). In this work he described numerous new species and redescribed most of the previously known ones. Altogether between 1902 and 1951 Silvestri added 40 species and seven varieties to the known South American iapygoid fauna. González R. and Smith, either separately or in collaboration, published descriptions of an additional 16 South American species from 1959 to 1964.

Reddell (1983) has briefly summarized knowledge on the general behavior of the Iapygoidea, with special emphasis on the North American fauna. The only species of South American iapygoid to have been studied in any detail is *Dinjapyx marcus* Silvestri. Marcus (1948a; 1948b; 1948c; 1949; 1950a; 1950b; 1951a; 1951b) has examined in detail various aspects of the morphology and behavior of *D. marcus*.

The South American iapygoid fauna includes 14 genera, of which nine are endemic to South America. *Austrjapyx* is also known by one species from the Belgian Congo, but further study will probably prove that the African species is not correctly placed. One South American species has been referred to *Mixojapyx*; this is a largely Central and North American genus and it probably does not occur in South America. *Neojapyx* occurs in Ecuador and along the northeast coast of South America and is also known by one species from Puerto Rico. The only species of *Evalljapyx* from South America occurs in Ecuador; other species of this genus are

known from North America, Central America, and the West Indies. This genus is in need of revision and final placement of the South American species must await further study. Finally, the genus *Parajapyx* is virtually cosmopolitan in distribution.

Most of the species of South American iapygoids are known only from the type-locality or from a few nearby localities. The wide distribution of *Austrjapyx neotropicalis* Silvestri is probably a reflection of a poor understanding of the limited material studied, and this nominal species may be a complex of closely related species. The only other widely distributed species is *Parajapyx (Parajapyx) isabellae* (Grassi). This species, which feeds on plant roots, is essentially cosmopolitan in distribution and has almost certainly been spread by commerce.

I have in general used the taxonomic placements of Silvestri, Smith, and González R. in their most recent treatment of particular species or genera. Paclt (1957) published a summary of the world iapygoid fauna, in which he made major rearrangements of species; this system has not been adopted by any other worker and I have not followed his taxonomic treatment when it differed from that of other workers. Many of the earlier descriptions are inadequate to correctly place the species; in these instances I have followed the most recent disposition given them by Silvestri. I am in agreement, however, with Paclt in his use of the original spelling of *Iapyx* and Iapygidae, as opposed to the spelling *Japyx* and Japygidae used by myself in my earlier report (1983) and by most other workers on the group. *Iapyx* is the spelling originally used by Haliday (1864) and has been used by a number of other authors since then. The International Code of Zoological Nomenclature (Article 11) states "j" may be used in the construction of zoological names and recommends the use of "j" preceding vowels in the construction of names derived from Greek words. Since it is not a requirement of the Code that "j" be used I see no justification for not using the original spelling as given by Haliday.

I have also accepted Scudder's (1876) genus *Typhlolabia*. González R. and Smith (1964) in their study of the genus *Teljapyx* Silvestri (1948a) reexamined the type of *Typhlolabia* and recognized it as an older name for *Teljapyx*. They chose to use the name *Teljapyx* in preference to the older name. There is no question, however, of the identity of *Typhlolabia larva* and of the synonymy of *Teljapyx* and *Typhlolabia*. In accordance with the amended Article 79 of the International Code of Zoological Nomenclature (Monaco Congress), *Typhlolabia* is the preferred name (International Commission on Zoological Nomenclature 1974). Neither *Typhlolabia* nor *Teljapyx* have appeared more than a few times in the literature and, therefore, I prefer to recognize the work of Scudder and place the name *Teljapyx* in the synonymy of *Typhlolabia*. I am convinced that stability is just as well served by use of the older name.

In the following list all references are given for each species with the appropriate page and figure numbers. Successive page numbers separated by a comma indicate passing references on each page; page numbers connected by a hyphen indicate a continuing discussion of the species throughout the pages cited. The list of references is followed by the type-locality as given in the original paper; corrections and current locality names or spellings are given in brackets. The acronym in parentheses following the type-locality refers to the museum in which it is believed the holotype is deposited. Silvestri, however, seldom listed the place of deposition of his material, so it is uncertain where the specimens can be found. Since much of his material was deposited in the Istituto di Entomologia Agraria dell'Università di Napoli in Portici, the acronym for that institution, preceded by a question mark, is given for most of his species.

ANNOTATED LIST OF SPECIES
FAMILY JAPYGIDAE HALIDAY

Iapygidae Haliday 1864:445-446; Paclt 1957:57.

Dicelluridae Haliday 1865:162-163.

Japygidae: Meinert 1865:404.

Subfamily Provalljapyginae Smith

Provalljapyginae Smith 1962a:240.

Genus *Provalljapyx* Silvestri

Provalljapyx Silvestri 1948a:65; Smith 1962a:237, 238, 240 (key to species).

Type-species.—*Provalljapyx lanei* Silvestri 1948a.

Comment.—This genus is known only from the two South American species listed here.

Provalljapyx brasiliensis Smith

Provalljapyx brasiliensis Smith 1962a:238-240, 241, figs. 1-9.

Type-locality.—Rondon, State of Paraná, Brazil [=Brasil] (FMNH).

Comment.—This species is known only from the holotype female.

Provalljapyx lanei Silvestri

Provalljapyx lanei Silvestri 1948a:4, 64, 65, figs. LI(1-15), LII; Silvestri 1949:45; Paclt 1957:83, 84; Smith 1959a:99; Smith 1962a:237, 238, 240, 241.

Provalljapyx lanei: Silvestri 1948a:65 (lapsus calami).

Evalljapyx lanei: Paclt 1957:84 (n. comb.).

Type-locality.—Jabaquara, São Paulo, [Estado do Espiritu Santo], Brazil [=Brasil] (?IEAUN).

Other record.—ARGENTINA: *Misiones*: Posadas.

Comment.—This species is known from the holotype of unknown sex. A paratype third instar larva and an adult of unknown sex from the type-locality and an adult of unknown sex from Argentina probably do not belong to this species. Smith (1962a) speculates that the paratypes from Jabaquara, Brasil, belong to *P. brasiliensis* Smith. The specimen from Argentina is probably an undescribed species. The specimens were all collected from humus.

Subfamily Iapyginae Womersley

Iapyginae Womersley 1939:62, 68.

Iapyginae: Paclt 1957:57.

Genus *Austrjapyx* Silvestri

Austrjapyx Silvestri 1948a:5; Silvestri 1951:77; Pagés 1952a:345-348, 350, 352-355, figs. 1-13; Smith and González 1964:159, 160, 161, 162, 163, fig. 1 (redagnosis).

Austrjapyx: Smith and González 1964:160 (lapsus calami).

Type-species.—*Austrjapyx travassosi* Silvestri 1948a.

Comment.—This genus is known from the fourteen species listed here and from *A. leleupi* Pagés from a cave in the Belgian Congo, Africa. The latter species may not belong to *Austrjapyx*. Smith and González (1964) speculate that the genus *Hapljapyx* may be a synonym of *Austrjapyx*.

Austrjapyx aberrans Silvestri

Austrjapyx aberrans Silvestri 1948a:4, 27, 28, 30, figs. XX(1-5), XXI; Silvestri 1949:46; Paclt 1957:70; Smith and González 1964:160.

Burmjapyx aberrans: Paclt 1957:70 (n. comb.).

Type-locality.—San Vicente [=San Vicente], Buenos Aires, Argentina (? IEAUN).

Comment.—This species is known only from a single, probably immature, specimen collected in humus.

Austrjapyx autuorii Silvestri

Austrjapyx autuorii Silvestri 1948a:4, 23, 24, 26, fig. XVI(1-9); Silvestri 1949:46; Paclt 1957:70; Smith and González 1964:160.

Burmjapyx autuorii: Paclt 1957:70 (n. comb.).

Type-locality.—Limeira [Estado do] São Paulo, Brazil [=Brasil] (?IEAUN).

Comment.—This species is known only from the holotype female collected from humus.

Austrjapyx autuorii Silvestri var. *paranensis* Silvestri

Austrjapyx autuorii Silvestri var. *paranensis* Silvestri 1948a:27 (lapsus calami); Paclt 1957:70.

Austrjapyx autuorii Silvestri var. *paranensis*: Silvestri 1948a:4.

Austrjapyx autuorii Silvestri var. *paranensis*: Silvestri 1949:46 (lapsus calami).

Burmjapyx autuorii paranensis: Paclt 1957:70 (n. comb.; n. status).

Type-locality.—Boa Vista, [Estado do] Paraná, Brazil [=Brasil] (?IEAUN).

Comment.—This “variety” is represented only by a single, probably immature, specimen.

Austrjapyx barberoi Silvestri

Austrjapyx barberoi Silvestri 1948a:4, 17, 18, 19, 20, figs. X(1-15), XI; Silvestri 1949:46; Pagés 1951:29; Paclt 1957:70; Smith and González 1964:160, 161.

Burmjapyx barberoi: Paclt 1957:70 (n. comb.).

Type-locality.—Cahi [=Cachi] Puente [=Coronel Bogado], Paraguay (?IEAUN).

Comment.—This species is known only from the holotype male.

Austrjapyx bitancourtii Silvestri

Austrjapyx bitancourtii Silvestri 1948a:4, 21, 22, 23, figs. XIV(1-6), XV; Paclt 1957:71; Smith and González, 1964:160.

Austrjapyx bitancourti: Silvestri 1949:46; Paclt 1957:71.

Burmjapyx bitancourti: Paclt 1957:71 (n. comb.; emended ending).

Type-locality.—Boa Vista, [Estado do] Paraná, Brazil [=Brasil] (?IEAUN).

Comment.—This species, represented only by one specimen of undetermined sex, was taken from humus.

Austrjapyx chapecoi Smith and González

Austrjapyx chapecoi Smith and González 1964:159, 162, 164, figs. 7-8, 10, 12-13.

Type-locality.—Chapeco, State of Santa Catarina, Brazil [=Brasil], elevation 600 m., 27° 27' lat., 52° 36' long. (CAS).

Comment.—This species is known from two stage I females, two stage III males, and one stage IV male.

Austrjapyx degradans Silvestri

Austrjapyx degradans Silvestri 1948a:4, 26, 27, 28, figs. XVIII(1-6), XIX; Silvestri 1949:46; Pagés 1955:76; Paclt 1957:71; Smith and González 1964:160.

Burmjapyx degradans: Paclt 1957:71 (n. comb.).

Type-locality.—San Vicente, [Provincia de] Buenos Aires, Argentina (?IEAUN).

Comment.—This species, known only from the holotype female, was collected from humus.

Austrjapyx descolei Silvestri

Austrjapyx descolei Silvestri 1948a:4, 13, 14, 16, fig. VIII(1-7); Silvestri 1949:46; Pagés 1952a:355; Paclt 1957:71; Smith and González 1964:160.

Burmjapyx descolei: Paclt 1957:71 (n. comb.).

Type-locality.—Posadas, [Provincia de] Misiones, Argentina (?IEAUN).

Comment.—This species, known only from one specimen of undetermined sex, was collected from humus.

Austrjapyx lilloi Silvestri

Austrjapyx lilloi Silvestri 1948a:4, 25, 26, fig. XVII(1-9); Silvestri 1949:46; Pagés 1955:76; Paclt 1957:72; Smith and González 1964:160, 161.

Burmjapyx lilloi: Paclt 1957:71 (n. comb.).

Type-locality.—Tafí Viejo, [Provincia de] Tucumán, Argentina (?IEAUN).

Comment.—This species, collected from humus, is known from the holotype female and from two paratypes of undetermined sex.

Austrjapyx neotropicalis Silvestri

Japyx neotropicalis Silvestri 1902:219-220, 244, 248, figs. 30-31; Verhoeff 1903:293; Kirby 1904:57; Silvestri 1948a:4, 10; Silvestri 1949:60; Paclt 1957:73.

Austrjapyx neotropicalis: Silvestri 1948a:4, 5, 7, 10, 11, 12, 14, 16, 18, 20, 22, figs. III(1-8), IV(1-10), V(1-3) (redescription; n. comb.); Silvestri 1949:46, 60; Paclt 1957:73; Smith and González 1964:160.

Burmjapyx neotropicalis: Paclt 1957:73 (n. comb.); Paclt 1958:87.

Type-locality.—Tafí Viejo, [Provincia de] Tucumán, Argentina (?IEAUN).

Other records.—ARGENTINA: *Misiones*: Loreto; Pampa Piray; Posadas; Santa Ana; San Ignacio. BRASIL: *Espirito do Santo*: Jabaquara; *Paraná*: Bella [=Bela] Vista; Salta del Aguazu [=Saltos do Iguazu]. PARAGUAY: Puerto Beroni. URUGUAY: La Sierra.

Comment.—This highly variable species probably should be split into several related species.

Austrjapyx neotropicalis Silvestri var. *progressa* Silvestri

Austrjapyx neotropicalis Silvestri var. *progressa* Silvestri 1948a:4, 12; Silvestri 1949:60; Paclt 1957:73.

Burmjapyx neotropicalis progressus: Paclt 1957:73 (n. comb.; n. status).

Type-locality.—Mons Alegre [=Monte Alegre], [Estado de São Paulo], Brazil [=Brasil] (?IEAUN).

Other record.—BRASIL: *São Paulo*: Campos de [=do] Jordão.

Comment.—This “variety” was taken from an altitude of 1600 m at Campos do Jordão.

Austrjapyx parvulus Silvestri

Austrjapyx parvulus Silvestri 1948a:4, 15, 16, 18, fig. IX(1-7); Silvestri 1949:46; Pagés 1952a:355; Paclt 1957:73; Smith and González 1964:160, 162.

Burmjapyx parvulus: Paclt 1957:73 (n. comb.).

Type-locality.—Villa Encarnación, Paraguay (?IEAUN).

Comment.—This species, known only from the holotype female, was collected from humus.

Austrjapyx peluffoi Silvestri

Austrjapyx peluffoi Silvestri 1948a:11, 12, 13, 14, figs. VI(1-7), VII; Silvestri 1949:46; Pagés 1952a:355; Paclt 1957:73; Smith and González 1964:160.

Burmjapyx peluffoi: Paclt 1957:73 (n. comb.).

Type-locality.—La Sierra, Uruguay (?IEAUN).

Comment.—This species, known only from the holotype of undetermined sex, was collected from humus.

Austrjapyx rochalimai Silvestri

Austrjapyx rochalimai Silvestri 1948:4, 19, 20, 21, 22, figs. XII(1-7), XIII; Silvestri 1949:46; Paclt 1957:74; Smith and González 1964:160, 161.

Burmjapyx rochalimai: Paclt 1957:74 (n. comb.).

Type-locality.—Curytiba [=Curitiba], [Estado do] Paraná, Brazil [=Brasil] (?IEAUN).

Comment.—This species is known only from the holotype male.

Austrjapyx teutoniuss Smith and González

Austrjapyx teutoniuss Smith and González 1964:159, 161-162, 163, 164, figs. 3-6, 9, 11.

Type-locality.—Nova Teutônia, [Estado de Santa Catarina], Brazil [=Brasil], at an altitude of 400 meters (CAS).

Comment.—This species is known from four stage II and one stage V(?) males, six stage II, three stage II, and one stage V(?) females.

Austrjapyx travassosi Silvestri

Austrjapyx travassosi Silvestri 1948a:4, 5, 6, 7, 8, 9, figs. I(1-10), II; Pagés 1951:24; Paclt 1957:70, 74; Smith and González 1964:159, 160, 161.

Austrjapyx travassosi: Silvestri 1949:46 (lapsus calami).

Burmjapyx travassosi: Paclt 1957:74 (n. comb.).

Type-locality.—Corcovado, [Estado do] Rio de Janeiro, Brazil [=Brasil] (?IEAUN).

Other record.—BRASIL: *São Paulo*: Leme.

Comment.—This species, collected from humus, is known from the holotype of undetermined sex, three other presumed adult specimens, and a stage II larva.

Austrjapyx travassosi Silvestri var. *regressa* Silvestri

Austrjapyx travassosi Silvestri var. *regressa* Silvestri 1948a:4, 10; Silvestri 1949:46; Paclt 1957:74.

Burmjapyx travassosi regressus: Paclt 1957:74 (n. comb.; n. status).

Type-locality.—Maginhos [=Manguinhos], Rio de Janeiro, Brazil [=Brasil] (?IEAUN).

Other record.—BRASIL: *Rio de Janeiro*: Saco de São Francisco.

Comment.—This variety, known from two specimens, may represent a distinct species.

Genus *Chiljapyx* Smith

Chiljapyx Smith 1962b:284.

Type-species.—*Chiljapyx caltagironei* Smith 1962b.

Comment.—This monotypic genus is most closely related to the genera *Hecajapyx* Smith and *Occasjapyx* Silvestri, both of which occur only in California, U.S.A.

Chiljapyx caltagironei Smith

Chiljapyx caltagironei Smith 1962b:273, 276, 280, 284, 285–287, figs. 3, 9, 17; González and Smith 1964:35, 44.

Type-locality.—Olmué, near Limache, [Provincia de Valparaiso], Chile (CAS).

Other records.—CHILE: *O'Higgins*: [Las] Palmas de Cocalán; *Santiago*: Aculeo (400 m); *Valparaiso*: Hacienda [de] La Palma; Jardín Botánico Nacional, Viña del Mar; Quebrada El Soldado, El Cobre; Quillota: Cerro El Quisco.

Comment.—This species is known from 118 specimens taken at elevations from 400 to 900 m. It has been found under stones and in humus and soil at depths of 16 inches, 20 cm, and 40 cm.

Genus *Hapljapyx* Silvestri

Hapljapyx Silvestri 1948a:30; Smith and González 1964:159, 160, 161, 162.

Type-species.—*Hapljapyx lopesti* Silvestri 1948a.

Comment.—This genus is known only from Paraguay, Brazil, and Argentina. Smith and González (1964) speculate that it is a synonym of *Austrjapyx*.

Haplapyx bertonii Silvestri

Haplapyx bertonii Silvestri 1948a:4, 34, 35, 37, figs. XXVI(1-6), XXVII; Silvestri 1949:49; Paclt 1957:71; Smith and González 1964:160.

Burmjapyx bertonii: Paclt 1957:71 (n. comb.).

Type-locality.—Paraguay: Asunción (?IEAUN).

Comment.—This species, known only from the holotype of undetermined sex, was collected from humus.

Haplapyx carinii Silvestri

Haplapyx carinii Silvestri 1948a:4, 40, 41, 42, 43, figs. XXXIII(1-9), XXXIV; Silvestri 1949:49; Paclt 1957:71; Smith and González 1964:160.

Burmjapyx carinii: Paclt 1957:71 (n. comb.).

Type-locality.—Brazil [=Brasil]: Corumbá ([Estado de] Matto [=Mato] Grosso) (?IEAUN).

Comment.—This species is represented by the holotype male and an immature specimen.

Haplapyx demadridi Silvestri

Haplapyx demadridi Silvestri 1948a:4, 36, 37, 39, figs. XXVIII(1-6), XXIX; Silvestri 1949:49; Paclt 1957:71; Smith and González 1964:160.

Burmjapyx demadridi: Paclt 1957:71 (n. comb.).

Type-locality.—Argentina: S[anta] Ana ([Provincia de] Misiones) (?IEAUN).

Comment.—This species, known only from the holotype female, was collected from humus.

Haplapyx distinctellus Silvestri

Haplapyx distinctellus Silvestri 1948a:4, 42, 43, 45, fig. XXXV(1-8); Silvestri 1949:50; Paclt 1957:71; Smith and González 1964:160, 162.

Burmjapyx distinctellus: Paclt 1957:71 (n. comb.).

Type-locality.—Paraguay: Villa Rica [=Villarrica] (?IEAUN).

Comment.—This species, known only from the holotype male, was collected in humus.

Haplapyx lizeri Silvestri

Haplapyx lizeri Silvestri 1948a:4, 37, 38, 39, fig. XXX(1-9); Silvestri 1949:50; Condé and Pagés 1950:76; Paclt 1957:72; Smith and González 1964:160.

Burmjapyx lizeri: Paclt 1957:72 (n. comb.).

Type-locality.—Argentina: S[anta] Ana ([Provincia de] Misiones) (?IEAUN).

Comment.—This species, known only from the holotype male, was collected from humus.

Haplapyx lopesi Silvestri

Haplapyx lopesi Silvestri 1948a:4, 29, 30–31, 33, 37, figs. XXII(1–10), XXIII(1); Silvestri 1949:50; Paclt 1957:70, 72; Smith and González 1964:160, 162.

Haplapyx lopesi: Pagés, 1952a:361 (lapsus calami).

Burmjapyx lopesi: Paclt 1957:72 (n. comb.).

Type-locality.—Brazil [=Brasil]: [Estado de São Paulo]: Caçapava (?IEAUN).

Other records.—BRASIL: *Minas Gerais*: Figueira; *São Paulo*: Monte Alegre.

Comment.—This species is known only from the holotype of unknown sex, and one adult and one juvenile from each of the other localities.

Haplapyx lopesi Silvestri var. *robustior* Silvestri

Haplapyx lopesi Silvestri var. *robustior* Silvestri 1948a:29, 31, figs. XXII(11), XXIII(2).

Burmjapyx lopesi robustior: Paclt 1957:72 (n. comb.; n. status); Smith and González 1964:160.

Type-locality.—Brazil [=Brasil]: Saco de São Francisco, (Est[ado] do Rio [de Janeiro]) (?IEAUN).

Other record.—BRASIL: *Rio de Janeiro*: Maugaratiba [=Mangaratiba].

Comment.—This “variety” is known from an adult of uncertain sex and a stage III larva from the type-locality and from two larvae from Mangaratiba.

Haplapyx meyerii Silvestri

Haplapyx meyerii Silvestri 1948a:4, 39, 41, 43; Silvestri 1949:50; Paclt 1957:73; Smith and González 1964:160.

Haplapyx meyeri: Silvestri 1948a:38, 40, figs. XXXI(1–6), XXXII (lapsus calami).

Burmjapyx meyeri: Paclt 1957:73 (n. comb.).

Type-locality.—Brazil [=Brasil]: Cuyaba [=Cuiabá], ([Estado do] Matto [=Mato] Grosso) (?IEAUN).

Comment.—This species, known only from the holotype male, was collected in humus.

Hapljapyx oglobinii Silvestri

Hapljapyx oglobinii Silvestri 1948a:4, 31, 32, 33, 35, 37, fig. XXIV(1-10);
Silvestri 1949:50; Paclt 1957:73; Smith and González 1964:160.

Burmjapyx oglobini: Paclt 1957:73 (n. comb.; emended ending).

Type-locality.—Argentina: Loreto ([Provincia de] Misiones) (?IEAUN).

Comment.—This species, known only from the holotype male, was collected from humus.

Hapljapyx patagonicus (Silvestri)

Japyx patagonicus Silvestri 1902:215, 243, 248, figs. 19–20; Verhoeff 1903:
293; Kirby 1904:57; Silvestri 1948a:4, 47; Silvestri 1949:50, 61;
Paclt 1957:73.

Hapljapyx patagonicus: Silvestri 1948a:4, 46, 47, 49, fig. XXXVII(1-6)
(n. comb.; redescription); Silvestri 1949:50, 61; Paclt 1957:73; Smith
and González 1964:160.

Burmjapyx patagonicus: Paclt 1957:73 (n. comb.).

Austrjapyx patagonicus: Smith and González 1964:160, 161 (lapsus calami).

Type-locality.—Argentina: Porto [=Puerto] Pirámides ([Provincia de] Chubut) (?IEAUN).

Comment.—This species, known only from the holotype female, was collected from humus.

Hapljapyx platensis (Silvestri)

Japyx platensis Silvestri 1902:218, 244, 248, fig. 27; Verhoeff 1903:293;
Kirby 1904:57; Verhoeff 1904:100; Silvestri 1905b:642; Verhoeff
1923:35; Silvestri 1929:905; Kosaroff 1936:15; Silvestri 1948a:4, 45;
Silvestri 1949:61; Pagés 1951:46; Paclt 1957:73; Smith 1961:439.

Hapljapyx platensis: Silvestri 1948a:4, 44, 45, 47, fig. XXXVI(1-14) (n.
comb.; redescription); Silvestri 1949:50, 61; Condé and Pagés 1950:76;
Paclt 1957:73; Smith 1961:439; Smith and González 1964:160.

Burmjapyx platensis: Paclt 1957:73 (n. comb.).

Japyx sp.: Smith 1961:439.

Type-locality.—Argentina: Núñez (B[ueno]s Aires), [Distrito Federal] (?IEAUN).

Other records.—ARGENTINA: *Buenos Aires*: San Isidro; San Vicente; *Entre Ríos*: Federacion.

Comment.—This species was collected from humus; it is known from the holotype female and a first stage larva from the type-locality and from an undesignated number of specimens from the other localities.

Haplapyx wygodzinskyi Silvestri

Haplapyx wygodzinskyi Silvestri 1948a:4, 32, fig. XXV(1-7); Silvestri 1949:50; Paclt 1957:74; Smith and González 1964:160, 162.

Haplapyx wygodzinski: Silvestri 1948a:33 (lapsus calami); Paclt 1957:74.

Burmjapyx wygodzinskyi: Paclt 1957:74 (n. comb.).

Type-locality.—Paraguay: Villa Rica [=Villarrica] (?IEAUN).

Comment.—This species, known only from the holotype of unknown sex, was collected in humus.

Genus *Iapyx* Haliday

Iapyx Haliday 1864:441; Paclt 1957:59.

Dicellura Haliday 1865:62.

Japyx: Meinert 1865:413-420 (unjustified emendation).

Type-species.—Of *Iapyx*: *Iapyx solifugus* Haliday 1864; of *Dicellura*: *Dicellura solifugus* Haliday 1865.

Comment.—The genus *Iapyx* probably does not occur in the New World. The material listed below will almost certainly prove to belong to another genus when it is restudied.

“*Iapyx*” sp.

Japyx sp.: Strickland 1947:5.

Record.—TRINIDAD AND TOBAGO: *Trinidad Island*: Near the St. Augustine Cotton Experimental Station in the Northern Range.

Comment.—Specimens assigned to this genus were collected in association with *Parajapyx* sp. at a depth of 0-3 inches in litter and soil in a savannah plot.

Genus *Merojapyx* Silvestri

Merojapyx Silvestri 1948a:53.

Type-species.—*Merojapyx spegazzinii* Silvestri 1948a.

Comment.—This genus is known only from Chile and Argentina.

Merojapyx porteri Silvestri

Merojapyx porteri Silvestri 1948a:4, 52, 54, 55-56, figs. XLI(1-5), XLII; Silvestri 1949:66; Silvestri 1951:72-73, figs. III(1-5), IV; Paclt 1957:73; Smith 1962b:291.

Burmjapyx porteri: Paclt 1957:73 (n. comb.).

Type-locality.—Chile: Llai-Llai [=Llaillay] (Santiago) (?IEAUN).

Comment.—Smith (1962b) does not believe that this species belongs in *Merojapyx*, but does not indicate to what genus it should be transferred. The

type-locality, Llaillay, is listed by Silvestri (1948a) as being in Santiago, but probably is in Provincia de Valparaiso. This species is known only from a juvenile female.

Merojapyx riverosi Silvestri

Merojapyx riverosi Silvestri 1948a:4, 54, 56, fig. XLIII(1-6); Silvestri 1949:66; Silvestri 1951:72-75, fig. V(1-6); Pagés 1952a:354; Paclt 1957:74; Smith 1962b:291.

Burmjapyx riverosi: Paclt 1957:74 (n. comb.).

Type-locality.—Chile: [Provincia de Valparaiso]: Chorrillo [=Chorrillos] (?IEAUN).

Comment.—This species, known only from a juvenile male, was collected from humus. Smith (1962b) indicates that it probably does not belong in *Merojapyx*.

Merojapyx spegazzinii Silvestri

Merojapyx spegazzinii Silvestri 1948a:3, 4, 52, 53, 55, fig. XL(1-17); Pagés 1955:76; Paclt 1957:70, 74; Smith 1962b:291.

Merojapyx spegazzini: Silvestri 1949:66 (lapsus calami).

Burmjapyx spegazzinii: Paclt 1957:74 (n. comb.).

Type-locality.—Argentina: Santa Catalina [Provincia de] B[ueno]s Aires] (?IEAUN).

Other record.—ARGENTINA: *Buenos Aires*: Near Buenos Aires.

Comment.—This species is known from the holotype of undetermined sex and two juveniles.

Genus *Mixojapyx* Silvestri

Mixojapyx Silvestri 1933a:135-136; Silvestri 1948c:297.

Type-species.—*Japyx saussurei* Humbert 1868.

Comment.—This genus is widespread in North America, but *M. riggii* Silvestri is the only species reported from South America.

Mixojapyx riggii Silvestri

Mixojapyx riggii Silvestri 1948a: 4, 57, fig. XLVI(1-9); Silvestri 1949:68.

Myxojapyx riggii: Silvestri 1948a:59 (lapsus calami); Paclt 1957:74.

Mixojapyx riggi: Pagés 1952a:354 (lapsus calami).

Burmjapyx riggii: Paclt 1957:74 (n. comb.).

Type-locality.—Argentina: Posadas ([Provincia de] Miniones [=Misiones]) (?IEAUN).

Comment.—This species, known only from the holotype male and two

juveniles, was collected from humus. It is doubtful if this species is correctly placed in *Mixojapyx*.

Mixojapyx riggii Silvestri var. *paraguayensis* Silvestri

Mixojapyx riggii Silvestri var. *paraguayensis* Silvestri 1948a:59, 61 (lapsus calami); Paclt 1957:74.

Mixojapyx riggii Silvestri var. *paraguayensis*: Silvestri 1948a:4.

Mixojapyx rigii Silvestri var. *paraguayensis*: Silvestri 1948a:4 (lapsus calami).

Mixojapyx riggi Silvestri var. *paraguayensis*: Silvestri 1949:68 (lapsus calami).

Burmjapyx riggii paraguayensis: Paclt 1957:74 (n. comb.; n. status).

Type-locality.—Tucuru Pucu [=Tucurupucú], ([Departamento del] Alto Paraná), Paraguay (?IEAUN).

Comment.—This “variety” is known only from the holotype of undetermined sex. This is probably a distinct species incorrectly placed in *Mixojapyx*.

Genus *Nelsjapyx* Smith

Nelsjapyx Smith 1962b:282.

Type-species.—*Nelsjapyx hichinsi* Smith 1962b.

Comment.—This genus includes only the two Chilean species listed here.

Nelsjapyx hichinsi Smith

Nelsjapyx hichinsi Smith 1962b:273, 276, 280, 282–283, 284, figs. 6, 15; González and Smith 1964:35, 44.

Type-locality.—Jardín Botánico Nacional, Viña del Mar, [Provincia de Valparaiso], Chile (CAS).

Other records.—CHILE: *Santiago*: Quebrada La Plata, Estación Experimental Agronómica, Maipú.

Comment.—This species was described from 32 females and 25 paratype males collected in dry leaf mold. An additional female from Quebrada La Plata was collected at “30 cm depth, 60 m elevation, xerophytic plant cover of *Trichocereus chilensis* and *Trevoa trinervis*” (González and Smith 1964).

Nelsjapyx soldadi Smith

Nelsjapyx soldadi Smith 1962b:273, 276, 283–284, fig. 7; González and Smith 1964:35, 44.

Type-locality.—Quebrada El Soldado, El Cobre, Valparaiso Province, Chile (CAS).

Other records.—CHILE: *Aconcagua*: Zapallar, Cordillera de la Costa (700 m); *Coquimbo*: Hacienda Las Palmas.

Comment.—The type-collection included four females and one male

collected at a depth of 3 to 16 inches in loam soil. A stage II male from Zapallar was collected at a depth of 40 cm, while one female and two juveniles were taken at Hacienda Las Palmas.

Genus *Neojapyx* Silvestri

Neojapyx Silvestri 1933b:120.

Type-species.—*Neojapyx guianae* Silvestri 1933b.

Comment.—This genus is known only from Guyana, Venezuela, Ecuador, and Puerto Rico.

Neojapyx centralis (Silvestri)

Japyx centralis Silvestri 1902:222, 244, 249, fig. 36; Kirby 1904:57; Silvestri 1948a:74; Silvestri 1949:55; Paclt 1957:64.

Neojapyx centralis: Silvestri 1948a:73, 74, fig. LVIII(1-13) (n. comb.; redescription); Silvestri 1949:55, 68; Paclt 1957:64.

Dipljapyx centralis: Paclt 1957:64 (n. comb.).

Type-locality.—Venezuela: [Estado de Zulia]: La Moka [=Moca] (?IEAUN).

Comment.—This species is known only from the holotype of unknown sex.

Neojapyx guianae Silvestri

Neojapyx guianae Silvestri 1933b:120-122, fig. V(1-12); Rapp 1946:705; Silvestri 1948a:72; Silvestri 1949:68; Paclt 1957:59.

Japyx guianae: Paclt 1957:59 (n. comb.).

Type-locality.—British Guiana [=Guyana]: Canister Falls sul Demerara e Kurupukari sull-Essequibo (?IEAUN).

Comment.—This species is known only from the holotype male.

Neojapyx ortonedae Silvestri

Neojapyx ortonedae Silvestri 1948a:73, 74-75, fig. LIX(1-12); Silvestri 1949:68; Paclt 1957:60.

Japyx ortonedae: Paclt 1957:60 (n. comb.); Paclt 1977:115, 119-122, figs. 2-7 (redescription).

Type-locality.—Ecuador: Naranjito (Guayaquil).

Other records.—ECUADOR: Oriente, Archidona; Santo Domingo; Andes, from Quito de Santo Domingo.

Comment.—The holotype is of unknown sex. Paclt (1977) reports an additional 61 specimens from an altitude of 600 to 750 m in the other localities.

Neojapyx tropicalis Ewing and Fox

Neojapyx tropicalis Ewing and Fox 1942:298–299, pl. 34(figs. 9–10);
Silvestri 1949:68; Paclt 1957:60.

Japyx tropicalis: Paclt 1957:60 (n. comb.).

Type-locality.—Georgetown, British Guiana [=Guyana]. “Quarantine at Philadelphia, Pa. [=Pennsylvania, U.S.A.]” (USNM No. 55219).

Comment.—This species is known only from the holotype of unknown sex. It was taken from the soil of a potted palm taken at quarantine. The gut contents included parts of a mite of the family Parasitidae.

Genus *Penjapyx* Smith

Penjapyx Smith 1962b:289–290; González and Smith 1964:44 (key to species).

Type-species.—*Penjapyx altus* Smith 1962b.

Comment.—This genus is known only from the two Chilean species listed here.

Penjapyx altus Smith

Penjapyx altus Smith 1962b:273, 276, 280, 290–291, figs. 5, 14; González and Smith 1964:44.

Type-locality.—La Laguna, Cordillera de Coquimbo, Chile, 6,600 feet elevation (CAS).

Comment.—This species is known only from the holotype male.

Penjapyx castrii González and Smith

Penjapyx castrii González and Smith 1964:35, 38, 40, 43–44, pl. I(fig. 4), pl. II(figs. 8, 12).

Type-locality.—Los Andes, Province of Aconcagua, Chile (UC).

Comment.—This species is known only from the holotype female and a male.

Genus *Rossjapyx* Smith

Rossjapyx Smith 1962b:287.

Type-species.—*Rossjapyx australis* Smith 1962b.

Comment.—This genus includes only the two Chilean species listed here.

Rossjapyx anodus (Silvestri)

Japyx anodus Silvestri 1902:218–219, 244, 248, figs. 28–29; Verhoeff 1903:293; Kirby 1904:57; Silvestri 1905a:773, 774, 788–789, 804,

805, pl. 41 (figs. 55–61), pl. 42 (fig. 62) (redescription); Silvestri 1948a: 4, 49; Silvestri 1949:49, 54; Silvestri 1951:67; Paclt 1957:70.

Japyx anodus Silvestri, varietas: Silvestri 1905a:789; Silvestri 1948a:51 (= *Hapljapyx subanodus* Silvestri); Silvestri 1949:50; Silvestri 1951:70; Paclt 1957:70.

Iapyx anodus: Carpenter 1916:21.

Hapljapyx anodus: Silvestri 1948a:4, 48, 49, 51, fig. XXXVIII(1–14) (n. comb.; redescription); Silvestri 1949:49, 54; Silvestri 1951:67–69, fig. I(1–14); Paclt 1957:70; Smith 1962a:289; Smith and González 1964:160.

Hapljapyx subanodus Silvestri 1948a:4, 50, 51, 53, fig. XXXIX(1–11); Silvestri 1949:50; Silvestri 1951:70–72, fig. II(1–11); Paclt 1957:70; Smith 1962a:289 (syn. of *Rossjapyx anodus*); Smith and González 1964:160.

Burmjapyx anodus: Paclt 1957:70 (n. comb.).

Burmjapyx anodus subanodus: Paclt 1957:70 (n. comb.; n. status).

Burmjapyx anodus var.: Paclt 1957:70 (n. comb.).

Rossjapyx anodus: Smith 1962b:273, 289 (n. comb.).

Type-localities.—Of *Japyx anodus*: Chile: [Provincia de Cautín]: Temuco (?IEAUN); of *Hapljapyx subanodus*: Chile: [Provincia de Cautín]: Coipué (Villa Rica [=Villarrica]) (?IEAUN).

Comment.—This species is known from the two male holotypes, a female, and several immatures. It has been collected from humus.

Rossjapyx australis Smith

Rossjapyx australis Smith 1962b:273, 276, 280, 287–289, figs. 2, 8, 12, 16, 18; González and Smith 1964:35, 44.

Type-locality.—Mocopulli, [Provincia de] Chiloé, Chile (USNM).

Other records.—CHILE: *Chiloé*: Chiloé Island: Dalcahue; *Llanquihue*: Los Muermos; 8 mi. W Puerto Varas.

Comment.—This species is known from five females and two males.

Genus *Typhlolabia* Scudder

Typhlolabia Scudder 1876:300; González and Smith 1964:41 (declared *nomen oblitum*).

Teljapyx Silvestri 1948a:61; Silvestri 1951:77; Smith 1962b:278–279; González and Smith 1964:35–36, 42, 43.

Valpjapyx Smith 1962b:275, 277; González and Smith 1964:35 (syn. of *Teljapyx*).

Type-species.—Of *Typhlolabia*: *Forficula? larva* Philippi 1863; of *Teljapyx*: *Teljapyx riestrae* Silvestri 1948a; of *Valpjapyx*: *Valpjapyx botani* Smith 1962b.

Comment.—This genus is known only from Chile. González and Smith (1964) redescribed the holotype of *Forficula? larva* and considered it conspecific with species which they had placed in *Teljapyx*. Although the name *Typhlolabia* has seldom been used since its description, the action of González and Smith (1964) in declaring it a *nomen oblitum* does not appear justified, and I retain *Typhlolabia* for the species placed in this genus.

Typhlolabia sp. NEW COMBINATION

Teljapyx sp.: González 1964:116, 127, fig. 2.

Record.—CHILE: *Santiago*: Huelquén.

Comment.—This is a large species known only from a single specimen.

Typhlolabia bidentata (Schäffer) NEW COMBINATION

Japyx bidentatus Schäffer 1897:30–32, 43, 48, pl. (figs. 99–105); Skorikow 1900:324; Silvestri 1902:214–215, 243, 248, fig. 18 (redescription); Verhoeff 1903:273, 293; Kirby 1904:57; Silvestri 1905a:774, 789–790, pl. 42 (figs. 63–66); Ewing 1928:26, 29, 41, pl. 9 (fig. 26) (probable error for *Japyx bidens* Cook); Silvestri 1948a:3, 58; Silvestri 1949:54, 65; Silvestri 1951:75; Paclt 1957:71; González and Smith 1964:36.

Merojapyx bidentatus: Silvestri 1948a:58 (n. comb.; lapsus calami); Smith 1962b:291 (lapsus calami).

Merojapyx bidentatus: Silvestri 1948a:4, 56, 57, figs. XLIV(1–6), XLV (n. comb.; redescription); Silvestri 1951:72, 75–77, figs. VI(1–5), VII; Paclt 1957:71; Smith 1962b:291.

Burmjapyx bidentatus: Paclt 1957:71 (n. comb.).

Valpjapyx botani Smith 1962b:273, 276, 277–278, 280, figs. 4–13; González and Smith 1964:36 (syn. of *Teljapyx bidentatus*).

Teljapyx bidentatus: González and Smith 1964:35, 36, 43 (n. comb.).

Type-localities.—Of *Japyx bidentatus*: Valparaiso, Viña del Mar, Chile (?ZIM); of *Valpjapyx botani*: Jardín Botánico Nacional, near Viña del Mar, Chile (CAS).

Other record.—CHILE: *Santiago*: Aculeo.

Comment.—This species is known from five specimens, some of which were found in soil and humus.

Typhlolabia costala (González and Smith) NEW COMBINATION

Teljapyx costalus González and Smith 1964:35, 36, 38, 40, 42, 43, pl. I (figs. 3, 5), pl. II (fig. 10).

Type-locality.—Aculeo, Province of Santiago, Chile, 33° 50' S, 70° 56' W, in the Cordillera de la Costa at 450 meters elevation (UC).

Comment.—This species, known from the holotype male and one juvenile, was found under stones.

Typhlolabia hirsuta (González and Smith) NEW COMBINATION

Teljapyx hirsutus González and Smith 1964:35, 36, 37, 38, 39, 40, 41, 42, 43, pl. I(figs. 1, 7), pl. II(figs. 9, 13).

Type-locality.—[Las] Palmas de Cocalan, Province of O'Higgins, Chile, 34° 12' S, 71° 20' W (UC).

Comment.—This species, known from five females, three males, and two juveniles, was collected "under stones, in open forest of *Jubaea chilensis*, at 700–800 meters elevation."

Typhlolabia larva (Philippi)

Forficula? *larva* Philippi 1863:219–221; Scudder, 1876:300, 302; Kirby 1904:58; González and Smith 1964:39.

Typhlolabia larva: Scudder 1876:332 (n. comb.); Bormans and Marquet 1883:34–36; Bormans 1887:XCVI; Bormans and Kraus 1900:129, 142; Kirby 1904:58; González and Smith 1964:39.

Japyx larva: Bormans 1887:XCVI (n. comb.); González and Smith 1964:41. Larva Forficulae: Karsch 1887:154.

Iapyx larva: Kirby 1904:58.

Forficula larva: González and Smith 1964:36, 41.

Teljapyx larva: González and Smith 1964:35, 36, 39, 40, 41, 43, pl. I(figs. 2, 6), pl. II(figs. 11, 14) (n. comb.; redescription).

Type-locality.—Chile: Colchagua (UC).

Comment.—This species, known only from the holotype male, was originally described as an earwig (Dermaptera).

Typhlolabia megalocera (Silvestri) NEW COMBINATION

Japyx megalocerus Silvestri 1902:215–216, 244, 248, figs. 21–23; Verhoeff 1903:273, 293, 297; Kirby 1904:57; Silvestri 1905a:773, 774, 785, 786–787, 804, pl. 40(figs. 41–47), pl. 41(figs. 48–54) (redescription); Silvestri 1905b:641; Verhoeff 1923:44; Silvestri 1948a:4, 63; Silvestri 1949:59, 71; Silvestri 1951:80–82; Paclt 1957:66.

Japyx chilensis Verhoeff 1903:296–297, pl. I(fig. 7); Verhoeff 1904:63, 69, 102, 110, 113; Silvestri 1905a:773, 786 (syn. of *Japyx megalocerus*); Silvestri 1905b:641; Verhoeff 1923:44; Silvestri 1948a:63, 65; Silvestri 1949:55, 71–72; Silvestri 1951:80, 82; Paclt 1957:66; González and Smith 1964:36.

Teljapyx megalocerus: Silvestri 1948a:4, 62, 63, 64, 65, figs. XLIX(1–11), L(1–6) (n. comb.; redescription); Silvestri 1949:55, 71; Silvestri 1951:79–80, figs. X(1–11), XI(1–6); Paclt 1957:66; Smith 1962b:273, 281; González and Smith 1964:36.

Teljapyx chilensis: Paclt 1957:66.

Type-localities.—Of *Japyx megalocerus*: Chile: [Provincia de Concepción]: S[an] Vicente (Talcahuano) (?IEAUN); of *Japyx chilensis*: Tumbes [Provincia de Concepción], Chile; Plate (BZM).

Comment.—This species, known from three specimens, was found in humus. Smith (1962b) doubts that this species is placed in the correct genus.

Typhlolabia profunda (Smith) NEW COMBINATION

Teljapyx profundus Smith 1962b:273, 276, 279, 280, 281, 282, figs. 1, 10; González and Smith 1964:42.

Type-locality.—Quebrada El Soldado, El Cobre, Valparaiso Province, Chile (CAS).

Comment.—This species, known only from two females, was found in loam soil 12 to 24 inches deep.

Typhlolabia riestrae (Silvestri) NEW COMBINATION

Teljapyx riestrae Silvestri 1948a:4, 60, 61, 63, figs. XLVII(1-11), XLVIII; Silvestri 1949:72; Silvestri 1951:77-79, figs. VIII(1-11), IX; Paclt 1957:66; Smith 1962b:273, 281, 282; González and Smith 1964:36, 43.

Teljapyx riestrai: Paclt 1957:66 (emended ending).

Type-locality.—Chile: [Provincia de Cautín]: Temuco (?IEAUN).

Comment.—This species is known only from two adult and two immature specimens.

Typhlolabia talcae (Smith) NEW COMBINATION

Valpjapyx talcae Smith 1962b:273, 278, 280, fig. 11.

Teljapyx talcae: González and Smith 1964:36, 42, 43 (n. comb.).

Type-locality.—22 miles north of Talca, [Provincia de Talca], Chile (CAS).

Comment.—This species is known only from the holotype female and two juveniles.

Subfamily Evalljapyginae Silvestri

Evalljapyginae Silvestri 1948c:304.

Genus *Evalljapyx* Silvestri

Evalljapyx Silvestri 1911:75-76.

Type-species.—*Evalljapyx sonoranus* Silvestri 1911 (= *Japyx hubbardi* Cook, 1899).

Comment.—This genus is known throughout North America, Central America, and the West Indies. The species listed here is the only one reported from South America.

Evalljapyx leleuporum Paclt

Evalljapyx leleuporum Paclt 1977:115, 123-125, figs. 8-15.

Type-locality.—Ecuador continental, versant Ouest des Andes, forêt tropicale a Santo Domingo, altitude 600 m (ISB).

Comment.—This species, known only from the holotype female, was found in humus.

FAMILY DINJAPYGIDAE WOMERSLEY

Dinjapyginae Womersley 1939:62.

Dinjapygidae: González 1964:115-117 (n. status).

Genus *Dinjapyx* Silvestri

Dinjapyx Silvestri 1930:232-233; González 1964:121-122 (emended diagnosis).

Leipojapyx Smith 1959b:27-28, 30, 32; González 1964:121-122 (syn. of *Dinjapyx*).

Type-species.—Of *Dinjapyx*: *Dinjapyx barbatus* Silvestri 1930; of *Leipojapyx*: *Leipojapyx rossi* Smith 1959b.

Comment.—The family Dinjapygidae is monotypic and all species are known only from South America.

Dinjapyx barbatus Silvestri

Dinjapyx barbatus Silvestri 1930:232, 233-236, figs. I(1-6), II(1-6), III(1-12), IV(1-2); Rapp 1946:704; Silvestri 1948b:84; Silvestri 1949:48; Paclt 1957:85; Smith 1959b:27, 32; González 1964:119, 120.

Type-locality.—Perú: Urumbamba 9500 ft. alt. (?YU).

Comment.—This species is known only from the holotype male.

Dinjapyx manni Silvestri

Dinjapyx manni Silvestri 1948b:84-85, figs. III(1-14), IV; Silvestri 1949:48; Paclt 1957:86; Smith 1959b:27, 32; González 1964:118, 119, 122, 127.

Type-locality.—Espía (Bolivia) (?IEAUN).

Comment.—This species is known only from a male and a female.

Dinjapyx marcus Silvestri

Dinjapyx marcus Silvestri 1948b:80-84, figs. I(1-14), II(1-2); Marcus 1948a:15, 18-19, 22, fig. 4; Marcus 1948b:79; Marcus 1948c:66-72, figs. 1-6; Marcus 1948d:33, 35, fig. 5; Marcus 1949:45-46, fig. 2a-b; Silvestri 1949:48; Marcus 1950a:57-62, figs. 1-6; Marcus 1950b:81-

85, figs. 1-2; Marcus 1951a:83-106, figs. 1a-b, 2-3, 4a-c, 5-6, 7a-b, 8a-b, 9a-b, 10-11, 12a-c, 13a-c, 14a-b, 15, 16a-d, 17; Marcus 1951b: 107-114, figs. 2-7; Marcus 1956:226, 227, 228, 231, 232, 234, 243, 246, 252, figs. 1, 4, 9, 19, 33; Paclt 1957:7, 86, fig. 11; Smith 1959b: 27, 32; González 1964:113, 116, 118, 119, 120, 122, 127, 128, figs. 1a-b, 4, 11, 12, 17; Pagés 1976:690, 692.

Type-locality.—Bolivia, in regione Temporal [probably near Cochabamba] (?IEAUN).

Comment.—This species is among the better known of all iapygoids due to the detailed studies of its morphology and behavior by Marcus. It is abundant in the vicinity of Cochabamba, where it has been found under trash and in moist soil. It has been reported by Marcus (1948c; 1951a) to feed on moss and algae, but Smith (1959b) reported that most specimens he examined contained insect fragments, with ants predominating.

Dinjapyx michelbacheri (Smith)

Leipojapyx michelbacheri Smith 1959b:32; González 1964:113, 118, 120.

Dinjapyx michelbacheri: González 1964:122, 127, figs. 6, 8, 10 (n. comb.).

Type-locality.—20 miles south of Cuzco [Provincia de Cuzco], Perú (CAS).

Comment.—This species is known from one juvenile female and four adult females. Smith (1959b) reports that ants were found in the abdomen.

Dinjapyx rossi (Smith)

Leipojapyx rossi Smith 1959b:27, 28, 29, 30-31, 32, figs. 1-11; González 1964:113, 118, 120.

Dinjapyx rossi: González 1964:123, 127, 128, figs. 5, 9, 16 (n. comb.).

Type-locality.—40 miles east of Abancay [Provincia de Apurímac], Perú (CAS).

Comment.—This species is known from six females, six males, two juvenile females, and one juvenile male. It appears to feed on ants.

Dinjapyx weyrauchi González

Dinjapyx weyrauchi González 1964:122, 123-124, 127, 128, figs. 7, 14, 15, 18, 19, 20.

Type-locality.—Atiquipa, al norte de Chala, [Provincia de Ariquipa], Perú (UC).

Comment.—This species is known from two males and two females.

FAMILY PARAJAPYGIDAE WOMERSLEY

Parajapyginae Womersley 1939:61, 64.

Parajapygidae: Pagés 1959:2, 22 (n. status).

Genus *Parajapyx* Silvestri

Parajapyx Silvestri 1903:6; Pagés 1952b:64–65.

Hemijapyx Ewing 1941:69–70; Pagés 1952b:66–67 (syn. of *Parajapyx*).

Type-species.—Of *Parajapyx*: *Japyx isabellae* Grassi 1886; of *Hemijapyx*: *Hemijapyx unidentatus* Ewing 1941.

Comment.—This genus is essentially cosmopolitan in distribution, with some species apparently having been spread by commerce.

Undetermined Subgenus

Parajapyx sp.

Parajapyx sp.: Strickland 1947:3, 5.

Record.—TRINIDAD AND TOBAGO: *Trinidad Island*: Near St. Augustine Cotton Experimental Station in foothills of Northern Range.

Comment.—Seven specimens of this genus were collected from 0–3 inches in litter and soil of a cacao plot. Many other specimens were obtained from a savannah plot.

Subgenus *Parajapyx* Silvestri

Parajapyx (*Parajapyx*): Pagés 1952b:64–65 (n. status).

Comment.—This subgenus is apparently cosmopolitan in distribution.

Parajapyx (*Parajapyx*) *isabellae* (Grassi)

Japyx isabellae Grassi 1886:11, tab. 2, figs. 18–19.

Parajapyx isabellae: Silvestri 1903:6 (n. comb.); Silvestri 1948a:4, 5, 66, 67, 69, fig. LIII(1–3); Smith 1962b:273; Paclt 1977:115, 116, 125.

Parajapyx (*Parajapyx*) *isabellae*: Pagés 1962b:64.

Japyx minimus Swenk 1903:131–132, unnumbered fig.

Parajapyx minimus: Silvestri 1905a:785 (n. comb.); Silvestri 1928:79 (syn. of *Parajapyx isabellae*).

Type-localities.—Of *Japyx isabellae*: Catania, Italy; of *Japyx minimus*: Malcolm (Lancaster County), Crab Orchard (Gage County), and Adams (Gage County), Nebraska [U.S.A.].

South American records.—ARGENTINA: *Misiones*: Posadas. CHILE: *Valparaiso*: La Cruz; Fundo Santa Teresa, Quillota. ECUADOR: *Archipel de Colón*: Isla de Santa Cruz: versant Sud-Est (200 m.).

Comment.—The above synonymy includes only primary references and

references of this species in South America. The type-locality of *J. minimus* was not given precisely. Smith (1962b) reported the presence of two specimens in irrigated soils in avocado orchards at La Cruz, Chile; and of five specimens from Fundo Santa Teresa, Chile. Paclt (1977) reports two specimens from humus in *Scalesia* forest on Isla de Santa Cruz. This species is known from many parts of the world and is apparently spread by commerce; it feeds on plant roots.

Subgenus *Grassjapyx* Pagés

Parajapyx (Grassjapyx) Pagés 1952b:64–65.

Type-species.—*Parajapyx grassianus* Silvestri 1911.

Comment.—This subgenus is probably worldwide in distribution.

Parajapyx (Grassjapyx) sp. cf. *brasilianus* Silvestri

Parajapyx (Grassjapyx) sp. cf. *brasilianus* Silvestri: Pagés 1959:71.

Record.—BRASIL: *Pernambuco*: Municipio de Serinhaém: near Pernambuco.

Comment.—One specimen was obtained from detritus.

Parajapyx (Grassjapyx) bahianus Silvestri

Parajapyx bahianus Silvestri 1948a:4, 68, 69, fig. LV(1–3); Silvestri 1949:40; Paclt 1957:88; Pagés 1975:524.

Parajapyx (Grassjapyx) bahianus: Pagés 1952b:65.

Type-locality.—Brasilia [=Brasil]: Bonfim (Estado [da] Bahia (?IEAUN).

Comment.—The two known specimens of this species were collected from humus.

Parajapyx (Grassjapyx) brasilianus Silvestri

Parajapyx brasilianus Silvestri 1948a:4, 70, 71, fig. LVI(1–6); Silvestri 1949:40; Paclt 1957:88.

Parajapyx (Grassjapyx) brasilianus: Pagés 1952b:65.

Parajapyx brasiliensis: Pagés 1975:524 (lapsus calami).

Type-locality.—Brasilia [=Brasil]: Cuyaba [=Cuiabá] ([Estado de] Matto [=Mato] Grosso) (?IEAUN).

Comment.—The three known specimens of this species were collected from humus.

Parajapyx (Grassjapyx) brasilianus Silvestri var. *meridionalis* Silvestri

Parajapyx brasilianus Silvestri var. *meridionalis* Silvestri 1948a:4, 70, 71, fig. LVI(11–13); Silvestri 1949:40; Paclt 1957:88.

Parajapyx (Grassjapyx) brasiliensis Silvestri var. *meridionalis*: Pagés 1952b: 65.

Parajapyx brasiliensis meridionalis: Paclt 1957:88 (n. status).

Parajapyx brasiliensis Silvestri var. *meridionalis*: Pagés 1975:524 (lapsus calami).

Type-locality.—Brasilia [=Brasil]: S. Ana [=Santana] ([Estado do] Rio Grande do Sul) (?IEAUN).

Comment.—This “variety,” known only from one specimen, was collected from humus.

Parajapyx (Grassjapyx) brasiliensis Silvestri var. *orientalis* Silvestri

Parajapyx brasiliensis Silvestri var. *orientalis* Silvestri 1948a:4, 70, 71, fig. LVI(7–10); Silvestri 1949:40; Paclt 1957:88.

Parajapyx (Grassjapyx) brasiliensis Silvestri var. *orientalis*: Pagés 1952b:65.

Parajapyx brasiliensis orientalis: Paclt 1957:88 (n. status).

Parajapyx brasiliensis Silvestri var. *orientalis*: Pagés 1975:524 (lapsus calami).

Type-locality.—Brasilia [=Brasil]: Corcovado ([Estado do] Rio de Janeiro) (?IEAUN).

Comment.—This “variety,” known only from one specimen, was collected in humus.

Parajapyx (Grassjapyx) grassianus Silvestri var. *paranensis* Silvestri

Parajapyx grassianus Silvestri var. *paranensis* Silvestri 1948a:4, 68, 69, fig. LIV(1–3); Silvestri 1949:41; Paclt 1957:89; Pagés 1975:524.

Parajapyx (Grassjapyx) grassianus Silvestri var. *paranensis*: Pagés 1952b:64.

Parajapyx paranensis: Paclt 1957:89 (n. status).

Type-locality.—Argentina: Posadas ([Provincia de] Misiones) (?IEAUN).

Comment.—This “variety” is known only from one specimen; it probably should be considered a valid species. *P. (G.) grassianus* is known otherwise from Veracruz, México.

LOCALITY LIST

Argentina: *Provalljapyx lanei*, *Austrjapyx aberrans*, *A. degradans*, *A. descolei*, *A. lilloi*, *A. neotropicalis*, *Hapljapyx demadridi*, *H. lizeri*, *H. oglobinii*, *H. patagonicus*, *H. platensis*, *Merojapyx spegazzinii*, *Mixojapyx riggii*, *Parajapyx (Parajapyx) isabellae*, *P. (Grassjapyx) grassianus* var. *paranensis*.

Bolivia: *Dinjapyx manni*, *D. marcusii*.

Brasil: *Provalljapyx brasiliensis*, *P. lanei*, *Austrjapyx auturoii*, *A. auturoii* var. *paranensis*, *A. bitancourtii*, *A. chapecoi*, *A. neotropicalis*, *A. neotropicalis* var. *progressa*, *A. rochalimai*, *A. teutoniensis*, *A. travassosi*, *A. travassosi* var. *regressa*, *Hapljapyx carinii*, *H. lopei*, *H. lopei* var. *robustior*, *H. meyerii*, *Parajapyx (Grassjapyx) sp. cf. brasilianus*, *P. (G.) bahianus*, *P. (G.) brasilianus*, *P. (G.) brasilianus* var. *meridionalis*, *P. (G.) brasilianus* var. *orientalis*.

Chile: *Chiljapyx caltagironei*, *Merojapyx porteri*, *M. riverosi*, *Nelsjapyx hichinsi*, *N. soldadi*, *Penjapyx altus*, *P. castrii*, *Rossjapyx anodus*, *R. australis*, *Typhlolabia sp.*, *T. bidentata*, *T. costala*, *T. hirsuta*, *T. larva*, *T. megalocera*, *T. profunda*, *T. riestrae*, *T. talcae*, *Parajapyx (Parajapyx) isabellae*.

Ecuador: *Neojapyx ortoneda*, *Evalljapyx leleuporum*, *Parajapyx (Parajapyx) isabellae*.

Guyana: *Neojapyx guianae*, *N. tropicalis*.

Paraguay: *Austrjapyx barberoi*, *A. neotropicalis*, *A. parvulus*, *Hapljapyx bertonii*, *H. distinctellus*, *H. wygodzinskyi*, *Mixojapyx riggii* var. *paraguayensis*.

Perú: *Dinjapyx barbatus*, *D. michelbacheri*, *D. rossi*, *D. weyrauchi*.

Trinidad and Tobago: "*Iapyx*" sp., *Parajapyx sp.*

Uruguay: *Austrjapyx neotropicalis*, *A. peluffoi*.

Venezuela: *Neojapyx centralis*.

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