A checklist of scorpions (Arachnida) in the collection of the Forschungsinstitut und Naturmuseum Senckenberg, Frankfurt am Main, Germany

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Abstract

A total of 2941 specimens of scorpions deposited in the collection is determined and revised. The collection contains 229 species, 62 genera, and 14 families. It includes types of 26 species and subspecies, of which 13 are valid. Heterometrus petersi luzonensis Couzijn, 1981 is synonymized with Heterometrus (Javanimetrus) cyaneus (C.L. Koch, 1836). Revision of specimens identified by Roewer makes doubtful the occurrences of Parabuthus capensis (Ehrenberg, 1831) 1831) in Parabuthus granulatus (Ehrenberg, in Namibia. androcottoides (Karsch, 1879) in Venezuela, Tityus carinatoides Mello-Leitão, 1945 in Brazil, Tityus lutzi Giltay, 1928 in Argentina, Tityus magnimanus Pocock, 1897 in Venezuela, Opisthacanthus asper (Peters, 1862) in Tanzania, Heterometrus liurus (Pocock, 1897) in Sri Lanka, and Pandinus militaris Pocock, 1900 in Sudan. Comparison of types leads to the conclusion that Pandinus militaris Pocock, 1900 is a junior synonym of Pandinus cavimanus (Pocock, 1888). The occurrences of Compsobuthus matthiesseni (Birula, 1905) in Syria and Paruroctonus becki (Gertsch & Allred, 1965) in Idaho (USA) are recorded for the first time.

History of the collection

The scorpions assembled at the Senckenberg Museum form a collection of worldwide importance. In the 19th century it was worked on by the renowned German arachnologists F. Karsch and K. Kraepelin, and in the 20th century it received types of several species described by F. Werner and incorporated C. F. Roewer's collection. In 1943 Roewer published a checklist of all the specimens (see Discussion). The collection was studied by a number of well known arachnologists who identified specimens, revised certain species, and added more species. Among them were W. Bücherl, O. F. Francke, M. A. González-Sponga, R. Kinzelbach, B. H. Lamoral, W. R. Lourenço, G. Schmidt, and M. Vachon.

Material and methods

Specimen data are given as they appear on the original labels, with the current country name preceding or substituting for the old name, e. g. "Namibia" instead of "S.W.-Afrika". Unfortunately, some locality labels are difficult to read, which may have caused a few inaccuracies in their transcription. Certain label data have proven altogether undecipherable.

I revised the Senckenberg Museum collection between May 1996 and March 2000, when I received it in 27 shipments. Specimens were in alcohol. All examined specimens (except for some already well labeled holotypes and paratypes) have received labels in Ariel or Times New Roman font produced on a laser printer. Basic data are also often penciled on the reverse of the label, as permanency of laser print in alcohol cannot be trusted. The labels contain the generic and species name; author and year of the original description; whether I have determined (det.) or revised (rev.) the specimen; and my name plus the year of the examination.

Abbreviations are as follows:

cf.: confer, conferred im.: immature S: specimen dsg.: designated juv.: juvenile syn.: synonymized

List of type material in the collection of the Forschungsinstitut und Naturmuseum Senckenberg

Details concerning localities and specimens are given below in the Results.

Buthidae C. L. Koch, 1837

Ananteris columbiana Lourenço, 1991 (holotype, allotype, and paratypes)

Caribetityus elii (Armas & Marcano Fondeur, 1992) (paratypes)

Hottentotta rugiscutis (Pocock, 1897)

= Hemibuthus kraepelini Roewer, 1943 (lectotype and paralectotypes) (dsg. and syn. by Kovařík, 1999: 291)

Isometrus (Isometrus) maculatus (De Geer, 1778)

= Isometrus madagassus Roewer, 1943 (holotype) (syn. by Lourenço, 1996: 444)

Lychas mucronatus (Fabricius, 1798)

= Lychas mentaweius Roewer, 1943 (holotype) (syn. by Kovařík, 1997: 342)

Microtityus paucidentatus Armas & Marcano Fondeur, 1992 (paratypes)

Orthochiroides vachoni Kovařík, 1998 (paratype).

Orthochirus luteipes Roewer, 1943 (lectotype and paralectotype) (dsg. by Kovařík, 1996: 180)

Rhopalurus agamemnon (C. L. Koch, 1840)

= Rhopalurus iglesiasi Werner, 1927 (holotype and paratypes) (syn. by Lucas & Bücherl, 1972: 262)

Tityus clathratus C. L. Koch, 1843

- = Tityus fahrenholtzi Roewer, 1943 (holotype and paratypes) (syn. by Lourenço, 1984: 357) Tityus costatus (Karsch, 1879)
- = Tityus bresslaui Werner, 1927 (holotype) (syn. by Mello-Leitão, 1945: 373)
- = Tityus novateutoniae Roewer, 1943 (holotype) (syn. by Lourenço & Eickstedt, 1988: 8)

Tityus tayrona Lourenço, 1991 (holotype and paratypes)

Diplocentridae Karsch, 1880

Didymocentrus krausi Francke, 1978 (holotype)

Ischnuridae Simon, 1879

Hadogenes tityrus (Simon, 1888)

= Hadogenes bifossulatus Roewer, 1943 (holotype) (syn. by Newlands, 1980: 72; Kovařík, 1998: 133)

Hadogenes troglodytes (Peters, 1862)

= Hadogenes troglodytes letabensis Werner, 1933 (holotype and paratypes) (syn. by Newlands, 1980: 124; Kovařík, 1998: 133)

Iuridae Thorell, 1876

Iurus dufoureius (Brullé, 1832)

= Chaerilomma dekanum Roewer, 1943 (holotype) (syn. by Vachon, 1966: 453)

Scorpionidae Latreille, 1802

Heterometrus (Chersonesometrus) fastigiosus Couzijn, 1981 (holotype and paratypes)

Heterometrus (Chersonesometrus) granulomanus Couzijn, 1981 (paratype)

Heterometrus (Chersonesometrus) pelekomanus Couzijn, 1981 (holotype and paratypes)

Heterometrus (Heterometrus) liophysa laevifrons Roewer, 1943 (holotype and paratype)

Heterometrus (Heterometrus) longimanus belitungensis Couzijn, 1981 (paratypes)

Heterometrus (Javanimetrus) cyaneus (C. L. Koch, 1836)

= Heterometrus petersi luzonensis Couzijn, 1981 (holotype and paratype) syn. n.

Opisthophthalmus schultzei Kraepelin, 1908

= Opisthophthalmus laevicauda Roewer, 1943 (holotype) (syn. by Lamoral, 1979: 745)

Scorpiopidae Kraepelin, 1905

Scorpiops dastychi Kovařík, 2000 (paratype)

Urodacidae Pocock, 1893

Urodacus novaehollandiae Peters, 1862

= Urodacus marianus Roewer, 1943 (holotype) (syn. by L. E. Koch, 1977: 194)

Results

Bothriuridae Simon, 1880

Bothriuridae sp.

Argentina, Prov. Mendoza, Cordillere, 1S (damaged), 29.XII.1913, leg. H. Gehrt-Borm.

Bothriurus araguayae Vellard, 1934

Brazil, Rio, Fischerdörrer, Piratininge, Itaipu, u. Itacoatiara, IX.1961-II.1963, 1Q, leg. Bücherl, No. 24484.

Bothriurus bonariensis (C. L. Koch, 1842)

Brazil, Rio Grande do Sul, 1875, 3\$\displaystyle{\displays

Bothriurus burmeisteri Kraepelin, 1894

Argentina, (Patagonien), Santa Cruz, 19647225juv., leg. Dade, No. 8857.

Bothriurus cf. vittatus (Guérin-Méneville, 1838)

Argentina, Bahia Blanca, 19, No. 6748/155.

Bothriurus sp.

Argentina, Prov. San Luís, 12, 29.XII.1913, leg. H. Gehrt-Borm.

Brachistosternus (Brachistosternus) ehrenbergi (Gervais, 1841)

Peru, $1\mathring{O}1$, No. 8058/173; Pacasmayo, 1889, 1, leg. M. Bamberger, No. 5185; S. Paita, 19.XI.1950, $1\mathring{O}$, leg. Koepcke, No. 8778; Luriu b. Lima, 23.II.1951, 1, leg. Koepcke, No. 8781; La Ventanilla b. Lima, 15.III.1951, 1, leg. Koepcke, No. 8780; Hda. Villa b. Lima,

1.IV.1951, 1, leg. Koepcke, No. 8782; Lomas v. Atocongo b. Lima, 200 m, 2.VII.1951, 1, leg. Koepcke, No. 8790; La Chira b. Lima, 14.VII.1951, 1, 1, leg. Koepcke, No. 8783; Lomas v. Lachay b. Chancay, 25.X.1951, 1, leg. Koepcke, No. 8785; Lomas v. Atocongo b. Lima, 28.X.1951, 2, leg. Koepcke, No. 8786; Lomas v. Atocongo b. Lima, 150 m, 4.XI.1951, 1juv., leg. Koepcke, No. 8784; Lomas v. Atocongo b. Lima, 400 m, 20.XI.1951, 3, leg. Koepcke, No. 8787; b. Arquipa, wesk. Andenseita, 2200 m, 15.II.1953, leg. Koepcke, 1juv., No. 8788, 1, No. 8789.

Brachistosternus (Leptisternus) intermedius Lönnberg, 1902

Bolivia, Rio Pilcomayo, San Francisco de Villa Montes, 32, 1927, leg. F. Berg.

Brachistosternus (Ministernus) ferrugineus (Thorell, 1876)

Paraguay, San Bernardino, 1juv., 31.XII.1910, leg. A. Fischer.

Cercophonius sulcatus Kraepelin, 1908

Australia, Tingle, 13, 11.II.1957, leg. Felten.

Orobothriurus alticola (Pocock, 1900)

Chile, Valparaiso, 1♀, 1933, leg. K. Rühle; Hochkordillere bei Lo Valdés, 2000-3000 m, 2♀1juv., 1933, leg. K. Rühle; Valparaiso, 1♂1♀, leg. Wistormayer, No. 6747/154; Santiago, 1♂, leg. Wistormayer, No. 8850/192.

Orobothriurus cf. alticola (Pocock, 1900)

?, Küsten Kordillere, Raum, Limache and Ocoatal, 3♂5Q2juv..

Orobothriurus cf. dumayi (Cekalovic, 1974)

Argentina, Comodore Rivadavia, 12, 1933, leg. S. König.

Orobothriurus sp.

Argentina, Río Negro, El Sillon, 13. ?, Rom, Palatin, 13 (damaged), VI.1906, leg. S. G. von Arand.

Orobothriurus sp.

Peru, Hda Llaguán (07°40'S, 78°40'W), 2660, 1♂, 14.XII.1952, leg. Koepcke, No. 8777; b. Jauja, 3500 m, 1juv., 3.VIII.1953, leg. Koepcke, No. 8774; bei Campanillaya, 2600 m, 6.VIII.1953, 2♀2im., leg. Koepcke, No. 8775; Lag. Alacocha, b. Junín-see, 4300, 8.VIII.1953, 1♂3im., leg. Koepcke, No, 8776;

Orobothriurus sp.

Peru, Chilca u. Mala, s. Lima, 12.II.1951, 1juv., leg. Koepcke, No. 8779.

Phoniocercus pictus Pocock, 1893

Chile, Valdivia, 1♀, No. 8056/171.

Thestylus glasioui (Bertkau, 1880)

Brazil, Petropolis, 1 (damaged); Petropolis, 2 \circlearrowleft 1 \circlearrowleft , No. 5126; Gorduras (Minas Gerais), 4.X.1913, 1 \circlearrowleft , leg. E. Bresslau, No. 5127.

Timogenes elegans (Mello-Leitão, 1931)

Bolivia, Rio Pilcomayo, San Francisco de Villa Montes, 291juv., 1927, leg. F. Berg.

Buthidae C. L. Koch, 1837

Ananteris columbiana Lourenço, 1991

Colombia, Dept. Magdalena, Bahía de Guairaca, Tayrona Park, VI.1985, 1juv. (paratype), No. 37017, 12.VII.1985, 1♀ (paratype), 26.VII.1985, 1♀ (allotype – labeled as *Ananteris ashmolei*) 1juv. (paratype), No. 37015, No. 37010, 6.XI.1985, 1♂ (holotype), No. 37016, leg. H.-G. Müller; Dept. Magdalena, Villa Culebra bei Bonda, XI.-XII.1985, 1♀ (paratype), No. 37018, leg. H.-G. Müller.

Ananteris cussinii Borelli, 1910

Venezuela, Maracay, 1934, 4313, No. 6653/61, rev. Maury (1971) and Vachon (1970-1976 - VA 1369).

Androctonus amoreuxi (Audouin, 1825)

Algeria, Djanet, Adjua-Houlleire, 1juv., No. 13023. Egypt, Cairo, 3juv., No. 6277/56; Cairo, $1 \circlearrowleft$, No. 6657/64; Mohila [Maybe: Mehalla], 1827, 2juv., leg. E. Rüppell, No. 30645; 1828, $1 \circlearrowleft$, leg. E. Rüppell, No. 5262; Cairo, 23.V.1914, $1 \circlearrowleft$, leg. Bannwarth, No. 5261; 1928, $1 \circlearrowleft$, leg. E. Rüppell, No. 5212; Djebel Genaifa, 1947, $1 \circlearrowleft$, leg. Konieczny, No. 5383. Libya, 24 km S Bu Ngem, 14.IX.1961, 1juv., leg. Bruer. Sudan, Wadi Halfa, $1 \circlearrowleft$, No. 6659/66. ?, N. Afrika, $2 \circlearrowleft$, No. 5271; Nubia, 1823, $1 \circlearrowleft 2 \circlearrowleft$, leg. E. Rüppell, Nos 5282 and 5305; $1 \circlearrowleft$ no locality.

Androctonus australis (Linnaeus, 1758)

Algeria, bei Oran, 1♂1juv., No. 6658/65. Egypt, 3♂3♀4im., leg. E. Rüppell, No. 5309. Libya, 1942, 1♂, leg. Stürmer, No. 5385. Tunisia, Sfax, 1913, 1♀1juv., leg. Sabich, No. 6656/63; SW Sidi-Ben-Said u Hammamlit-Soliman, 1941, 1♂1juv., leg. Wollenberg, No.

5379. ?, Sahara, 1, leg. Beverförde, No. 5259; Afrika, 1885, 2, 1, 1, leg. L. Heyden, No. 5311; 1, 4, 4, leg. No. 5310; 7, 9, 1, lubien, 1823, 1, leg. E. Rüppell, No. 5273; Golf v. Boruba (?), IV.1957, 1, leg. Dr. Kalta; 3, 2, 2, lubien, 1823, 1, locality; 1, no locality, No. 24514.

Androctonus bicolor Ehrenberg, 1828

Algeria, Figig-Oase, $1\mathcappe$, No. 6661/68. Egypt, Cairo, $1\mathcappe$., 1826, leg. E. Rüppell, No. 5283. Israel, Haiffa, $2\mathcappe$, 1880, leg. H. Simon, No. 5245; Haiffa, 1886, 1juv., leg. H. Simon, No. 5270; Jaffa, 17.I.1913, $1\mathcappe$, leg. Aharoni, No. 5269, Umgebung v. Jerusalem, $1\mathcappe$, leg. Verechson, No. 13026. Libya, 1942, $1\mathcappe$, leg. Stürmer, No. 5386; $3\mathcappe$, 1958, leg. Brandt. Tunisia, oasa Tozeur, $1\mathcappe$, leg. F. Celo, No. 13025. ?, 1899, $1\mathcappe$, leg. Dönitz, No. 5258.

Androctonus crassicauda (Olivier, 1807)

Iran, Ahwaz, $1\mathcal{d}$, 1961, leg. Schubert, No. 12109/1. Israel, Zoo gestorben, $1\mathcal{Q}$. Saudi Arabia, 150 km ssö El Riyadh, 13.VI.1959, $3\mathcal{d}$, leg. Diehl, Nos 34542-3. Syria, Homs, $2\mathcal{d}$, No. 4980/24; Abou Hourejra a Euphrat, 1962, $1\mathcal{Q}$, leg. F. Celo, No. 13022; Nahr-al-Habur Area, 35°37'N 40°45'E, Tall Shaih Hamad, $1\mathcal{d}$ 2 \mathcal{Q} 3juv., 21.-24.IX.1988, TSH 1/88; Abu Galál, 25.IX.1988, $1\mathcal{d}$ 1juv., TSH 6/88; Nahr-al-Habur Area, 36°24'N 40°49'E, Tall Budairi, $1\mathcal{Q}$, 30.IX.1988, TSH 9/88; Steppe ca 11km NO von Tall Shaih Hamad, 12.X.1988, $2\mathcal{d}$, TSH 41/88; 5km SE Margáda, 12.X.1988, $1\mathcal{Q}$, TSH 42/88; Steppe ca 2km SO von Margáda, 12.X.1988, $1\mathcal{Q}$, TSH 43/88; $4\mathcal{d}$ 1 \mathcal{Q} 1.

Androctonus hoggarensis (Pallary, 1929)

Algeria, Hoggar-Geb, 1♂, No. 6660/67.

Androctonus mauretanicus (Pocock, 1902)

Morocco, Masagan, 1juv., leg. Fritsch & Rein, No. 5268; Rabat, 2juv., No. 6662/69; 1♂1♀2im.2juv., leg. Fritsch, No. 5242.

Babycurus buettneri Karsch, 1886

Gabun, Ogowe, 1♀, No. 6695/102.

Babycurus jacksoni (Pocock, 1890)

Kenya, O. A. Afrika, Mombasa, 25.XII.1969, 1° , leg. M. Grasshoff; Watamu Beach, II.1981, 1° , leg. Kaingulashe. Namibia, Windhoek (loc. in error?), V.1912, 6° , leg. F. Schmidt, Nos 5293 and 5314. ?, O. Afrika, 2° , leg. Knippes.

Babycurus kirki (Pocock, 1890)

Togo, Atakpame, 1♀; Kete Kratschi, 2♀, No. 8873/215.

Babycurus sp.

Mozambique, Tete, 1juv., IV.1947.

Buthacus arenicola (Simon, 1885)

Algeria, Djanet, Adjua-Houlleire, 13, No. 13023.

Buthacus leptochelys (Ehrenberg, 1829)

1♀ no locality.

Buthacus tadmorensis tadmorensis (Simon, 1892)

Syria, Abou Holireira am Euphrat, 4, leg. Celo, No. 13029; Nahr-al-Habur Area, 35°37'N 40°45'E, Tall Shaih Hamad, 11im.8juv., 21.-24.IX.1988, TSH 1/88; Abu Galál, 25.IX.1988, 131juv., TSH 6/88; Qalcat Sakkara, 2.X.1988, 23 (?), TSH 13/88.

Buthoscorpio politus (Pocock, 1899)

India, S. Dekan, Anamalei, 12, det. 1932, No. 8869/211.

Buthus occitanus (Amoreux, 1789)

Israel, Haifa, 1910, 1, leg. O. Boeltger, No. 5228; Haifa, 1913, 1im., leg. Aharoni, No. 5229. Libya, Cyrenaica, 117 km W. Tobruk, 28.IV.1957, 1, leg. Kaltenbach; 1958, 2, 2, leg. Brandt. Morocco, Casablanca, 3im., leg. Fritsch, Nos 5222 and 29224; Tilla, Mogador, 1, leg. Fritsch & Rein, No. 5227; Ain Diab, 1934, 2, leg. Bysch-Mainz, No. 5408. ?, N. Afrika, 1, No. 5272; Hoher Atlas, Marakech v. Tiznit, 18.IV.1968, 2, leg. P. Teisig; West Atlas, Argana env., 28.I.1975, 1, leg. D. Kock. ?, 1, Sektana, 1, 1juv., No. 5226; NW Afrika, 1881, 2, leg. W. Kobelt, No. 5225; 1899, 5, leg. W. Dönitz, No. 5239. USA, Texas, 1, leg. Tips (loc. in error?).

Buthus occitanus barcaeus Birula, 1909

Libya, 2juv., leg. Brandt, Nos 29223 and 29225, det. M. Vachon (1976 - No. 1076).

Buthus occitanus occitanus (Amoreux, 1789)

France, Gall, $1 \circ 1$, leg. Leuckadt, No. 5223. Portugal, $1 \circ 1$, No. 25898. Spain, Oropesa, $1 \circ 1 \circ 1$, No. 6672/79; prov. Castelloni, Alcosobra, Playa Calcala de Chisbert, $1 \circ 1$, leg. Kluge, No. 25896/1; prov. Tarragona, Flix, $1 \circ 3 \circ 1$ 1 1 2 1 2 2 2 3 3; south, 1887, $2 \circ 1$, leg. H. Simon, No. 5241; Barcelona, 1914, 1 1 1 2 3 4. Fahr, No. 5231;

prov. Tarragona, 1915, $7 \circlearrowleft 20 \circlearrowleft 21 \text{juv.}$, leg. F. Haas, No. 5307; Sierra de la Picosa b. Mora, III.1918, $1 \circlearrowleft$, leg. F. Haas, No. 52238; Puente de Montana, III.1918, $1 \circlearrowleft 1 \text{juv.}$, leg. Malec, No. 25895/2; prov. Gerona, Sa Riera (Bagur), 29.III.1964, 1im.1juv., No. 25897/2.

Buthus occitanus tunetanus (Herbst, 1800)

Tunisia, Stadt, $2\sqrt[3]{1}$, No. 6673/80; 1906, $1\sqrt[3]{3}$, leg. Pfaff, No. 2921; 1906, $1\sqrt[3]{3}$, No. 5390.

Caribetityus elii (Armas & Marcano Fondeur, 1992)

Dominican Republic, Prov. La Vega, Jarabacoa, La Golondrina, 1400 m, 2♀ (paratypes), leg. E. Martínez, No. 38697.

Centruroides exilicauda (Wood, 1863)

USA, Arizona, Morenci, 1906, 1♀ (im.), leg. A. Lotichius, No. 5153.

Centruroides exsul (Meise, 1933)

Galapagos, Abingdon, 15.VIII.1957, 1♀, leg. Eibl, No. 25940; Island Indefatigable, Akademiebucht, 17.VII.1957, 1♂2♀ (im.), leg. Eibl, No. 25938; Island Indefatigable, 1966, 2♀2iuv., leg. Eibl-Eibesfeldi, Nos 25937 and 25939.

Centruroides flavopictus (Pocock, 1898)

Mexico, Chiapas, Prusia, 1933, 1, leg. Wagner, No. 5371; Chiapas, Gadow, 1938, 1, leg. Wagner, No. 5372; Stadt. Umgebung, 1, No. 5714/29.

Centruroides gracilis (Latreille, 1804)

Guatemala, 1897, 13; 1897, 491im., leg. Fleischmann, No. 5180; Ousaltemango, 19, leg. Walte, No. 8062/177. Mexico, Mazatlan, 1319, No. 678/7; 19, Mus. Hamburg, No. 5155; Veracruz, 13, No. 5982/34. ?, (in Frankfurt leben eingeschleppt), 19, 1925.

Centruroides limbatus (Pocock, 1898)

Guatemala, Quezal tenango, 1♀ (after 4th ecdysis), leg. Walte, No. 6746/153.

Centruroides cf. limbatus (Pocock, 1898)

?, mit Bananen 1931 in Frankfurt, 1juv.

Centruroides limpidus (Karsch, 1879)

Mexico, 2juv., leg. H. Wagner.

Centruroides margaritatus (Gervais, 1841)

Colombia, 1885, 19, leg. Lehmann, No. 5154; Macarena (Zanza), 450-500 m, 19, 11.1956; La Guayacana, Wald, 240 m, 2juv., 31.VII.1956, leg. H. Sturm; Sta Marta, IX.1974, 3♀, leg. Grasshoff; Dept. Magdalena, Punta de Betin, Santa Marta, I.-III.1986, 1♂2♀3juv., leg. H.-G. Müller. Costa Rica, San José, 1♀, No. 8063/178; San José, 1892, 1♀. leg. C. Fleischmann, No. 5373; San Miguel, 1♀, 6.VI.1937, Prinz Sigismund. Cuba, 3♂1♀1juv., No. 5718/33; 1♀, No. 6652/60. Guatemala, 1885, 1juv., leg. Lehmann, No. 5156; 1905, 19, leg. Fleischmann, No. 5163. Honduras, Nacaomo, 1914, 1612, leg. Flügge, No. 5387; 12, No. 5711/26; mit Bananen in Frankfurt, 1♂, 25.I.1934. Jamaica, 1♂1♀, No. 6745/152. Mexico, Mazatlán, 1871, 18, No. 5164; Mazatlán, 184 $^{\circ}$ 1juv., No. 5717/32; 19, No. 5187. Salvador, 291juv., No. 6262/41; Akuachapan, 18.VII.1950, 1♀(im.), leg. Mertens, No. 8721; Sisimico, 11.X.1950, 1♀, leg. Mertens, No. 8733; Justitut, 1951, 9♂21♀24juv., leg. A. Zilch, No. 8730; Los Cobanos, 10.V.1951, 13, leg. A. Zilch, No. 8725; Laguna de Zapotitan, 450 m, 29.VI.1951, Ijuv., leg. Zilch, No. 8728; Mdg. d. Rio Chilana, 6.VII.1951, 2juv., leg. A. Zilch, No. 8729; km 48 to Sousanete, 600 m, 10.VII.1951, 3juv., leg. A. Zilch, No. 8723, 4.VIII.1951, 1juv., leg. A. Zilch, No. 8724. Loas Cabanos, 5♂1♀, 10.VIII.1951, leg. A. Zilch, No. 8726; Waldch. ub. d. Strand Felsen, Acajutla, 10.VIII.1951, 1∂1♀(im.), leg. A. Zilch, No. 8727; road La Union to Pasaquina, 19.VIII.1951, 1\(\sigma\)2im., leg. A. Zilch, No. 8738; O-Seite d. Cerro de Gua-Zapa, 800 m, 21.VIII.1951, 1♀, leg. A. Zilch, No. 8732; Hda. Los Planes, 1800 m, 25.VIII.1951, 1juv., leg. A. Zilch, No. 8722; km 155 to La Union, 12.IX.1951, 3♂2♀1juv., leg. A. Zilch, No. 8737; San Salvador, Justitut, 1952, 4♂11♀11juv., leg. O. Schuster & H. Felten, No. 8731; Santa Ana, 4.XI.1952, 1♂1♀, leg. H. Felten, Nos 8739 and 8740; San Andres, 16.IX.1953, 1⊊1im., leg. H. Falten, No. 8742; Opico, 390 m, 20.XI.1953, 1∂1\Q1juv., leg. H. Falten, No. 8741; 1\Q, 12.XI.1954, 1\Q1juv. after 4th ecdysis, 1954, 1\Q, 5.IX.1955, 12, 20.IX.1955, 12, 24.X.1955, 1juv. after 3rd ecdysis, 1955, leg. Schustel; O-Kegal d. San Vincente, Finca El Caruen, 1300 m, 10.X.1957, 1♀5juv., leg. A. Zilch, No. 8734, 1juv., No. 8736, 30.VII.1952, 3juv.., leg. O. Schuster, No. 8735.

Centruroides cf. margaritatus (Gervais, 1841)

Honduras, 1♂ (import).

Centruroides nitidus (Thorell, 1876)

Dominican Republic, Santa Ana near Siudad Trujillo, 22.2.1939, 1♀, leg. Martens, No. 5370.

Centruroides cf. ochraceus (Pocock, 1898)

Mexico, 32, No. 5179; 1866, 12, No. 5152.

Centruroides testaceus (De Geer, 1778)

Costa Rica, Hamburg Farm, $1 \circlearrowleft 1 \updownarrow$, No. 8064/179. Lesser Antilles, Bonaire Island, $1 \circlearrowleft 1 \updownarrow$, No. 679/8.

Centruroides cf. thorellii (Kraepelin, 1891)

Honduras, Dpto. de Ocotepeque, Guisayok, 1900 m, 14°27′58″N, 89°04′53″W, 1♀, 4.X.1996, leg. G. Köhler.

Centruroides vittatus (Say, 1821)

USA, Cincinnati, 1894, $1\sqrt[3]{1}$ (im.), leg. Zipperler, No. 5151. ?, $1\sqrt[3]{1}$ No. 29200.

Centruroides sp.

Salvador, 1juv. after 1st ecdysis, VI. 1955.

Compsobuthus acutecarinatus (Simon, 1882)

Saudi Arabia, 150 km ssö El Riyadh, 13.VI.1959, 1♂ (im.), leg. Diehl, No. 29218. Sudan, Sennar, 1♀, No. 8860/202.

Compsobuthus brevimanus (Werner, 1936)

Yemen, 29, No. 6663/72.

Compsobuthus matthiesseni (Birula, 1905)

Syria, Nahr-al-Habur Area, 35°37'N 40°45'E, Tall Shaih Hamad, 2♂5♀6juv., 21.-24.IX.1988, TSH 1/88; Qalcat Sakkara, 1♀, 2.X.1988, TSH 13/88; Gabal Abd-al-Aziz, 1♀1juv., 2.X.1988, TSH 15/88; 5km SE Margáda, 1♀, 12.X.1988, TSH 42/88.

cf. Compsobuthus matthiesseni (Birula, 1905)

Syria, Tall Gunaidiya, 1juv., 5.X.1988, TSH 20/88.

Compsobuthus werneri (Birula, 1908)

Libya, 1\operatorname{1}(im.), leg. Brandt, No. 29220. Sudan, Dafur Prov., El Fashes, XI.1961, 1\operatorname{1}, leg. H. Schwitulla. Syria, Nahr-al-Habur Area, 35°37'N, 40°45'E, Tall Shaih Hamad, 3\operatorname{2}(?im.), 21.-24.IX.1988, TSH 1/88.

Grosphus madagascariensis (Gervais, 1843)

Madagascar, 1885, 5, leg. A. Stümpf, Nos 5176 and 5178; 2, No. 5177; Sikora, 1, No. 6685/92; Station forestiere de Perinet, Cote d'est, 860 m, Eu montant avant Moramanga, 1221juv., 1960, leg. Koch; 13.

Hottentotta alticola (Pocock, 1895)

Afghanistan, Kabul, 30.IV.1961, (18), 13.

Hottentotta conspersa (Thorell, 1876)

Namibia, 1938, 2♀1im., leg. G. Boss, No. 5393; Farm Okatji Komu, 2♀, 27.X.1952; 1juv., 1956, leg. F. Gardes.

Hottentotta franzwerneri franzwerneri (Birula, 1914)

Algeria, Beni Ormi F de Figuigi, VIII.1910, 1im., leg. F. Werner, No. 5128.

Hottentotta franzwerneri gentili (Pallary, 1924)

Algeria, Oran, 1♀, No. 6668/75. Morocco, Anti Atlas, Anezi, 1♀im., 18.IV.1968, leg. P. Teisig.

Hottentotta hottentotta (Fabricius, 1787)

Burkina Faso (H. Volta), Garango, 11°48′ N, 0°33′ W, 17.X.1966, 1♂(?), leg. Lamontellorie. Cameroon, 4.X.1911, 1♀, leg. Schubotz, No. 5248; Duala, 16.XII.1913, 1♀, leg. A. Haas, No. 5247; Edea, 1♀, No. 8863/205. Cape Verde Is., Ribeira da Praia, 1993, 3♀, leg. Santos, No. 38561. Congo, Frz. Kongo, Kabo, 15.III.1911, 1juv., leg. Schubotz, No. 5249; Fort Archambault, 1911, 1juv., leg. Schubotz, No. 5250; Fort Crampel, 1911, 2juv., leg. Schubotz, No. 5232. Guinea, Franz. Guinea, 1♀, No. 6666/73. Guinea-Bissau (Portug. Guinea), 1♀1juv., No. 8862/204. Togo, 2♀, leg. Bayer, No. 37466.

Hottentotta judaica (Simon, 1872)

Israel, Tel-Aviv, $2\heartsuit$, No. 6663/70; 1839, $1\sqrt[3]{1}$, leg. Rosenbach, No. 5244; Jaffa, 1885, $1\sqrt[3]{1}$ (im.), leg. H. Simon, No. 5255; Haifa, 1886, $1\sqrt[3]{3}$, leg. H. Simon, No. 5243.

Hottentotta minax (L. Koch, 1875)

Egypt, 13, No. 5246. ? Kenya (D. O. Afrika), Tabora, 1913, $5\sqrt[3]{5}$ ljuv., leg. Schablitzki, No. 5220. Sudan, Khartoum, $1\sqrt[3]{2}$, leg. F. Celo, No. 13028/4; Sennar, $1\sqrt[3]{7}$, No. 6667/74.

Hottentotta pachyura (Pocock, 1897)

India, Dekan, Nilgiris, 22, No. 8851/193.

Hottentotta rugiscutis (Pocock, 1897)

India, Dekan, Nilgiris, 1♀ (lectotype of *Hemibuthus kraepelini*) 2♂ (paralectotypes Nos 1-2 of *Hemibuthus kraepelini*) No. 8880/222, 1♂1juv., No. 1084/15.

Hottentotta tamula (Fabricius, 1798)

India, Dekan, Nilgiris, 1im., No. 8851/193; Dekan, Bombay, $6\sqrt[3]{18}$ Q17juv., No. 327/1; Lanooli, $1\sqrt[3]{3}$ Q, 10.XII.1911, leg. Löw-Beer, Nos 5251 and 5260; Dekan, Anamalei, 1juv., No. 8852/194.

Hottentotta trilineata (Peters, 1862)

Egypt, 1, No. 5246. Kenya, O. A. Afrika, Mombasa, 1, 25.XII.1969, leg. M. Grasshoff; bei Voi, 1, XI.1978, leg. M. Grasshoff. Mozambique, Tete, 1, 3, 4juv., IV.1947. Tanzania, O. Afrika, Tanga, 1, No. 6674/81. Tanzania, O. Afrika, Iraku-Landschaft, Kohl-Larsen, 1939, 1, No. 5388; O. Afrika, Matelebach, Kohl-Larsen, 2, No. 5389; D. O. Afrika, 2, leg. F. Kinkelin, No. 5219. R. South Africa, Transvaal, Southpansberg env., Steinen, XI.1970, 1, leg. Lamoral, No. 29296.

Isometrus (Isometrus) maculatus (De Geer, 1778)

Algeria, Stadt, 12, No. 6697/104. Australia, Caivus, 13, leg. Felten. Brazil, Amazonas, Manacapuru, 4♂3♀A, VIII.1924, leg. W. Ehrhardt; Amazonas, Manacapuru, Sdimoes, 3♂6♀1juv., VII.1924, leg. W. Erhardt; Olinda (Recifo), St. Pernambuco, 2♀, 24.V.1930; Tiriyo, Maloca am, ob. Rio Parú de Oeste, 12, 24.-30.I.1961, leg. Sattler. Congo DR, Belg. Kongo, zw. Mutskatscha Dilolo, 1931, 1♀, leg. F. Haas. India, Dekan, Anamalei, 1♂1♀2juv., No. 1086/17. Indonesia, Sumatra, Deli, 12, leg. Heyden, No. 5169; Sumatra, Atjeh (Hügellani Boeloch Blang-Asa über Iho Seumawa), 16, III.192?, leg. Rookmarker. Madagascar, Tananarive, 1♂ (holotype of Isometrus madagassus), No. 8879/221; Nossibé, 1898, 2♂4♀, leg. Ebenar, No. 5206. Surinam, 1♂, Cardua. Sri Lanka, Estate Beliturdi, 1914, 2♀, leg. Mastbaum, No. 5167. Tanzania, Dar-es-Salaam, 1♂, No. 8868/210. USA, Hawaii, Honolulu, 2♂, No. 4942/23. Venezuela, San Estaban, Puerto Cabello, 1♀, 19.X.1948, leg. Schöffer; Rancho la Grande, 1♀, II.1955, leg. R. Mertens. ?, Au Bord der "Marie", 1908, ljuv., leg. H. Merton, No. 5166; 1♂2, No. 5168; Aroe, Dobo, Wammer, 22.III.1908, 2♀1im., leg. H. Merton, No. 5165; Elat, Gross-Key, IV.1908, 1♂, leg. H. Merton, No. 5207; Banana, Kongo-Mündung, 1885, 13121im., leg. Hesse, No. 5124; Kawieng, 1juv., 5.IX.1909, leg. E. Wolf (Hanseatische Südsee Expedition 1909). O. Afrika, 12, leg. Knippes. Feisuut dem Schift (Hanseatische Südsee-Expedition), 13, 3.10.1909, leg. E. Wolf.

Isometrus (Reddyanus) melanodactylus (L. Koch, 1867)

Australia, Winton, 13, No. 6698/105.

Leiurus quinquestriatus (Ehrenberg, 1828)

Egypt, 1826, 2im., 1828, 13, leg. E. Rüppell, Nos 5234 and 5224; 1827 and 1828, 1319, leg. E. Rüppell; Sinai, 1827, 2im., leg. E. Rüppell, No. 5230; Tor, 1827, 53109, leg. E. Rüppell, Nos 5236 and 5308; 13191im.(94)iuv. no locality; Cairo, 13, No. 4981/25; 19, leg. Rüppell, No. 30642. Saudi Arabia, NW Al Jübail, $27^{\circ}08^{\circ}56^{\circ}N$, $49^{\circ}20^{\circ}06^{\circ}E$, 1111, 14.V.1992, leg. D. Kock. Sudan, Flussifer bei Omdurman, 1966, 123377915juv., leg. F. Celo, No. 30639; Khartoum, 19, leg. F. Celo, No. 13024. Syria, 1882, 19, leg. H. Simon, No. 5235; Abou Houreira a. Euphrat, 1962, 191im., leg. F. Celo, No. 13021. Yemen, 13191juv., No. 6675/82.

Lychas asper (Pocock, 1891)

Mozambique, Tete, 82, IV.1947, No. 10085-6.

Lychas burdoi (Simon, 1882)

Tanzania, O. Afrika, Tanga, 19, No. 6690/97. ? Tanzania (O. Afrika), 19, leg. Knippes. Lychas marmoreus (C. L. Koch, 1844)

Australia, City Beach, Perth, 1, 29.V.1958, leg. J. A. Philipp; 1, 1895; 1, 23.VI.1911, leg. O. Frank; Adelaide, 1, 1952-1953, leg. Hendenstrom, 1, 16.III.1957, leg. Falten.

Lychas mucronatus (Fabricius, 1798)

Indonesia, Lombok, Sadjang, 29.IV.1909, 1♂, leg. Elbert, No. 5184; Boeton, 1♀, 1909, Sunda Exped. des Frankf., leg. J. Elbert; Montawein Isl., Sipora, 1♀ (holotype of *Lychas mentaweius* Roewer, 1943), No. 8870/212; Isambawa, Ampong, 1♂, 2.I.1910, leg. J. Elbert, Sunda Exped. des Frankf., rev. M. Vachon 1981, No. VA 2659. Myanmar, Zaming, 30 km nördl. Mandalay, 1im., No. 7983/157; Mt. Popa, 600 m, 1♂, No. 7985/159. Thailand, Lat Yao, 25 km W. Nakhon-Sawanr., cca 80 m, VIII.1987, 1♀, leg. Thielen.

Lychas obsti Kraepelin, 1913

Tanzania, Tanga, 1♀, No. 6691/98.

Lychas scutilus C. L. Koch, 1845

Indonesia, Sumatra, Deli, 1♀. No. 6689/99; Sumatra, Baudar Kwala, 1900, 2♂, leg. V. Auer, No. 5171.

Lychas tricarinatus (Simon, 1884)

India, Dekan, Anamalei, 12, No. 1085/16.

Mesobuthus eupeus (C. L. Koch, 1839)

Iran, bei Teheran, 1 \bigcirc , No. 6669/76; 20 km NE Ahwaz (Khousistan), 20.-30.III.1958, 4 \bigcirc , leg. H. Frank; Umgebg. v. Ahwaz (Khousistan), 1959, 1 \bigcirc 2 \bigcirc , leg. H. Frank; Persia, Sultanabad, 1juv., No. 6269/48. ? Iran, 1 \bigcirc . ?, 1 \bigcirc . Namibia, Waterberg, 2 \bigcirc , No. 8855/197 (loc. in error ?).

Mesobuthus eupeus eupeus (C. L. Koch, 1839)

Nagornyi Karabakh Autonomous Region, Kaukasus, 1890, 234, leg. Valentin, No. 5253, 21im., leg. Valentin, No. 5256; Kaukasus, 12, 1890, leg. S. Valentin.

Mesobuthus eupeus thersites (C. L. Koch, 1839)

?, S. Turkestan, Muschachar, 15.V.1913, 1♀, leg. K. Küchler, No. 5254.

Mesobuthus gibbosus (Brullé, 1832)

Albania, Tafelebene, V.1939, $1\sqrt[3}4\sqrt[3]{3}$ im., leg. K. Müller, No. 5381. Cyprus, Cypern, Platraes, Trodos Gel, $2\sqrt[3]{4}$, leg. Plutrues, No. 6677/84. Greece, Chios, 1862, $1\sqrt[3]{4}$, leg. S. Pauli, No. 5252; Creta, Akrotiri (Arkalo-Höhle), 1926, $2\sqrt[3]{2}$, leg. Roon, No. 685/14, 1juv., leg. Rus, No. 6273/52; Creta, Melidhori, $1\sqrt[3]{4}$, No. 8854/196; Morea, Akrokorinth, 1926, $1\sqrt[3]{4}$, leg. Rus, No. 6676/83; Samos Island, 1juv., No. 6270/49; Rhodos, Apollo-Tempe, 25.IX.1958, $2\sqrt[3]{4}$, leg. R. Martens, No. 10639/2; Preveza, Nikopolis, $1\sqrt[3]{4}$, 22.VIII.1964; Nikopolis bei Preueza, 22.VIII.1964, $1\sqrt[3]{4}$, No. 25894; Preveza Nikopolis, 22.VIII.1964, $1\sqrt[4]{4}$, No. 39236; Peloponnes, Tolon bei Nandja, 26.VI.1985, $1\sqrt[4]{4}$, leg. Hohorst, No. 34531. Turkey, Karybische, Grotte, 26.-27.III.1966, $2\sqrt[4]{2}$ juv., leg. Dobat, No. 25893. Armenia, Armenia, Marasch (? loc. in error ?), 1906, $2\sqrt[4]{5}\sqrt[4]{4}$, No. 5306.

Mesobuthus martensii (Karsch, 1879)

China, Shantung, 1, No. 6670/77; Shantung (Kjautschou), 1, 3, 1juv., No. 328/2; Tientsin, 4, No. 8861/203; Kreyenberg, 1907, 1, 3, leg. Boettger, No. 5240.

Microtityus (Parvabsonus) paucidentatus Armas & Marcano Fondeur, 1992

Dominican Republic, Prov. Perauia, Bani, secc. Monteria, La Laguna, 22.V.1988, 2\(\times\) (paratypes), No. 38698.

Odontobuthus doriae (Thorell, 1876)

Iran, 1940, 1♀, leg. G. Konieczny, No. 5384. ?, Persien, 1♂, No. 6671/78.

Odonturus dentatus Karsch, 1879

Kenya, O. A. Afrika, Mombasa, $1\sqrt[3]{}$, 25.XII.1969, leg. M. Grasshoff. Tanzania, O. Afrika, Tanga, $1\sqrt[3]{}1\sqrt[3]{}4$ juv., No. 5983/35, $1\sqrt[3]{}$, No. 6686/93.

Olivierus caucasicus (Nordmann, 1840)

Afghanistan, Kabul, (18), 12.IV.1963, 1♀. Iran, Shirudi bei Meshed, 1969, 1♀, leg. Kluge and Theissig, No. 34544; Persia, Isphahan, 1♀, No. 5716/31. ? Uzbekistan, Turkestan, 1890, 2♀, leg. Retter, No. 5263; Turkestan, Syn Tarja, 2♀, leg. S. Retter, No. 5264; Turkestan, Andishan, 1910, 2♀3juv., leg. J. Kilb, No. 5265; Asjon, Scrobelef, Ferghana, 20.XI.1911, 1im., leg. J. Kilb, No. 5257; Turkestan, Koksavai, Andishan, 9.X.1912, 1♀, No. 5267; S. Turkestan, Safichavan, 31.V.1913, 1♂1im., leg. K. Küchler, No. 5266.

Olivierus caucasicus intermedius (Birula, 1897)

Uzbekistan, Fergana, V.1913, 1im., leg. Skobelev, No. 29221; Fergana, VII.1913, 1im., leg. Kilb, No. 29222.

Orthochiroides vachoni Kovařík, 1998

Somalia, Sar Uanle, about 20 km South from Chisimaio, 00°29'48"S, 42°25'30"E, 13° (paratype No. 16 [MZUF No. 536]).

Orthochirus innesi Simon, 1910

Egypt, Sinai Halbinsel, 9.1.1922, 13, leg. A. Andres, No. 5125; 13, No. 30644.

Orthochirus cf. innesi Simon, 1910

1S, no locality.

Orthochirus luteipes Roewer, 1943

India, Dekkan, Anamalei., 13 (lectotype) 19 (paralectotype No. 1), No. 2124/21. ?, 2319, No. VA 2182-1-3.

Parabuthus brevimanus (Thorell, 1876)

Namibia, Okahandja, 3juv. (1329), V.1953, leg. Yaerdes.

Parabuthus granulatus (Ehrenberg, 1831)

Namibia, Chnosgebirge, 2im., leg. F. Rintelen, No. 5211; Lüderitzbucht, 2♀, No. 6678/85; Waterberg, 1♂3♀, No. 8867/85. ?, 1♀, No. 18156.

Parabuthus kraepelini Werner, 1902

Namibia (SW Afrika), Windhoek, $1\sqrt[3]{2}$, No. 6278/57, 1, No. 6680/87; Berseba, 1, No. 6683/90; Berseba, $1\sqrt[3]{3}$, No. 6684/91; Sükses near Okahandjo, 1, 1952, leg. Martens; Okahandja, 1, 1juv., leg. Gaesdes, 1juv., V.1953, leg. Yardes; Okahandja, X.1955, 1, 1957, $3\sqrt[3]{3}$, liuv., leg. Gaesdes, Nos 9646 and 10532. **R. South Africa** (S Afrika), Cape Town, $1\sqrt[3]{3}$, No. 8856/198; Port Elisabeth, 1910, $1\sqrt[3]{3}$, leg. Dieges, No. 5214.

Parabuthus leiosoma (Ehrenberg, 1828)

?, N. Afrika, 1♂, No. 5209.

Parabuthus pallidus Pocock, 1895

Tanzania, O. Afrika, Tanga, 13, No. 6682/89; D. O. Afrika, Isamba-Plateau, Oberlaof des Bubu-Fl, 1935, 1juv., leg. L. Kohl.

Parabuthus raudus (Simon, 1888)

Namibia (SW Afrika), Gobabis, 2juv., No. 676/5; Otavi, 1juv., No. 8866/208.

Parabuthus stridulus Hewitt, 1914

Namibia (SW Afrika), Lüderitzbucht, 1♀1juv., No. 5985/37, 1♂1♀, No. 6679/86.

Parabuthus transvaalicus Purcell, 1899

R. South Africa, O. Transvaal, Letaba-Camp, 1931, 12, leg. F. Haas, No. 5221.

Parabuthus villosus (Peters, 1863)

Namibia (SW Afrika) Chnosgebirge, $1\capp2$, leg. F. Rintelen, No. 5203; $1\capp3$, leg. Leonhardt, No. 5233; Windhoek, $2\capp2$, No. 6687/94, $1\capp3$ 1juv., No. 8848/190; Lüderitzbucht, 2juv., No. 5987/39, 1juv., No. 6740/147, 2juv., No. 8865/207; Berseba, $1\capp2$, No. 6681/88; Waterberg, $2\capp2$, No. 8864/206; Kl. Windhoek, Regent, 1908, $1\capp3$, leg. K. Schliermann, No. 5313; Koelmanshoop, 1913, 1juv., leg. S. Hardt, No. 5202; Otjimbingue, 1938, $1\capp3$, leg. Boss, No. 5392; Namibfläche, 1938, $1\capp3$ 3 $\capp3$, leg. Boss, No. 5364; Okahandja, 1952, $1\capp2$; Kaoko Veld, 1juv., 1.IX.1955, leg. Gaesdes; $1\capp2$, 1956, $1\capp3$, 1958, leg. Gaesdes.

Parabuthus sp

?, Windhuds, 12, 1909 (rev. M. Vachon, 1976 No. VA 1453, det. B. Lamoral).

Rhopalurus agamemnon (C. L. Koch, 1840)

Brazil, Piañhy, 12.I.1914, 2♂3♀ (holotype and paratypes of *Rhopalurus iglesiasi* Werner, 1927), leg. Bresslau, Nos 5280 and 5315; 1♂, No. 680/9.

Rhopalurus junceus (Herbst, 1800)

Cuba, 19, No. 6652/60.

Rhopalurus laticauda Thorell, 1876

Colombia, Dept. Magdalena, Santa Marta, $2\Q$, 29.VI.-31.VII.1966, 1juv., 20.VII.-20.VIII.1966; Dept. Magdalena, Bahia de Guairaca, Tayrona Park, 26.VII.1985, 1juv., 31.X.1985, $1\Q$, leg. H.-G. Müller, Nos. 37027 and 37028. Venezuela, Ciudad Bolívar, $2\Q$ 1im., leg. T. Lüning, No. 5150; Merida, $2\Q$ 3 \Q , No. 5712/27; Maracay, $1\Q$ 2 \Q , No. 8876/218; Maracay, $1\Q$, No. 29208; San José de Guaviare, $1\Q$, XII.1955, leg. Meden.

Tityus cf. argentinus Borelli, 1899

Bolivia, La Paz, 19, No. 8877/219. **Peru**, 29, No. 5369; Mapir-Fluss, 1888, 1im., leg. Emmel, No. 5159; Olmos u. Jaen, 1550-1800 m, 10.-11.IV.1953, 1im., leg. Koepcke, No. 11028.

Tityus cf. bahiensis (Perty, 1834)

Argentina, Entre Ríos, Puerto Marguez, La Paz, 2♀, 14.1.1950, leg. Leers.

Brazil, São Paulo, 2♀, No. 8046/161; from Inst. Butantan (Bücherl), 9.X.1959, 4♀, No. 11322; São Paulo, 1♀, 12.XII.1954; São Paolo, 2♀, II.1962, leg. K. Friedrich.

Tityus clathratus C. L. Koch, 1843

Venezuela, Maracay, 1934, 10♀23juv. before 1st ecdysis (holotype and paratypes of *Tityus fahrenholtzi* Roewer, 1943), leg. Fahrenholtz, No. 6651/59.

Tityus columbianus (Thorell, 1876)

Colombia, 7, No. 39229; 7.

Tityus costatus (Karsch, 1879)

Brazil, Therezopolis, 7.I.1914, $1\mathred{Q}$ (holotype of *Tityus bresslaui* Werner, 1927), leg. E. Bresslau, No. 5158; Nova Teutonia, $1\mathred{d}$ (holotype of *Tityus novateutoniae* Roewer, 1943), No. 6263/42; Nova Teutonia, 27°11'S, 52°23'W, 2juv., leg. F. Plaumann, No, 6654/62; Nova Teutonia, $1\mathred{d} 1\mathred{Q}$, No. 6742/149.

Tityus discrepans (Karsch, 1879)

Venezuela, Caracas, 1897, 1♀, leg. Müller, No. 5157.

Tityus cf. evandroi Mello-Leitão, 1945

Brazil, Tiriyo-Maloca am, Rio Tamirin, Serra de Tunucumaque, 12, 17.II.1961, leg. Sattler.

Tityus cf. nematochirus Mello-Leitão, 1941

Colombia, Monterre-dondo, unter Steinen, 1300-1800 m, XII.1955, 923juv...

Tityus paraensis Kraepelin, 1896 (= T. cambridgei Pocock, 1897)

Guyana, 1, No. 8048/163. French Guiana, Tonate, 20.X.1985, 1 (im.), leg. Kock. Surinam, Paramaribo, 1913, 2 δ , leg. G. Hartmann, No. 5391.

Tityus pococki Hirst, 1907

Venezuela, Puerto Cabello, 1♀, No. 30641.

Tityus rugosus Schenkel, 1932

Venezuela, Timotes, 1\(\text{Q}\)(im.), No. 8049/164.

Tityus stigmurus (Thorell, 1876)

Brazil, Pernambuco, 24.VI.1914, 1♀, leg. Bresslau, No. 5160; Penha, 24.VI.1914, 1♀, leg. Bresslau, No. 5161; from Inst. Butantan (Bücherl), 9.X.1959, 4♀, No. 11321, 1♀, No. 31486, 1981, 1♀, 31487; São Paulo, Ribeirão, Preto u. Umgebung (450 km w. São Paulo), II.-VI.1968, 11♀1im., leg. Bücherl, No. 24485;

Tityus tayrona Lourenço, 1991

Colombia, Dept. Magdalena, Bahía de Guairaca, Tayrona n. p., 13.VI.1985, 13 (holotype), No. 37019, 8.X.1985, 14 (allotype), No. 37024, 19.VI.1985, 1juv. (paratype), No. 37023, 12.VII.1985, 1314 [juv. (paratypes), No. 37022, VIII.1985, 14 (paratype), No. 37026, 30.IX.1985, 1344 [juv. (paratypes), No. 37025, 31.X.1985, 14 (paratype), No. 37021, 6.XI.1985, 13 (paratype), No. 37020, leg. H. G. Müller.

Tityus trinitatis Pocock, 1897

Trinidad and Tobago, Tobago, 12, leg. A. Seotz, No. 5170.

Tityus trivittatus Kraepelin, 1898

Argentina, La Plata, 1, No. 8047/162. Paraguay, San Bernardino, 1juv. after 2^{nd} ecdysis, 1911, 1, 13.I.1913, 1juv. after 2^{nd} ecdysis, 21.VIII.1913, 1, 3.III.1914, leg. A. Fischer.

Tityus cf. zulianus González-Sponga, 1981

Venezuela, Timotes, 2♀1juv., No. 5713/28.

Tityus sp. ("groupe bolivianus")

Peru, Hda Taulis (06°50'S, 79°10'W), 1700 m, 1im., leg. Koepcke, No. 10656; Hda Monteseco (06°50'S, 79°10'W), 1200 m, 2.1.1953, 1juv., leg. Koepcke, No. 11084; La Florida, Rio Saua, 1200 m, 25.1V.1954, 2juv., leg. Koepcke, No. 10981.

Tityus sp.

Brazil, 1juv. (very damaged), L. von Heyden; Lago do Jarici, Amazonas, Rio Negro, 19, II.1927, leg. Ekrhardt.

Tityus sp.

?, Westindien, 12, leg. G. Salomon.

Uroplectes fischeri (Karsch, 1879)

?, O. Afrika, 1♀, leg. Knippes.

Uroplectes cf. fischeri (Karsch, 1879)

Mozambique, Tete, 16♂12♀1juv., IV.1947. ?, ? D. O. Afrika, 1♀, 1936, leg. Dr. Kohl.

Uroplectes flavoviridis Peters, 1862

R. South Africa, Transvaal, Kruger-Park, 1931, 1323 (im.) 1 juv., leg. F. Haas, No. 5174.

Uroplectes lineatus (C. L. Koch, 1843)

R. South Africa, Natal, Durban, 12, No. 6693/100.

Uroplectes occidentalis Simon, 1876

Congo, Banana, Mündung, 1876, 2♀, leg. P. Hesse, No. 5162.

Uroplectes otjimbinguensis (Karsch, 1879)

Namibia, Okahandja, 1951, 13, 1955, 1312, V.1955, 1juv., leg. Gaesdes.

Uroplectes pilosus (Thorell, 1876)

Namibia (SW Afrika), Lüderitzbucht, 1\(\sigma 3\sigma'\)(im.), No. 5985/37; Farm Okatji-Komu, 1\(\sigma'\)(im.), 27.X.1952, leg. Waterbery.

Uroplectes planimanus (Karsch, 1879)

Namibia, Windhoek, 1, No. 6279/58; Windhoek, 1, (im.), No. 8871/213; Lüderitzbucht, 1, No. 8872/214; 1 (im.); Weluritschia-Zone a. SW Rand der Braundberge, 1, 15.-16.X.1952, leg. R. Martens; Evongo, 1, 1956, leg. Gaesdes; N.O. Kalahari, Ahaberge, 1, VII.1953, leg. Yourdes; Okahandja, 1, 1951, 2, 224 (juv., V.1953, leg. Yourdes, 1, 1956, 24, leg. Gaesdes; Konigsteni, 1, 11.VI.1956, leg. Gaesdes; Windhoek, Garten, II.1986, 1, leg. B. Mracky. **? Namibia**, 1, (im.), No. 5172.

Uroplectes cf. planimanus (Karsch, 1879)

Namibia, Okahandja, 2♀1juv., leg. Gaesdes, 2♀1juv., 1958, leg. Gaesdes, 1♂, V.1955.

Uroplectes tumidimanus Lamoral, 1979

Namibia, Berseba, 1♂, No. 6692/99.

Uroplectes cf. vittatus (Thorell, 1876)

Mozambique, Tete, 1♀, IV.1947, No. 10090.

Uroplectes sp.

R. South Africa, Transvaal, Barbeston, 18 (im.), No. 6694/101.

Uroplectes sp.

Namibia, Windhoek, Garten, II.1986, 1juv., leg. B. Mracky.

Vachoniolus globimanus Levy, Amitai & Shulov, 1973

?, 18 no locality.

Chactidae Pocock, 1893

Broteochactas nitidus Pocock, 1893

Trinidad, 1♂, No. 8055/170.

Chactas (Euchactas) aequinoctialis (Karsch, 1879)

Colombia, Bogotá, 19, No. 8057/172; Dept. Magdalena, Santa Marta, N. Sierra Nevada, Nähe San Pedro de La Sierra, 16.VIII.1985, 191im., leg. H.-G. Müller, Nos 37011 and 37030; Dept. Magdalena, Santa Marta, N. Sierra Nevada, Nähe San Lorenzo, 23.VIII.1985, 491juv., leg. H.-G. Müller.

Chactas (Brachychactas) brevicaudatus (Karsch, 1879)

Colombia, Dept. Magdalena, Bahia de Guairaca, Tayrona Park, 13.VI.1985, 1♂, leg. H.-G. Müller, Nos 37029.

Chactas cf. lepturus Thorell, 1876

? Colombia, 23494juv.

Chactas cf. vanbenedeni Gervais, 1844

Colombia, La Tagua, 1juv., 13.-14.V.1956.

Teuthraustes cf. atramentarius Simon, 1878

Ecuador, 12, No. 8059/174.

Teuthraustes sp.

Colombia, Dept. Magdalena, Sta Marta, N. Sierra Nevada, El Campano aus Fallaub, 1000 m, 1juv., 20.IV. 1986, leg. H. G. Müller.

Chaerilidae Pocock, 1893

Chaerilus variegatus Simon, 1877

Indonesia, Lombok, Tengengeak, $2 \circlearrowleft 3 \circlearrowleft$, 1909, Sunda Exped. des Frankf., leg. J. Elbert, Nos 5380 and 5303; Java, Idien-Geb, $1 \circlearrowleft$, No. 6731/138.

Diplocentridae Karsch, 1880

Didymocentrus hummelincki Francke, 1978

Lesser Antilles, Bonaire Island, 291im. ljuv., No. 8054/169.

Didymocentrus krausi Francke, 1978

El Salvador, Dept. La Union, 1km nach Abzweigung des Str. nach Conchagua, 11.IX.1951, 1♀(im.), holotype, leg. A. Zilch, No. 8791.

Didymocentrus lesueurii (Gervais, 1843)

Lesser Antilles, Santa Lucia, 2♀, No. 8053/168.

Nebo hierichonticus (Simon, 1872)

Palestine, Jerusalem, 1962, 1\(\text{Q(im.)}\), leg. Celo, No. 13020.

Nebo cf. hierichonticus (Simon, 1872)

?, 1\(\text{?}\)1juv. no locality.

Nebo cf. yemenensis Francke, 1980

Yemen, 1♀(im.), No. 6699/106.

Euscorpiidae Laurie, 1896

Euscorpius (Euscorpius) carpathicus (Linnaeus, 1767)

Croatia, Dalmatia, Ragusa, $1\sqrt[3]{3}$ juv., No. 7703/156; Rovijn, 1902, $4\sqrt[3]{10}$ \bigcirc 3juv., leg. R. Römer, No. 5136; Rovijn, 1905, $2\sqrt[3]{10}$, leg. F. Winter, No. 5101; Dalmatia, Cherso Island, 1juv., leg. Strasser, No. 6264/43, 3juv., No. 6265/44; Rovijn, 1910, $2\sqrt[3]{5}$ \bigcirc 4, leg. E. Pfaff, No. 5144; Dalmatia, 3.1.1911, $1\sqrt[3]{10}$, leg. E. Rödiger, No. 5134; Umbegung von Rovigno, 1.-13.IV.1956, $1\sqrt[3]{5}$ \bigcirc 2juv., No. 25923; Island near Rovinj, IV.1956, $1\sqrt[3]{10}$, leg. Kraus, No. 25935; Istria,

Puzzi-Höhle bei Abbazia, 1juv., No. 8486/181; Rovijn, IX. 1958, 1im., No. 25906; Rovinj, VIII.-IX.1974, 1&, No. 30979; NW Rovijn, Weise, 2.IV.1962, 1&724juv., leg. G. Strack, No. 12953; NW Rovijn, Maccie, 7.IV.1962, 391juv., leg. G. Strack, No. 12954; Hangö Pazin, 12.IV.1962, 29, leg. G. Strack, No. 12951; Rovijn (Istria), 13.IV.1962, 13, leg. G. Strack, No. 12956; Hvar Island, Macchie, 19.IV.1962, 121im., leg. G. Strack, No. 12952; Jrnotski, 23.IV.1962, 19, leg. G. Strack, No. 12955; Rovinj, Machie, IV.1962, 19, leg. G. Strack, No. 12950. France, Cannes, Côté d'Azur, IX.1954, 19, leg. Schirner, No. 25924. Greece, Rhodos, 19, No. 6267/46; Crete, Chania, V.1926, 191juv., leg. F. Roewer, No. 6272/51; Crete, Aptera, V.1926, 19, leg. F. Roewer, No. 6274/53; Crete, Attika, Pentelli, V.1926, 39, leg. F. Roewer, No. 682/11; Crete, Akrotiri, Katholiko-Höhle, V.1926, 29, leg. F. Roewer, No. 8844/186; Crete, Governeto-Kloster, V.1926, 19, leg. F. Roewer, No. 8445/180; Crete, Akrotiri, Arkalo-Höhle, V.1926, 12, leg. F. Roewer, No. 8846/188; Crete, Lakkos, VI.1926, 2629, leg. F. Roewer, No. 675/4; Crete, Topolia, VI.1926, 1649, leg. F. Roewer, No. 681/10; Crete, Topolia, VI.1926, 3juv., leg. F. Roewer, No. 6275/54; Crete, Meskla, Panageia-Quelle, VI.1926, 29, leg. F. Roewer, No. 6276/55; Crete, Phurnes, VI.1926, 2im., leg. F. Roewer, No. 8842/184; Crete, Topolia-Höhle, VI.1926, 19, leg. F. Roewer, No. 8843/185; Crete, Akrotiri, Kumaro-Höhle, VI.1926, 16, leg. F. Roewer, No. 8845/187; Crete, Meskla (Schlucht-Abhang), VI.1926, 12, leg. F. Roewer, No. 8847/189; Skiathos, 28.VI.1978, 12, leg. Liebegott, No. 30978; N Sporaden, 5.VII.1978, 19, leg. Kock, No. 30977, 1juv., No. 30780; Pevonna bei Toannina, 17.111.1961, 1juv., leg. Winter, No. 25936; N. Sporaden, 16.V.1979, 1♀, 19.V.1979, 2♀1juv., 22.V.1979, 1juv., 23.V.1979, 1♀, 27.V.1980, 1♂1juv., leg. S. Liebegott, Nos 30903 - 30909. Italy, Brenta-Tal, 29, No. 2473/22; Sardinia, Subol, 1juv., No. 10702/254; Nizza, 2♀, leg. Firman, No. 5140; Malta, Zurrico, 1♀, No. 6738/145; Sicilia, Palermo, 1886, 39, leg. C. Hirsch, No. 5137; Rapallo, 1957, 19, leg. Rau, No. 25925; Liguria, Torre Paponi, 200m, 43°50'11"N, 07°55'48"E, 1♀, 21.III.1978, leg. D. Kock; Varazze, 28.III.1959, 2\(\timeg\)(im.), leg. Simon, No. 25926. Romania, Mehadia, 2\(\frac{1}{2}\)20\(\timeg\), leg. Matic, No. 24517; Baia de Arama, 1juv., leg. Matic, No. 25927; Mänästirea, Muntele Cozia, 1955, 29, leg. Matic, No. 25933; Bäile Herculane, 1956, 29, leg. Matic, No. 25932; 19, No. 38497. Spain, Mallorca, 1♀, No. 684/13; Mallorca, Palma, X.1951, 1♂1♀, leg. Peters, No. 25930; Balearen, Porrosa, 1♂1♀, No. 683/12. Tunisia, 1906, 1♂1♀, leg. Pfaff, Nos 5117 and 5129. Turkey, 19, leg. L. Heyden, No. 5135; Istanbul, 1941, 1juv., leg. Bott, No. 25910. ?, Bordighera, 39, No. 5141; Prinkipo Island, 1349, No. 6735/142; Ibessalien, Pelion bei Velos, $1\sqrt[3]{2}$, No. 6737/144; Prinkipos, 1888, $1\sqrt[3]{2}$, leg. Retowski, No. 25929, $1\sqrt[3]{1}$, No. 5147; Krain, 17.V.1896, 19, leg. A. Weiss, No. 5146; Riviera, 1910, 19, leg. O. Boettger, No. 5149; Genua, 6.III.1912, 13392juv., leg. S. Nick, No. 5148; Insel Lacroma near Regusa, 29, leg. Löw-Beer, No. 5139; Brioni, 29.V.1913, 3♀, leg. Löw-Beer, No. 5143; Kap Ferrat, 9.II.1914, 1♂1♀1juv., leg. Löw-Beer, No. 5145; Portofino, 1914, 5♂9♀3juv., leg. L. Nikl, No. 5133; Skiathos Asellina, 26.IX.1982, 2QA, leg. M. Turuny; error label "R. South Africa, Zululand, Umfolosi, Camp Masimba, IX.1952, leg. Schmidt", 3 342.

Euscorpius (Euscorpius) carpathicus canestrinii (Franzago, 1872)

Italy, Sardinia, Desulo, 1952, 1612, No. 25931, M. Vachon, 1976 (VA 1341).

Euscorpius (Euscorpius) germanus (C. L. Koch, 1837)

Austria, Tirol, Innichen, $1\colong$, No. 5120; Tirol, Ala, $1\colong$, No. 5986/38; Tirol, Galitzer-Klamm bei Lienz, $1\colong$, leg. Zilch, No. 25899; Tirol, Heuben, 800 m, $1\colong1$ im., leg. Zilch, No. 25900; Tirol, Zw. Bozen, Klobenstein, 24.VI.1911, $1\colong1$, leg. E. Schwarz, No. 5119; Tirol, Grödner-Tal, VIII.1913, $1\colong1$ 4\colong1 juv., leg. R. Herzberg, Nos 5113 and 22093; Tirol, Grödner-Tal, VII.1914, $1\colong1$, leg. M. Stellwag, No. 5118; S. Tirol, St. Valentin/Etsch, 1500 m, VIII.1958, $1\colong1$ 2\colong, leg. Klausewitz, No. 25902; Tirol, Unterpeischlach bei Heuben, VII.1964, $3\colong1$, leg. Zilch, No. 25901. ?, Kärtnen, Villach, $1\colong1$ 7, No. 6736/143.

Euscorpius (Euscorpius) mingrelicus (Kessler, 1874)

Georgia, Kaukasus, Karabagh-Gau, 1♀, leg. Valentin, No. 5115. Turkey, Aksehir, 15.IV.1960, 1♀, No. 25934; Karybische Grotte, 26.-27.III.1966, 4im., leg. Dobat, No. 25893. ?, Mendelpass, 1♀, leg. A. Weis, No. 5114; Steiermark, Bürg Schleinitz, 1905, 1♂1♀, leg. Heyden, No. 5116.

Euscorpius (Polytrichobothrius) italicus (Herbst, 1800)

Albania, Tirana, 29, No, 6733/140; Tafalebene, 1939, 29, leg. K. Müller, No. 5382. Austria, Tirol, 1619, leg. S. Heyden, Nos 5109 and 25907; Tirol, Bozen, 26.V.1904, 1619, No. 5107. Croatia, Dalmatia, Lissa, 16, No. 6734/141; Rovijn, 1902, 26291juv., leg. F. Römer, No. 5108; Rovijn, 1905, 16, leg. F. Winter, No. 5138; Rovijn, 1910, 16, leg. E. Pfaff, No. 5111; Rovijn, 1.-13.1V.1956, 193juv., No. 25904; Rovijn, IX. 1958, 1im., No. 25906; Istria, Rovinj,

13.IV.1962, ljuv., leg. G. Strack, No. 12957. ? France, Brioni, 29.V.1913, $1\sqrt[3]{2}$, leg. Löw-Beer, No. 5105. Germany, Tessin (introduced), $1\sqrt[9]{2}$, IX.1959, $1\sqrt[9]{2}$, leg. Mertens, Nos 25903 and 25909. Italy, Verona, ljuv., leg. Leuwer, No. 6268/47; Verona, 1912, $1\sqrt[3]{2}$, leg. Hobrecht, No. 5112. Turkey, $1\sqrt[3]{2}$, leg. Heyden, No. 5106; Constantinopel, 21.VI.1888, $1\sqrt[3]{2}$, 1888, 1juv., leg. Retowski, No. 25905 and 25908; Istanbul, 1941, 1juv., leg. Bott, No. 25910. ? Turkey, Frankfurt (a.d. Turkey), 1903, $1\sqrt[3]{2}$, leg. G. Meyer, No. 5104. ?, Pegli, $1\sqrt[3]{2}$, leg. Schiller, No. 5110; $1\sqrt[9]{2}$, No. 24513; Lussin-Picolo, 8.V.1911, $1\sqrt[9]{2}$, leg. S. Lehrs, No. 5103; Morea, Vityna, VIII.1926, 1im., No. 6271/50; erroneous label "? Kenia", $1\sqrt[3]{2}$; Istria, 1990, $1\sqrt[3]{2}$, leg. Leffler.

Euscorpius (Tetratrichobothrius) flavicaudis (De Geer, 1778)

France, Hyeres, 13, leg. A. Gwinner, No. 5122; Corse, 1905, 191im., leg. Richters, No. 5121; Nimes, Amphitheater, 18.VI.1958, 19, No. 25911. ? France, Pyreneen, 2319, No. 8952/236. Italy, Lucca, 1904, 19, leg. L. Heyden., No. 5131; Rom (Palatin), 1906, 19, leg. Arani, No. 5123; Sardinia, Sassari, 4.IV.1952, 194juv., No. 25919, 5.IV.1952, 291juv., No. 25914; Sardinia, Lago buneri, 11.IV.1952, 1349juv., No. 25918; Sardinia, Castel Sardo, 15.IV.1952, 191im., No. 25912; Sardinia, Bunorva, 15.IV.1952, 391juv., No. 25916; Sardinia, Urgini, 17.IV.1952, 11m., No. 25913; Sardinia, Sassari, IV.1952, 1399juv., No. 25915, 491juv., No. 25920; Sardinia, Sassari, Fledermaushöhle, 6.V.1952, 291juv., No. 25922; Varazze, 28.III.1959, 191, leg. Simon, No. 25917; Sardinia, 12.VIII.1961, 191, No. 25921; Toscana, Lucca, Cour San Leonardo in Treponzia, San Ginese, 191, 14.VIII.1988, leg. D. Kock. ?, Bormes, Deo. Var., 291juv., leg. Oppenheim, No. 5132; 1899, 131, leg. Dönitz, No. 5130; Monsummano, 1914, 13191juv., leg. S. Hobrecht, No. 5102.

Megacormus gertschi Díaz Najera, 1966

Mexico, Hidalgo, 1juv., 14.IV.1946, leg. H. Wagner.

Hemiscorpiidae Pocock, 1893

Hemiscorpius lepturus Peters, 1862

Iran, Alewaz (Khonsistan), 1♂1♀, 1959, leg. Frank.

Hemiscorpius socotranus Pocock, 1899

Yemen, Socotra, Adho-Demellus, 1♀, No. 6710/117.

Heteroscorpionidae Kraepelin, 1905

Heteroscorpion opisthacanthoides (Kraepelin, 1896)

Madagascar, Nossibé, 1898, 1im., leg. Ebenau, No. 5173.

Ischnuridae Simon, 1879

Cheloctonus crassimanus (Pocock, 1896)

R. South Africa, Butterworth, 12, No. 6729/136.

Cheloctonus jonesii Pocock, 1892

R. South Africa, Zululand, Natumu (nordöstl. Dongola-River), 1♂1♀(im.), No. 6728/135.

Hadogenes taeniurus (Thorell, 1876)

Namibia, Okahandja, 1955, 2juv., leg. Gaeldes; Kaoko Veld, 1.IX.1955, 1juv., leg. E. v. Koener.

Hadogenes tityrus (Simon, 1888)

Namibia (SW Afrika), Waterberg, 1juv. (holotype of *Hadogenes bifossulatus* Roewer, 1943), No. 6739/146; Lüderitzbucht, 1♂(im.)1♀(im.), Nos 5988/40 and 8889/231.

Hadogenes trichiurus (Gervais, 1843)

R. South Africa, Grahamstown, 12, No. 6725/132.

Hadogenes troglodytes (Peters, 1862)

R. South Africa, Transvaal, Letaba Camp, 4.-11.IX.1931, 2\Q1juv. (holotype and paratypes of *Hadogenes troglodytes letabensis* Werner, 1933), Nos 5345 and 5346; Transvaal, Korugs Park, Letaba Camp, 28.VIII.1952, 1\Q2.

Hadogenes sp.

Namibia, 3juv., 24.IX.1952.

Iomachus laeviceps (Pocock, 1890)

India, Nilgiris, 2∂4juv., No. 1089/20; Dekan, Madras, 1♀, No. 6727/134.

Iomachus politus Pocock, 1896

Mozambique, 13, No. 6726/133. Namibia, Windhoek, V.1912, 29, leg. F. Schmidt, No. 5183; Swakopmund, V. 1912, 13, leg. F. Schmidt, No. 5183 (loc. in error?). ?, Tonga Island, 19, No. 5984/36 (loc. in error?).

Liocheles australasiae (Fabricius, 1775)

Australia, Rimitara Island, 1909, 4♀, leg. E. Wolf, No. 5377. Indonesia, Celebes, 3♀, No. 5715/30; W. Borneo, 29, leg. F. Wille, No. 5216; Amboina, 19, No. 6730/137; Halmaheira, Galela, 1894, 29, leg. Kükenthal, No. 5195; Halmaheira, Soah Konorra, 1894, 39, leg. Kükenthal, No. 5192; Halmaheira, Oba, 1894, 4♀, leg. Kükenthal, No. 5193; Halmaheira, Patani, 1894, 1♀, leg. Kükenthal, No. 5194; Borneo, Baranfluss, 1894, 5♀2juv., leg. Kükenthal, No. 5191; Sumatra, Bandar Kwela, 1900, 19, leg. V. Auer, No. 5199; Roembi-Muskoka, 191juv., 1909, Sunda Exped. des Frankf., leg. J. Elbert.? Indonesia, Nine, 2♀1juv., 9.V1.1909, Levuka, Ovalon, 1♀, VI.1909, Laeuassa (?), 1♀, 7.IX.1909, Feis, W. Carolinen, 12, 21.-22.IX.1909, Makotea Paumota (?), 223juv., 1909, Levuca, 22, 1909, Hanseatische Südsee Expedition, leg. Wolf; W. Java, Tjibodas, 1400 m, 2♀5juv., 5.V.1927, leg. S. Ueberer; W. Java, Tjibodas, 4600 m, 3juv., 13.-25.VI.1957, leg. A. M. R. Wegner; Warelana (?), 1juv., 11.VI.1959. Indonesia (or Malaysia), Borneo, 1♀, leg. Well; Borneo, Baramfluss, 1894, 19, leg. Kükenthal, No. 5213. Malaysia, Selangor, Staat um Kuala Lumpur, 1\(\times\)2juv., III.1961, 2\(\times\), 11.IV.1961, leg. U. Klingel; Batu Höhle, XII.1961, 1\(\times\), leg. Klingel; Bali, 1♀, leg. Altmann. Melanesia, Solomonen, Apia, 1909, 5♀2juv., leg. E. Wolf. No. 5376. Myanmar, Burma, Mt. Victoria, 19, No. 9784/158. New Guinea, Eitape Island, 3♀, No. 8892/234. Papua New Guinea, Palmen plantage 15 km E Madarg, 1♀, 5.IX.1990, leg. D. Mebs. Philippines, Luzon, Mt. Maquiling, 199juv., No. 6266/45, 1092juv., No. 6744/151. Samoa, Upolu, Aistr. Apia, IV.1966, 19, leg. Marschall. Tahiti, 2juv., 27.VII.1909, 1♀, 28.VII.1909, Hanseatische Südsee Expedition, leg. Wolf. ?, 2♀, No. 5218; Batjan, 1894, 1296juv., leg. Kükenthal, No. 5215; Key, Doelala, VI.1908, 19, leg. H. Merton, No. 5208; Aroe, Umgebung v. Ngaigoeli, II.1908, 1juv., leg. H. Merton, No. 5190; Aroe, Manoembai, Kobroor, III.1908, 19, leg. H. Merton, No. 5196; Elat, Gross-key, VI.1908, 1♀, No. 5188, 9.VI.1908, 1♀1juv., No. 5210, 10.VI.1908, 7♀, No. 5197, leg. H. Merton,; Look Jus, Mittiero, 1909, 39, leg. E. Wolf, No. 5374; Savage-Jus, Nirce, 1909, 4\(\text{\$\sigma}\)2juv., leg. E. Wolf, No. 5375; Lombok, Swela, 362 m, 1909, 1\(\text{\$\sigma}\), leg. J. Elbert, No. 5217; Lombok, Sadjang, 29.IV.1909, 291juv., leg. J. Elbert, No. 5198; Lombok, 1909, 2juv., leg. J. Elbert, No. 5189.

Liocheles karschii (Keyserling, 1885)

New Guinea, Sitape, Ijuv., 14.IX.1909, Hanseatische Südsee Expedition, leg. Wolf. Liocheles waigiensis (Gervais, 1843)

Indonesia, Halmaheira, 13, No. 8890/232; Halmaheira, Patani, 1894, 3im., leg. Kükenthal, No. 5200; Halmaheira, 2200, 1894, 1\(\times\) (im.), leg. Kükenthal, No. 5201. **Melanesia**, Solomon, Buka, 1908, 1\(\times\), No. 5378. ?, Admiralitäts Islands, Manus, 1juv., No. 8891/233; Doerdjela Island, Aru, Wämmer, 1\(\times\), leg. H. Merton, No. 5204, det. Kraepelin as *Hormurus papuanus*; Elat, Gross-key, 2\(\times\)2im., leg. H. Merton, No. 5349, det. Kraepelin as *Hormurus caudicula keyensis*.

Liocheles cf. waigiensis (Gervais, 1843)

Australia, Bramston Beach, 5.V.1957, 1Q2juv., leg. Felten.

Opisthacanthus (Nepabellus) africanus Simon, 1876

Cameroon, Molundu, 1911, Ijuv., leg. Schultze, No. 5285. Congo, Fr. Kongo, Quesso, II.1910, Ijuv., leg. Schubotz, No. 5284.

Opisthacanthus (Nepabellus) asper (Peters, 1862)

R. South Africa, $1\sqrt[3]{}$, No. 5300; N. Transvaal, Mica, $1\sqrt[9]{}$, 4.IX.1952; Zululand, Umfolosi, Camp Masimba, IX.1952, $1\sqrt[3]{}1\sqrt[3]{}2$ juv., leg. Schmidt.

Opisthacanthus (Nepabellus) cf. asper (Peters, 1862)

?, O. Afrika, 1juv., XII.1953, leg. K. L. Koch.

Opisthacanthus (Nepabellus) cf. laevipes (Pocock, 1893)

R. South Africa, Transvaal, Melelane Camp, 1931, 1juv., leg. F. Haas, No. 5279.

Opisthacanthus (Nepabellus) madagascariensis Kraepelin, 1894

Madagascar, 1885, 1juv.(♂), leg. Stümpf, No. 5301; Tananarive, Liaterit, Steppe, 1300 m, 1♂(im.), 26.III.1960, leg. K. L. Koch; Ouest, Ampanily, Xerophytenbrusch, 30 juv., 5.V.1960, leg. K. L. Koch; Kalkplatean bei Bevoalava, 2.VI.1960, 2♀(im.), leg. K. L. Koch.

Opisthacanthus (Nepabellus) cf. punctulatus Pocock, 1896

Madagascar, W, Kusta, Moroudava, X. 1960, 121juv., leg. K. L. Koch.

Opisthacanthus (Nepabellus) rugiceps Pocock, 1897

Tanzania, O. Afrika, Tanga, 1♀, No. 6724/13; Kilimandjaro, Moschi, 1897, 1♂, leg. Nolte, No. 5295

Opisthacanthus (Nepabellus) cf. rugiceps Pocock, 1897

Tanzania, Dar-es-Sallam, Tanganyika Territory, 1juv., 8.IX.1954, No. 489/1.

Opisthacanthus (Nepabellus) validus Thorell, 1876

R. South Africa, Kap der Guten Hoffnung, 1im., No. 5302.

Opisthacanthus (Opisthacanthus) elatus (Gervais, 1843)

?, Indonesia, Halmahera, 1894, 1&, leg. Kükenthal, No. 30640 (loc. in error?).

Opisthacanthus (Opisthacanthus) lecomtei (Lucas, 1858)

Cameroon, Edea, 1Q, No. 6723/130; Victoria, Idenau-Pflanzuy, 1Q, leg. O. Volley, No. 5292.

Paleocheloctorus pauliani Lourenço, 1996

Madagascar, Ampotaka, Primärer Dornwald, 2juv., 26.V.1960, leg. K. L. Koch.

Iuridae Thorell, 1876

Hadruroides charcasus (Karsch, 1879)

Peru, b. Olmos, 06°00'S, 79°40'W, 200 m, 7.IV.1953, 1♂, leg. Koepcke, No. 8758; Weg Ohmos-Jacu, 600 m, 13.IV.1953, 1♀, leg. Koepcke, No. 8761. **Panama**, (loc. in error?), 1♀, No. 5281.

Hadruroides galapagoensis Maury, 1974

Galapagos, 1♀, No. 8052/167; 2♀, leg. Eibel-Eibesfeldt, No. 25959; S-Seymour (Baltra), 15.VII.1957, 1♀1juv., leg. Eibel-Eibesfeldt, No. 25948; Duncan, 28.VII.1957, 1♀2juv., leg. Eibel-Eibesfeldt, No. 25945; James, James-Bay, 3.VIII.1957, 2juv., leg. Eibel-Eibesfeldt, No. 25954; Barrington, 31.VIII.1957, 1♀, leg. Eibel-Eibesfeldt, No. 25946; Charles, Bleach Reach, 20.IX.1957, 1♂2♀, No. 25955, 2♂2♀, No. 25956, leg. Eibel-Eibesfeldt; Akademiebucht, 17.VII.1957, 1♀(im.), No. 25953, VII.-IX.1957, 2im., No. 25952, leg. Eibel-Eibesfeldt; 8 mil NW Akademiebucht, 21.X.1957, 2im., leg. Eibel-Eibesfeldt, No. 25947; Narborough, V1.-X.1957, 1♂(im.), leg. Eibel-Eibesfeldt, No. 25951; Albemarle, Essex Point, 14.X.1960, 2im., leg. Eibel-Eibesfeldt, No. 25950; Santa Cruz Island, Akademy Bay, Darwin Research Sta., 12.II.1964, 2♀3im., leg. Cavagnaro & Schuster, No. 25958; James, James-Bay, 8.III.1966, 3♀2im., leg. Eibel-Eibesfeldt, No. 25941; S-Seymour (Baltra), 1966, 1♀, No. 25944; 1966, 2♀, leg. Frühjahr, No. 25942.

Hadruroides lunatus (L. Koch, 1867)

Peru, Silla de Paita, Küste, 14.IX.1950, 12, leg. Koepcke, No. 8744; Lomas v. Atocongo b. Lima, 12.VIII.1950, 1&1\(\text{2}\) juv., No. 8743, 15.IV.1951, 1\(\text{1}\) 1\(\text{Q}\), No. 8745, 18.IV.1951, 1\(\text{d}\), No. 8752, 1juv., No. 8753, 28.X.1951, 4♂8♀8juv., No. 8748, 20.XI.1951, 2♂3♀, No. 8750, 18.IV.1952, 2♂4♀8juv., No. 8754, leg. Koepcke; Lomas v. Lachay b. Chamcay, 25.X.1951, 1♀1juv., No. 8747, 8.XI.1951, 7♂10♀4juv., No. 8746, leg. Koepcke; Puente Piedras, Larentanilla, 18.XI.1951, 1♂3♀, leg. Koepcke, No. 8749; Wald v. Zárate b. San Bartholome, 2700 m, 10.IV.1952, 1♀, leg. Koepcke, No. 8751; Hda. Llayuen, 07°40'S, 78°40'W, 1800 m, 12.XII.1952, 1♂1♀, No. 8755, 1♂1juv., No. 8756, leg. Koepcke; b. Olmos, 06°00'S, 79°40'W, 200 m, 7.IV.1953, 2\(\text{2}\) ljuv., No. 8757, 8.IV.1953, 4juv., No. 8759, 9.IV.1953, 1\(\text{2}\), No. 8760, leg. Koepcke; Oberh. Santa Eulalia, 1250 m, 3.VI.1953, 1♂2♀1juv., leg. Koepcke, No. 8765; b. Autiska oberh. Lima, 450 m, 3.VI.1953, 19, leg. Koepcke, No. 8764; Autisha oberh. Lima, 2100 m, 3.VI.1953, 1im., leg. Koepcke, No. 8766; Wald v. Zárate oberh. Lima, 2700 m, 25.VI.1953, 121juv., leg. Koepcke, No. 8762; b. Huanta, Andemabh, 2400 m, 29.X.1953, 2juv., leg. Koepcke, No. 8768; Matucama oberh. Lima, 2500 m, 23.IX.1953, 2juv., leg. Koepcke, No. 8773; Weg Oknos-Jaen, 13.IV.1953, 3juv., leg. Koepcke, No. 8762; Huariquina b. Matucana, 2600 m, 18.II.1954, 1♀, leg. Koepcke, No. 8770; Mirados Lives, 1050 m, 17.IV.1954, 13, No. 8771, 3juv., No. 8772, leg. Koepcke; Lomas v. Lachay b. Chavcay, 10.XII.1954, 1im., leg. Koepcke, No. 8769; San Bartolomé oberh. Lima, 2000-2200 m, 22.V.1955, 4im.2juv., leg. Koepcke, No. 8763. ?, 5im., No. 25957.

Hadrurus arizonensis Ewing, 1928

Mexico, Tampico (loc. in error ?), 1, No. 8051/166. USA, Arizona, 1, No. 8050/165. *Iurus asiaticus* Birula, 1903

Turkey, Ovacick, 1♀, No. 6732/139; Belemedek Mara, Baracken, 1914, 1♂1♀2im., leg. Fahringes, No. 24518; Giglikara, 1680 m, 2♀, leg. Felten, No. 25890; Karybische Grotte, 26.-

27.III.1966, 6im.2juv., leg. Dobat, No. 25893; Pazarkoy, sö von Egridir, 1400 m, 27.V.1966, 1 Q, leg. Felten, No. 25892. ?, ohne Fundortangabe, 1 Q, No. 25891.

!urus dufoureius (Brullé, 1832)

India, Dekkan, Anamalai (loc. in error?), 18 (holotype of Chaerilomma dekanum Roewer, 1943), No. 8893/235.

Scorpionidae Latreille, 1802

Heterometrus (Chersonesometrus) fastigiosus Couzijn, 1981

India, Assam, 18191juv. (holotype and paratypes), No. 8886/228.

Heterometrus (Chersonesometrus) fulvipes (C. L. Koch, 1837)

India, Madras, 1889, 1∂191juv., leg. S. Kolb, No. 5347.

Heterometrus (Chersonesometrus) granulomanus Couzijn, 1981

India, Palni-Hills, Kadai-canal, 16 (paratype), No. 5332.

Heterometrus (Chersonesometrus) pelekomanus Couzijn, 1981

India, Deccan, Nilgiris, Maharshtra, 23 (holotype and paratype), No. 1088/19; Bombay, Deccan, 132218juv.(1038) (paratypes), No. 329.

Heterometrus (Gigantometrus) swammerdami Simon, 1872

India, Madras, 1889, 13, leg. Th. Kolb, No. 5334; Malabar, Puddapoddy, 19, leg. O. Lotichius, No. 5333; Malabar-Küste, 1319, No. 8885/227; Lanooli, 1911, 191juv., leg. Low-Beck, No. 5320. Sri Lanka, Ceylon, Kandy, 13, No. 6703/110; Ceylon, Paradenya, 2juv., No. 8853/195; Ceylon, Estata Beriturdi, 24.I.1914, 1juv., leg. J. Mastbaum, No. 5304.

Heterometrus (Heterometrus) bengalensis (C. L. Koch, 1841)

Myanmar, Prome, 12 (det. Couzijn, 1977), No. 7986/160.

Heterometrus (Heterometrus) laoticus Couzijn, 1981

Laos, Karen-Dorf, ca 8 km SE Luang Prabang, 18.XII.1964, 12.

Heterometrus (Heterometrus) liophysa (Thorell, 1888)

Indonesia, Sumatra, Padang, 26(im.), No. 5278; Sumatra, Bunga Bondar, 1911, 16, 28.X.1911, 26, leg. Schütze, No. 5323 and 18158.

Heterometrus (Heterometrus) liophysa laevifrons Roewer, 1943

Indonesia, Mentawei Isl., Siberut, 2juv. (male holotype, female paratype), No. 8883/225; Sumatra, Nias, 1♀, leg. P. Beyer, No. 5322.

Heterometrus (Heterometrus) longimanus (Herbst, 1800)

Indonesia, Java, Idien-geb, 3\operatorname{Q}. No. 6743/150; Sumatra, Padang, 1\operatorname{Q}, No. 6702/109; Sumatra, 2juv., leg. S. Auer, No. 5291; Sumatra, Fort de Kock, 1\operatorname{Q}1\operatorname{Q}, No. 8814/183; Sumatra, Deli, 1879, 2\operatorname{Q}1\operatorname{Q}, leg. V. Schauler, No. 5328; Sumatra, 1886, 1\operatorname{Q}, leg. Hochwiesner, No. 5329; Sumatra, Deli, 1892, 2\operatorname{Q}2\operatorname{Q}1\text{im.}, leg. Benecke, No. 5348; West Borneo, Pontianak, 1893, 2\operatorname{Q}2\operatorname{Q}6juv., leg. F. Will, No. 5324; Halmahera, 1894, 5\operatorname{Q}5\operatorname{Q}4\text{im.}, leg. Kükenthal, No. 5350; Sumatra, 1900, 1\operatorname{Q}1\text{im.}, leg. V. Guer, No. 5327; Sumatra, Hügelland Boelaeh Blang-Cra, Lho Seumawe, Atjeh, 1\operatorname{Q}2\operatorname{Q}1juv., leg. Rookmaaker, No. 5368; Sumatra, Lippisches Landes, 26.VII.1954, 4\operatorname{Q}3\operatorname{Q}5\text{juv.} Malaysia, Borneo, Baramfluss, 1894, 3im.13juv., leg. Kükenthal, Nos 5325 and 5326.

Heterometrus (Heterometrus) longimanus belitungensis Couzijn, 1981

Indonesia, Bangka, 222juv. (paratypes), No. 5330.

Heterometrus (Heterometrus) petersii (Thorell, 1876)

?, Cochinchina, V.1872, 1♀, No. 5331.

Heterometrus (Heterometrus) cf. petersii (Thorell, 1876)

?, label in error "Colombia, Sta Marta, leg. Kickhefel", 16.

Heterometrus (Javanimetrus) cyaneus (C. L. Koch, 1836)

Indonesia, Java, Matang, $1\copole$, No. 6705/112; Java, Idien-geb, $2\colongraphi^2\colongraphi^2$. No. 8814/183; Sumatra, Deli, $2\colongraphi^2\colongraphi^2$. No. 8884/226; W. Java, Djasinga, 1929, $1\colongraphi^2\colongraphi^2$, leg. Wolf, No. 5362; Java, 1933, 1juv., leg. F. Ohaus; Java, 4.X.1961, 4juv. (im.). **Philippines**, Luzon, Mt. Maquiling, $1\colongraphi^2\colongraphi^2$ (holotype and paratype of *Heterometrus petersi luzonensis* Couzijn, 1981 Syn. n.), No. 8882/224. ?, Usambara (loc. in error), $1\colongraphi$, No. 6707/114.

Heterometrus (Srilankametrus) indus (Geer, 1778)

India, Dekan, Nilgiris, 1im., No. 6704/111, 1juv., No. 1087/18; Dekan, Travankore, 2juv., No. 8881/223. Sri Lanka, Ceylon, 1847, $1 \Im 1$ juv., leg. G. Worms, No. 5319; Ceylon, 1912, $1 \Im 1$ juv., leg. A. Hansen, No. 5317; Ceylon, IV.1914, $1 \Im 2 \Im 1$, leg. J. Mastbaum, No. 5318. Phyderabad, Banjara Road, 1931, $1 \Im 1$, leg. S. Mirza, No. 5367; Pava (loc. in error P), Mus. Leiden, $1 \Im 1$, No. 5321.

Opisthophthalmus cf. capensis (Herbst, 1800)

?, Ägypten (loc. in error), $1\sqrt[4]{9}$, leg. E. Rüppell, No. 5294.

Opisthophthalmus carinatus (Peters, 1862)

Namibia (SW Afrika), Chnosgebirge, 1, leg. F. Rintelen, No. 5297; Aus, 1; Windhoek, 1; 2; 12; Iuv., leg. K. Schliermann, No. 5342; Lüderitzbucht, 1; 2; Iuin, No. 6718/125; Windhoek, 2; No. 8840/182, 1; No. 8858/200; Swakopmund, 1909, 1; leg. F. Rintelen, No. 5296; 1909, 1; leg. Leonhardi, No. 5341; Aukas, 1909, 1; lijuv., No. 5343; Koelmanshoop, 1913, 1; leg. S. Hardt, No. 5298; Koelmanshoop, III. 1913, 2; leg. H. Lotz, No. 18157; Schinxfläche, 1938, 1; leg. Boss, No. 5359; Namibfläche, 1938, 2; leg. Boss, No. 5360; Maltahöhe, 1938, 2im., leg. Boss, No. 5361; Marienthal, 1938, 2; leg. Boss, No. 5363; Okahandja, 1951, 2juv., IX.1952, 1; V.1953, 1juv., V.1955, 3juv., leg. Gaesdes, Okahandja, X.1955, 1; leg. Gaesdes, No. 9647; b. Okahandja, 1957, 1; leg. Gaesdes, No. 10531. 2; No. 5299.

Opisthophthalmus cf. carinatus (Peters, 1862)

Namibia, Ahaberge, VII.1953, 5juv., leg. Gaesdes; Kaoko Veld, 1.IX.1955, 1juv., leg. E. v. Koener; Okahandja, 1juv., 1956, leg. Gaesdes.

Opisthophthalmus gigas Purcell, 1898

Namibia (SW Afrika), Lüderitzbucht, 12, No. 6717/124.

Opisthophthalmus glabrifrons Peters, 1862

R. South Africa, Grahamstown, 13, No. 6721/128. ? Zimbabwe, Rhodesia, Salisbury, 13, No. 6722/129.

Opisthophthalmus holmi (Lawrence, 1969)

Namibia, Sandünen bei Koicheb, 12.11.1973, 13, leg. B. Lamoral, No. 29295.

Opisthophthalmus karrooensis Purcell, 1898

R. South Africa, Beaufort West, 1319, No. 6720/127.

Opisthophthalmus latimanus C. L. Koch, 1841

R. South Africa (S Afrika), Kei Bridge, 12, No. 6719/126.

Opisthophthalmus cf. latimanus pugnax Thorell, 1876

R. South Africa (S Afrika), Port Elizabeth, 13, No. 6716/123.

Opisthophthalmus cf. litoralis Lawrence, 1955

Namibia, 1♂, 1956, leg. Gaesdes.

Opisthophthalmus opinatus (Simon, 1888)

Namibia (SW Afrika), Kunene, 39, No. 6715/122. ?, 19, ded. 1888, No. 30643.

Opisthophthalmus schultzei Kraepelin, 1908

Namibia (SW Afrika), Lüderitzbucht, 1juv.(\$\times\$) (holotype of *Opisthophthalmus laevicauda* Roewer, 1943), No. 6741/148.

Opisthophthalmus wahlbergii (Thorell, 1876)

Namibia (SW Afrika), Lüderitzbucht, 131, No. 8888/230; Swakopmund, 1909, 131juv., No. 5344; 1938, 23, leg. Boss, No. 5358.

Opisthophthalmus sp.

Palestina (loc. in error?), 13.

Opisthophthalmus sp. (possibly several species)

Namibia (SW Afrika), Koetmanshoop, 2juv., leg. Hardt, No. 5288; Okahandja, 1957, 2juv., leg. Gaesdes, No. 10354; Chuosgebirge, 2juv., leg. Rintelen, No. 5287; 1juv., 15.-16.X.1952; Windhoek, 1juv., 31.X.1952. R. South Africa, Karroo, 3juv., No. 8849/191.

Pandinus (Pandinoides) cavimanus (Pocock, 1888)

Kenya, 1 ?. Namibia (SW Afrika), Windhoek, 1912, 1 $\bigcirc 2$?, leg. F. Schmidt, No. 5339 (loc. in error?). Sudan, Lado Distr., Dufile, 1 ?, No. 6709/116. ?, O. Afrika, 3 ?, leg. F. Kinkelin, No. 5340.

Pandinus (Pandinopsis) dictator (Pocock, 1888)

Cameroon, Duala, 16.XII.1913, 2♂1♀1im., leg. A. Haas, No. 5335; Edea, 1♂, No. 6708/115. ?, Inner Afrika, Ufer J. Niger, 1♂, leg. A. Melly, G. Heyden, No. 5336.

Pandinus (Pandinurus) exitialis (Pocock, 1888)

Eritrea?, Erythraea, 1juv., No. 6706/113.

Pandinus (Pandinurus) viatoris (Pocock, 1890)

Mozambique, Tete, IV.1947, 4juv. Namibia, Tabora, 1913,1379 (im), No. 5338 (loc. in error?). Tanzania, O. Afrika, Tanga, 199 (im), No. 8859/201; Kilimatinda, 1904, 2379, leg. Belzing, No. 5337; Mateteback, 1200 m, 2379, leg. Kohl-Larsen, No. 5365; Hohenloho-Graben, 1932, 1999 1 im., leg. Kohl-Larsen, No. 5366. ?, 19999, No. 39008.

Pandinus (Pandinus) imperator (C. L. Koch, 1841)

Ivory Coast, Atidian, 1juv., leg. D. Satlien. Togo, Misahöhe, 1, No. 6711/118; Sansanne Mangu, 1, No. 8887/229. ?, 1, No. 37586; 8juv. before 1st ecdysis, ZOO Frankfurt, No. 35512; W. S. 158, Schausammlung, 1; Fernando Poo, 1963, 1.

Scorpio maurus Linnaeus, 1758

Scorpiopidae Kraepelin, 1905

Scorpiops dastychi Kovařík, 2000

India, Himalaya, Molta, 3.000 m, Deutsche Indien-Expedition 1955-57, leg. G. A. von Maydall, 6.V.1956, 1 (paratype No. 6).

Scorpiops longimanus Pocock, 1893

India, Assam, 1♀, No. 6685/95.

Scorpiops petersii Pocock, 1893

India, a. d. Nachlass Eidmann, 13, No. 4415d.

Scorpiops tibetanus Hirst, 1911

?, Kambu batsi, 12.IV.1939, 1\(\frac{1}{2}6\Q2\)9juv., leg. N. Eidmann.

Urodacidae Pocock, 1893

Urodacus armatus Pocock, 1888

Australia, Alice Springs, 26.III.1957, 1juv., leg. Felten.

Urodacus cf. armatus Pocock, 1888

Australia, Darling Range, 50 km E Perth, 11.I.1957, 1juv., 2.II.1957, 1.juv., leg. Felten.

Urodacus hoplurus Pocock, 1898

Australia, West-Australien, Lancefield, 13, No. 6700/107; Central-Australien, 1908, 133im., leg. Leonhardi, Nos. 24515 and 24516; Emily Sop, E Alice Springs, 8.IV.1957, 13, leg. Felten.

Urodacus cf. hoplurus Pocock, 1898

Australia, Palen Valley b. Hermanus-?, 1♀, 4.IV.1957, leg. Felten.

Urodacus manicatus (Thorell, 1876)

Australia, Neu-Süd-Wales, Bendigo, 1 \bigcirc , No. 6701/108; Yalgor, 1907, 1 \bigcirc , leg. H. Görling, No. 5175; Adelaide, 1 \bigcirc , 10.III.1957, leg. Felten; Adelaide, 1 \bigcirc , 16.III.1957, leg. Felten; 30 mil E Adelaide Spr., 1 \bigcirc , 28.III.1957, leg. Felten.

Urodacus novaehollandiae Peters, 1862

Australia, Marianen, Saipan, Ijuv. (holotype of *Urodacus marianus* Roewer, 1943), No. 8878/220.

Urodacus cf. yaschenkoi (Birula, 1903)

Australia, central, Tnatata, 4juv., leg. Leonkardi.

Vaejovidae Thorell, 1876

Paruroctonus becki (Gertsch & Allred, 1965)

USA, Idaho, Buttle Co., Arco, 8.VIII.1969, 2♂1♀, leg. M. M. Cazier, det. Francke, 1976, No. 29199.

Paruroctonus boreus (Girard, 1854)

USA, Nevada, Washoe Co., 7.5 miles west of Nixon, 19.VIII.1969, 2♂1♀, leg. Bigelow, det. Francke, 1974, No. 29201.

Paruroctonus utahensis (Williams, 1968)

USA, Utah, 3 miles ONO Bluff San Juan Co., 1969, 16, leg. M. A. Cazier, No. 29202.

Smeringurus mesaensis (Stahnke, 1957)

USA, California, San Bernardino Co., Death Valley Natl. Mnt. Saratona Springs, 11.VI.1970, 13, leg. Francke, No. 29207.

Uroctonus mordax Thorell, 1876

Ecuador, 2, No. 8060/175 (loc. in error?).

Vaejovis carolinianus (Beauvois, 1805)

USA, Alabama, 2im., No. 8061/176.

Vaejovis coahuilae Williams, 1968

USA, Texas, Brewster Co., Big Bend Natl. Park, Rio Grande Village, 17.VI.1974, 1♂1♀, leg. Cazier and Francke, No. 29205.

Vaejovis confusus Stahnke, 1940

USA, Arizona, Maricopa Co., Mesa, 14.V.1971, 2∂1♀, leg. O. F. Francke, No. 29206.

Vaejovis intrepidus cristimanus Pocock, 1898

Mexico, 19, Mus. Hamburg, No. 5186.

Vaejovis spinigerus (Wood, 1863)

USA, Arizona, Pinal Co., Florence, 30.V.1975, 2♀(im.)1juv., leg. R. Smith, No. 29204.

Vaejovis vorhiesi Stahnke, 1940

USA, Arizona, Cochise Co., 5 miles W Portal, 5.Vl.1974, 2, leg. O. F. Francke, No. 29203.

Discussion of the faunistic data published by Roewer (1943)

Revision of specimens identified by Roewer (1943) has revealed a number of errors, of which those listed below resulted in species appearing in a country where they in fact do not occur or where their occurrence is doubtful.

Parabuthus capensis (Ehrenberg, 1831) apparently does not occur in Namibia as assumed by Werner (1902: 598) and Roewer, but only in the Republic of South Africa. Specimens from Namibia that Roewer (1943: 207) identified as *P. capensis* are hereby assigned to *Parabuthus kraepelini* Werner, 1902 and *Parabuthus raudus* (Simon, 1888).

Parabuthus granulatus (Ehrenberg, 1831) does not occur in Kenya, specimens so identified by Roewer (1943: 207) are Parabuthus pallidus Pocock, 1895.

The occurrence of *Tityus androcottoides* (Karsch, 1879) in Venezuela is doubtful, as the female so identified by Roewer (1943: 219) in my opinion is *Tityus rugosus* Schenkel, 1932.

Specimens of *Tityus carinatoides* Mello-Leitão, 1945 (nec *Tityus carinatus*) from Brazil (Roewer, 1943: 219) are hereby assigned to *Tityus bahiensis* (Perty, 1834).

Specimens of *Tityus lutzi* Giltay, 1928 (= *Tityus trivittatus lutzi*) from Argentina (Roewer, 1943: 219) in my opinion are *Tityus trivittatus* Kraepelin, 1898.

Specimens of *Tityus magnimanus* Pocock, 1897 from Venezuela (Roewer, 1943: 219), which Lourenço (1987: 568) regarded as *Tityus pococki* Hirst, 1907, show characters of *Tityus zulianus* González-Sponga, 1981. Definite identification of these species will require a separate revision.

The female of *Opisthacanthus asper* (Peters, 1862) from Tanzania (Roewer, 1943: 234) belongs to *Opisthacanthus rugiceps* Pocock, 1897.

Specimens of *Heterometrus liurus* (Pocock, 1897) from Sri Lanka (Roewer, 1943: 228) are juveniles of *Heterometrus swammerdami* Simon, 1872.

The specimen of *Pandinus militaris* Pocock, 1900 from Sudan (Roewer, 1943: 229) is *Pandinus cavimanus* (Pocock, 1888). I have examined the types of both species and conclude that *Pandinus militaris* Pocock, 1900 is a junior synonym of *Pandinus cavimanus* (Pocock, 1888).

Discussion

Since even specialists on a given group of scorpions do not always agree on species relations, examination of a single museum collection cannot resolve questions of this nature. Among taxonomically difficult complexes are the *Tityus* "group bolivianus" or the Venezuelan group comprising *Tityus magnimanus*, *T. pococki*, and *T. rugosus* (see González-Sponga, 1996 and Lourenço, 1987). Resolution of these and many other matters is beyond the scope of this work, which cannot do more than to inform specialists of the presence of specimens that possess characters relating them most closely to the species named above. It will allow other specialists to use the collection for solving particular taxonomic problems.

A real impediment to the value of the collection is the uncertainty about the correctness of some labels. In some instances the labels are quite certainly incorrect, e. g. for *Babycurus jacksoni* (Pocock, 1890) (Nos. 5293 and 5314 have labels: SW Africa: Windhoek, V.1912, leg. F. Schmidt), *Buthus occitanus* (Amoreuxi, 1789) (male label: USA, Texas, leg. Tips), *Uroctonus mordax* Thorell, 1876 (No. 8060/175 label: Ecuador), or *Opisthacanthus elatus* (Gervais, 1843) (No. 30640 label: Indonesia, Halmahera, 1894, leg. Kükenthal). Some specimens unfortunately lack locality data altogether.

A problem which concerns not just this but all older museum collections is the state of preservation of some specimens, which after 50 to over 100 years in alcohol are completely devoid of pigment.

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Addendum

In the period between completion of the checklist and its submission there occurred several taxonomic changes which necessitate additional comments. For instance, specimens from Cyprus identified as *Mesobuthus gibbosus* (Brullé, 1832) probably are *Mesobuthus cyprius* Gantenbein & Kropf, 2000.

Newly described or designated species of the genus Euscorpius are very difficult to interpret. This concerns Euscorpius beroni Fet, 2000, Euscorpius gamma Caporiacco, 1950 (both in the Euscorpius mingrelicus group), Euscorpius alpha Caporiacco, 1950 (Euscorpius germanus group) and Euscorpius tergestinus (C.L. Koch, 1837) (Euscorpius carpathicus group). Taking geographic distribution into account, I surmise that of these species only Euscorpius tergestinus could be present in the revised collection, amongst specimens identified as Euscorpius carpathicus.

Species such as *Euscorpius gamma* or *Euscorpius alpha* are likely to be identifiable in museum collections only tentatively and so will tend to lower the importance of the collection. To be more specific, with solitary specimens or only small series it is impossible to separate e.g. *Euscorpius alpha* from *Euscorpius germanus*.

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