

ADDITIONS AND CORRECTIONS OF THE PREVIOUS  
LAND PLANARIAN INDICES OF THE WORLD  
(TURBELLARIA, TRICLADIDA, TERRICOLA)<sup>1)</sup>

by

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I. INTRODUCTION TO THE CONCLUSIVE INDEX ON LAND PLANARIANS

This series of publications had its origins in our common research needs. Correspondence under way in 1984 dealt with our mutual interests in land planarians and especially our separate publications describing old and new species of the genus *Bipalium* STIMPSON, 1857, the family Bipaliidae VON GRAFF, 1896. We discussed nomenclatural problems, searching for basic literature, setting dates for citations, validating species with inadequate descriptions and many other issues. Through these exchanges of viewpoints and information our professional cooperation matured. We realized independently the need for an Index to the genera and species in the various families. In fact through sharing of our literature searches, photocopies and information, some of the work on the Indices was already underway. Both of us were developing functional card files of species and references. Problems discussed in letters became part of later manuscripts. Thus, it was natural that we should cooperate when KAWAKATSU in 1986 proposed a joint effort. The medium for publication was to be the Fuji Women's College printing resources. Without the availability of this service the publications probably could not have been possible and both authors are truly grateful. The Indices represent a real joint effort although preparations for the publication and consultations with publisher were entirely born by KAWAKATSU. There is, moreover, an international aspect to our work since we sought the advice and assistance of many interested colleagues throughout the world.

A stimulus to our studies occurred in spring of 1985, when OGREN had his sabbatical from college teaching. Literature was obtained and studied, a computer was purchased allowing his preparation of data bases on land planarian species and key references. Preparation of a manuscript entitled Genera and Species of the Family Rhynchodemidae was part of this effort. In 1985 the writers decided to cooperate in preparation of an article on *Platydemus manokwari* DE BEAUCHAMP, 1962, from Guam and The Philippines (cf. KAWAKATSU, OGREN & MUNIAPPAN, 1992). They were also obtaining the literature of families Rhynchodemidae VON GRAFF, 1896, and Geoplanidae STIMPSON, 1857. OGREN with his computer was preparing short indexes to geoplanid species for the many references of the late Drs. Ernst MARCUS and Eveline DU BOIS-REYMOND MARCUS, and Drs. Claudio FROEHLICH and

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1) This paper is affectionately dedicated to the late Dr. Hisao SUGINO, Professor Emeritus of Ōsaka Kyōiku University, who passed away on August 4, 1992, at Ōsaka, Japan. The deceased was recognized as a leading authority on morphogenetic studies of planarians in Japan and was a respected friend of the authors.

Eudoxia Maria FROEHRICH. Eventually species of A. DENDY were indexed and combined with the main list.

Work was accelerated by OGREN's retirement from Wilkes in 1986. In his July 15, 1986, letter KAWAKATSU suggested there was great need for a modern check list of land planarians and that we should cooperate in this effort beginning with the Bipaliidae. OGREN, in his letter of July 23, 1986, readily agreed to this suggestion and discussion of format and contents began in earnest. For the preparation of the *Bipalium* Index, we started with the species reported in VON GRAFF's monograph (1899). Next, all species reported after VON GRAFF (1899) were obtained from the literature. A computerized data base of all species was next prepared by OGREN, so that by February through June, 1987, we were exchanging printed lists of species and references for corrections and additions. KAWAKATSU was preparing his literature citation cards for each species, making the Index very functional.

At the occasion of the Fifth International Symposium on the Biology of Turbellaria held in Göttingen, on August 9-14, 1987, KAWAKATSU showed to OGREN copies of his basic cards of bipaliid species with extensive citations in the literature. The manuscript for the "Introduction" to the genus *Bipalium* prepared by OGREN, was sent to KAWAKATSU in the fall of 1987 with some additions and corrections of KAWAKATSU's cards. Thus, our first cooperative study on bipaliid species was completed for publication on December 25, 1987: Index to the species of the genus *Bipalium* (Turbellaria, Tricladida, Terricola) (Bull. Fuji Women's College, No. 25, Ser. II: 79-119).

An attempt was made in the first published Index in this series, to collect *major* known *taxonomic* information on all bipaliid species of the world. However, it became clear that we overlooked some important records concerning taxonomy and geographic distribution of bipaliid species. One main reason for this was the limited availability of old literature in our personal collections. In order to compensate, make corrections and additions, and comment on literature, we published the following supplementary article on June 15, 1988: Index to the species of the genus *Bipalium* (Turbellaria, Tricladida, Terricola): Additions and corrections (Occ. Publ., Biol. Lab. Fuji Women's College, No. 19: 1-16). According to the editorial plan at that time, species citations found in non-taxonomic articles (especially the many publications in Japanese) were excluded from our 1987 and 1988 (a) publications on Bipaliidae mentioned above.

The Index for the Rhynchodemidae VON GRAFF, 1896, was prepared in much the same way as for the Bipaliidae, working from data lists of VON GRAFF's species and those described since VON GRAFF (1899). There was much exchange and review of lists. By this time we had obtained a greater part of the literature and KAWAKATSU was able to make the citation cards. But there were small taxonomic problems to be decided relating to name changes, species with the same name or the correct date of publications. The Introduction for this Rhynchodemidae Index was a development of OGREN's sabbatical study presented at the Fifth International Symposium on the Biology of the Turbellaria, Göttingen, 1987. This Index, published in 2 parts (*i. e.*, Rhynchodermidae CORRÊA, 1947, and Microplaninae PANTIN, 1953) summarized and reviewed the various genera and provided keys, but did not introduce new genera. Major taxonomic references were used giving the complete synonymy for each species, correcting erroneous spellings and printing variations caused by errors and misprints.

The family Geoplanidae STIMPSON, 1857, has remained from the time of VON GRAFF (1899) to the present with minor changes, except for description of new species of *Geoplana* STIMPSON, 1857, and a few new genera. However, the first systematic changes were made when OGREN & KAWAKATSU (1990) introduced the subfamily Geoplaninae STIMPSON, 1857, with several new genera (Geoplanidae Index, Part I). Then, in Geoplanidae Index Part II, OGREN & KAWAKATSU (1991)

introduced, subfamilies Caenoplaninae OGREN et KAWAKATSU, 1991, and Pelmato-planinae OGREN et KAWAKATSU, 1991, also with several new genera; references and taxonomic index for the Geoplanidae Index (Parts I and II) are published in 1992 (see foregoing pages). In this final part necessary additions and corrections are documented and an extensive bibliography of literature cited is provided.

For the Geoplanidae Indices (Parts I and II) we used a revised editorial plan, changed after publication of the Rhynchodemidae Indices (Parts I and II). Namely, an attempt was made to collect *every* known literature citation for all rhynchodemid and geoplanid species of the world. Basic cards for these species prepared at first by KAWAKATSU were checked by OGREN. Introductions, including taxonomic discussions for each animal group, were principally prepared by OGREN. The following publications were issued from 1988 (b) to 1992: Index to the species of the family Rhynchodemidae (Turbellaria, Tricladida, Terricola), Part I: Rhynchodeminae (Bull. Fuji Women's College, No. 26, Ser. II: 39-91. 1988); *Do.*, Part II: Microplaninae (*Ibid.*, No. 27, Ser. II: 53-111. 1989); Index to the species of the family Geoplanidae (Turbellaria, Tricladida, Terricola), Part I: Geoplaninae (*Ibid.*, No. 28, Ser. II: 79-116. 1990); *Do.*, Part II: Caenoplaninae and Pelmato-planinae (*Ibid.*, No. 29, Ser. II: 25-102. 1991); *Do.*, Part II: Caenoplaninae and Pelmato-planinae (A continuation) (*Ibid.*, No. 30, Ser. II: 33-58. 1992). Separation of publications is mainly due to time factors in assembling information and to the restricted capacity of each annual issue of the Bulletin of Fuji Women's College, Series II. The series of Indices and Alphabetical Systematic Indices of specific names have increased in importance by providing a common reference for all species and a listing of references so that future workers can readily trace the path of various species as they may be moved to new genera. Thus, we have been occupied jointly for 9 years in assembling information and obtaining literature, while the actual publication of our Land Planarian Indices has required 7 years.

In the present publication of this series, we present information on additions and corrections of our previous Indices. Abbreviations used in the text are the same. The Bipaliidae Index is enlarged by much additional information. Additions and corrections for the Rhynchodemidae Index (Rhynchodeminae and Microplaninae Indices) are relatively few. However, for the Geoplanidae Index, Part I (Geoplaninae Index), many corrections have been made where necessary. These errors in our 1990 publication were due to misunderstanding of the published taxonomic information on Brazilian geoplanid species. We express our great appreciation for the scholarly efforts of Dr. Eudoxia Maria FROELICH who has carefully corrected KAWAKATSU's basic cards. Moreover, she has agreed to serve as one of the coauthors in this publication. Although we exchanged many letters and copies of parts of manuscripts prior to the printing of this final publication, she is essentially responsible for the section on Additions and Corrections of the Geoplanidae Index, Part I, Geoplaninae. It is her opinion that a new name, *Pseudogeoplana pauloschirchi* nom. nov., be proposed in this publication.

Finally, knowledge of land planarian faunas, especially in Asiatic and Indo-Pacific regions, is poor. Species descriptions are based upon collections made 75-125 years ago and we do not know if described species still have living populations. To answer these concerns we anticipate the publications by Mr. WINSOR on Australian species of Caenoplaninae. We believe our Indices on land planarians will enhance taxonomic studies especially for the subfamilies Caenoplaninae and Pelmato-planinae from the Australo-Pacific regions. What is needed now is a new era of collection efforts. KAWAKATSU and OGREN believe that land planarian faunas of Japan and Taiwan have become better known through KAWAKATSU's field collecting work now being studied. Recent results of these efforts were published in 1991 and 1992 (cf. KAWAKATSU, 1991; KAWAKATSU & KAWAKATSU, 1991; KAWAKATSU, OGREN & MUNIAPPAN, 1992; KAWAKATSU, OKI, TAMURA, ITÔ, NAGAI, OGURA, SHIMABUKURO, ICHINOHE, KATSUMATA & KANEDA, 1993). Thus, as detailed studies of land planarians

continue, we believe revisions to the Indices of land planarians will be necessary as more knowledge of old species becomes available and it is expected that systematic changes will be desirable as the results of new studies are introduced.

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As Addenda of the Land Planarian Indices, the authors have prepared manuscripts of the following 3 chapters.

**ADDENDUM I.** Combined Taxonomic Index: Bipaliidae; Rhynchodemidae (Rhynchodeminae; Microplaninae); Geoplanidae (Geoplaninae; Caenoplaninae; Pelmatoplaninae) — Exclusive of WINSOR's Second 1991 Paper —.

Based on our previous indices, KAWAKATSU has prepared a "Combined Taxonomic Index" for all known families, subfamilies, genera, subgenera, and species of land planarians of the world (Addendum I). However, the various new genera in WINSOR's (1991 b) paper are not listed.

**ADDENDUM II.** HALLEZ's (1890-1893, 1894) Classification System of Land Planarians.

Under Addendum II, we review HALLEZ's (1890-1893, 1894) classification system of land planarians. His publications have historical importance for showing knowledge and viewpoints present in the period prior to VON GRAFF's great monographs (1896, 1899). Copies of these early but important treatises have been difficult to locate and obtain, thus, for many years we were without these references. We give our hearty thanks to the following persons and institutions who have assisted us by supplying good photocopies of these publications: Professor Dr. Luis DEHARVENG and Mrs. C. SAPORTE (Université Paul Sabatier, Narbonne, France), Dr. John HARSHBARGER (National Science Museum of Natural History, Smithsonian Institution, Washington, D. C., U. S. A.), Dr. Hugh D. JONES (University of Manchester, Manchester, U. K.), and the Library of British Museum (Natural History), London, and the Library of Academy of Natural Sciences, Philadelphia, U. S. A.

**ADDENDUM III.** WINSOR's (1991 b) Provisional Classification of Australian and New Zealand Caenoplanid Land Planarians.

Under Addendum III, we review recent new work by WINSOR (1991 b) on Australian (and New Zealand) species of land planarians which introduces several new genera. The genera and species from WINSOR's paper (*op. cit.*) are listed with their own Taxonomic Index. Since his classification is provisional, we have not revised our Geoplandidae Index, Part II.

Due to the restricted capacity of the Bulletin of Fuji Women's College, No. 30, Series II, for 1992, these manuscripts will be published in 1993 (Bull. Fuji Women's College, No. 31, Ser. II) by OGREN, KAWAKATSU & FROELICH.

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**II. ADDITIONS AND CORRECTIONS**

- A. BIPALIIDAE INDEX (1987: Bull. Fuji Women's College, No. 25, Ser. II, pp. 79-119;  
1988: Occ. Publ., Biol. Lab. Fuji Women's College, No. 19, pp. 1-16)

- P. 81. Add the type genus of the Family BIPALIIDAE VON GRAFF, 1896, and the type species of the Genus *BIPALIUM* STIMPSON, 1857 (not 1858). In the synonymy list of the genus, SABUSSOWA's 1925 subgenus should be added. They are as follows:
- Type genus: *Bipalium* STIMPSON, 1857  
 Type species: *Bipalium fuscatum* STIMPSON, 1857; here designated.  
*Protobipalium* SABUSSOWA, 1925.
- Note: *Protobipalium* was described as a new subgenus of *Bipalium* Stimpson, 1857, by Sabussowa's 1925 paper; she did not mention the name of the nominate subgenus. de Beauchamp (1948, p. 159) considered a synonym with *Perocephalus* von Graff, 1896.
- P. 81. *Bipalium adensameri* von Graff, 1899. Add the following item.  
*Bipalium adensameri*: Winsor, 1983 b: 93.
- Pp. 81-82. *Bipalium adventitium* Hyman, 1943. Add the following items.  
*Bipalium adventitium*: Cole, 1969: 71.  
*Bipalium adventitium*: Curtis, Cowden, Moore & Robertson, 1983: 171-194, figs. 1-32 (HI).  
 Tennessee / U. S. A.  
*Bipalium adventitium*: Ogren & Kohn, 1989: 112 A. Seattle, Washington / U. S. A.  
*Bipalium adventitium*: Ball & Sluys, 1990: 139, 143, fig. 7-1 G (DH), 146-147, fig. 7-B (FCA), 149-150. U. S. A.  
*Bipalium adventitium*: Kawakatsu & Kawakatsu, 1991: 21.
- Pp. 82-83. *Bipalium cantori* (Wright, 1860). Add the following items.  
*Bipalium cantori*: Winsor, 1983 b: 90.  
*Bipalium cantori*: Makino & Shirasawa, 1984 a: 127, 131.  
*Bipalium cantori*: Kawakatsu, 1991 b: 40.
- P. 83. Insert a new species list just after the list of *Bipalium ceres* Moseley, 1875. It is as follows:  
*Bipalium chhatarpurensis* Chaurasia, 1988 emend.  
*Bipalium chhatarpurensis* n. sp. Chaurasia, 1988: 403-407, figs. 7-8 (PCA); pl. figs. 1-6 (HI, PCA). The gardens of Maharaja College, Chhatarpur, M. P. / India.  
 Note: Since no figures of external morphology of animals and schematic figure of the copulatory apparatus were given, the taxonomic position of this new species is uncertain.
- P. 83. *Bipalium claviforme* Loman, 1890. Add the following item.  
*Bipalium claviforme*: Winsor, 1985: 27. Bogor, Java / Indonesia.
- P. 83. *Bipalium core* de Beauchamp, 1930. Add the following item.  
*Bipalium core*: Chaurasia, 1988: 405-406.
- P. 84. *Bipalium crassatrium* de Beauchamp, 1939. Add the following item.  
*Bipalium crassatrium*: Winsor, 1983 b: 93.
- P. 84. *Bipalium dendrophilum* (Schmarda, 1859). Add the following item.  
*Sphyrocephalus dendrophilus*: Schmarda, 1871: 269 (I Band), fig. 187 (DB).
- P. 85. *Bipalium dubium* Loman, 1890. Add the following item.  
*Bipalium dubium*: Winsor, 1983 b: 90-91, 93.
- P. 85. *Bipalium ellioti* von Graff, 1899. Add the following item.  
*Bipalium ellioti*: von Linden, 1900: 558.
- P. 86. *Bipalium ferrugineoideum* Sabussowa, 1925. Add the following item.  
*Bipalium* (*Protobipalium*) *ferrugineoides*: Sabussowa, 1925: 297.
- P. 86. *Bipalium floweri* von Graff, 1899. Add the following item.  
*Bipalium floweri*: Oki, Tamura, Ogren & Kawakatsu, 1991: 146, 167.

Pp. 86-87. *Bipalium fulvum* (Kaburaki, 1922). Add the following items.

*Perocephalus fulvus* : Kaburaki, 1936 : 506. Nikkō / Japan.

*Bipalium fulvum* : Kawakatsu, 1991 b : 41.

P. 87. *Bipalium fuscatum* Stimpson, 1857. Add the following items.

*Bipalium fuscatum* : Ijima, 1918 : 357, fig. 425 (DVB). Spelling error.

*Placocephalus fuscatus* : Kaburaki, 1930 : 5, fig. 5 g (DB). Japan.

*Placocephalus fuscatus* : Kaburaki, 1931 : 1121, fig. 2162 (DB). Japan.

*Bipalium fuscatum* : Katō, 1943 : 664.

*Placocephalus fuscatus* : Yatsu, 1943 : 71.

*Bipalium fuscatum* : Sugino, 1949 : 53-55, figs. 1-5 (regeneration). Japan.

*Bipalium fuscatum* : Kawakatsu, 1971 a : table 2.

*Bipalium fuscatum* : Kawakatsu, 1971 b : vol. 7, 272-273, fig. (DB in color).

*Bipalium fuscatum* ? : Akama, 1972 : 56-57, photo 1 (DH). Mt. Ōmine, Gunma Pref. / Japan.

*Bipalium fuscatus* : Kawakatsu, 1972 : 165. Japan.

*Bipalium fuscatum* : Kawakatsu, 1973 : vol. 17, 404.

*Bipalium fuscatum* : Hashimoto, 1976 : 146. Shizuoka / Japan.

*Bipalium fuscatum* : Sasada, Tomimori, Arakuni, Hibino (& Ōgawara), 1978 : 310. Kyōto / Japan.

*Bipalium fuscatum* : Shirasawa & Makino, 1978 a : 115-121, figs. 1-4 (graphs). Tōkyō / Japan.

*Bipalium fuscatum* : Shirasawa & Makino, 1979 a : 25-34, figs. 2-3 (graphs). Tōkyō / Japan.

*Bipalium fuscatum* : Shirasawa & Makino, 1980 b : 592.

*Bipalium fuscatum* : Winsor, 1980 a : 194-195.

*Bipalium fuscatum* : Makino & Shirasawa, 1981 a : 1, 3, 6.

*Bipalium fuscatum* : Makino & Shirasawa, 1981 b : 80.

*Bipalium fuscatum* : Shirasawa & Makino, 1981 a : 35-50 ; pls. 1-8, figs. 1-18 (DB, HI). Ya-chiyo, near Tōkyō / Japan.

*Bipalium fuscatum* : Kawakatsu, 1983 : vol. 12, 38 ; vol. 25, 416.

*Bipalium fuscatum* : Makino & Shirasawa, 1983 a : 70, 75-76.

*Bipalium fuscatum* : Makino & Shirasawa, 1983 b : 640.

*Bipalium fuscatum* : Makino & Shirasawa, 1984 a : 127, 129, 131-134, 141, pl. 7 (DVB, HI, PCA, FCA).

*Bipalium fuscatum* : Gunji, 1985 : 250, fig. (bottom) (DB). Chiba Pref. / Japan.

*Bipalium fuscatum* : Makino & Shirasawa, 1985 a : 44.

*Bipalium fuscatum* : Takeda, Murayama, Takayanagi, Iwanaga & Yanaihara, 1985 : 21.

*Bipalium fuscatum* : Makino & Shirasawa 1986 a : 229, 231.

*Bipalium fuscatum* : Makino & Shirasawa, 1986 c : 125-134, figs. 1-5 (DB, PCA). Shinjuku, Tōkyō ; Hino, near Tōkyō ; Atsugi / Japan.

*Bipalium fuscatum* : Seo, Makino & Shirasawa, 1987 : 1099.

*Bipalium fuscatum* : Shirasawa & Makino, 1987 a : 92.

*Bipalium fuscatum* : Kawakatsu, 1988 : 166. Japan.

*Bipalium fuscatum* : Makino & Shirasawa, 1988 : 1334.

*Bipalium fuscatum* : Seo, Makino & Shirasawa, 1988 : 31-41, figs. 1-5 (DB), 6 (idiograms : 2n = 10). Hino, near Tōkyō / Japan.

*Bipalium fuscatum* : Shirasawa & Makino, 1988 b : 1324.

*Bipalium fuscatum* : Shirasawa & Makino, 1989 a : 77-93, figs. 1-4, 29 (DB, graph), pls. 1-6, figs.

- 5-28, 30-41 (regenerated pieces, HI). Koshigaya, Saitama Pref. / Japan.  
*Bipalium fuscatum* : Kawakatsu, 1991 a : figs. 12—2, 14—3 (DB, FCA) ; 1. Japan.  
*Bipalium fuscatum* : Kawakatsu, 1991 b : 39, 49-50.
- P. 87. *Bipalium fuscocephalum* Kaburaki, 1922. Add the following item.  
*Bipalium fuscocephalum* : Kawakatsu, 1991 b : 41.
- Pp. 87-88. *Bipalium fuscolineatum* Kaburaki, 1992. Add the following items.  
*Bipalium fuscolineatum* : Kaburaki, 1936 : 506. Nikkô / Japan.  
*Bipalium fuscolineatum* : Kawakatsu, 1971 a : table 2.  
*Bipalium fuscolineatum* ? : Akama, 1972 : 57. Mt. Ômine, Gunma Pref. / Japan.  
*Bipalium fuscolineatum* : Kawakatsu, 1972 : 165.  
*Bipalium fuscolineatum* : Kawakatsu, 1973 : vol. 17, 404.  
*Bipalium fuscolineatum* : Makino & Shirasawa, 1984 a : 127, 129, 131-133, 142, pl. 8 (DVB, PCA, FCA). Tôkyô? / Japan.  
*Bipalium fuscolineatum* : Makino & Shirasawa, 1986 a : 229.  
*Bipalium fuscolineatum* : Seo, Makino & Shirasawa, 1987 : 1099.  
*Bipalium fuscolineatum* : Kawakatsu, 1988 : 166.  
*Bipalium fuscolineatum* : Kawakatsu, 1991 : 41.
- P. 88. *Bipalium gestroi* von Graff, 1894. Add the following item.  
*Bipalium gestroi* : von Linden, 1900 : 558.
- Pp. 89-90. *Bipalium hilgendorfi* (von Graff, 1899). Add the following items.  
*Perocephalus hilgendorfi* n. sp. nom. nud. von Graff, 1896 a : 84.  
*Bipalium* sp. Type II : Shirasawa & Makino, 1978 a : 113-121, figs. 1-4 (graphs). Hino, near Tôkyô / Japan.  
*Bipalium hilgendorfi* : Shirasawa & Makino, 1978 a : 115.  
*Bipalium* sp. Type II : Shirasawa & Makino, 1979 a : 25-34, figs. 2-3 (graphs). Hino, near Tôkyô / Japan.  
*Bipalium hilgendorfi* : Makino & Shirasawa, 1981 a : 1-7, fig. 2 (DVB). Hino, near Tôkyô / Japan.  
*Bipalium hilgendorfi* : Makino & Shirasawa, 1981 b : 80.  
*Bipalium hilgendorfi* : Makino & Shirasawa, 1983 a : 72, 75, 79.  
*Bipalium hilgendorfi* : Makino & Shirasawa, 1983 b : 640.  
*Bipalium* sp. : Murayama, 1983 : 196, fig. —bottom (DB in color). Sapporo / Japan. Cf. Kawakatsu & Kawakatsu, 1991.  
*Bipalium hilgendorfi* : Makino & Shirasawa, 1984 a : 129-132, 134, 143, pl. 9 (DVB, PCA, FCA). Hino, near Tôkyô / Japan.  
*Bipalium hilgendorfi* : Makino & Shirasawa, 1985 a : 44.  
*Bipalium hilgendorfi* : Makino & Shirasawa, 1986 a : 229, 232.  
*Bipalium hilgendorfi* : Seo, Makino & Shirasawa, 1987 : 1099.  
*Bipalium hilgendorfi* : Shirasawa & Makino, 1987 a : 92.  
*Bipalium hilgendorfi* : Kawakatsu, 1991 b : 40-41.  
*Bipalium hilgendorfi* : Kawakatsu & Kawakatsu, 1991 : 7-23, figs. 1 A-J (DVB, DH, AE), 2 A-B and 3 (HI), 4 (FCA), 5 A-J (PCA), 6 A-B (FCA cited from von Graff, 1899, and Kaburaki, 1922), 7 A-D (photographs showing the Sapporo locality). Sapporo / Japan.
- Pp. 90-91. *Bipalium javanum* Loman, 1883. Add the following items.  
*Bipalium javanum* : Winsor, 1983 b : 90-91, 93.

- Bipalium javanum* : Kawakatsu, 1991 b : 40.
- Pp. 91-93. *Bipalium kewense* Moseley, 1878. Add the following items.
- Placocephalus (Bipalium) Kewensis* : Scharff, 1900 b : 215.
- Placocephalus kewensis* : Scharff, 1900 b : 216-217, fig. 1 (DB). Ireland / U. K.
- Placocephalus kevensis* : Kraepelini, 1901 : 206. Spelling error.
- Bipalium kewense* : Morgan, 1901 : 170, figs. 50-51 (DB, regeneration).
- Bipalium Kewense* : Anonym, 1906 : 68. U. K.
- Placocephalus (Bipalium) kewensis* : Woestijné, 1907 : 110-112.
- Placocephalus kewensis* : Southern, 1911 : 5-6.
- Bipalium kewense* : Garman, 1915 : 404. Lexington, Kentucky / U. S. A.
- Bipalium kewense* : Barclay, 1921 : 171. Glasgo, Scotland / U. K.
- Bipalium kewense* : Söderström, 1936 : 189. Haga / Finland.
- Bipalium kewense* : Katô, 1943 : 664.
- Placocephalus kewensis* : Pope, 1949 : 2 pages (without pagination). Australia.
- Bipalium kewence* : Sugino, 1949 : 53. Spelling error.
- A land planarian (*Bipalium*) : Buchsbaum, 1957 : 152, fig. (DB).
- Bipalium kewense* : Barnwell, Peacock & Taylor, 1964 : 52-53, fig. 1 (DB). Georgia / U. S. A.
- Bipalium kewense* : Barnwell, Peacock & Taylor, 1965 : 15-17.
- Bipalium kewense* : Campbell, 1965 : 1300.
- Bipalium kewense* : Barnwell, 1966 : 41-46, fig. 1 (DB).
- Bipalium kewense* : Barnwell, 1967 : 72-74. Figs. on cover page and in the text (DB).
- Bipalium kewense* : Barnwell, 1969 : 30-31.
- Bipalium kewense* : Kawakatsu, 1971 b : vol. 8, 214.
- Bipalium kewense* : Morton & Kleinginna, 1971 : 25-26.
- Bipalium kewense* : Kawakatsu, 1972 : 165.
- Bipalium kewense* : Olewine, 1972 : 88. Georgia / U. S. A.
- Bipalium kewense* : Storch & Abraham, 1972 : 267-274, figs. 1-4 (HI). Karlsruhe / Germany.
- Bipalium kewense* : Phillips & Dresden, 1973 : 329-334, figs. 1-5 (graphs); pl. 1, fig. (polyacrylamide-gel electrophoresis). Houston, Texas / U. S. A.
- Shovel-headed garden worm : Pope, 1974 : 891, fig. 2 (DB). Australia.
- Bipalium kewense* : Daly & Matthews, 1975 : 332-333. Texas / U. S. A.
- Bipalium kewense* : Barnwell, 1978 : 151.
- Bipalium kewense* : Landsper, Peters & Dresden, 1981 : 213-220, figs. 1-6 (graphs, electrophoresis, ect.). Texas / U. S. A.
- Bipalium kewense* : Winsor, 1979 : 155-156, 160, fig. 1 A-C (DB, DVH, CP). Royal Botanic Gardens, Melbourne, Victoria / Australia.
- Bipalium kewense* : Winsor, 1980 a : 194-196, fig. 3 (DB).
- Bipalium kewense* : Winsor, 1980 b : 70.
- Bipalium kewense* : Makino & Shirasawa, 1981 a : 1.
- Bipalium kewense* : Makino & Shirasawa, 1981 b : 69-82.
- Placocephalus kewensis* : Makino & Shirasawa, 1981 b : 73.
- Bipalium kewense* : Crezée, 1982 : 734.
- Bipalium kewense* : Daly & Matthews, 1982 : 148-153.
- Bipalium kewense* : Filella-Sabirã, 1982 : 151. Barcelona and la Pedrera / Spain.
- Bipalium kewense* : Makino & Shirasawa, 1982 a : 105, 110, 115.



- Bipalium kewense*: Makino & Shirasawa, 1982 b: 628.
- Bipalium kewense*: Curtis, Cowden, Moore & Robertson, 1983: 171, 191.
- Bipalium kewense*: Kawakatsu, 1983 a: 56, figs. 6-7 (DVB, DVH, FCA). California / U. S. A.; Brazil; Australia.
- Bipalium kewense*: Kawakatsu, 1983 b: vol. 12, 38; vol. 25, 416. Okinawa? / Japan.
- Bipalium kewense*: Makino & Shirasawa, 1983 a: 70-75, 79-83.
- Bipalium kewense*: Winsor, 1983 a: 282. Saint Helena Island / U. K.; Richmond, Victoria / Australia; North Calolina / U. S. A.
- Placocephalus virgatus* in Kaburaki, 1922: Winsor, 1983 b: 64, 68, 89-90. Taiwan / Republic of China. See "Note" of *Bipalium nobile* Kawakatsu et Makino, 1982.
- Bipalium javanum* in de Beauchamp, 1929: Wansor, 1983 b: 64. Java / Indonesia.
- Bipalium kewense*: Makino & Shirasawa, 1984 a: 127, 131, 134.
- Bipalium kewense*: Shirasawa & Makino, 1984 a: 112.
- Bipalium kewense*: Cotton, 1985: 546.
- Bipalium kewensis*: Landsperger, 1985: 1437. Texas / U. S. A.
- Bipalium kewense*: Makino, 1985: 13.
- Bipalium kewense*: Winsor, 1985: 102-105, figs. 1, 2 A-C (DB, DH, FCA). Australia.
- Bipalium manubriatum*: Winsor, 1985: 102.
- Bipalium costaricensis*: Winsor, 1985: 102.
- Placocephalus kewensis*: Winsor, 1985: 102.
- Placocephalus isabellinus*: Winsor, 1985: 102.
- Sphyrocephalus kewensis*: Winsor, 1985: 102.
- Bipalium kewense*: Makino & Shirasawa, 1986 a: 230, 232.
- Bipalium kewense*: Makino & Shirasawa, 1986 b: 54.
- Bipalium kewense*: Makino & Shirasawa, 1986 d: 1106. Campus of Tōkyō Medical College, Shinjuku, Tōkyō / Japan.
- Bipalium kewense*: Makino, 1987: 49. Hino, near Tōkyō / Japan.
- Bipalium kewense*: Makino & Shirasawa, 1987 a: 75-89, fig. 1 (regeneration), pl. fig. 9 (DB). Shinjuku, Tōkyō / Japan. "Kewense" is also used.
- Bipalium kewense*: Seo, Makino & Shirasawa, 1987, 1099. Shinjuku, Tōkyō / Japan.
- Bipalium kewense*: Kawakatsu, 1988: 166.
- Bipalium kewense*: Seo, Makino & Shirasawa, 1988: 31-41, figs. 1-3 (DB), 4 (idiograms:  $2n = 18$ ). Shinjuku, Tōkyō / Japan.
- Bipalium kewense*: Makino & Shirasawa, 1989 a: 95-103, figs. 2, 8 (DB, graphs). Shinjuku, Tōkyō / Japan.
- Bipalium kewense*: Makino & Shirasawa, 1989 b: 1219. Shinjuku, Tōkyō / Japan.
- Bipalium kewense*: Shirasawa & Makino, 1989 a: 78. Shinjuku, Tōkyō / Japan.
- Bipalium kewense*: Shirasawa & Makino, 1989 b: 1200. Shinjuku, Tōkyō / Japan.
- Bipalium kewense*: Sluys, 1989 c: 30.
- Bipalium kewense*: Ball & Sluys, 1990: 139, 143, fig. 7—1E (DB), 147-149, 151. U. S. A.
- Bipalium kewense*: Jones, Darlington & Newson, 1990: 256. Kenya.
- ?*Bipalium kewense*: Kawakatsu, Oki, Tamura, Ogren, Yamada & Murayama, 1990: 7-9, fig. 11 A-D (DVB, DVH), figs. 15 A and B (photomicrographs of chromosomes), 18 (idiogram;  $2x = 18$ ). Chichijima Island, the Ogasawara Islands / Japan.
- Bipalium kewense*: Shirasawa & Makino, 1990 a: 51-66, figs. 1-5, 30, 35 (DB, HI), pls. 1-6, figs.

- 6-29, 31-34 (fragmented pieces, HI). Shinjuku, Tōkyō / Japan.
- Bipalium kewense*: Shirasawa & Makino, 1990 b: 47-63, fig. 1 A-B (DVB), pls. 1-4, figs. 3-18 (HI). Shinjuku, Tōkyō / Japan.
- Bipalium kewense*: Shirasawa & Makino, 1990 c: 110. Shinjuku, Tōkyō / Japan.
- Bipalium kewense*: Shirasawa & Makino, 1990 d: 1158. Shinjuku, Tōkyō / Japan.
- Bipalium kewense*: Kawakatsu, 1991 a: fig. 11—6-7 (HI); 1. Europe.
- Bipalium kewense*: Ogren, 1991 a: 27.
- Bipalium kewense*: Oki, Tamura, Ogren & Kawakatsu, 1991: 163-167, figs. 2 E (photomicrograph of chromosome), 8 (idiogram); 2x = 18). Chichijima Island, the Ogasawara Islands / Japan.
- Bipalium kewense*: Shirasawa & Makino, 1991: 57. Tōkyō / Japan.
- Bipalium kewense*: Shirasawa & Makino, 1992: 58. Tōkyō / Japan.
- Bipalium manubriatum*: Spamer & Bogan, 1992: 51. A greenhouse, Lansdown, Pennsylvania / U. S. A. Note: Holotype of Sharp's new species retained in the Academy of Natural Sciences of Philadelphia, Pennsylvania. The sample was identified by Ogren as *Bipalium kewense* (12 / October 1985).
- ?*Bipalium kewense*: Kawakatsu, Oki, Tamura, Itō, Nagai, Ogura, Shimabukuro, Ichinohe, Katsumata & Kaneda, 1993 (In press). The Okinawa Islands and the Miyako Islands, the Southwest Islands of Japan / Japan.
- P. 93. *Bipalium kisoense* Kaburaki, 1922. Add the following item.  
*Bipalium kisoensis*: Makino & Shirasawa, 1984 a: 132.
- P. 95. *Bipalium marginatum* Loman, 1887. Add the following item.  
*Bipalium marginatum*: Winsor, 1983 b: 91.
- P. 96. *Bipalium modiglianii* von Graff, 1894. Add the following item.  
*Bipalium modiglianii*: Winsor, 1985: 27. The Lake Toba area, Sumatra / Indonesia.
- P. 96. *Bipalium monolineatum* Kaburaki, 1922. Add the following items.  
*Bipalium monolineatum*: Winsor, 1983 b: 90.  
*Bipalium monolineatum*: Makino & Shirasawa, 1984 a: 132.
- P. 96. *Bipalium moseleyi* Loman, 1887. Add the following item.  
*Bipalium moseleyi*: Winsor, 1983 b: 85.
- Pp. 96-97. *Bipalium multilineatum* Makino et Shirasawa, 1983. Add the following items.  
*Bipalium* sp. Type I: Shirasawa & Makino, 1978 a: 113-121, figs. 1-4 (graphs). Hino, near Tōkyō / Japan.  
*Bipalium* sp. Type I: Shirasawa & Makino, 1979 a: 25-34, figs. 2-3 (graphs). Hino, near Tōkyō / Japan.  
*Bipalium* sp. Type 1: Makino & Shirasawa, 1981 a: 2-7, fig. 1 (DVB). Hino, near Tōkyō / Japan.  
*Bipalium* sp.: Makino & Shirasawa, 1982 a: 105, 109, 113-114, pl. 5, figs. 21-26 (DB, fragments). Hino, near Tōkyō / Japan.  
*Bipalium* sp.: Makino & Shirasawa, 1982 b: 628.  
*Bipalium* sp.: Shirasawa & Makino, 1982 b: 351.  
*Bipalium* sp. (in part): Makino & Seo, 1983: 63, 67-68.  
*Bipalium multilineatum*: Makino & Shirasawa, 1984 a: 128, 131, 133.  
*Bipalium multilineatum*: Makino, 1985: 13.  
*Bipalium multilineatum*: Makino & Shirasawa, 1986 a: 229-232, figs. 1-3 (DB), 5—left (regen-

eration). Hino, near Tōkyō / Japan. See Note.

*Bipalium multilineatum* : Makino & Shirasawa, 1986 d : 1106.

*Bipalium multilineatum* : Shirasawa & Makino, 1986 b : 1094.

*Bipalium multilineatum* : Makino, 1987 : 49.

*Bipalium multilineatum* : Makino & Shirasawa, 1987 a : 75-89, figs. 2-3 (regeneration), pl. fig. 10 (DB). Hino, near Tōkyō / Japan.

*Bipalium multilineatum* : Seo, Makino & Shirasawa, 1987 : 1099.

*Bipalium multilineatum* : Shirasawa & Makino, 1987 a : 91-102, figs. 1-27 (DB, HI). Hino, near Tōkyō / Japan.

*Bipalium multilineatum* : Makino & Shirasawa, 1988 : 1334.

*Bipalium multilineatum* : Seo, Makino & Shirasawa, 1988 : 31-41, figs. 1—1 (DB), 2 (idiograms :  $2n = 10$ ). Hino, near Tōkyō / Japan.

*Bipalium multilineatum* : Makino & Shirasawa, 1989 a : 95-103, figs. 3, 9 (DB, graphs). Hino, near Tōkyō / Japan.

*Bipalium multilineatum* : Shirasawa & Makino, 1989 a : 78.

*Bipalium multilineatum* : Shirasawa & Makino, 1990 b : 47-63, fig. 1 C-D (DVB), pls. 5-8, figs. 23-50 (HI). Hino, near Tōkyō / Japan.

*Bipalium multilineatum* : Shirasawa & Makino, 1990 : 1158.

*Bipalium multilineatum* : Kawakatsu, 1991 b : 40.

*Bipalium multilineatum* : Oki, Tamura, Ogren & Kawakatsu, 1991 : 163-166.

*Bipalium multilineatum* : Shirasawa & Makino, 1992 : 58.

Note : In our previous Index to the species of the genus *Bipalium* (Ogren & Kawakatsu, 1987), figure citation of *B. multilineatum* from Makino & Shirasawa's paper (1986 a, Hydrobiologia) is wrong (see the first line on p. 97). It was corrected in the present paper. See "Note" under *Bipalium nobile* Kawakatsu et Makino, 1982, in the present paper.

P. 97. *Bipalium myadenosum* de Beauchamp, 1939. Add the following item.

*Bipalium myadenosum* : Winsor, 1983 b : 93.

P. 97. *Bipalium nobile* Kawakatsu et Makino, 1982. Add the following items.

*Bipalium* sp. : Aoki, 1969 : prefatory photographic page (DB in color), 26. Tōkyō / Japan.

*Bipalium kewense* : Gunji, 1970 a : photographic page, figs. (DB, DH). Chōshi / Japan.

*Bipalium kewense* : Gunji, 1970 b : 67-68, photos 3-4 (DB, DH). Chōshi / Japan.

*Bipalium* sp. : Kawakatsu, 1971 b : vol. 8, 214, fig. (DB in color). Tōkyō / Japan.

*Bipalium* sp. : Shirasawa & Makino, 1976 : 513. Hino, near Tōkyō / Japan.

*Bipalium* sp. : Shirasawa & Makino, 1977 : 507.

*Bipalium* sp. : Shirasawa & Makino, 1978 a : 114. Hino, near Tōkyō / Japan.

*Bipalium kewense* : Shirasawa & Makino, 1978 b : 506.

*Bipalium* sp. Type III : Shirasawa & Makino, 1979 a : 25-38, figs. 1-4, 23 (DB, HI, head regeneration, graphs), pls. 1-3, figs. 5-22 (HI). Mine, Yamaguchi Pref. / Japan.

*Bipalium* sp. : Shirasawa & Makino, 1979 b : 644. Mine, Yamaguchi Pref. / Japan.

*Bipalium kewense?* : Makino & Shirasawa, 1980 a : 87-98, figs. 1-3 (DB in color, graph), pl. figs. 4-7 (HI, PCA). Hino, near Tōkyō / Japan.

*Bipalium kewense?* : Makino & Shirasawa, 1980 b : 584. Hino, near Tōkyō / Japan.

*Bipalium* sp. Type III : Shirasawa & Makino, 1980 a : 73-86 ; pls. 1-13, figs. (DB in color, HI). Hino, near Tōkyō / Japan.

*Bipalium* sp. : Makino & Shirasawa, 1981 b : 69-89, figs. 1-9 (DVB in color, DB, FCA, regener-

- ated pieces, graphs), pls. 1-5, figs. 10-29 (DVB, HI, PCA). Hino, near Tōkyō / Japan.  
See Note.
- Bipalium* sp.: Makino & Shirasawa, 1981 c: 678.
- Bipalium* sp.: Shirasawa & Makino, 1981 b: 659.
- Bipalium* sp.: Makino & Shirasawa, 1982 a: 105-121, figs. 1-4 (DB in color, DVB, graphs), pls. 1-4, figs. 5-4 (DVB). Hino, near Tōkyō / Japan. See Note.
- Bipalium* sp. Type III: Shirasawa & Makino, 1982 a: 75-87, figs. 1-7 (DB, AE, HI), pls. 1-5, figs. 8-18 (HI). Hino, near Tōkyō / Japan.
- Bipalium nobile*: Kawakatsu, 1983 b: vol. 12, 38, fig. (DB in color); vol. 25, 416.
- Bipalium* sp. (in part): Makino & Seo, 1983: 63, 67-68.
- Bipalium* sp.: Makino Shirasawa, 1983 a: 69, 75-78, figs. 1 A (DH, CP in color), 2 A-B (fragmentation), 3 (regeneration). Hino, near Tōkyō / Japan.
- Bipalium nobile*: Makino & Shirasawa, 1983 b: 640.
- Bipalium* sp. Type III: Shirasawa & Makino, 1983 a: 123-141; pls. 1-9, figs. 1-32 (DB, HI). Hino, near Tōkyō / Japan.
- Bipalium nobile*: Shirasawa & Makino, 1983 b: 639.
- Bipalium virgatum* (in part): Winsor, 1983 b: 68, fig. 2 I-K, 90 (DVH). Chusan Archipelago / People's Republic of China. See Note.
- Bipalium kewense* in Kawakatsu & Aoki, 1968 and 1969: Winsor, 1983 b: 89.
- Bipalium kewense* in Gunji, 1970 and 1972: Winsor, 1983 b: 89. Note: Gunji's two papers were published in 1970.
- Bipalium kewense*? in Shirasawa & Makino, 1980: Winsor, 1983 b: 89.
- Bipalium nobile*: Makino & Shirasawa, 1984 a: 127-136, pls. 1—I, 2 (DB, FCA). Hino, near Tōkyō / Japan.
- Bipalium nobile*: Makino & Shirasawa, 1984 b: one page (Aug. 6).
- Bipalium nobile*: Makino & Shirasawa, 1984 c: 983.
- Bipalium nobile*: Shirasawa & Makino, 1984 a: 111-125, fig. 1 (HI), pls. 1-7, figs. 2-32 (HI). Hino, near Tōkyō / Japan.
- Bipalium nobile*: Shirasawa & Makino, 1984 b: 982.
- Bipalium nobile*: Makino, 1985: 12.
- Bipalium nobile*: Makino & Shirasawa, 1985 a: 43-56, figs. 1-2 (regeneration, graph), pls. 1-4, figs. 4-17 (regenerated pieces, HI). Hino, near Tōkyō / Japan.
- Bipalium nobile*: Makino & Shirasawa, 1985 b: 993.
- Bipalium nobile*: Shirasawa & Makino, 1985 a: 87-99, figs. 1-5 (HI), pls. 1-4, figs. 6-22 (HI). Hino, near Tōkyō / Japan.
- Bipalium nobile*: Shirasawa & Makino, 1985 b: 993.
- Bipalium nobile*: Makino & Shirasawa, 1986 a: 229-232, figs. 1—1, 3-4 (DB, cocoon), 5—left (regeneration), 6—I (FCA). Hino, near Tōkyō / Japan. See Note.
- Bipalium nobile*: Makino & Shirasawa, 1986 b: 53-68, figs. 1-10 (DB, regenerated pieces). Hino, near Tōkyō / Japan.
- Bipalium nobile*: Makino & Shirasawa, 1986 d: 1106.
- Bipalium nobile*: Shirasawa & Makino, 1986 a: 99-110, pls. 1-5, figs. 1-16 (HI). Hino, near Tōkyō / Japan.
- Bipalium nobile*: Makino, 1987: 49.
- Bipalium nobile*: Makino & Shirasawa, 1987 a: 75-89, figs. 4-8 (regeneration), pl. figs. 11-12

- (DB). Hino, near Tōkyō / Japan. “*Nobile*” is also used.
- Bipalium nobile* : Seo, Makino & Shirasawa, 1987 : 1099.
- Bipalium nobile* : Shirasawa & Makino, 1987 a : 92-93.
- Bipalium nobile* : Shirasawa & Makino, 1987 b : 1099.
- Bipalium nobile* : Kawakatsu, 1988 : 166.
- Bipalium nobile* : Makino & Shirasawa, 1988 : 1334.
- Bipalium nobile* : Seo, Makino & Shirasawa, 1988 : 31-41, figs. 1-2 (DB), 3 (idiograms : 2n = 10).  
Hino, near Tōkyō / Japan.
- Bipalium nobile* : Shirasawa & Makino, 1988 a : 43-60, figs. 1-4 (DB, regenerated pieces), pls. 1-8, figs. 5-36 (regenerated pieces, HI). Hino, near Tōkyō / Japan.
- Bipalium nobile* : Makino & Shirasawa, 1989 a : 95-103, figs. 1, 4-7 (DB, graphs). Hino, near Tōkyō / Japan.
- Bipalium nobile* : Makino & Shirasawa, 1989 b : 1219.
- Bipalium nobile* : Shirasawa & Makino, 1989 a : 78.
- Bipalium nobile* : Kawakatsu, Oki, Tamura, Ogren, Yamada & Murayama, 1990 : 7-9, fig. 11 A-D (DVB, DVH), 15 A-B (photomicrographs of chromosomes), 16 (idiogram : 2x = 10).  
Yokohama and Toyonaka (near Ōsaka) / Japan.
- Bipalium nobile* : Kawakatsu, 1991 a : figs. 11—1-3, 12—1, 14—1-2 (DVB, DVH, FCA) ; 1.  
Tōkyō / Japan.
- Bipalium nobile* : Kawakatsu, 1991 b : 40.
- Bipalium nobile* : Oki, Tamura, Ogren & Kawakatsu, 1991 : 163-167, figs. 2 A-B (photomicrographs of chromosomes of Yokohama and Toyonaka specimens), 3 (idiograms, 2x = 10).  
Yokohama, near Tōkyō, and Toyonaka, near Ōsaka / Japan.
- Bipalium nobile* : Kawakatsu, 1991 c : 394.
- Bipalium nobile* : Kawakatsu, 1992 : 2—86, fig. (DB in color of a live specimen) and its explanation. Yokohama / Japan.
- Bipalium nobile* : Shirasawa & Makino, 1992 : 58.
- Note : In publications from Makino's team, *Bipalium nobile* is mentioned as *Bipalium kewense*, *Bipalium* sp., *Bipalium* sp. Type III, yellowish brown colored species with dorsal three stripes, brownish species, etc. Since several undescribed species (*Bipalium* spp.) are also included in their articles, separation of each species is sometimes difficult. Explanation of 4 schematic figures of copulatory apparatus of animals in Makino & Shirasawa's (1986 a) English paper is insufficient. Corrections were based upon figures of their Japanese paper (Makino & Shirasawa, 1984 a). Thus, replacement of 3 items in our previous Index (Ogren & Kawakatsu, 1987, p. 97) should be necessary : lines 4 and 5, 6 and 7, and 11.
- Winsor (1983 b, p. 89) believes Kaburaki's (1922 a, b) record of *Placocephalus virgatus* from Taiwan is *Bipalium kewense* Moseley, 1878. He (*op. cit.*, p. 68, fig. 2 I-K, p. 90) also provisionally identified two specimen lots of the British Museum collection from China (Chusan Archipelago and Da Lau Sau) as *Bipalium virgatum* Stimpson, 1857. His photographs of the Chusan animal cited above is resembles to the external appearance of *Bipalium nobile*. Stimpson's original species should be considered as species inquirenda.
- Pp. 97-98. *Bipalium ocellatum* von Graff, 1899. Add the following item.  
*Bipalium ocellatum* : von Linden, 1900 : 558.
- P. 98. *Bipalium ochroleucum* Kaburaki, 1922. Add the following items.  
*Bipalium ochroleucum* : Winsor, 1983 b : 90.  
*Bipalium ochroleucum* : Makino & Shirasawa, 1984 a : 132.

- P. 98. *Bipalium pennsylvanicum* Ogren, 1987. Add the following items.  
*Bipalium* sp.: Makino & Shirasawa, 1984 a: 129, 134, 140, pl. 6 (DVB, PCA, FCA), Hino, near Tōkyō / Japan.  
*Bipalium* sp.: Makino & Shirasawa, 1986 a: 229, 232. Hino, near Tōkyō / Japan.  
*Bipalium pennsylvanicum*: Makino & Shirasawa, 1987 b: 1099. Hino, near Tōkyō / Japan.  
*Bipalium pennsylvanicum*: Seo, Makino & Shirasawa, 1987: 1099. Hino, near Tōkyō / Japan.  
*Bipalium* sp.: Makino & Shirasawa, 1988: 1334. Hino, near Tōkyō / Japan.  
*Bipalium pennsylvanicum*: Seo, Makino & Shirasawa, 1988: 31-41, figs. 1-4 (DB), 5 (idiograms:  $2n = 15$ [sic]). Hino, near Tōkyō / Japan.  
*Bipalium pennsylvanicum*: Ball & Sluys, 1990: 139, 148, fig. 7—5 (FCA), 149. U. S. A.  
*Bipalium pennsylvanicum*: Makino & Shirasawa, 1990: 1178. Hino, near Tōkyō / Japan.  
*Bipalium pennsylvanicum*: Kawakatsu, 1991 b: 48. U. S. A.  
*Bipalium pennsylvanicum*: Ogren & Sheldon, 1991: 3-9, figs. 1-6 (DB, cocoons), 7 (a graph showing the growth rate). Pennsylvania / U. S. A.  
*Bipalium pennsylvanicum*: Oki, Tamura, Ogren & Kawakatsu, 1991: 164. U. S. A.  
*Bipalium pennsylvanicum*: Shirasawa & Makino, 1991: 1072. Tōkyō / Japan.  
*Bipalium pennsylvanicum*: Shirasawa & Makino, 1992: 55-72, pls. 1-9, figs. 1-49 (DB, FCA, PCA, HI, cocoons). Tōkyō / Japan.
- Note: Makino & Shirasawa (1984 a) gave rough paintings of dorsal and ventral views of the body of an animal from the Hino locality, 3 photomicrographs of parts of the copulatory apparatus with a very simplified sketch. However, it must be said that their identification has uncertainty. In their 1992 paper, the schematic figure and photomicrographs of the copulatory apparatus were given (pl. 4, fig. 20; also figs. 21-22); its penis lumen shows a narrow, tubular form. It must be said that there is still uncertainty with their identification. Ogren has not received a sample specimen for examination.
- P. 98. *Bipalium persephone* de Beauchamp, 1939. Add the following item.  
*Bipalium persephone*: Winsor, 1983 b: 90-91, 93.
- P. 99. *Bipalium proserpina* Humbert, 1862. Add the following items.  
*Bipalium proserpina*: von Linden, 1900: 556.  
*Bipalium proserpina*: Chaurasia, 1988: 406.
- P. 100. *Bipalium quadricinctum* Loman, 1890. Add the following item.  
*Bipalium quadricinctum*: von Linden, 1900: 558.
- P. 100. *Bipalium rauchi* von Graff, 1899. Add the following item.  
*Bipalium ranchi*: von Linden, 1900: 558. Spelling error.
- P. 100. *Bipalium ridleyi* von Graff, 1899. Add the following item.  
*Bipalium ridleyi*: von Linden, 1900: 558.
- P. 100. *Bipalium rigaudi* von Graff, 1894. Add the following item.  
*Bipalium rigaudi*: Winsor, 1983 b: 93.
- P. 101. *Bipalium robiginosum* von Graff, 1899. Add the following item.  
*Bipalium robiginosum*: von Linden, 1900: 558.
- P. 101. *Bipalium ruteofulvum* Kaburaki, 1922. Add the following item.  
*Bipalium ruteofulvum*: Kawakatsu, 1991 b: 41.
- P. 102. *Bipalium simrothi* von Graff, 1899. Add the following item.  
*Bipalium simrothi*: von Linden, 1900: 558.
- P. 102. Deletion of *Bipalium somii* Chaurasia, 1981 (3 lines). Since this is not a valid species, it is indicated as *Bipalium* sp. of Chhatarpur? and should be placed at the end of the Index

(section of non-described species). There does not appear to be a properly published description of this species.

- P. 103. *Bipalium stimpsoni* Diesing, 1861. Add the following item.

*Bipalium stimpsoni* : Winsor, 1983 b : 91.

- P. 104. *Bipalium trifuscostriatum* Kaburaki, 1922. Add the following item next to the last line.

*Bipalium trifuscostriatum* : Kawakatsu, 1991 b : 39-52, figs. 1-4 (DVB, DH, AE, HI, FCA, FGO).

Kôbe, Neyagawa (Ôsaka) and Iwade-chô (Wakayama Pref.) / Japan.

Note : This is a redescription of Kaburaki's (1922) uncertain species based upon sexual specimens collected from a new locality, and the neotype was designated. The distance between the type locality and the new collection site for the neotype specimen is less than 80 km.

- Pp. 104-105. *Bipalium trilineatum* Stimpson, 1857. Add the following items.

*Bipalium trilineatum* : Katô, 1943 : 664.

*Bipalium trilineatum* : Kawakatsu, 1971 a : table 2.

*Bipalium trilineatum* : Kawakatsu, 1972 : 165.

*Bipalium trilineatum* : Kawakatsu, 1973 : vol. 17, 404.

*Bipalium trilineatum* : Hashimoto, 1976 : 146.

*Bipalium trilineatum* (species inquirenda) : Kawakatsu, 1983 b : vol. 12, 38 ; vol. 25, 416.

*Bipalium trilineatum* : Winsor, 1983 b : 91.

*Bipalium trilineatum* (species inquirenda) : Kawakatsu, 1988 : 166.

*Bipalium trilineatum* (species inquirenda) : Kawakatsu, 1989 : 254.

*Bipalium trilineatum* (species inquirenda) : Kawakatsu, 1991 a : 1. Explanation of Stimpson's (1857) original description.

*Bipalium trilineatum* (species inquirenda) : Kawakatsu, 1991 b : 40, 48.

- P. 105. *Bipalium univittatum* Grube, 1866. Add the following item.

*Bipalium univittatum* : Oki, Tamura, Ogren & Kawakatsu, 1991 : 146, 167.

- P. 106. *Bipalium venosum* Kaburaki, 1922. Add the following items.

*Bipalium venosum* : Winsor, 1980 a : 194-195.

- P. 106. *Bipalium virgatum* Stimpson, 1857. Add the following items.

*Placocephalus virgatus* : Makino & Shirasawa, 1981 b : 74.

*Bipalium virgatum* (in part) : Winsor, 1983 b : 64, 68, 90.

*Bipalium virgatum* : Kawakatsu, 1991 b : 40.

- Pp. 107-111 : Undescribed Species. The following undescribed species should be placed here by alphabetical order.

*Bipalium* sp. of Bogor (Java). Storch & Welsch, 1977.

*Bipalium* sp. : Storch & Welsch, 1977 : 423-425, fig. 1 a-c (HI). Botanical Gardens, Bogor, Java / Indonesia.

*Bipalium* sp. of Canton 1 (China). Hsu, Li & Xu, 1980.

*Bipalium* sp. : Hsu, Li & Xu, 1980 : 154, 182. Shân-tou, near Canton, Guangdong Province / China.

Note : A live specimen has approximately 20 cm in body length.

*Bipalium* sp. of Canton 2 (China). Li & Liu, 1991.

*Bipalium* sp. : Li & Liu, 1991 : 156. Canton, Guangdong Province / China.

Note : A live specimen has approximately 21 cm in body length ; with 6 longitudinal stripes of black coloration on the dorsal side of the body.

*Bipalium* sp. of Chhatarpur? (India). Chaurasia, 1981?

*Bipalium somii* nom. nud. Chaurasia, 1981? : Chhatarpur? / India.

Note: The name of this species is only found in "references" of Chaurasia's 2 papers (1985 and 1988). These citations are as follows: CHAURASIA, O. N.: Studies on a new land planaria, *Bipalium somii*. Ind. Sci. Cong. Assoc. 69, Cong. Abst. Vol. IV, No. 23, 1981. Cf. Chaurasia, 1985, p. 128. CHAURASIA, O. N.: Studies on a new land planarian[sic], *Bipalium somii*. Ind. Sci. Cong. Assoc. 69: 23 (1981).

We could not obtain a copy of this abstract in any of libraries of the world. Moreover, its copy was not obtained from the original author. Thus, we considered the above-cited abstract is not an available publication (cf. ICZN, 3rd Ed., 1985, Arts. 7-9).

*Bipalium* sp. of Chichijima Island. Ogren & Kawakatsu, 1988.

*Bipalium* sp.: Ogren & Kawakatsu, 1988 a: 1-2, cover photograph (DB). Chichijima Island, the Ogasawara Islands / Japan.

*Bipalium* sp. 3: Kawakatsu, Oki, Tamura, Ogren, Yamada & Murayama, 1990: 8-9, figs. 14 A -D (DVB), 15 D (photograph of chromosomes), 17-bottom (idiogram:  $2x = 10$ ). Chichijima Island, the Ogasawara Islands / Japan.

*Bipalium* sp. 3: Oki, Tamura, Ogren & Kawakatsu, 1991: 163-167, figs. 2 D, 3 (photomicrograph of chromosomes, idiogram:  $2x = 10$ ). Chichijima Island, the Ogasawara Islands / Japan.

*Bipalium* sp. of Hino (near Tōkyō). Makino & Shirasawa, 1984.

*Bipalium* sp.: Makino & Shirasawa, 1984 a: 127, 129-131, 134-135, 138, pls. 1-III, 4 (DVB, PCA, FCA). Hino, near Tōkyō / Japan.

*Bipalium* sp.: Makino & Shirasawa, 1986 a: 229, 231-232, fig. 6-III (FCA). Hino, near Tōkyō / Japan.

*Bipalium* sp. of Hirosaki. Makino & Shirasawa, 1984.

*Bipalium* sp.: Makino & Shirasawa, 1984 a: 129, 131-132, 134-135, 139, pls. I-IV, 5 (DVB, PCA, FCA). Campus of Hirosaki Univ., Hirosaki / Japan.

*Bipalium* sp.: Makino & Shirasawa, 1986 a: 229, 231-232, fig. 6-IV (FCA). Hirosaki / Japan.

*Bipalium* sp. of Honolulu. Kawakatsu, 1983.

*Bipalium* sp.: Kawakatsu, 1983 a: 59, fig. 11—bottom-right (DVH). Specimen Lot No. 642. Honolulu, Hawaii / U. S. A.

*Bipalium* sp. of Iejima Island (Okinawa). Kawakatsu, Oki, Tamura, Itō, Nagai, Ogura, Shimabukuro, Ichinohe, Katsumata & Kaneda, 1993.

*Bipalium* sp.: Kawakatsu, Oki, Tamura, Itō, Nagai, Ogura, Shimabukuro, Ichinohe, Katsumata & Kaneda, 1993 (In press). Specimen Lot No. 2024. Iejima Island, Okinawa Island, the Southwest Islands of Japan / Japan.

*Bipalium* sp. of Kōbe. Kawakatsu, 1991.

*Bipalium* sp.: Kawakatsu, 1991 b: 43. Specimen Lot No. 1888. Suma, Kōbe / Japan.

*Bipalium* sp. of Malaysia. Kawakatsu & Mitchell, 1992.

*Bipalium* sp.: Kawakatsu, 1992: 2—86, fig. (DB in color of live specimens; photo by R. & L. Mitchell) and its explanation. Malaysia.

*Bipalium* sp. of Naha (Okinawa). Kawakatsu, 1983.

*Bipalium* sp.: Kawakatsu, 1983 a: 59, fig. 11—bottom-left (DVH). Specimen Lot No. 583. Naha, Okinawa Island, the Southwest Islands of Japan / Japan.

*Bipalium* sp. of Neyagawa. Kawakatsu, 1991.

*Bipalium* sp.: Kawakatsu, 1991 b: 43. Specimen Lot No. 1930. Neyagawa, near Ōsaka /



Japan.

*Bipalium* sp. of Panjang (the Krapataus). Winsor, 1985.

A non-sexual specimen of *Bipalium* : Winsor, 1985 : 27. Panjang, the Krapataus / Indonesia.

Note : Winsor (1985) considered the Panjang specimen is similar to *Bipalium modiglianii* von Graff, 1894, from northern Sumatra and *Bipalium claviforme* Loman, 1890, from Java.

*Bipalium* sp. 1 of Sanjō (Nigata Pref.). Kawakatsu, Oki, Tamura, Ogren, Yamada & Murayama, 1990.

*Bipalium* sp. 1 : Kawakatsu, Oki, Tamura, Ogren, Yamada & Murayama, 1990 : 7, fig. 9 A-F (DVB, DVH). Sanjō, Nigata Pref. / Japan.

*Bipalium* sp. 1 : Oki, Tamura, Ogren & Kawakatsu, 1991 : 164. Sanjō, Nigata Pref. / Japan.

*Bipalium* sp. 2 of Sanjō (Nigata Pref.). Kawakatsu, Oki, Tamura, Ogren, Yamada & Murayama, 1990.

*Bipalium* sp. : Murayama, 1983 : 196, fig.—top (DB in color). Nigata Pref. / Japan.

*Bipalium* sp. : Makino & Shirasawa, 1983 b : 640. Tōkyō / Japan.

*Bipalium* sp. : Makino & Shirasawa, 1984 a : 127, 129-131, 134-135, 137, pls. I-II, 3 (DVB, PCA, FCA). Nerima, Tōkyō / Japan.

*Bipalium* sp. : Makino & Shirasawa, 1986 a : 231, fig. 6-II (FCA). Tōkyō / Japan.

*Bipalium* sp. : Kawakatsu, Oki, Tamura, Ogren, Yamada & Murayama, 1990 : 8-9, figs. 13 A-F (DVB, DVH), 15 C (photomicrograph of chromosomes), 17-top (idiogram :  $2x = 10$ ). Sanjō, Nigata Pref. / Japan.

*Bipalium* sp. 2 : Oki, Tamura, Ogren & Kawakatsu, 1991 : 163-167, figs. 20, 3 (photomicrograph of chromosomes, idiogram :  $2x = 10$ ). Sanjō, Nigata Pref. / Japan.

*Bipalium* spp. of Akiyoshi-dai (Yamaguchi Pref.). Kawakatsu, 1983.

*Bipalium* spp. : Kawakatsu, 1983 a : 57, fig. 9 (DVH). Specimen Lot Nos. 867, 1645 and 1646. Akiyoshi-dai Karst, Yamaguchi Pref. / Japan.

*Bipalium* spp. of Okinoerabu-jima Island. Kawakatsu, 1983.

*Bipalium* spp. : Kawakatsu, 1983 a : 59, fig. 11-top (DVB, DVH). Specimen Lot Nos. 899 and 910. Okinoerabu-jima Island, the Southwest Islands of Japan / Japan.

*Bipalium* spp. of Tsushima Islands. Kawakatsu, 1983.

*Bipalium trilineatum* : Kawakatsu, 1976 : 911-912, fig. 1 F-H (DVB, DH). Specimen Lot Nos. 691, 692 and 705. Mt. Shira-dake and Ni'i, Shimoshima Island ; Mt. Mitake, Kamishima Island ; the Tsushima Islands / Japan.

*Bipalium* spp. : Kawakatsu, 1983 a : 58, fig. 10 (DVB, DH). The Tsushima Islands / Japan.

*Bipalium* spp. : Kawakatsu, 1989 : 254.

## B. RHYNCHODEMIDAE INDEX, PART I : RHYNCHODEMINAE

(1988 : Bull. Fuji Women's College, No. 26, Ser. II, pp. 39-91)

P. 51. *Caenoplana?* (or *Kontikia?*) *sumbawaeiensis* (Haslauer-Gamisch, 1982) comb. nov. Delation of a full sentence. The following new list should be placed just after the list of *Rhynchodemus stenopus* von Graff, 1894, on page 78. It is as follows :

*Rhynchodemus sumbawaeiensis* (Haslauer-Gamisch, 1982) comb. nov.

*Platydemus sumbawaeiensis* n. sp. Haslauer-Gamisch, 1982 : 55-56, 62-63, figs. 5-6 (CP, FCA). Geli Moetor, Flores / Indonesia.

*Caenoplana?* (or *Kontikia?*) *sumbawaeiensis* : Ogren & Kawakatsu, 1988 b : 51, 59, 66.

Note : The limited taxonomic features provided in the original description of this species indicate that multiple eyes were not noticed by Haslauer-Gamisch (1982, p. 56) ; she wrote : "Augen konnte ich von aussen

nicht sehen, an Schnitten aber fand ich zwei." Hence, it does not belong in the Geoplanidae. On the other hand, her report of finding 2 anterior eyes allows assignment to the family Rhynchodemidae. There is also the report of strong subepithelial, longitudinal musculature and the copulatory apparatus lacking the penis papilla which indicate the subfamily Rhynchodeminae. The species cannot with certainty be placed into the genus *Platydemus* because there is no description of the morphology of the female copulatory organ and there is no intra-antral papilla in the male copulatory organ.

This species is temporarily placed under the genus *Rhynchodemus* on basis of the simple male copulatory apparatus lacking the penis papilla. This reverses an earlier opinion based on an incorrect assumption that multiple eyes were present (cf. Ogren & Kawakatsu, 1988 a). The necessary corrections (species list, taxonomic index, etc.) were made in this publication.

- Pp. 51-52. *Cotyloplana megalophthalma* (Loman, 1890). A head specific name: correct "*magalophthalma*" to "*megalophthalma*". Add the following item.  
*Cotyloplana megalophthalma*: Schmidt, 1902: 560.
- P. 52. *Cotyloplana punctata* Spencer, 1892. Add the following item.  
*Cotyloplana punctata*: Smith & Convey, 1970: 97.
- P. 52. *Cotyloplana whiteleggei* Spencer, 1892. Add the following item.  
*Cotyloplana whiteleggei*: Smith & convey, 1970: 98.
- Pp. 54-55. *Dolichoplana carvalhoi* Corrêa, 1947. Add the following item.  
*Dolichoplana carvalhoi*: Sluys, 1989 c: 48.
- Pp. 55-56. *Dolichoplana feildeni* von Graff, 1899. Add the following items.  
*Dolichoplana feildeni*: Schmidt, 1902: 546, 548, 558, 564; taf. XXXIII, figs. 3-5 (HI).  
*Dolichoplana feildeni*: Sluys, 1989 c: 36.
- Pp. 57-58. *Dolichoplana striata* Moseley, 1877. Add the following item.  
*Dolichoplana striata*: Ball & Slyus, 1990: 139, 143, fig. 8-1 H (DB), 150. U. S. A. Syn. *Dolichoplana feildeni* von Graff, 1899.
- P. 58. *Elatotodermus steinböcki* Haslauer-Gamisch, 1982. The last 2 lines of "Note" should be corrected as follows:  
Two of these species (except for *sumbawaeiensis*) now appear to belong in the Geoplanidae: *Kontikia quadrilineata* (Halauer-Gamisch, 1982) and *Caenoplana steinboeckii* (Haslauer-Gamisch, 1982). The remaining species, *sumbawaeiensis*, is classified as *Rhynchodemus sumbawaeiensis* (Haslauer-Gamisch, 1982).
- P. 59. *Kontikia? sumbawaeiensis* (Haslauer-Gamisch, 1982). Deletion of a full sentence.
- P. 60. Genus *Pelmatoplana* von Graff, 1896. Type species should be corrected.  
Type species: *Pelmatoplana moluccana* von Graff, 1899. Designated by Ogren & Kawakatsu, 1991 b.
- P. 61. *Platydemus albicinctus* von Graff, 1899. Add the following item.  
*Platydemus albicinctus*: Muniappan, 1990: 180.
- P. 62. *Platydemus dubius* (Spencer, 1892). Add the following item.  
*Rhynchodemus dubius*: Smith & Convey, 1970: 102.
- P. 62. *Platydemus fasciatus* (Spencer, 1892). Add the following item.  
*Rhynchodemus fasciatus*: Smith & Convey, 1970: 102.
- Pp. 62-63. *Platydemus fletcheri* (Spencer, 1892). Add the following item.  
*Rhynchodemus fletcheri*: Smith & Convey, 1970: 102.
- P. 63. *Platydemus grandis* (Spencer, 1892). Add the following item.  
*Platydemus grandis*: Schmidt, 1902: 548-550, 555-556.  
*Platydemus grandis*: Sluys, 1989 c: 34-35, figs. 23-24 (HI).

- Rhynchodemus grandis* : Smith & Convey, 1970 : 103.
- P. 63. *Platydemus insularis* von Graff, 1899. Add the following item.  
*Platydemus insularis* : Muniappan, 1990 : 180.
- P. 63. *Platydemus laterolineatus* (Spencer, 1892). Add the following item.  
*Rhynchodemus laterolineatus* : Smith & Convey, 1970 : 103.
- P. 64. *Platydemus macropthalmus* von Graff, 1899. Add the following item.  
*Platydemus macropthalmus* : Kawakatsu, Ogren & Muniappan, 1992 : 19.
- Pp. 64-65. *Platydemus manokwari* de Beauchamp, 1962. Add the following items.  
*Platydemus manokwari* : Kaneda & Nagai, 1988 : 4-5.  
*Platydemus manokwari* : Muniappan, 1990 : 179-183, fig. 1 (a map of Guam showing the spread of *Platydemus manokwari*).  
*Platydemus manokwari* : Kaneda, Kitagawa & Ichinohe, 1990 : 524-528, figs. 1-5 (DB, cocoon, graphs). Culture stock of animals from the Philippines at Yokohama Plant Protection Station.  
*Platydemus manokwari* : Oki, Tamura, Itô, Nagai, Ogura, Shimabukuro, Ichinohe, Katsumata, Kaneda & Kawakatsu, 1991 : 1200. The Okinawa Islands / Japan.  
*Platydemus manokwari* : Winsor, 1991 d : 48.  
*Platydemus manokwari* : Hopper & Smith, 1992 : 77. Guam / U.S.A.  
*Platydemus manokwari* : Kawakatsu, Ogren & Muniappan, 1992 : 9-23, figs. 1-5 (DVB, DH, HI, FCA, PCA, FGO). Guam Island / U. S. A. ; The Philippines.  
*Platydemus manokwari* : Kawakatsu, Oki, Tamura, Itô, Nagai, Ogura, Shimabukuro, Ichinohe, Katsumata & Kaneda, 1993 (In press) : figs. 1 A-E (DVB, cocoons), 2 (FCA), 3 A-P (PCA), 4 (photomicrograph of chromosomes), 5 (idiograms). The Okinawa Islands, the Southwest Islands of Japan / Japan.
- P. 65. *Platydemus mediolineatus* (Spencer, 1892). Add the following item.  
*Rhynchodemus mediolineatus* : Smith & Convey, 1970 : 103.
- P. 66. *Platydemus sumbawaeiensis* Haslauer-Gamisch, 1982. Deletion of 2 lines. Correct them as follows :  
 See *Rhynchodemus sumbawaeiensis* (Haslauer-Gamisch, 1982).
- Pp. 66-67. *Platydemus victoriae* (Dendy, 1890). Add the following items.  
*Rhynchodemus victoriae* : Smith & Convey, 1970 : 103.  
*Platydemus victoriae* : Sluys, 1989 c : 50.
- Pp. 67-68. *Rhynchodemus americanus* Hyman, 1943. Add the following item.  
*Rhynchodemus americanus* : Ball & Sluys, 1990 : 138-139, 145, fig. 7—3 A (FCA), 146. U. S. A.
- P. 72. *Rhynchodemus ijimai* Kaburaki, 1922. Add the following items.  
*Rhynchodemus ijimai* : Katô, 1943 : 664.  
*Rhynchodemus ijimai* : Kawakatsu, 1991 b : 40.
- P. 76. *Rhynchodemus putzei* von Graff, 1899. Add the following items.  
*Rhynchodemus putzei* : Sluys, 1989 c : 36.  
*Rhynchodemus putzei* : Kawakatsu, 1991 b : 49.
- P. 78. *Rhynchodemus simulans* Dendy, 1891. Add the following item.  
*Rhynchodemus simulans* : Smith & Convey, 1970 : 103.
- Pp. 78-81. *Rhynchodemus sylvaticus* (Leidy, 1851). Add the following items.  
*Rhynchodemus bilineatus* : Jones, 1977 : 36.  
*Rhynchodemus sylvaticus* : Sluys, 1989 c : 34.

*Rhynchodemus sylvaticus* (*R. bilineatus*): Ball & Sluys, 1990: 138-139, 143, fig. 7—1 B-D (DH, DB), 145, fig. 7—3 B (FCA), 146, 149, 151. U. S. A.

*Rhynchodemus sylvaticus*: Jones, 1991: 34.

*Rhynchodemus sylvaticus*: Ogren, 1991 a: 27-29, fig. 1 (DB), 32. Toronto, Ontario / Canada.  
Syn. *Rhynchodemus bilineatus* and *Rhynchodemus blainvillei* (= *pellucidus*) (see pp. 27, 32).

*Rhynchodemus sylvaticus*: Ogren, 1991 b: 139.

Pp. 82-84. **UNDESCRIBED RHYNCHODEMID SPECIES.** Add the following item.

Rhynchodeminae sp. of Naha (Okinawa). Kawakatsu, Oki, Tamura, Itô, Nagai, Ogura, Shimabukuro, Ichinohe, Katsumata & Kaneda, 1993.

Rhynchodeminae sp.: Kawakatsu, Oki, Tarura, Itô, Nagai, Ogura, Shimabukuro, Ichinohe, Katsumata & Kaneda, 1993 (In press). Specimen Lot No. 2022. Naha, Okinawa Island, the Southwest Islands of Japan / Japan.

P. 88. **TAXONOMIC INDEX: RHYNCHODEMINAE.** *sondaica*. Delete the following indication.

"Type species of the genus *Pelmatoplana* von Graff, 1896."

P. 90. **TAXONOMIC INDEX: MICROPLANINAE.** *hepatica*. Lines 2 and 3 should be corrected as follows: Type species of the genus *Fasciola* Linné, 1758.

P. 90. *hepaticarum*. Delete the following indication.

"Type species of the genus *Fasciola* Linné, 1758."

#### C. RHYNCHODEMIDAE INDEX, Part II: MICROPLANINAE

(1989: Bull. Fuji Women's College, No. 27, Ser. II, pp. 53-111)

P. 57. *Diporodemus hymanae* E. M. Froehlich et Froehlich, 1972. Add the following item.

*Diporodemus hymanae*: Sluys, 1989 c: 34.

P. 57. *Diporodemus indigenus* Hyman, 1943. Add the following item.

*Diporodemus indigenus*: Ball & Sluys, 1990: 139, 142-143, fig. 7—1 J (DB, VB), 145, fig. 7—3 C (FCA), 149. U. S. A.

*Diporodemus indigenus*: Ogren, 1991 a: 17-28, 30-31, figs. 5, 6 and 8 (PCA, FCA), 34. Quebec / Canada.

Pp. 57-58. *Diporodemus yucatani* Hyman, 1938. Add the following item.

*Diporodemus yucatani*: Ogren, 1991 a: 34.

P. 59. *Incapora weyrauchi* du Bois-Reymond Marcus, 1953. Add the following item.

*Incapora weyrauchi*: Sluys, 1989 b: 93, fig. 5 (FCA).

Pp. 60-61. *Microplana atrocyanea* (Walton, 1912). Add the following item.

*Microplana atrocyanea* (*Rhynchodemus atrocyaneus*, *Geodesmus atrocyaneus*): Ball & Sluys, 1990: 139, 143, fig. 7—1 I (DB), 144, fig. 7—2 B (FCA), 145-146, 149. U. S. A.

Pp. 61-62. *Microplana attemusi* (Bendl, 1909). Add the following item.

*Microplana attemusi*: Ogren, 1991 a: 34.

P. 62. *Microplana britannica* (Percival, 1925). Add the following item.

*Microplana britannicus*: Jones, 1977: 36.

P. 66. *Microplana humicola* Vejdovský, 1890. Add the following item.

*Microplana humicola*: Ogren, 1991 a: 34.

- P. 67. *Microplana monacensis* (Heinzel, 1929). Add the following item.  
*Microplana monacensis*: Ogren, 1991 a: 27, 34. He considered this species may belong to the genus *Diporodemus*.
- P. 69. *Microplana pyrenaica* (von Graff, 1893). Add the following item.  
*Rhynchodemus pyrenaicus*: Schmidt, 1902: 548.
- P. 70. *Microplana rufoccephalata* Hyman, 1954. Add the following item.  
*Microplana rufoccephalata*: Ball & Sluys, 1990: 139, 142-144, fig. 7—2 C (FCA). U. S. A.
- P. 70. *Microplana ruteocephala* Kaburaki, 1922. Add the following item.  
*Microplana ruteocephala*: Kawakatsu, 1991 b: 40, 42.
- Pp. 70-71. *Microplana scharffi* (von Graff, 1896). Add the following items.  
*Microplana scharffi*: Jones, 1977: 36.  
*Microplana scharffi*: Ogren & Kohn, 1989: 112 A. Seattle, Washington / U. S. A.  
*Rhynchodemus (Microplana) scharffi*: Sluys, 1989 c: 34.  
*Microplana scharffi*: Jones, 1991: 34.
- P. 72. Insert a new species list just after the list of *Microplana teres* (von Graff, 1899). It is as follows:  
*Microplana termitophaga* Jones, Darlington et Newson, 1990  
 Unidentified geoplanid turbellaria of Nairobi (Kenya): Sheppe, 1970: 214.  
*Microplana termitophaga* n. sp. Jones, Darlington & Newson, 1990: 249-256, figs. 1 a-e, 2 a-b (VB, DVH, HI). Loresho Ridge (alt. 1768 m), Nairobi / Kenya.  
 Note: The genital anatomy of this species is not known.
- Pp. 72-77. *Microplana terrestris* (Müller, 1774). Photocopies of several old papers (Férussac, 1821 a, b; Blainville, 1826; Blomefield, 1846) were obtained. It becomes clear that line 6 under the list of *Microplana terrestris* in our previous paper (Ogren & Kawakatsu, 1989, p. 72) should be corrected as follows:  
*Fasciola terrestris*: Férussac, 1821 a: 235.  
*Fasciola terrestris*: Férussac, 1821 b: 92.  
 Add the following items after page 74.  
*Rhynchodemus terrestris*: Hallez, 1879: 14. Spelling error.  
*Rhynchodemus terrestris*: Hallez, 1879: 9. 12, 14, 20.  
*Rhynchodemus terrestris*: Schmidt, 1902: 548.  
*Microplana terrestris*: Jones, 1977: 36.  
*Rhynchodemus (Microplana) terrestris*: Curtis, Cowden, Moore & Robertson, 1983. 172, 192.  
*Microplana terrestris*: Ogren & Kohn, 1989: 112 A. Seattle, Washington / U. S. A.  
*Microplana terrestris*: Sluys, 1989 c: 33, fig. 22 (HI).  
*Rhynchodemus terrestris*: Sluys, 1989 c: 53.  
*Microplana terrestris*: Ball & Sluys, 1990: 139, 143, fig. 7—1 A, C (DH, DB), 144, fig. 7—2 A (FCA), 145-146, 149. U. S. A.  
*Microplana terrestris*: Ogren, 1991 a: 27-33, figs. 2-4, 8 (PB, PCA, FCA). Toronto, Ontario and Quebec / Canada. Syn. *Microplana mahnerti* (see pp. 27, 32).  
*Microplana terrestris*: Ogren, 1991 b: 139.
- Pp. 77-78. *Microplana thwaitesii* (Moseley, 1875). Add the following item.  
*Microplana thwaitesi*: Sluys, 1989 c: 36.
- P. 79. *Microplana voeltzkowi* (von Graff, 1899). Add the following item.  
*Dolichoplana voeltzkowi*: Schmidt, 1902: 546-551, 564; taf. XXX, fig. 2 (HI).
- P. 81. *Othelosoma cylindricum* (de Beauchamp, 1913). Add the following item.

- Othelosoma cylindrica* : Jones, Darlington & Newson, 1990 : 256.
- Pp. 85-86. *Othelosoma speciosum* (von Graff, 1896). Add the following item.  
*Artioposthia speciosum* : Schmidt, 1902 : 560.
- P. 87. *Pseudarticotylus ceylonicus* Ikeda, 1911. A head scientific name : correct "*Pseudarticotylus*" to "*Pseudarticotylus*."
- P. 91. Additions and Corrections. Line 7. Correct *Rhynchodemus* to *Rhynchodemus*. Add the following item of an unidentified species.  
 Unidentified geoplanid turbellaria of Nairobi (Kenya). Sheppe, 1970.  
 See *Microplana termitophaga* Jones, Darlington et Newson, 1990.
- Pp. 106-111. Taxonomic Index. Add the following item.  
*termitophaga*.....see under *Microplana*. Microplaninae.
- P. 109. *pindaudei*. Correct "*Dolichoplana*" to "*Platydemus*."
- P. 110-left. *sambawaeiensis*...see under *Kontikia?* (GEOPLANIDAE), *Platydemus*. Deletion of a full sentence. Correct them as follows :  
*sumbawaeiensis*...see under *Rhynchodemus*, *Platydemus*. Rhynchodeminae.
- P. 110. *sondaica*. Delete the following indication.  
 "Type species of the genus *Pelmatoplana* von Graff, 1896."
- P. 111. *zimmermanni* or *Zimmermanni*. Correct "*Dolichoplana*" to "*Platydemus*."

#### D. GEOPLANIDAE INDEX, PART I : GEOPLANINAE

(1990 : Bull Fuji Women's College, No. 28, Ser. II, pp. 79-166)

- P. 85. Line 28. 4. Descriptions of the Genera and Subgenera of the Geoplaninae (not Geoplanidae).
- Pp. 92-93. *Amaga bogotensis* (von Graff, 1899) comb. nov. Deletion of a full sentence. Exchange the list for the following new list.
- Pseudogeoplana bogotensis* (von Graff, 1899) comb. nov.  
*Geoplana bogotensis* n. sp. von Graff, 1899 : 324 ; taf. III, figs. 12-14 (DVB in color). Bogota / Colombia.  
*Geoplana bogotensis* (in part) : von Graff, 1915 : 2996-2997.  
*Geoplana bogotensis* : Riester, 1938 : 60. Syn. of *Geoplana férussaci* von Graff, 1899.  
*Geoplana bogotensis* : du Bois-Reymond Marcus, 1951 : 223. [nec *Geoplana bogotensis* von Graff, 1899, in Riester (1938)].  
*Geoplana bogotensis* : Marcus, 1951 : 64-65, 120.  
*Geoplana bogotensis* : du Bois-Reymond Marcus, 1957 : 153-154.  
*Geoplana bogotensis* : du Bois-Reymond Marcus, 1958 : 395-396.  
*Geoplana bogotensis* : Hyman, 1962 : 1.  
*Amaga bogotensis* : Ogren & Kawakatsu, 1990 b : 92-93.  
 Note : [nec *Geoplana bogotensis* von Graff, 1899, in Busson (1903) and Fuhrmann (1914) ; nec *Geoplana bogotensis* von Graff, 1899, in Hyman (1955)]. See *Amaga buergeri* (Hyman, 1955) ; *Amaga libbieae* (du Bois-Reymond Marcus, 1958).
- P. 93. *Amaga buergeri* (Hyman, 1955) comb. nov. Insert 2 items between lines 15 and 16.  
*Geoplana bogotensis* : C. G. Froehlich, 1955 a : 208.  
*Geoplana bogotensis* in Busson (1903) and Fuhrmann (1914) : du Bois-Reymond Marcus, 1957 :

Correct the "Note" as follows:

Note: [nec *Geoplana bogotensis* von Graff, 1899]. See *Pseudogeoplana bogotensis* (von Graff, 1899).

- P. 93. *Amaga bussoni* (Froehlich, 1959) comb. nov. Correct the "Note" as follows:

Note: [nec *Geoplana olivacea* Shultze et Müller, 1857, in Busson (1903) and Fuhrmann (1914)]. See *Pseudogeoplana olivacea* (Schultze et Müller, 1857).

- P. 94. *Amaga libbieae* (du Bois-Reymond Marcus, 1958) comb. nov. Insert one item next to the last line.

(?) *Geoplana bogotensis* in Hyman (1955): C. G. Froehlich, 1967: 158.

Correct the "Note" as follows:

Note: [nec *Geoplana bogotensis* von Graff, 1899; nec *Geoplana bogotensis* von Graff, 1899, in Busson (1903); nec *Geoplana bogotensis* von Graff, 1899, in Fuhrmann (1914)]. See *Pseudogeoplana bogotensis* (von Graff, 1899); *Amaga buergeri* (Hyman, 1955).

- P. 94. *Amaga olivacea* (Schultze et Müller, 1857) comb. nov. Correct the genus name as follows:

*Pseudogeoplana olivacea* (Schultze et Müller, 1857) comb. nov.

Add one item next to the last line.

*Amaga olivacea*: Ogren & Kawakatsu, 1990 b: 94.

Correct the last 3 lines of "Note" as follows:

Since the separation of records of *Geoplana olivacea* (original species and von Graff's) is difficult, they are listed here under *Pseudogeoplana olivacea* (Schultze et Müller, 1857). [nec *Geoplana olivacea* Schultze et Müller, 1857, in Busson (1903) and Fuhrmann (1914)]. See *Amaga bussoni* (Fuhrmann, 1959).

- P. 96. Continued from *Choeradoplana iheringi* von Graff, 1899 (p. 95). Insert one item between lines 1 and 2.

*Choeradoplana iheringi*: Schmidt, 1902: 561.

Line 14. The locality should read as "Ribeirão Pires, Estrada de Ferro Santos-São..."

Line 18. Deletion of "von Graff's (1899) material."

- P. 96. *Choeradoplana langi* (von Graff, 1894). Insert one item between lines 5 and 6; add another item next to the last line.

*Choeradoplana langi*: Schmidt, 1902: 561.

*Choeradoplana langi*: Sluys, 1989 c: 34.

- P. 99. Deletion of lines 2-7 (3 items of *Geoplana argus*). The following new list should be placed here.  
*Geoplana argus* von Graff, 1899 (in part), in Riester, 1938

See *Geoplana* (*Geoplana*) *argus* von Graff, 1899.

*Geoplana argus* von Graff, 1899 (in part), in Riester, 1938

See *Geoplana* (*Geoplana*) *eudoxiae* Ogren et Kawakatsu, nom. nov.

- P. 99. Lines 16 and 17 (*Geoplana atra*). Correct them as follows:

*Geoplana atra* Schultze et Müller, 1857 (in part), in von Graff, 1914 and 1915, Steinböck, 1925, Riester, 1938, du Bois-Reymond Marcus, 1951, Marcus, 1951, E. M. Froehlich, 1955 b, C. G. Froehlich, 1956 b, and Fyfe, 1956.

See *Geoplana* (*Geoplana*) *nigra* Froehlich, 1959.

- P. 99. Line 18 (*Geoplana atra*). Correct it as follows:

*Geoplana atra* Schultze et Müller, 1857 (in part), in von Graff, 1899.

- P. 99. Lines 20 and 21 (*Geoplana atra*). Correct them as follows:

*Geoplana atra* Schultze et Müller, 1857 (in part), in von Graff, 1899, 1914 and 1915, Schmidt, 1902, Steinböck, 1925, Riester, 1938, du Bois Reymond-Marcus, 1951, E. M. Froehlich, 1955 b, C. G.

- Froehlich, 1956 b.  
 See *Notogynaphallia atra* (Schultze et Müller, 1857).
- P. 100. Deletion of lines 7-16 (5 items of *Geoplana bogotensis*). The following new list should be placed here.
- Geoplana bogotensis* von Graff, 1899  
 See *Pseudogeoplana bogotensis* (von Graff, 1899).
- Geoplana bogotensis* var. *bürgeri* Busson, 1903  
 See *Amaga buergeri* (Hyman, 1955).
- Geoplana bogotensis* von Graff, 1899, in Busson (1903) and Fuhrmann (1914)  
 See *Amaga buergeri* (Hyman, 1955).
- (?) *Geoplana bogotensis* von Graff, 1899, in Hyman (1955) in C. G. Froehlich, 1967  
 See *Amaga libbieae* (du Bois-Reymond Marcus, 1958).
- Geoplana bogotensis* von Graff, 1899, in Hyman, 1955  
 See *Amaga libbieae* (du Bois-Reymond Marcus, 1958).
- P. 101. Deletion of lines 42 and 43 (one item of *Geoplana chilensis*... in Schirch, 1929).
- P. 104. Lines 19 and 20 (*Geoplana ita*). Correct them as follows:  
*Geoplana ita* in E. M. Froehlich, 1978  
 See *Geoplana ita* nom. nud. E. M. Froehlich, 1978. Listed in the section "Undescribed Geoplaninae Species."
- P. 105. Deletion of lines 5-19 (7 items of *Geoplana marginata*). The following new list should be placed here.
- Geoplana marginata* Schultze et Müller, 1857  
 See *Pseudogeoplana marginata* (Schultze et Müller, 1857).
- Geoplana marginata* (auctorum) in Almeida, Yamada & Froehlich, 1990  
 See *Notogynaphallia marginata* (von Graff, 1899). See also *Pseudogeoplana marginata* (Schultze et Müller, 1857).
- Geoplana marginata* Schultze et Müller, 1857, in Schirch, 1929 and Riester, 1938  
 See *Notogynaphallia caissara* (E. M. Froehlich, 1955).
- Geoplana marginata* Schultze et Müller, 1857 (in part), in Marcus, 1951 and Hyman, 1962  
 See *Notogynaphallia marginata* (von Graff, 1899).
- Geoplana marginata* Schultze et Müller, 1857 (in part), in von Graff, 1894, 1896 and 1899; in Goetsch, 1933, and de Beauchamp, 1958.  
 See *Notogynaphallia marginata* (von Graff, 1899).
- Geoplana marginata* Schultze et Müller, 1857 (in part), in von Graff, 1899; in Goetsch, 1933, and Marcus, 1951.  
 See *Pseudogeoplana marginata* (Schultze et Müller, 1857).
- P. 105. Deletion of lines 28-33 (3 items of *Geoplana maximiliani*). The following new list should be placed here.
- Geoplana maximiliani* Schultze et Müller, 1857, in Schirch, 1929  
 See *Pseudogeoplana schirchi* Ogren et Kawakatsu, nom. nov.
- Geoplana maximiliani* Schultze et Müller, 1857, in von Graff, 1899 and 1914, de Beauchamp, 1913, and Goetsch, 1933  
 See *Pseudogeoplana maximiliani* (Schultze et Müller, 1857).
- P. 106. Lines 28 and 29 (*Geoplana nephelis*). Correct them as follows:  
*Geoplana nephelis* Schultze et Müller, 1857 (in part), in von Graff, 1899, 1913, 1914, 1915, and 1916



- See *Pseudogeoplana nephelis* (Schultze et Müller, 1857).
- P. 107. Lines 9 and 10 (*Geoplana olivacea*). Correct them as follows:  
*Geoplana olivacea* Schultze et Müller, 1857  
 See *Pseudogeoplana olivacea* (Schultze et Müller, 1857).
- P. 108. Deletion of lines 22-23 (one item of *Geoplana polyophthalma*... in Schirch, 1929).
- P. 108. Lines 30-33 (2 items of *Geoplana pulchella*). Correct them as follows:  
*Geoplana pulchella* Schultze et Müller, 1857  
 See *Pseudogeoplana pulchella* (Schultze et Müller, 1857).
- Geoplana pulchella* Schultze et Müller, 1857 (in part), in du Bois-Reymond Marcus, 1951  
 See *Pseudogeoplana pulchella* (Schultze et Müller, 1857).
- P. 112. *Geoplana (Barreirana) barreirana* Riester, 1938. Lines 1 and 2. Correct them as follows:  
*Geoplana polyophthalma* (in part): Schirch, 1929: 30-31, 36-37; pls. I, fig. 6 (DB in color), II, fig. 2 (DB in color). Therezópolis, Rio de Janeiro / Brazil. Spelling error. [nec *Geoplana polyophthalma* von Graff, 1899].
- P. 114. *Geoplana (Geoplana) argus* von Graff, 1899. Insert one item between lines 2 and 3.  
*Geoplana argus*: Schmidt, 1902: 561.  
 Line 3. The cited page should read as "413" (not 426).  
 Lines 9 and 10. Correct them as follows:  
*Geoplana argus*: Schirch, 1929: 30, 34, 36.  
 Lines 12 and 13. Correct them as follows:  
*Geoplana argus* (in part): Riester, 1938: 48-50. See *Geoplana (Geoplana) eudoxiae* Ogren et Kawakatsu, nom. nov.  
 Add one item next to line 18.  
*Geoplana argus*: Sluys, 1989 c: 34.  
 The last word in the first line of "Note" should read as "têm" (not tem).  
 The last 3 lines after "See..." Correct them as follows:  
 See *Geoplana (Geoplana) eudoxiae* Ogren et Kawakatsu, nom. nov.
- P. 116. *Geoplana (Geoplana) burmeisteri* Schultze et Müller, 1857. Lines 11 and 12. Correct them as follows:  
*Geoplana polyophthalma* (in part): Schirch, 1929: 30-31, 36-37, fig. 1 (DB); pl. I, figs. 4-5, 7-8 (DB, DVB). Therezópolis, Rio de Janeiro / Brazil. Spelling error.  
 Deletion of lines 13-18 (3 items cited from Schirch's 1929 paper).  
 Deletion of the last 2 lines after "See..." in "Note." The following new additions are placed here.  
 According to E. M. Froehlich (in litt., Sept., 1990 and May, 1991), C. G. Froehlich's (1955 b, p. 190) citations of plate figures of "*Geoplana polyophthalma* Schirch[h] 1929 (part)" should read as follows: "p. 37 f. 1, t. 1 f. 4, 5, 7 e 8 (non t. 1 f. 6, t. 2 f. 2)." For animals shown in Schirch's (1929) pl. I, fig. 6 and pl. II, fig. 2, see *Geoplana (Barreirana) barreirana* Riester, 1938.
- Pp. 118-119. *Geoplana (Geoplana) crawfordi* de Beauchamp, 1939. Add one item next to the last line.  
*Geoplana crawfordi*: Ogren & Darlington, 1991: 234.
- P. 119. *Geoplana (Geoplana) crioula* E. M. Froehlich, 1955. Add one item next to the last line.  
*Geoplana crioula*: Ogren & Darlington, 1991: 235.
- P. 119. *Geoplana (Geoplana) eudoxiae* Ogren et Kawakatsu, nom. nov. Correct the last line of "Note" after "See..." as follows:  
 See *Geoplana (Geoplana) argus* von Graff, 1899.

- P. 120. *Geoplana (Geoplana) ferussaci* von Graff, 1899. Line 4. Insert "30" between "1929:" and "35-36,..."  
Line 7. The locality should read as "Gorduras, Serra do..."
- P. 121. *Geoplana (Geoplana) fuhrmanni* Hyman, 1962. Add one item next to the last line.  
*Geoplana fuhrmanni*: Ogren & Darlington, 1991: 235.
- P. 122. *Geoplana (Geoplana) itatiayana* Schirch, 1929. Deletion of line 12 (*Geoplana ita*).
- P. 123. *Geoplana (Geoplana) ladislavii* von Graff, 1899. Insert one item between lines 5 and 6.  
*Geoplana ladislavii*: Schmidt, 1902: 561.  
Add one item next to the last line.  
*Geoplana ladislavii*: Sluys, 1989 c: 34.
- Pp. 124-125. *Geoplana (Geoplana) marginata* (Schlutze et Müller, 1857). Deletion of a full sentence.  
Exchange the list for the following new list.  
*Pseudogeoplana marginata* (Schultze et Müller, 1857) comb. nov.  
*Geoplana marginata* n. sp. Schultze & Müller, 1857: 24. Blumenau, Santa Catharina / Brazil.  
*Geoplana marginata*: Schultze, 1857: 4.  
*Geoplana marginata*: Diesing, 1861: 551.  
*Geoplana marginata*: Moseley, 1877 a: 288.  
*Geoplana marginata* (in part): von Graff, 1899: 305.  
*Geoplana marginata* (in part): Goetsch, 1933: 264.  
*Geoplana marginata* (in part): Marcus, 1951: 56-58, 118.  
*Geoplana marginata*: C. G. Froehlich, 1959: 235.  
*Geoplana (Geoplana) marginata*: Ogren & Kawakatsu, 1990 b: 124-125.  
Note: [nec *Geoplana marginata* Müller, 1857, in von Graff (1894, 1896, 1899) and Marcus (1951); nec *Geoplana marginata* Müller, 1857, in Schirch (1929) and Riester (1938)].  
According to E. M. Froehlich (in litt., Sept., 1990 and May, 1991), *Geoplana marginata* Schultze et Müller, 1857, has 4 or 6 (?) clear stripes on the dark dorsal surface. See *Notogynaphallia abundans* (von Graff, 1899), *Notogynaphallia caissara* (Froehlich, 1955) and *Notogynaphallia marginata* (von Graff, 1899).
- P. 127. *Geoplana (Geoplana) multicolor* von Graff, 1899. Lines 11 and 12. Correct them as follows:  
*Geoplana multicolor*: C. G. Froehlich, 1955 a: 195, 213, 241, pl. III, fig. 19 (HI).
- P. 128. *Geoplana (Geoplana) nigra* Froehlich, 1959. Insert one item between lines 12 and 13.  
*Geoplana atra*: Fyfe, 1956: 513.  
Lines 14 and 15. Correct them as follows:  
*Geoplana nigra* nom. nov. C. G. Froehlich, 1959: 235, 240.  
Correct the last line of "Note" after "See..." as follows:  
See *Notogynaphallia atra* (Schultze et Müller, 1857).
- P. 128. *Geoplana (Geoplana) notocelis* Bresslau, 1930. Add one item next to the last line.  
*Geoplana notocelis*: Sluys, 1989 c: 53.
- P. 129. *Geoplana (Geoplana) placilla* E. M. Froehlich, 1978. Add one item next to the last line.  
*Geoplana placilla*: Ogren & Darlington, 1991: 235.
- Pp. 129-130. *Geoplana (Geoplana) polyophthalma* von Graff, 1899. Line 2.  
The locality should read as "Taquara, Rio Grande do Sul / Brazil."  
Deletion of line 5 (*Geoplana polyophthalma* cited from Schirch's 1929 paper).  
Correct the "Note" (on p. 130) as follows:  
Note: [nec *Geoplana polyophthalma*[sic] von Graff, 1899, in Schirch, 1929]. See *Geoplana (Geoplana) burmeisteri* Schultze et Müller, 1857; *Geoplana (Barreirana) barreirana* Riester, 1938; *Geoplana (Geoplana) metzi* von

Graff, 1899.

- P. 130. *Geoplana (Geoplana) preta* Riester, 1938. Add one item next to the last line.  
*Geoplana preta*: Ogren & Darlington, 1991: 234.
- P. 130. *Geoplana (Geoplana) quagga* Marcus, 1951. Add one item next to the last line.  
*Geoplana quagga*: Ogren & Darlington, 1991: 234.
- Pp. 131-132. *Geoplana (Geoplana) rufiventris* Schultze et Müller, 1857.  
Insert one item between lines 8 and 9; add another item next to the last line (on p. 132).  
*Geoplana rufiventris*: Schmidt, 1902: 546-547, 559-561.  
*Geoplana rufiventris*: Sluys, 1989 c: 34.
- P. 132. *Geoplana (Geoplana) saima* du Bois-Reymond Marcus, 1951. Add one item next to the last line.  
*Geoplana saima*: Ogren & Darlington, 1991: 234.
- Pp. 135-136. *Gigantea gigantea* (von Graff, 1899). Add the following item.  
*Geoplana gigantea*: Ogren, 1991: 143.
- P. 138. *Issoca rezendei* (Schirch, 1929). Add the following item.  
*Issoca rezendei*: Almeida, Yamada & Froehlich, 1991: 169-173, figs. 1 (DB, idiogram), 3 (C-band idiogram). 2x = 14. São Paulo / Brasil.
- Pp. 139-140. *Notogynaphallia abundans* (von Graff, 1899) comb. nov. Deletion of full sentence. The following new list should be placed here.
- Notogynaphallia abundans* (von Graff, 1899) comb. nov.  
*Geoplana marginata* var. *abundans* n. var. von Graff, 1899: 306. Brazil.  
*Geoplana abundans*: C. G. Froehlich, 1959: 201, 208, 235, 239. São Leopoldo, Rio Grande do Sul / Brazil.  
*Geoplana abundans*: C. G. Froehlich, 1967: 159, 161.  
*Geoplana abundans*: Almeida, Yamada & Froehlich, 1991: 169.
- Note: [nec *Geoplana marginata* Schultze et Müller, 1857; nec *Geoplana marginata* Müller, 1857, in von Graff (1899); nec *Geoplana marginata* Müller, 1857, in Schirch (1929) and Riester (1938)].
- It becomes clear in C. G. Froehlich (1959, p. 208) that at present *Notogynaphallia abundans* (von Graff, 1899) is strictly applied to 7-striped worms. He (*l. c.*) wrote on this species: "Its anatomy, as well as its relations to the species Graff, and after him several authors, called *G. marginata*, will be presented and discussed in a future paper." The same must be applied to *Notogynaphallia caissara* (E. M. Froehlich). See *Pseudogeoplana marginata* (Schultze et Müller, 1857); *Notogynaphallia caissara* (E. M. Froehlich, 1955); *Notogynaphallia marginata* (von Graff, 1899).
- P. 140. *Notogynaphallia atra* (Schultze et Müller, 1857) comb. nov. Insert one item between lines 5 and 6.  
*Geoplana atra* (in part?): Schmidt, 1902: 560.  
Delete line 14 (Fyfe, 1956).
- P. 141. *Notogynaphallia caissara* (E. M. Froehlich, 1955) comb. nov. Deletion of full sentence. The following new list should be placed here.
- Notogynaphallia caissara* (E. M. Froehlich, 1955) comb. nov.  
*Geoplana marginata*: Schirch, 1929: 30, 36; taf. II, fig. 10 (DB in color). Brazil.  
*Geoplana marginata*: Riester, 1938: 29-32, figs. 31-33 (DH, AE, HI, FCA), 86-87; taf. 1, fig. 7 (DB, CP in color), fig. 30 (DB). Boa Fê, Fazenda Arnaldo Guinle and Therezópolis, Rio de Janeiro; Ribeirão Pires, Serra de Mar, São Paulo / Brazil.  
*Geoplana marginata* (in part): Marcus, 1951: 56-58.

*Geoplana caissara* : C. G. Froehlich, 1955 c : 267. Cf. E. M. Froehlich (1955 a).

*Geoplana caissara* nom nov. E. M. Froehlich, 1955 a : 291, 295-297, 317, 329-332 ; pl. I, figs. 1-8 (DH, CP, HI, FCA). Ubatuba, São Paulo ; Teresópolis and Barreira, Rio de Janeiro / Brazil.

*Geoplana marginata* in Schirch (1929) and Riesetr (1938) : E. M. Froehlich, 1955 a : 295, 297, 329-332.

*Geoplana caissara* : E. M. Froehlich, 1955 b : 205.

*Geoplana caissara* : C. G. Froehlich, 1956 a : 314, 331. Gávea Pequena, Rio de Janeiro / Brazil.

*Geoplana marginata* in Schirch (1929) and Riester (1938) : C. G. Froehlich, 1956 a : 330.

*Geoplana caissara* : C. G. Froehlich, 1959 : 219, 235.

*Geoplana marginata* (in part) : Hyman, 1962 : 13.

Note : [nec *Geoplana marginata* Schultze et Müller, 1857 ; nec *Geoplana marginata* Müller, 1857, in von Graff (1894, 1896, 1899) ; nec *Geoplana marginata* Müller, 1857, in Marcus (1951)].

According to E. M. Froehlich (in litt., Sept., 1990 and May, 1991), *Notogynaphallia caissara* (E. M. Froehlich, 1955) has 5 dark stripes. See *Notogynaphallia abundans* (von Graff, 1899), *Notogynaphallia marginata* (von Graff, 1899), and *Pseudogeoplana marginata* (Schultze et Müller, 1857).

- P. 142. Continued from *Notogynaphallia froehlichae* Ogren et Kawakatsu, nom. nov., "Note" (on p. 141), in Portuguese. The second sentence should read as follows :

"O tamanho, colorido e a distribuição dos olhos em *G. modesta* Riester, provinda do Estado da Paraíba, discordam, porém, tanto de parca como de *G. modesta* Graff."

- P. 142. Insert a new species list just after the list of *Notogynaphallia goetschi* (Riester, 1838) comb. nov. It is as follows :

*Notogynaphallia marginata* (von Graff, 1899) comb. nob.

*Geoplana marginata* (in part) : von Graff, 1894 : 2. San Pedro and Colonie Neu Germania / Paraguay. [nec *Geoplana marginata* Schultze et Müller, 1857].

*Geoplana marginata* (in part) : von Graff, 1896 b : 81.

*Geoplana marginata* (in part) : von Graff, 1899 : 187, fig. 36 "FCA), 305, 307 ; taf. V, figs. 27-30 (DB, CP in color), LVIII, fig. 36 (FCA). Santa Catharina and Taguara, Rio Grande do Sul / Brazil ; San Pedro and Colonie Neu Germania / Paraguay. Except for *Geoplana marginata* var. *abundans* von Graff, 1899.

*Geoplana marginata* (in part) : von Graff, 1912 : taf. LI, fig. 5 (FCA).

*Geoplana marginata* (in part) : von Graff, 1914 : 2959.

*Geoplana marginata* (in part) : von Graff, 1915 : 3075.

*Geoplana marginata* (in part) : von Graff, 1916 : 3139.

*Geoplana marginata* (in part) : Goetsch, 1933 : 264.

*Geoplana marginata* (in part) : Marcus, 1951 : 6, 56-58, 60-69, 118, 121, 176, 177, pl. XXI, fig. 121 (DB), 180-181, pl. XXIII, figs. 151-154 (CP, HI, FCA), 212-213, pl. XXXIX, fig. 286 (CP in color). Cidade Jardim, Mogi des Cruzes, Parque Paulista, and Ribeirão Pires, São Paulo ; Vila Atlântica, Santos, Serra do Mar, São Paulo / Brazil.

*Geoplana marginata* : C. G. Froehlich, 1955 c : 264, 267-269.

*Geoplana marginata* (in part) : E. M. Froehlich, 1955 a : 295, 297, 317, 330.

*Geoplana marginata* : E. M. Froehlich, 1955 b : 205.

*Geoplana marginata* : C. G. Froehlich, 1956 b : 173. Curitiba and Caiobá, Paraná / Brazil.

*Geoplana marginata* (in part) : de Beauchamp, 1958 : 360.

*Geoplana marginata* : C. G. Froehlich, 1958 : 93-94, 110-111, pl. 1, fig. 1 (FCA). Cananeia, São

Paulo / Brazil.

*Geoplana marginata* : Fyfe, 1956 : 506.

*Geoplana marginata* : Hyman, 1962 : 13.

*Geoplana marginata* auct. : C. G. Froehlich, 1967 : 160.

*Geoplana marginata* : E. M. Froehlich, 1978 : 31.

*Geoplana abundans* : Almeida, Yamada & E. M. Froehlich, 1988 : 764-765. 2x = 14. Misidentification (E. M. Froehlich, in litt., May, 1991).

*Geoplana marginata* (auctorum) : Almeida, Yamada & E. M. Froehlich, 1990 : 48. 2x = 14.

*Geoplana marginata* auctorum : Almeida, Yamada & Froehlich, 1991 : 169-173, figs. 2 (DB, idiogram), 4 (C-band idiogram). 2x = 14. São Paulo / Brazil.

Note : [nec *Geoplana marginata* Schultz et Müller, 1857 ; nec *Geoplana marginata* Müller, 1857, in von Graff (1899) ; nec *Geoplana marginata* Müller, 1857, in Schirch (1929) and Riester (1938)].

According to E. M. Froehlich (in litt., Sept., 1990 and May, 1991), *Notogynaphallia marginata* (von Graff, 1899) should be restricted to animals with 5 dark stripes on the dorsal surface. See *Pseudogeoplana marginata* (Schultz et Müller, 1857) ; *Notogynaphallia abundans* (von Graff, 1899) ; *Notogynaphallia caissara* (E. M. Froehlich, 1955).

- P. 144. Continued from *Notogynaphallia octostriata* (Schultz et Müller, 1857) comb. nov. (on p. 143). Insert one item between lines 4 and 5.

*Geoplana octostriata* : du Bois-Reymond Marcus, 1951 : 236.

- P. 144. *Notogynaphallia sexlineata* (Riester, 1938) comb. nov. Correct line 4 (the last line on p. 144) as follows :

*Geoplana sexlineata* : du Bois-Reymond Marcus, 1951 : 236-238. Syn. *Geoplana sexstriata* von Graff, 1899.

- P. 145. *Notogynaphallia sexstriata* (von Graff, 1899) comb. nov. Lines 4-6. Correct them as follows : *Geoplana sexstriata* : du Bois-Reymond Marcus, 1951 : 235-236, 238, 252-253, pl. VIII, figs. 79-81 (DH, CP in color). Brusque, Santa Catarina ; São Paulo / Brazil. Syn. *Geoplana octolineata* Schirch, 1929 ; *Geoplana sexlineata* Riester, 1938.

- P. 146. *Pasipha chilensis* (von Graff, 1899) comb. nov. Deletion of lines 4 (Schirch, 1929) and 6 (E. M. Froehlich, 1955 a). Correct the "Note" as follows :

Note : [nec *Geoplana chilensis* von Graff, 1899, in Schirch (1929)]. E. M. Froehlich considers it is very unlikely, on account of their distribution ranges, that *Geoplana chilensis* in Schirch, 1929 (loc. Therezópolis, Rio de Janeiro, Brazil) and *Geoplana chilensis* von Graff, 1899 (loc. Chile) are the same species. See *Pseudogeoplana pauloschirchi* Ogren, Kawakatsu et E. M. Froehlich, nom. nov.

- P. 148. *Pasipha pulchella* (Schultz et Müller, 1857) comb. nov. Correct the genus name as follows :

*Pseudogeoplana pulchella* (Schultz et Müller, 1857) comb. nov. Lines 7-9. Correct them as follows :

*Geoplana pulchella* : C. G. Froehlich, 1955 b : 189-191, fig. 1 (DB), 199. Blumenau, Santa Catarina / Brazil. [nec *Geoplana pulchella* Schultz et Müller, 1857, in du Bois-Reymond Marcus, 1951]. See *Pasipha velina* (Froehlich, 1955).

Deletion of line 10.

Add one item next to the last line.

*Pasipha pulchella* : Ogren & Kawakatsu, 1990 b : 148.

- P. 149. *Pasipha velina* (Froehlich, 1955) comb. nov. Insert one item between lines 3 and 4.

*Geoplana pulchella* : E. M. Froehlich, 1955 a : 315, 327, 331.

Correct the "Note" as follows :

Note : See *Pseudogeoplana pulchella* (Schultz et Müller, 1857).

Pp. 151-152. *Polycladus gayi* Blanchard, 1845. Insert one item between lines 3 and 4 ; insert another item between lines 18 and 19.

*Polycladus Gayi* : Blanchard, 1849 : 69-71 ; Atlas zoológico, Anillados (Gusanos anillados), no. 3, fig. 1 (1, 1a-e) (DVB, HI). Chile.

*Polycladus gayi* : Schmidt, 1902 : 545-548, 551-564 ; taf. XXXIII, figs. 1, 8-9 (HI, FGO), XXXIV, figs. 1-16 (HI, FGO).

On p. 152. Insert one item between lines 10 and 11 ; insert 2 items next to the last line.

*Polycladus gayi* : Katô, 1943 : 664. Chile.

*Polycladus gayi* : Winsor, 1983 a : 282.

*Polycladus gayi* : Sluys, 1989 c : 34.

Add the following note next to the last item.

Note : The text of Blanchard's 1847 French paper of *Polycladus Gayi* is the same to all intents as his 1845 French paper ; that of 1849 Spanish paper is slightly different from the foregoing 2 papers. The plate figures of his 1849 paper are the same as in the 1845 paper (plate figures of his 1847 paper are missing in our photocopy). Figures of this species in these plates consist of the following 6 drawings. 1 : Dorsal view of an animal in natural size (95 mm × 28 mm in the figure of 1849 paper) ; 1a : ventral view ; 1b : alimentary system ; 1c and 1d : ventral and side views of the pharynx ; 1e : positions of the pharynx and copulatory apparatus. Additionally, the Spanish explanation of Fig. 1e (1849, p. 71) is wrong : "El systema nervioso, mostrando los ganglios cerebroides y sus dos cadenas laterales."

As was already pointed out by Moseley (1877 a), all of these figures are turned upside down.

P. 153. The revised species list of *Pseudogeoplana bogotensis* (von Graff, 1899) comb. nov. (on pp. 92-93) should be placed just after the list of *Pseudogeoplana blanchardi* (von Graff, 1899) comb. nov.

P. 153. *Pseudogeoplana brasiliensis* (Blainville, 1826) comb. nov. Since photocopies of several old papers (Férussac, 1821 a, b ; Blainville, 1826) were obtained, replace lines 1 and 2 by the followings.

Ver terrestre du Brésil : Férussac, 1821 a : 233-235 ; pl. II, figs. 2 and 3 (DVB).

Ver terrestre du Brésil : Férussac, 1821 b : 90-92 ; pl. CXVI, figs. 2 and 3 (DVB).

P. 156. The revised species list of *Pseudogeoplana marginata* (Schultze et Müller, 1857) comb. nov. (on pp. 124-125) should be placed just after the list of *Pseudogeoplana maculata* (Darwin, 1844) comb. nov.

P. 156. *Pseudogeoplana maximiliani* (Schultze et Müller, 1857) comb. nov. Deletion of lines 9 and 10 (citation of Schirch, 1929).

P. 158. Continued from *Pseudogeoplana nigrofusca* (Darwin, 1844) comb. nov. (p. 157). Add one item next to the last line.

*Geoplana nigrofusca* : Sluys, 1989 c : 34.

P. 158. The revised species list of *Pseudogeoplana olivacea* (Schultze et Müller, 1857) comb. nov. (on p. 94) should be placed just after the list of *Pseudogeoplana oerstedii* (von Graff, 1899) comb. nov.

P. 159. Insert a new species list just after the list of *Pseudogeoplana pardalina* (von Graff, 1899) comb. nov. It is as follows :

*Pseudogeoplana pauloschirchi* Ogren, Kawakatsu et E. M. Froehlich, nom. nov.

*Geoplana chilensis* : Schirch, 1929 : 30, 36 ; taf. II, fig. 7 (DB in color). Therezópolis, Rio de Janeiro / Brazil. Misidentification.

*Geoplana chilensis* : E. M. Froehlich, 1955 a : 293, 319, 331.

Note : [nec *Geoplana chilensis* von Graff, 1899 ; nec *Geoplana chilensis* von Graff, 1899, in E. M. Froehlich (1978)].

See *Pasipha chilensis* (von Graff, 1899).

- P. 159. The revised species list of *Pseudogeoplana pulchella* (Schultze et Müller, 1857) comb. nov. (on p. 148) should be placed just after the list of *Pseudogeoplana perspicillata* (von Graff, 1899) comb. nov.
- P. 160. *Pseudogeoplana schirchi* Ogren et Kawakatsu, nom. nov. Lines 1 and 2. Correct them as follows :  
*Geoplana maximiliani* : Schirch, 1929 : 30, 36 ; taf. II, fig. 10 (DB in color). Therezópolis, Rio de Janeiro / Brazil.
- P. 162. UNDESCRIBED GGOPLANINAE SPECIES. Insert one item between lines 6 and 7 (next to *Geoplana grisea*...).
- Geoplana ita* in E. M. Froehlich, 1978.  
*Geoplana ita* nom. nud. E. M. Froehlich, 1978 : 31.

#### E. GEOPLANIDAE INDEX, PART II : CAENOPLANINAE AND PELMAOPLANINAE

(Bull. Fuji Women's College, No. 29, Ser. II, pp. 25-102)

- P. 39. *Artioposthia japonica* Kaburaki, 1922. Add the following item.  
*Artioposthia japonica* : Kawakatsu, 1991 b : 40.
- P. 43. *Australopacifica bimaculata* (Kaburaki, 1922). comb. nov. Add the following item.  
*Geoplana bimaculata* : Kawakatsu, 1991 b : 40.
- P. 49. *Australopacifica lapidicola* (Stimpson, 1857). nom. nov. Add the following item.  
*Geoplana lapidicola* : Kawakatsu, 1991 b : 40.
- Pp. 62-63. *Caenoplana coerulea coerulea* Moseley, 1877. Add the following item.  
*Caenoplana coerulea* : Ogren, 1991 a : 142.
- P. 79. *Kontikia andersoni* Jones, 1981. Add the following item.  
*Kontikia andersoni* : Ogren, 1991 a : 142.
- Pp. 79-80. *Kontikia bulbosa* Sluys, 1983. Add the following items.  
*Kontikia bulbosa* : Almeida, Yamada & Froehlich, 1991 : 169.  
*Kontikia bulbosa* : Ogren, 1991 a : 141-142.
- P. 80. *Kontikia cookiana* (Schröder, 1924). Add the following item.  
*Kontikia cookiana* : Ogren, 1991 a : 140, 142.
- P. 82. *Kontikia mexicana* (Hyman, 1939). Add the following items.  
*Kontikia maxicana* : Ogren & Kohn, 1989 : 112 A. Seattle, Washington / U. S. A.  
*Kontikia mexicana* : Ogren, 1991 a : 139-143, figs. 1-4 (FCA) U. S. A.
- P. 83. *Kontikia orana* Froehlich, 1955. Add the following item.  
*Kontikia orana* : Ogren, 1991 a : 139, 142.
- P. 83. *Kontikia pelewensis* (von Graff, 1899). Add the following item.  
*Kontikia pelewensis* : Ogren, 1991 a : 140, 142.
- Pp. 84-85. *Kontikia whartoni* (Gulliver, 1879). Add the following item.  
*Kontikia whartni* : Ogren, 1991 a : 142.

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## EXPLANATION OF PLATES I-IV (1 and 2)

Sketch-maps have been added in our present publication showing geographic distribution of families, subfamilies and principal genera (Pls. I-III). The introduction of a pictorial key to families and subfamilies we trust will be useful to many readers (Pl. IV).

### Plate I

Top: Bipaliidae STIMPSON, 1857. The present knowledge of the worldwide distribution range of bipaliid species is shown by black areas. Shaded circles show the geographic range of a wide-spread species, *Bipalium kewense* MOSELEY, 1878, as it is known present.

Bottom: Rhyncyodemidae VON GRAFF, 1896: Rhynchodermidae CORRÊA, 1947. See black areas.

### Plate II

Top: Rhynchodermidae VON GRAFF, 1896: Microplaninae PANTIN, 1953. See black areas.

Bottom: Geoplanidae STIMPSON, 1857: Geoplaninae STIMPSON, 1857. See black areas.

### Plate III

Top: Geoplanidae STIMPSON, 1857: Caenoplaninae OGREN et KAWAKATSU, 1991. See black areas.

Bottom: Geoplanidae STIMPSON, 1857: Pelmatoplaninae OGREN et KAWAKATSU, 1991. See black areas.

### Plate IV (1 and 2)

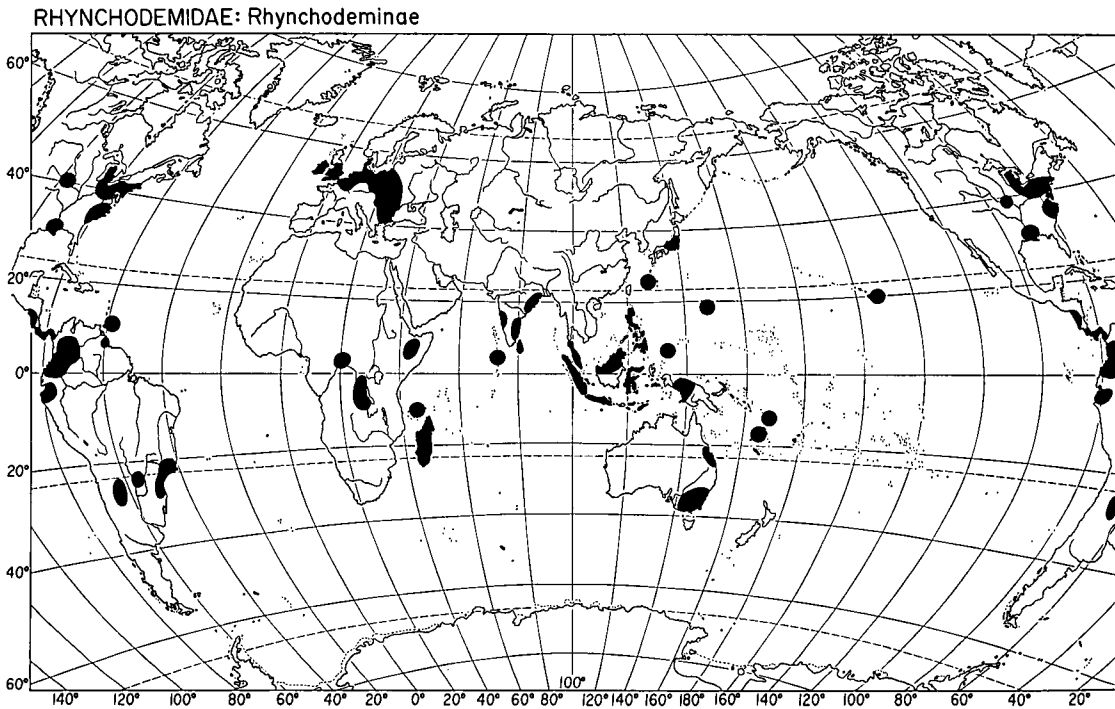
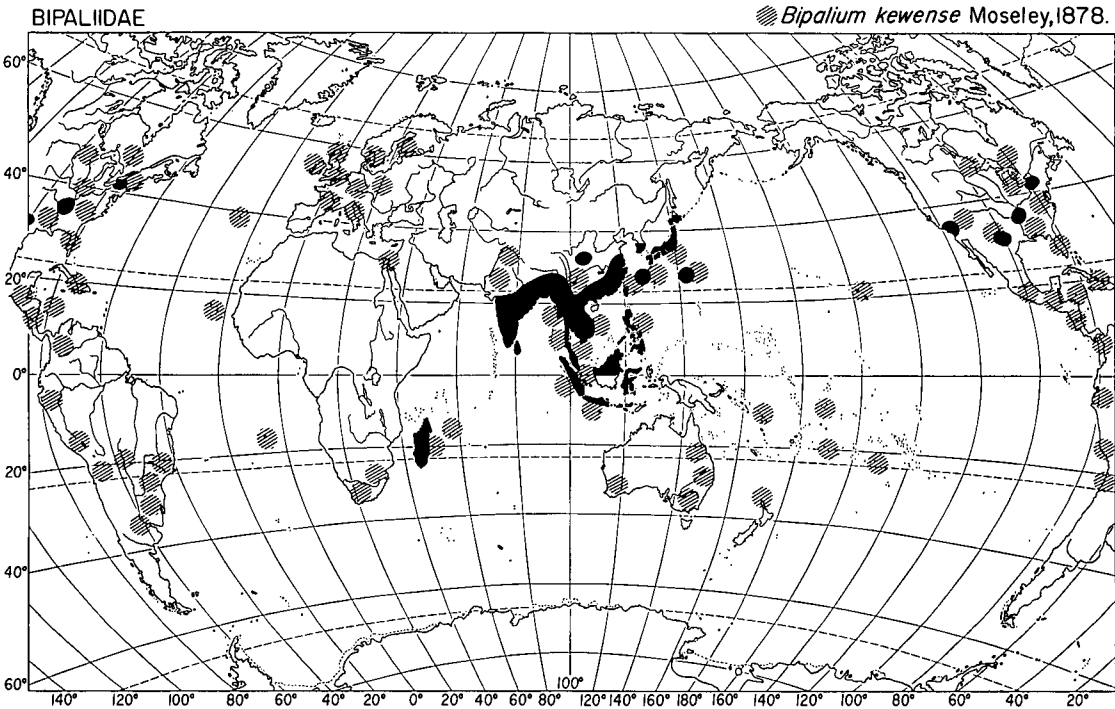
Pictorial key to families and subfamilies of land Planarians. For each subfamily schematic body diagram, dorsal and ventral views are illustrated. The midventral pore in the region of the creeping sole indicates the mouth; the posterior opening, the genital pore. In figures showing transverse sections of the prepharyngeal region of 3 subfamilies of the Geoplanidae, subepithelial longitudinal muscles (solid circles), testes (a pair of small, dotted areas), intestine (large, shaded areas with an irregular outline), and nerveplate (lined area) are shown.

### Plate IV (1 and 2)

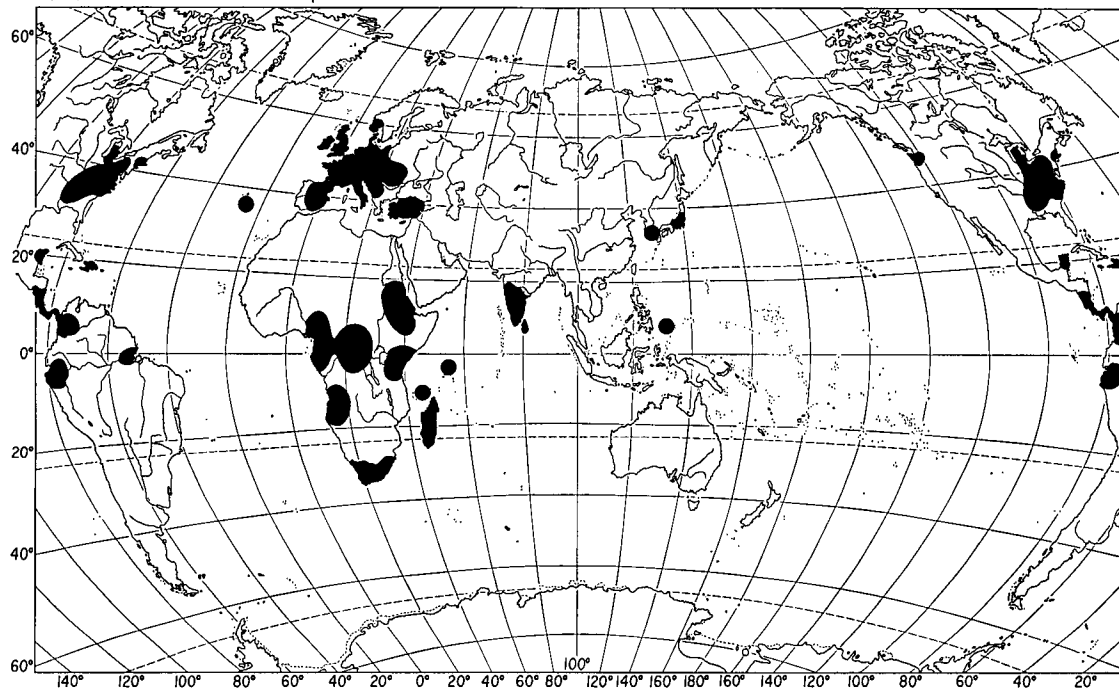
Pictorial key to families and subfamilies of land planarians (after KAWAKATSU, 1991; modified and amplified). For each subfamily schematic body diagram, dorsal and ventral views are illustrated. The midventral pore in the region of the creeping sole indicates the mouth; the posterior opening, the genital pore. In figures showing transverse sections of the prepharyngeal region of 3 subfamilies of the Geoplanidae, subepithelial longitudinal muscles (solid circles), testes (a pair of small, dotted areas), intestine (large, shaded areas with an irregular outline), and nerve plate (lined area) are shown.

December 25, 1992.

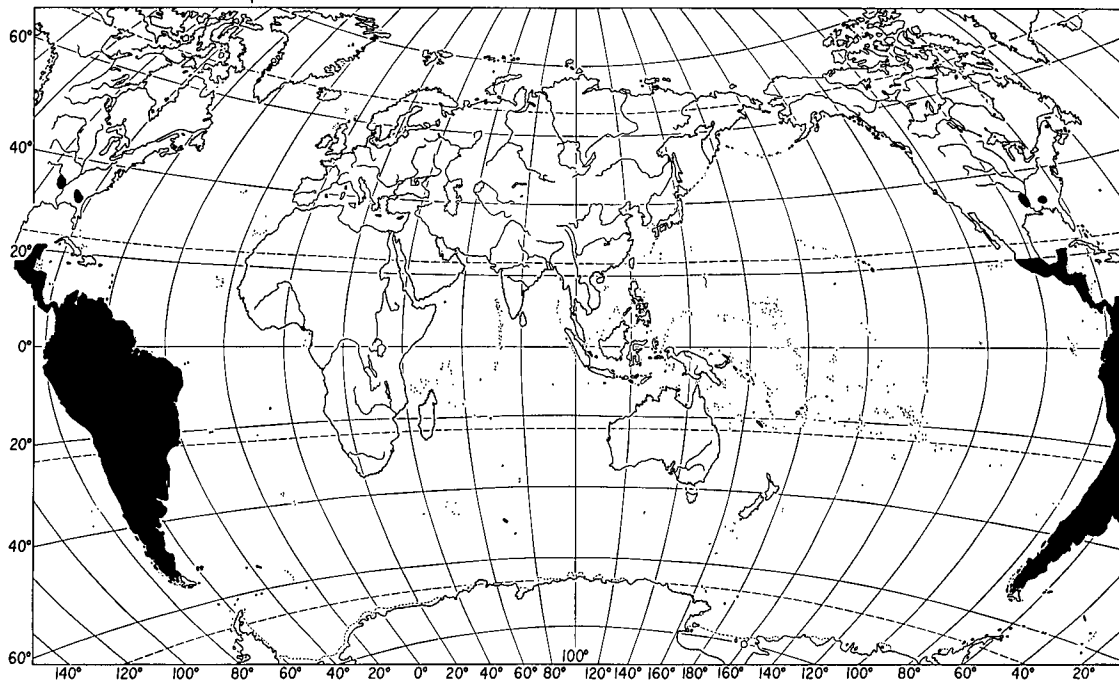




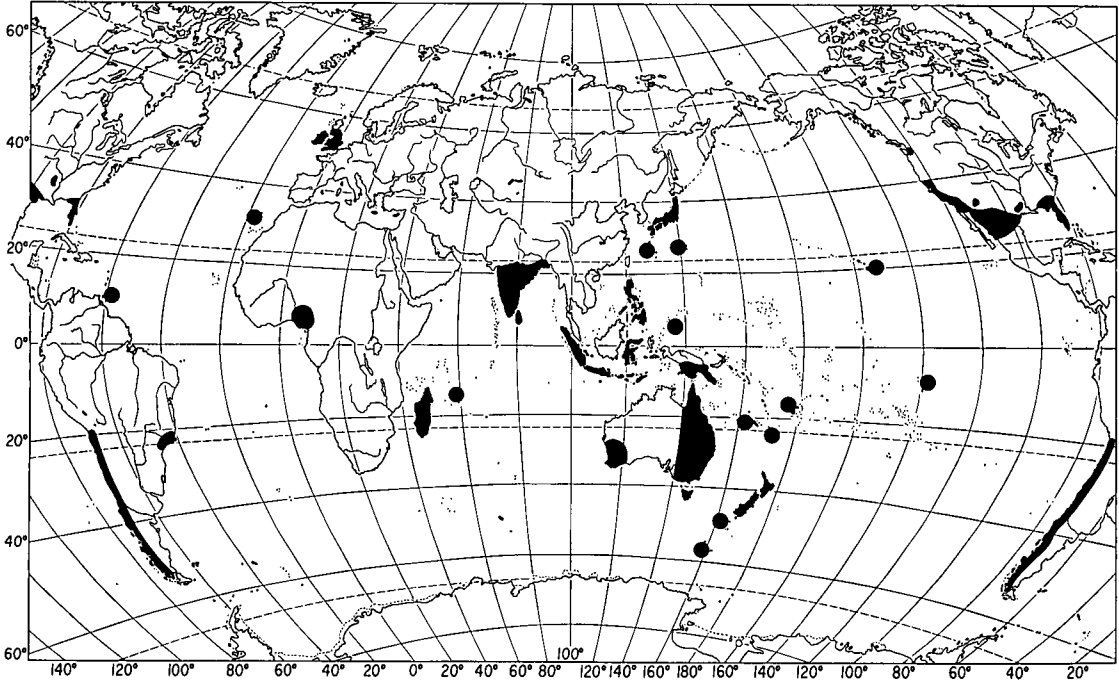
RHYNCHODEMIDAE: Microplaninae



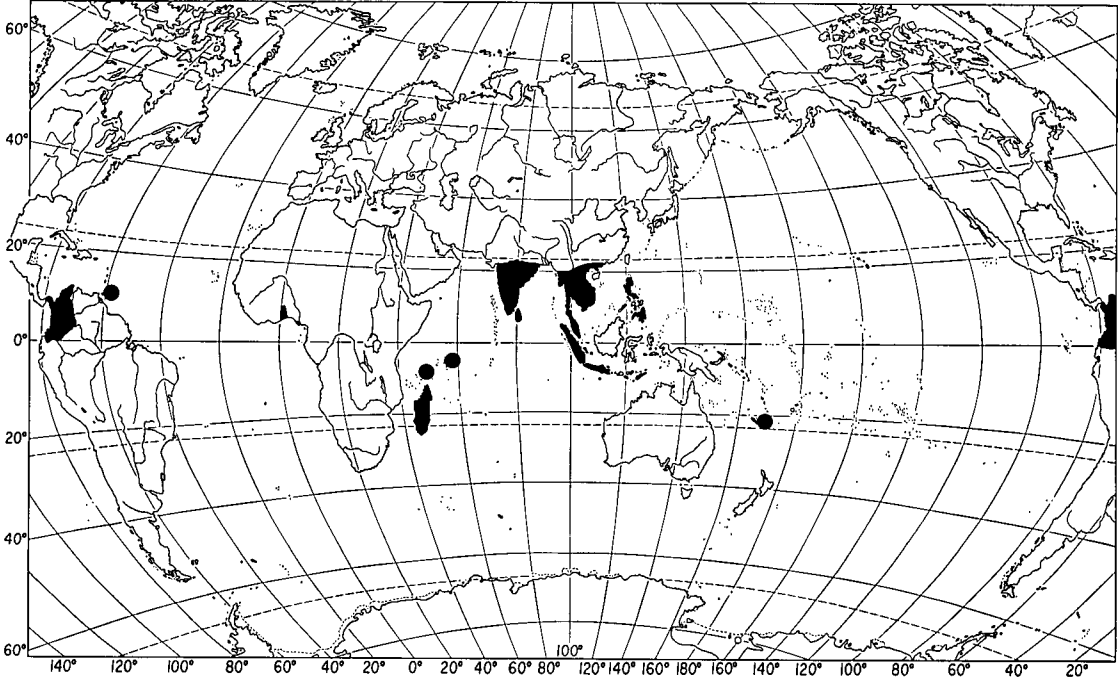
GEOPLANIDAE: Geoplaninae



GEOPLANIDAE: *Caenoplaninae*



GEOPLANIDAE: *Pelmatoplaninae*



# TRICLADIDA-TERRICOLA: Families & Subfamilies

