

藤女子大学・藤女子短期大学紀要, 第29号, 第II部: 25-102. 平成3年.

Bull Fuji Women's College, No. 29, Ser II: 25-102. 1991.

INDEX TO THE SPECIES OF THE FAMILY GEOPLANIDAE

(TURBELLARIA, TRICLADIDA, TERRICOLA)¹⁾

PART II: CAENOPLANINAE AND PELMATOPLANINAE²⁾

by

ROBERT E. OGREN and MASAHIRO KAWAKATSU

I. INTRODUCTION TO TAXONOMY

This is a continuation from Part I of the Geoplanidae Index (cf. OGREN & KAWAKATSU, 1990 b, "Introduction to Taxonomy", pp. 177-190). The subfamilies in Part II have localities primarily Australasian and Indo-Pacific. They also have ventrally located testes. Unfortunately, they are not as well known as is desired for a complete review. Many species necessarily will be placed under the new genus *Australopacifica*, the second collective group for *Geoplana* species inquirendae possibly belonging to the new subfamily Caenoplaninae and from Australasian-Pacific locations. Below we present the exposition of the taxonomic system used to arrange the various genera in the present work. It should also be emphasized that the classification of geoplanids is still under investigation and it is expected that future studies will involve desirable revisions as species become better known.

In our preparation of the Geoplanidae Index it became desirable to subdivide the large number of species into a minimum of 3 subfamilies. On the basis of fundamental location of testes in the dorsal or ventral position, and of the condition of subepithelial longitudinal musculature, there is good separation of 2 groups: Geoplaninae and Caenoplaninae. In Part I of this Index, the subfamily Geoplaninae STIMPSON, 1857, is newly defined as having dorsal testes and medium longitudinal muscle bundles. Species are collated under old and several new genera (cf. OGREN & KAWAKATSU, 1990 b).

The new subfamily Caenoplaninae is for species having ventrally located testes and a thick layer of longitudinal muscle bundles. New genera are also introduced. However, because the internal morphology and especially copulatory apparatus, are known for relatively few species, we have been restrained in proposing additional subfamilies or genera. It is expected that new genera and possibly subfamilies will be desirable in the future. However, this can only occur as the result of learning the necessary anatomical features for the many species presently known only by external appearance. The much needed investigation of Australian species is currently under way by Mr. L. WINSOR.

The new subfamily Pelmatoplaninae has been introduced for species formerly placed in the

1) Part of this study was presented at the Sixth International Symposium on the Biology of Turbellaria held at Hirosaki, on August 7-12, 1990. Cf. OGREN & KAWAKATSU's abstract of the Poster Session entitled "Genera of the land planarian family Geoplanidae (Turbellaria; Tricladida)". The VI ISBT Programme / Abstracts, p. 92 (Hirosaki, Japan, 1990).

2) This paper is affectionately dedicated to the late Dr. Atsuhiko ICHIKAWA, Professor Emeritus of Hokkaido University and honorary member of the Zoological Society of Japan, who passed away on February 4, 1991, at Sapporo, Japan. He would have been 87 on his next birthday. The deceased was recognized as the authority on experimental zoology and turbellariology in Japan and was a respected friend of the authors. We will long remember the scientific life and work of the late Dr. Atsuhiko ICHIKAWA (May 20, 1904-February 4, 1991).

genus *Pelmatoplana* VON GRAFF, 1896, noted for the very narrow ciliated creeping sole, multiple eyes, ventral testes and subepithelial longitudinal musculature not in bundles, or in very small groups and the copulatory apparatus is variable not being typical of other geoplanids. These features suggest that a separate subfamily is desirable at this time while further investigations are being made.

The following provisional key to the 3 subfamilies (one newly defined in Part I, and 2 new subfamilies which will be described in this publication of Part II) will be useful assuming sufficient information is known. For initial assignment it is necessary to have external features, geographic location, transverse body section showing testes and musculature and sagittal section showing profile of the copulatory apparatus. The correlation of eyes in single or multiple rows, with location of testes and musculature, needs to be tested further by investigators attempting to make separations using external features.

PROVISIONAL KEY TO SUBFAMILIES OF THE GEOPLANIDAE

- 1 . Ciliated creeping sole broad, 50% or more of ventral body width ; or body sparsely ciliated without definite creeping sole (*Geobia*) ; subepithelial longitudinal muscle in well-developed bundles 2
- Ciliated creeping sole very narrow, 25% or less of body width ; subepithelial longitudinal muscle fibers not in bundles PELMATOPLANINAE**
- 2 . Eyes located in multiple rows and often extending dorsally ; testes dorsally situated ; subepithelial longitudinal musculature in medium-sized bundles ; parenchymal longitudinal muscle weak or absent GEOPLANINAE*
- Eyes usually in a single lateral row, or with a lateral cluster, not spreading dorsally ; testes ventrally situated ; subepithelial longitudinal musclature in large bundles ; parenchymal longitudinal muscle in some cases forming a strong ring zone (*Caenoplana*, *Kontikia*), in other groups weak or absent CAENOPLANINAE**

* See Part I; ** see Part II.

From the taxonomic and historic viewpoints, this is the first attempt to subdivide the large and heterogenous group of geoplanids with ventral testes. There are, however, some natural divisions apparent on basis of creeping sole, musculature and copulatory apparatus. These were earlier noted by VON GRAFF (1899) for the family Geoplanidae STIMPSON, 1857. We have introduced subdivisions (termed sections) within the Caenoplaninae to informally indicate possible groupings (cf. OGREN & KAWAKATSU, 1990 b). However, since a great deal of comparative study remains to be done, based upon internal features, we have avoided making these formal systematic taxa. Only 2 new subfamilies are included, but it is possible in the future more will be required.

A brief review will be helpful concerning 2 similar genera : *Caenoplana* MOSELEY, 1877, which has priority, and *Kontikia* C. G. FROEHLICH, 1955. The genus *Caenoplana* has been suppressed for many years because it was considered a synonym of the genus *Geoplana* STIMPSON, 1857 (cf.

FLETCHER & HAMILTON, 1888; DENDY, 1890, 1891; VON GRAFF, 1899). However, C. G. FROELICH (1955 a) realized the special difference of geoplanids with ventral testes, creating the new genus *Kontikia* for some of them. He also indicated that *Coenoplana* [sic] should no longer be considered a synonym of *Geoplana* and could be used once again. In describing the new species *Caenoplana chapmani* OGREN et KAWAKATSU, 1988, from Papua New Guinea, which had ventral testes, the genus was conveniently used. Redescriptions of *Caenoplana coerulea vaga* (HYMAN, 1943) (*olim Geoplana vaga*) and *Kontikia mexicana* (HYMAN, 1939) (*olim Geoplana mexicana*) revealed strong similarities and differences between the genera (cf. OGREN, 1989, 1990). These studies confirmed that both genera were distinct from *Geoplana* (sensu OGREN & KAWAKATSU, 1990 b, p. 86) with dorsal testes; species in *Caenoplana* and *Kontikia* have ventral testes. Studies also confirmed that the type species of *Caenoplana* should be *Caenoplana coerulea* MOSELEY, 1877, and was so designated by OGREN & KAWAKATSU (1988 c). It was learned that the type species of *Caenoplana* lacks the penis papilla, which was also the case for many similar species (cf. OGREN, 1989). In the case of *Kontikia*, the type species as declared by C. G. FROELICH (1955 a), has a well-developed penis papilla and this is also true for many of the similar species assigned to the genus. As the result, it is now believed by the writers (cf. OGREN & KAWAKATSU, Ms.) that the major difference between the 2 genera is the presence of the penis papilla in *Kontikia* and the absence of the penis papilla in *Caenoplana*. Thus, our present definitions have been written to follow this observation. If this were not followed, *Kontikia* would become a synonym of *Caenoplana* because of great similarity and priority. As the species assigned to those 2 genera become better known it is expected that new genera and distinctions will be necessary.

Some explanation is desirable in regard to what has been done to the genus *Pelmatopiana* VON GRAFF, 1896, and why a separate subfamily is desirable. The systematic position of the genus was questioned by DE BEAUCHAMP (1930 a, b, 1939 a, 1961), who suggested the genus was more allied to members of the subfamily Microplaninae PANTIN, 1953, in the family Rhynchodemidae VON GRAFF, 1896, although numerous eyes are present in *Pelmatopiana* species. The genus today still remains in need of critical study and revision as suggested by C. G. FROELICH (1967, p. 154), because the copulatory organs are variable resembling in some cases features of the family Bipaliidae VON GRAFF, 1896, and the subfamily Microplaninae. Thus, under way is the study of literature such as DE BEAUCHAMP (1925, 1926, 1929), MELL (1903, 1904), SCHRÖDER (1924), and several others. Also specimen material borrowed from the British Museum (Natural History) has been studied by OGREN. The result is a different concept of the genus and the creation of a new genus for one group of species. A future paper is planned on this subject.

Morphological review of the known taxonomic features of the *Pelmatopiana* species indicates some are representative of certain Geoplanidae: for example, numerous eyes, ventral testes, cylindrical pharynx. However, the very narrow ciliated creeping sole, 1 / 4th or less of ventral area, is unusual in the family. The musculature is also unusual, but since all species have not as yet been studied, complete comparisons are not possible. The study of prepared histological material, and literature reports, reveals that characteristically, the cutaneous subepithelial layers consist of circular and longitudinal systems. The longitudinal system is not arranged in bundles, or only in very minute groups, and generally consists of large single fibers arranged in a single layer of parallel fibers internal to the circular system. This is more like the arrangement in the Microplaninae of the Rhynchodemidae. The parenchymal musculature, on the other hand, is very strong forming a ring zone consisting largely of longitudinal fibers. Review of the copulatory apparatus according to published descriptions reveals a combination of features from simple to complex. Two general types

are present, both having a penis papilla : 1) Simple copulatory apparatus with only the female canal entering the genital antrum and usually no posterior diverticulum ; 2) More complex copulatory apparatus, with complexities in the female system and 2 ducts entering the genital antrum.

As the result of this analysis the following changes are introduced.

1) A new subfamily Pelmatoplaninae is introduced because the species are distinct from other Geoplanidae.

2) The genus *Pelmatopla* is retained for the one group of species with simple copulatory apparatus and features resembling *Pelmatopla moluccana* VON GRAFF, 1899. Definition more restricted.

3) The new genus *Beauchampius* is recommended for a large group of species with suitable descriptions and complex features of the copulatory apparatus. In some ways this group has resemblance to the genus *Othelosoma* GRAY, 1869, of the Microplaninae, but is still under investigation.

4) Two species that did not have the common features of these groups were transferred to more suitable genera : a) *Pelmatopla glandulosa* DE BEAUCHAMP, 1925, is transferred to *Bipalium* STIMPSON, 1857 ; 2) *Pelmatopla willeyi* BUSSON, 1903, belongs in the Caenoplaninae and should be in a new genus with *Caenopla sanguinea* MOSELEY, 1877, will be described by Mr. L. WINSOR (not yet published). The need for transfer of this species out of *Pelmatopla* was recognized by MARCUS (1951, p. 123).

5) Many species for which only external features are known, cannot be assigned to *Pelmatopla* or *Beauchampius*, but must be placed in the new collective group *Australopacifica* until their internal features have been described.

II. TAXONOMIC DESCRIPTIONS

A. Subfamily Caenoplaninae OGREN et KAWAKATSU, subfam. nov.

1 . Definition: Testes ventrally situated ; subepithelial longitudinal musculature in large bundles ; mouth in third quarter ; eyes often in single row around anterior, continuing posteriorly but not usually extending dorsally.

Type genus : *Caenopla* MOSELEY, 1877 ; here designated.

Note : For synonyms of the genus *Caenopla*, see OGREN & KAWAKATSU (1988 b, pp. 85-86).

a) Section 1: Broad ciliated creeping sole occupying entire width of ventral surface ; parenchymal longitudinal musculature is strong, well-developed forming a prominent ring zone. Genera : *Caenopla* MOSELEY, 1877 ; *Kontikia* C. G. FROELICH, 1955.

b) Section 2 : Ciliated creeping sole occupies less than 50% or less (25% to 30%) of width of ventral surface ; parenchymal longitudinal muscle weak or absent, not forming a ring zone. Genera : *Timyma* E. M. FROELICH, 1978 ; *Pimea* WINSOR, 1990 ; the new genus *Endeavouria* ; and a new Australian genus to be proposed by Mr. WINSOR (not yet published).

c) Section 3. Creeping sole occupies most of ventral surface ; often with weak subepithelial longitudinal musculature ; parenchymal longitudinal muscle system weak or absent ; ovaries near central body region ; copulatory apparatus with adenodactyls ; or with recessed accessory glands. A heterogeneous group of species. Genera : *Artioposthia* VON GRAFF, 1896 ; *Coleocephalus* FYFE, 1953 ; the new genus *Newzealandia*.

d) Section 4. Collective group with the single new genus *Australopacifica*, for species

lacking sufficient internal details but found in the Australian-Pacific regions.

2 . Genera of the Caenoplaninae :

Section 1.

- a) Genus *Caenoplaena* MOSELEY, 1877
- b) Genus *Kontikia* C. G. FROEHLICH, 1955

Section 2.

- c) Genus *Pimea* WINSOR, 1990 Locality in New Caledonia.
- d) Genus *Timyma* E. M. FROEHLICH, 1978
- e) Genus *Endeavouria* (original description is given in the present paper)
- f) Genus, unnamed, of WINSOR (Ms., not yet published.) Australian genus to include
Geoplana sanguinea MOSELEY, 1877.

Section 3.

- g) Genus *Artioposthia* VON GRAFF, 1896
- h) Genus *Coleocephalus* FYFE, 1953
- i) Genus *Newzealandia* (original description is given in the present paper)

Section 4.

- j) Genus *Australopacifica* (collective group) (original description is given in the present paper)

Etymologies of new genera :

The new generic name of *Endeavouria* is from the name of the flagship "Endeavour" of the James (= Captain) COOK's (1728-1779) first Pacific expedition (1768-1771) (cf. ICZN, 3rd Ed., 1985, Appendix, D, IV, 38). That of *Newzealandia* is from New Zealand (cf. ICZN, Appendix, C, D, IV, 23). That of *Australopacifica* is from Latin: *australo* (*austro*, southern; *austral*, Australian)+*pacifica* (the Pacific). Gender of them is feminine.

3 . Key to Genera of the Caenoplaninae :

1 . Sufficient external and internal details

known to assign species to a genus below	2
Limited external details, internal features unknown	11
2 . Anterior end tapered	3
Anterior rounded, blunt or hooded	6
3 . Creeping sole broad; cilia most of ventral surface	4
Creeping sole narrow; cilia 50% or less of width ; same width or narrower than nerve plate	7 , 8
4 . Parenchymal longitudinal muscle forms ring zone	5
• Parenchymal longitudinal muscle weak or absent	8
5 . Without penis papilla	CAENOPLANA
Penis papilla present	KONTIKIA
6 . Anterior end rounded; without ventral glandular cushion; copulatory apparatus lacks penis papilla.....	TIMYMA
Anterior end rounded, hood-shaped, or blunt; ventral glandular cushion present	7
7 . Copulatory apparatus simple, intra-antral papilla	PIMEA

Copulatory apparatus complex, with adenodactyls or recessed accessory glands; penis papilla present; ventral cephalic gland area covered by hood-shaped fold	COLEOCEPHALUS
8 . Ventral subepithelial longitudinal muscle bundles are strong forming a band thicker than dorsal muscle; narrow system of transverse muscle fibers below nerve plate	9
Dorsal subepithelial longitudinal muscle bundles form a layer that is thicker than the ventral layer; strong system of longitudinal muscle fibers below nerve plate	ENDEAVOURIA*
9 . Copulatory apparatus simple, without accessory structures.....	New Australian genus to be proposed by WINSOR
Copulatory apparatus complex, with accessory structure	10
10. Penis papilla and adenodactyls present	ARTIOPOSTHIA
Without penis papilla; recessed accessory glands in walls of copulatory apparatus; without adenodactyls	NEWZEALANDIA*
11. External details are geoplanid and suggest one of above genera but lack of internal details prevents assignment; locality is Australian and Pacific	AUSTRALOPACIFICA*

* For original description of these 3 genera, see below.

4 . Descriptions of the Genera of the Caenoplaninae :

a) Genus *Caenoplana* MOSELEY, 1877

Original definition: "Body long and wormlike, much rounded on the back, flattened on the under surface, without an ambulacral line. External longitudinal muscular bundles largely and evenly developed over both dorsal and ventral regions. Lateral organs distinct and isolated as in *Rhynchodemus* and, as in it, connected by a transverse commissure. Eyes absent from the front of the anterior extremity, but present in two lateral elongate patches placed just behind the anterior extremity and scattered sparsely on the lateral margins of the body for its entire extent. Mouth nearly central, pharynx cylindrical." (MOSELEY, 1877, p. 285.)

Emend to include: Eyes continue around anterior end; subepithelial longitudinal musculature in bundles; parenchymal musculature forms a ring zone in the type species; male copulatory apparatus lacks the penis papilla; female canal enters horizontally and oviducts approach ventrally; adenodactyls absent. Localities are in the Australian and Indo-Pacific countries; also introduced into California, U.S.A.

Type species: *Caenoplana coerulea* MOSELEY, 1877. Designated by OGREN & KAWAKATSU, 1988 c : 86; see also OGREN (1989).

Note: The copulatory apparatus of the type species lacks the penis papilla. Basic features are otherwise similar to those of *Kontikia* C.G. FROELICH, 1955. The use of the copulatory apparatus to distinguish these genera is desirable since otherwise, *Kontikia*, proposed in 1955, would become a synonym of the older genus *Caenoplana*. In order

to clearly distinguish the 2 genera, species lacking the penis papilla are placed in *Caenoplana*; species possessing the penis papilla are allocated to *Kontikia*.

There are exceptions to the above features. Certain species lacking the parenchymal muscular ring zone, and resembling *Caenoplana sanguinea* MOSELEY, 1877, which has an intra-antral papilla, are currently retained, but in the future should be removed to a new genus. The authors in the future plan to discuss the problems as well as the perspective on the definition of the genera *Caenoplana* and *Kontikia* in greater detail (see also OGREN, 1989, 1990 a).

b) Genus *Kontikia* C. G. FROEHLICH, 1955

Original definition: "Geoplanidae de corpo alongado. Sola rastejadora com um a dois terços, ou pouco mais, da largura do corpo. Musculatura longitudinal cutânea forte. Musculatura longitudinal parenquimática presente, geralmente bem desenvolvida. Testículos ventrais. Órgãos musculo-glândulares adesivos e papilas sensoriais ausentes. Aparêlho copulador sem adenodáctilos." (C. G. FROEHLICH, 1955 a, p. 199.) English abstract on p. 246: "Geoplanidae of elongate body form. Creeping sole one to two thirds, or a little more, of body width. Strong cutaneous longitudinal muscles. Rather strong longitudinal parenchymal muscles, chiefly located in an annular zone. Ventral testes. Glandulo-muscular organs, sensory papillae, and adenodactyls absent."

Emend to include: Dorsal body often has dark longitudinal stripes; male copulatory apparatus of the type species has the penis papilla. Localities in North and South America, islands in the Atlantic Ocean and Indo-Pacific area.

Type species: *Kontikia orana* C. G. FROEHLICH, 1955. Designated by C. G. FROEHLICH, 1955
a: 199.

c) Genus *Timyma* E. M. FROEHLICH, 1978

Original definition: "Geoplanidae with elongated body ending abruptly in a wide anterior extremity. Longitudinal cutaneous musculature weak and longitudinal parenchymal musculature absent. Sensory border circling the anterior end and restricted to it. Ventral testes opening directly into the efferent ducts which run over the central nerve plate. Without adhesive musculo-glandular organs or sensory papillae. Copulatory apparatus without adenodactyls." (E. M. FROEHLICH, 1978, p. 14.)

Emend to add: Anterior end has broad spatula shape; creeping sole appears broad but width not stated in description. Penis papilla is absent in *Timyma juliae*, the type species. Large female antrum with dorsal entering female canal and ovovitelline ducts approaching from anterior dorsal aspect. Locality in Chile.

Type species: *Timyma juliae* E. M. FROEHLICH, 1978. Designated by E. M. FROEHLICH, 1978: 14.

Note: This genus may differ somewhat from other genera assigned here in that the subcutaneous longitudinal muscle is relatively less well developed and weaker. Future comparisons may reveal a more appropriate grouping as more histological details become known about the species in the Geoplanidae. The genus *Timyma* belongs in Section 2 of the Caenoplaninae because of its weak tegumentary longitudinal muscle and lack of the parenchymal ring zone.

d) Genus *Pimea* WINSOR, 1990

Original definition: "Geoplanidae with elongate body; creeping sole almost one third of the body width; anterior end expanded; single glandulo-muscular organ (adhesive pad) located antero-ventrally; longitudinal cutaneous musculature well developed; muscle bundles smaller dorsally than ventrally; ventral cutaneous longitudinal musculature partially insunk into the parenchyma internally

to the cutaneous nerve net to form the retractor muscle for the glandulo-muscular organ; dorsal cutaneous muscles integrated with parenchymal transverse muscles form glandulo-muscular organ extensor muscle; ventro-lateral sensory zone restricted to neck, with few small sensory pits; testes ventral, uniserial; vasa deferentia situated on the lateral aspect of the ventral nerve cords; copulatory organs without adenodactyls." (WINSOR, 1990, p. 20.)

Emend to include: The male copulatory organ has an intra-antral papilla; oovitelline ducts enter female canal horizontally and from a posterior ventral approach; parenchymal muscles are weak, principally circulo-oblique fibers, most numerous laterally where the cutaneous musculature is reduced. Locality in New Caledonia.

Type species: *Pimea monticola* WINSOR, 1990. Designated by WINSOR, 1990: 20.

Note: This species illustrates the Caenoplaninae, Section 2, land planarians with ventral testes and weak or absent parenchymal longitudinal muscle.

e) Genus *Endeavouria* OGREN et KAWAKATSU, gen. nov.

Definition: Characters of Caenoplaninae, with ventral testes; eyes forming a single row along sides; ciliated creeping sole 50% or less of ventral width being about same width as the nerve plate; subepithelial longitudinal muscle fibers in bundles which form a thick dorsal layer, but ventrally the layer is about half the thickness; parenchymal musculature is weak dorsally consisting largely of transverse fibers, while ventrally there is a strong band of longitudinal and mixed fibers below the nerve plate. Copulatory apparatus has an elongate penial organ of eversible type with large folds in common genital antrum and the female organ enters horizontally, receiving oovitelline ducts posteriorly and from below. Locality in Oahu Island, Hawaii.

Type species: *Geoplana septemlineata* HYMAN, 1939; here designated.

Note: The combined features of *Geoplana septemlineata* makes it difficult to assign the species to a known genus within the subfamily Caenoplaninae. It is excluded from *Caenoplaena* MOSELEY, 1877, and *Kontikia* FROEHLICH, 1955, because these have broader creeping sole, extending beyond nerve plate and strong systems of longitudinal parenchymal fibers. It is excluded from *Pimea* WINSOR, 1990, because this genus has an anterior ventral sucker. It does not belong *Timyma* E. M. FROEHLICH, 1978, because its single species has a rounded anterior end, with front encircled by a sensory border. *Geoplana septemlineata* also has distinctive features of its own which separate it from all the above genera by the following: 1) the creeping sole is 50% of ventral width or slightly wider (10%) than nerve plate; 2) the subepithelial bundles of longitudinal muscle fibers form a thick layer dorsally, but ventrally the layer is about half the thickness; 3) beneath the nerve plate is a thick layer of large longitudinal muscle fibers with mixed fibers interspersed; 4) the male copulatory apparatus has an intra-antral papilla, and the simple female organ enters horizontally receiving the oovitelline ducts ventrally. The above features represent fundamental differences, not of developmental or functional origins, and provide the basis for a new genus.

f) Genus *Artioposthia* VON GRAFF, 1896

Original definition: "Geoplaniden von gestrecktem Körper mit breiter Kriechsohle und einer das Vorderende umsäumenden Drüsenkante. Mund und Geschlechtsöffnung bauchständig, der Copulationsapparat mit paarigen (und unpaaren) muskulösen Drüsengangorganen versehen. Drüsenvorwerke fehlen." (VON GRAFF, 1899, p. 401.) (See also VON GRAFF, 1896, p. 66 and 1916, p. 3225.)

Emend to include: Presence of penis papilla. Localities in Europe, the Australasian and Indo-Pacific countries.

Type species: *Geoplana fletcheri* DENDY, 1891. Designated by WOOD, 1926: 608.

Note: The date of this paper by DENDY is given by WOOD as 1890, since the paper was read in May, 1890.

However, in our bibliography, it is listed as 1891 since the volume was not issued until 1891.

g) Genus *Coleocephalus* FYFE, 1953

Original definition: "Geoplanidae with a hooded anterior end partly covering an oval glandular area on the ventral surface." (FYFE, 1953, p. 12.)

Emend to include: Penis papilla present; adenodactyls present. Locality in the Auckland Islands (Enderby Is.), subantarctic location, approximately 320 km S of New Zealand.

Type species: *Coleocephalus fusca* FYFE, 1953. Designated by FYFE, 1953: 12.

Note: To conform to Latin rules in nomenclature, the correct spelling of the type species is *Coleocephalus fuscus* FYFE, 1953. Cf. ICZN, 3rd Ed., 1985, Art. 11, (h), (i), (l); Art. 31, (b); Art. 34, (b).

h) Genus *Newzealandia* OGREN et KAWAKATSU, gen. nov.

Definition: Caenoplaninae with ventral testes; penis papilla absent; recessed accessory glands present in copulatory organ, but without adenodactyls. Localities in New Zealand.

Type species: *Geoplana inaequabilis* FYFE, 1956; here designated.

i) New Genus to be proposed by WINSOR (Ms.) from Australia (Not yet published.)

Note: Two species, *Caenoplana sanguinea* MOSELEY, 1877, and *Pelmatopiana willeyi* BUSSON, 1903, should be placed here. Since Mr. WINSOR's original paper is not yet published, these 2 species are tentatively placed in the new collective group *Australopacifica* in the present Index.

j) Genus *Australopacifica* OGREN et KAWAKATSU, gen. nov. (collective group)

Definition: Geoplanidae, but not classifiable into the present taxonomic genera because of insufficient morphological information; geographical distribution largely in Australasia and Indo-Pacific islands (the Oriental subregion of the Arctogaea and the Notogaea). A collective group to temporarily assign species inquirendae and nomina dubia.

No type species. Cf. ICZN, 3rd Ed., 1985, Art. 42, (b), (i).

Note: A considerable number of uncertain geoplanid species have been reported by previous researchers. These were originally described on the basis of external features alone and assigned to *Geoplana*, although many morphological details remained unknown. In Part II of this Index, such species found in Australasian and Indo-Pacific localities are tentatively classified under this collective group. A simple division into non-taxonomic sections on the basis of extent of the creeping sole. Section 1: Creeping sole occupies greater part of the ventral surface; Section 2: Creeping sole less than 50% of ventral surface; and Section 3: Creeping sole 30% or less.

.B. Subfamily Pelmatoplaninae OGREN et KAWAKATSU, subfam. nov.

1. Definition: Elongated narrow body with tapered anterior; numerous eyes clustered along sides of anterior, but usually not extending behind the mouth; cylindrical pharynx; creeping sole narrow, about 25% of ventral area; testes ventral; tegumentary subepithelial longitudinal muscle weak not in bundles; parenchymal longitudinal musculature very strong and forming annular ring zone; male copulatory organ with a well-developed penis papilla.

Type genus: *Pelmatopiana* VON GRAFF, 1896; here designated.

2. Genera of the Pelmatoplaninae:

a) Genus *Pelmatopiana* VON GRAFF, 1896

b) Genus *Beauchampius* (original description is given in the present paper)

Etymology of new genus:

The new generic name *Beauchampius* is dedicated to the late Dr. Paul DE BEAUCHAMP, who studied this animal group more than 60 years (cf. ICZN, 3rd Ed., 1985, Appendix D, III, 15, VI, 37). Gender of it is masculine.

3 . Key to Genera of the Pelmatoplaninae:

- 1 . Copulatory apparatus is simple with penis papilla ;
only the female canal (vagina) enters the
genital antrum ; a genito-intestinal duct
may be present *PELMATOPLANA*
- 2 . Copulatory apparatus is complex with penis papilla ;
female organ has 2 ducts opening into
the genital antrum, one being the vagina
the other a diverticulum or in some cases
a seminal bursa *BEAUCHAMPIUS**

* For original description of the genus, see below.

4 . Description of Genera of the Pelmatoplaninae:

a) Genus *Pelmatopiana* VON GRAFF, 1896

Original definition: "Geoplaniden von gestrecktem Körper mit schmaler Kriechleiste und ohne Drüsenkante. Mund und Geschlechtsöffnung bauchständig, der Copulationsapparat entbehrt der muskulösen Drüsen organe. Drüsenpolster fehlen." (VON GRAFF, 1899, p. 387.) (See also VON GRAFF, 1896, p. 65 and 1916, p. 3224.)

Emended definition: With characters of the subfamily; weak subepithelial longitudinal musculature; strong parenchymal longitudinal musculature forming a ring zone; copulatory apparatus is simple and variable; penis papilla is well developed, conical type; female organ is simple with only the vagina entering the common genital chamber, but a genito-intestinal duct or connection may be present arising from the posterior part of the vagina as in the Microplaninae (Rhynchodemidae). Localities in the Southeast Asiatic countries and the Indo-Pacific area.

Type species: *Pelmatopiana moluccana* VON GRAFF, 1899; here designated.

b) Genus *Beauchampius* OGREN et KAWAKATSU, gen. nov.

Definition: With characters of the subfamily; weak subepithelial longitudinal musculature; strong parenchymal musculature forming ring zone; copulatory apparatus is complex and variable; penis papilla is well developed of conical type; female copulatory organ is complex with 2 ducts opening into the genital antrum, one from ventrally situated vagina and ovovitelline ducts, the other from the dorsally located diverticulum or in some cases a seminal bursa. Localities in Southeast Asiatic countries.

Type species: *Pelmatopiana trimeni* VON GRAFF, 1899; here designated.

Note: The organization of the copulatory apparatus resembles patterns from the genus *Othelosoma* GRAY, 1869, of the Microplaninae (Rhynchodemidae).

The following 3 groups can be separated within the new genus:

i . *B. trimeni*-group : Female organ has a blind dorsal diverticulum. Localities in India, Sri Lanka and Indonesia.

ii . *B. dawyoffi*-group : With diverticulum of bursa-like female glandular chamber connected to ovovitelline ducts. Localities in Vietnam.

iii . *B. crassusus*-group : Female glandular chamber receives the 2 ducts before entering the genital antrum. Localities in India and Vietnam.

* * * * *

For the abbreviations used in the present publication, see in Part I of Geoplanidae Index (OGREN & KAWAKATSU, 1990 b, p. 91). The complete references and taxonomic indices for Parts I and II of Geoplanidae Index are given at the end of this publication.

Our serial publications on the Bipaliidae, Rhynchodemidae (Part I on the Rhynchodeminae and Part II on the Microplaninae) and Geoplanidae (Part I on the Geoplaninae and Part II on the Caenoplaninae and Pelmatoplaninae) had been completed (cf. OGREN & KAWAKATSU, 1987, 1988 a, 2, 1990, and the present paper). Some taxonomic corrections, additions and complete taxonomic indices of our Indices on Land Planarians will also be published in the next year, together with several sketch-maps showing the geographical distribution of families, subfamilies and principal genera.

The authors are indebted to Professor Dr. Teiji KIFUNE, Department of Parasitology, School of Medicine, Fukuoka University, Fukuoka, Japan, for his careful reading of the early draft of this publication. They are also indebted for helpful suggestions and discussions of taxonomic problems to three colleagues currently studying land planarians: Prof. Dr. Eudoxia Maria FROEHLICH (São Paulo), Dr. Hugh D. JONES (Manchester) and Mr. Leigh WINSOR (Townsville). The authors express their thanks to many other colleagues ... their names are given in Part I ... for generously supplying copies of rare papers. Finally, for publishing research results of this series of literary work, financial assistance from Fuji Women's College is greatly acknowledged.

INDEX

Subfamily CAENOPLANINAE OGREN et KAWAKATSU subfam. nov.

Caenoplaninae n. subfam. Ogren & Kawakatsu: described in the present paper. See page 28..

Type genus: *Caenoplaena* MOSELEY, 1877.

Genus *Artioposthia* von Graff, 1896

Artioposthia n.g. von Graff, 1896 a: 66.

Type species: *Geoplana fletcheri* Dendy, 1891.

Literature: von Graff, 1896 a: 66; von Graff, 1899: 401; von Graff, 1916: 3225; Fyfe, 1937; Fyfe, 1944; Fyfe, 1946; Fyfe, 1947.

Artioposthia adelaideensis (Dendy, 1892)

Geoplana fletcheri var. *adelaideensis* n.var. Dendy, 1892 f: 373-374. Norton's Summit, near Adelaide, South Australia / Australia.

Geoplana fletcheri var. *adelaideensis*: Dendy, 1894 a: 185-188; pl. X, figs. A-E (DB).

Geoplana Fletcheri var. *Adelaideensis*: Dendy, 1894 b: 422. Mount Lofty, South Australia /

Australia. Spelling error.

Geoplana fletcheri var. *borealis* n. var. Dendy, 1895 b: 731-732. Black-heath, New South Wales / Australia.

Artioposthia adelaidensis : von Graff, 1896 b: 91-93, fig. 13 (FCA).

Artioposthia adelaidensis : von Graff, 1899: 229, fig. 73 (FCA), 230, fig. 74 (FCA), 235, fig. 80 (FCA), 237, fig. 81 (FCA with a cocoon), 403-404; taf. XXXI, fig. 8 (FGO), XXXII, figs. 1-8 (FGO, HI in color), XXXIII, figs. 1-4 (FGO, HI in color). South Australia and New South Wales / Australia.

Geoplana Fletcheri var. *Adelaidensis* : Steel, 1900 b: 628.

Artioposthia adelaidensis : von Graff, 1912: taf. LIX, fig. 10 (FGO), LX, figs. 8-9 (FCA).

Artioposthia adclaidensis : von Graff, 1915: 3030. Spelling error.

Artioposthia adelaidensis : von Graff, 1915: 3115, 3119-3124, 3128, fig. 154 (FCA), 3129.

Artioposthia adelaidensis : von Graff, 1916: 3138, 3151.

Artioposthia adelaidensis : Steinböck, 1924: 461, 475-478, figs. 10-11 (FCO, HI), 480-481, fig. 12 a (FCA), 485.

Artioposthia fletcheri var. *adelaidensis* : Steinböck, 1924: 476.

Artioposthia fletcheri var. *borealis* : Steinböck, 1924: 476, 491.

Artioposthia borealis : Steinböck, 1924: 476, 479-480.

Artioposthia adelaidensis : Steinböck, 1925: 172, 178, 191.

Artioposthia adelaidensis : Meixner, 1928: 593.

Artioposthia adelaidensis : de Beauchamp, 1930 b: 733.

Artioposthia adelaidensis : de Beauchamp, 1933: 40.

Geoplana fletcheri var. *adelaidensis* : Smith & Convery, 1970: 99.

Note: See *Artioposthia fletcheri* (Dendy, 1891).

Artioposthia adelaidensis (Dendy, 1892)

See *Artioposthia adelaidensis* (Dendy, 1892).

Artioposthia australis (Dendy, 1895)

Geoplana triangulata var. *australis* var. nov. Dendy, 1895 a: 395-396. Dunedin, S. Island / New Zealand.

Geoplana triangulata var. *australis* var. nov. Dendy, 1895 c: 180.

Geoplana triangulata var. *australis* : Dendy, 1895 d: 115-116.

Geoplana triangulata var. *australis* : Dendy, 1896 a: 211.

Geoplana triangulata var. *australis* : Gamble, 1896: 33.

Geoplana triangulata var. *australis* : Dendy, 1901: 224. Near Invercargill, S. Island / New Zealand.

Geoplana triangulata var. *australis* : Dendy, 1904: 307.

Geoplana triangulata australis : Fyfe, 1937: 104. Syn. of *Artioposthia triangulata* (Dendy, 1895).

Artioposthia australis : Fyfe, 1947: 518-520, 522; pl. 48, fig. 3 (FCA). Dendy's samples (British Museum collection). Dunedin, Canterbury, Homer Saddle, and West Coast, S. Island / New Zealand.

Geoplana triangulata var. *australis* : Fyfe, 1947: 518-520. Syn. of *Artioposthia australis* (Dendy, 1895).

Artioposthia australis : Fyfe, 1948: 64-65.

Geoplana triangulata var. *australis* : Fyfe, 1948: 64-65. Syn. of *Artioposthia australis* (Dendy, 1895).

Geoplana triangulata var. *australis* : Fyfe, 1948 : 64-65. Syn. of *Artioposthia australis* (Dendy, 1895).

Note: Fyfe (1947, pp. 519-520) considered the following 3 species are juvenile forms of *Artioposthia australis* (Dendy, 1895): *Geoplana latissima* Dendy, 1896; *Geoplana flavimarginata* Dendy, 1897; *Geoplana cuculata* Dendy, 1897. Since histology and genital anatomy of these species are uncertain, they are classified under the genus *Australopacifica* in this Index. See *Caenoplana triangulata* (Dendy, 1895); *Australopacifica latissima* (Dendy, 1896); *Australopacifica flavimarginata* (Dendy, 1897); *Australopacifica cuculata* (Dendy, 1897).

Artioposthia borealis Dendy, 1895

See *Artioposthia adelaidensis* (Dendy, 1892).

Artioposthia carneyli Fyfe, 1953

Artioposthia carneyli n. sp. Fyfe, 1953 : 9-10, fig. 2 (CP), 18 (pl. II), fig. 1 (FCA), 19 (pl. III), fig. 2 (FGO). Colonel Peak, Campbell Island; Musgrave Peninsula, Ocean Island, Auckland Islands / New Zealand.

Artioposthia castanea von Graff, 1899

See *Australopacifica castanea* (von Graff, 1899).

Artioposthia civis Cardale, 1941

Artioposthia civis n. sp. Cardale, 1941 : 277-281; pls. 37-38 (HI, FCA). Kelburn, Wellington, N. Island / New Zealand.

Artioposthia civis : Fyfe, 1946 : 137.

Artioposthia civis : Fyfe, 1947 : 520.

Note: Fyfe (1946, p. 137) pointed out that *Artioposthia civis* may be a synonym of *Artioposthia exulans* (Dendy, 1901).

Artioposthia diemenensis (Dendy, 1894)

Geoplana diemenensis n. sp. Dendy, 1894 a : 179-180. Mt. Wellington, Newtown Falls, North Coast, Emu Bay, and Parattah, Tasmania / Australia.

Geoplana Dianensis n. sp. Dendy, 1894 b : 421. Spelling error.

Artioposthia diemenensis : von Graff, 1896 b : 86, 89-91, fig. 12 (FCA).

Artioposthia diemenensis : von Graff, 1899 : 232, fig. 75 (FCA), 233, figs. 76-79 (FCA), 404-406 ; taf. V, figs. 20-24 (CP, AE in color), XXXIII, figs. 5-7 (FGO, HI in color), XXXIV, figs. 1-4 (FGO, HI in color). Tasmania / Australia.

Geoplana diemenensis : Steel, 1900 b : 619, 627-628, 631; pl. XLI, fig. 8 (DB). Trevallyn-Hills, near Launceston, and Table Cape, Tasmania / Australia.

Artioposthia diemenensis : von Graff, 1912 : taf. XXXIII, fig. 28 (CP), XXXVIII, fig. 5 (HI), XXXIX, fig. 6 (HI), LII, fig. 2 (FCA), LX, figs. 3-7 (FCA, FGO).

Artioposthia diemenensis : von Graff, 1913 : 2757, 2774-2775.

Artioposthia diemenensis : von Graff, 1915 : 3076, 3085-3086, 3108, 3115-3116, 3121, 3124-3125.

Geoplana diemenensis : Dendy, 1915 : 700.

Artioposthia diemenensis : von Graff, 1917 : 3355.

Artioposthia diemenensis : Steinböck, 1924 : 475.

Artioposthia diemenensis : Bresslau, 1930 : 140, fig. 130 1-2 (FCA).

Geoplana dianensis : Smith & Convey, 1970 : 99. Spelling error.

Geoplana dienensis : Smith & Convey, 1970 : 99.

Artioposthia diemenensis : E. M. Froehlich, 1978 : 19.

Note: Dendy (1915, pp. 699-701) considered the following are synonomies of *Geoplana nichollsi* Dendy, 1915, from

Tasmania : ?*Geoplana diemenensis* Dendy, 1894 (in part), ?*Artioposthia diemenensis* (Dendy, 1894) in von Graff, 1899 (in part) and ?*Geoplana diemenensis* (Dendy, 1894) in Steel, 1990.

Artioposthia exulans (Dendy, 1901)

Geoplana exulans n. sp. Dendy, 1901 : 222, 233-234. Ara-tea-tea, N. Island / New Zealand.

Geoplana exulans : Dendy, 1904 : 307.

Artioposthia exulans : Fyfe, 1946 : 135-138 ; pl. 7, fig. 1 (FCA). Dendy's samples (British Museum collection). The Chatham Islands / New Zealand.

Artioposthia flavimarginata (Dendy, 1897)

See *Australopacifica flavimarginata* (Dendy, 1897).

Artioposthia fletcheri (Dendy, 1891)

Geoplana fletcheri n. sp. Dendy, 1891 : 78 ; pl. 7, figs. 8-9 (DB). Macedon, Victoria / Australia.

Geoplana fletcheri : Spencer, 1891 : 91.

Geoplana fletcheri : Dendy, 1892 b : 41.

Geoplana fletcheri : Dendy, 1892 e : 26-27, 38-39, 40-41 ; pl. 4, fig. 6 (VB). Macedon, Victoria / Australia.

Geoplana fletcheri : Dendy, 1892 f : 372-373. Norton's Summit, near Adelaide, South Australia / Australia.

Geoplana Fletcheri : Dendy, 1895 d : 117, note.

Artioposthia fletcheri : von Graff, 1896 b : 86-89, fig. 11 (FCA).

Geoplana Fletcheri : Steel, 1897 a : 112.

Artioposthia fletcheri : von Graff, 1899 : 226, fig. 71 (FCA), 227, fig. 72 (FCA) ; 402-403 ; taf. XXX, fig. 10 (HI), XXXI, figs. 1-7 (FCA, HI in color). Victoria and South Australia / Australia.

Geoplana Fletcheri : Steel, 1900 b : 628.

Geoplana fletcheri : Dendy, 1909 : 673.

Geoplana fletcheri : von Graff, 1912 : taf. XXXII, figs. 12-16 (DB).

Artioposthia fletcheri : von Graff, 1912 : taf. LX, figs. 1-2, 10 (FCA, FGO).

Artioposthia fletcheri : von Graff, 1915 : 3086, 3114-3116, 3118-3121, 3124-3125.

Artioposthia fletcheri : von Graff, 1917 : 3353, 3355.

Artioposthia fletcheri : Frieb, 1923 : 512.

Artioposthia fletcheri : Steinböck, 1924 : 476, 479, 481, fig. 12 b (FCA).

Artioposthia fletcheri : Wood, 1926 : 608, 610.

Artioposthia fletcheri : Okugawa, 1953 : 41.

Geoplana fletcheri : Smith & Convey, 1970 : 99.

Artioposthia fletcheri : Winsor, 1973 c : 264, fig. (DB), 441. Melbourne, Victoria / Australia.

Artioposthia fletcheri : Winsor, 1977 : 144. Macedon Ranges, Victoria / Australia.

Note: *Geoplana fletcheri* var. *adelaidensis* Dendy, 1892, and *Geoplana fletcheri* var. *borealis* Dendy, 1895, are classified as *Artioposthia adelaideensis* (Dendy, 1892) in this Index.

Artioposthia fletcheri var. *adelaidensis* (Dendy, 1892)

See *Artioposthia adelaideensis* (Dendy, 1892).

Artioposthia fletcheri var. *borealis* (Dendy, 1895)

See *Artioposthia adelaideensis* (Dendy, 1892).

Artioposthia garveyi (Dendy, 1901)

Geoplana garveyi n. sp. Dendy, 1901 : 234. Clinton Valley, head of Lake Te Anau, S. Island / New Zealand.

- Geoplana garveyi* : Dendy, 1904 : 307.
- Artioposthia garveyi* : Fyfe, 1947 : 521-522 ; pl. 48, fig. 4 (FCA). Dendy's samples (British Museum collection). Lake Te Anau, Otago, S. Island / New Zealand.
- Caenoplana garveyi* : Ogren, 1989 : 141. Generic assignment.
- Artioposthia glandulosa* Fyfe, 1956**
- Artioposthia glandulosa* n. sp. Fyfe, 1956 : 509-510, fig. 3 A-B (CP, FCA). Dunedin, S. Island / New Zealand.
- Artioposthia grubei* von Graff, 1899**
- See *Australopacifica grubei* (von Graff, 1899).
- Artioposthia harrisoni* Wood, 1926**
- Artioposthia harrisoni* n. sp. Wood, 1926 : 610-612, figs. 3-4 (DB, AE, FCA). Barrington River, Barrington Tops, the Mount Royal Range, 257 km N of Sydney, New South Wales / Australia.
- Artioposthia harrisoni* : Fyfe, 1937 : 112.
- Artioposthia harrisoni* : Winsor, 1977 : 140.
- Artioposthia howesi* (Dendy, 1901).**
- Geoplana howesi* n. sp. Dendy, 1901 : 238-239. Invercargill, S. Island / New Zealand.
- Geoplana howesi* : Dendy, 1904 : 308.
- Artioposthia howesi* : Fyfe, 1944 : 288, 291-293 ; pl. 39, fig. 2 (FCA). Dunroon, North Otago, S. Island / New Zealand.
- Artioposthia howesii* : Fyfe, 1946 : 138. Spelling error.
- Artioposthia howesii* : Fyfe, 1947 : 518, 520. Spelling error.
- Artioposthia howesii* (Dendy, 1901)**
- See *Artioposthia howesi* (Dendy, 1901).
- Artioposthia japonica* Kaburaki, 1922**
- Artioposthia japonica* n. sp. Kaburaki, 1922 : 1-7, fig. 1 (FCA), 48, 54 ; pl. 1, fig. 2 (DB in color). Nikkō, Tochigi Pref., Honshū / Japan.
- Artioposthia japonica* : Kaburaki, 1927 : 1674, fig. 3200 (DB).
- Artioposthia japonica* : Kaburaki, 1931 : 1120, fig. 2161 (DB).
- Artioposthia japonica* : Tu, 1940 : 219, 247.
- Artioposthia japonica* : Katō, 1943 : 664.
- Artioposthia japonica* : Kaburaki, 1947 : 1489, fig. 4197 (DB).
- Artioposthia japonica* : Marcus, 1953 : 54.
- Artioposthia japonica* : Okugawa, 1953 : 41.
- Artioposthia japonica* : Okugawa, 1965 : 322, fig. 46 (DB).
- Artioposthia japonica* : Uchida, 1965 : 65.
- Artioposthia japonica* : Okugawa, 1970 : 109, fig. 79 a (DB).
- Artioposthia japonica* : Kawakatsu, 1971 : table 2.
- Artioposthia japonica* : Kawakatsu, 1972 : 165.
- Artioposthia japonica* : Hashimoto, 1976 : 146. Shizuoka / Japan.
- Artioposthia japonica* : Kawakatsu, 1983 : 54-55, table 1. Japan.
- Artioposthia japonica* : Kawakatsu, 1988 : 165.
- Artioposthia latissima* (Dendy, 1896)**
- See *Australopacifica latissima* (Dendy, 1896).
- Artioposthia mariae* (Dendy, 1895)**

Geoplana Marioe n. sp. Dendy, 1895 a : 396. Spelling error.

Geoplana mariae n. sp. Dendy, 1895 c : 184. Jackson's, the Teremakau River, W of Otira Gorge, S. Island / New Zealand.

Geoplana Mariae : Dendy, 1896 b : 214.

Geoplana mariae : Dendy, 1897 : 263. Lake Mahinapua, S. Island / New Zealand.

Geoplana mariae : von Graff, 1899 : 349-350. New Zealand.

Geoplana mariae : Dendy, 1901 : 223, 240. Clinton Valley, Head of Lake Te Anau, S. Island / New Zealand.

Geoplana mariae : Dendy, 1904 : 308.

Artioposthia mariae : Fyfe, 1947 : 517-518 ; pl. 47, fig. 1 (FCA). Dendy's samples (British Museum collection). West Coast, S. Island / New Zealand.

Artioposthia mariae : de Beauchamp, 1961 : 120, fig. 61 B (FCA).

Artioposthia polyadoides Fyfe, 1956

Artioposthia polyadoides n. sp. Fyfe, 1956 : 509-511, fig. 3 C-E (CP, FGO, FCA). Pipikaretu, the Otago Peninsula, S. Island / New Zealand.

Artioposthia regina (Dendy, 1892)

See *Australopacifica regina* (Dendy, 1892).

Artioposthia subquadrangulata (Dendy, 1895)

Geoplana subquadrangulata n. sp. Dendy, 1895 a : 398. Christchurch, Ashburton and Dunedin, S. Island / Australia.

Geoplana subquadrangulata n. sp. Dendy, 1895 c : 187-188. Christchurch, Ashburton, Dunedin and Bluff, S. Island / New Zealand.

Geoplana subquadrangulata : Dendy, 1897 : 263. Otira and Dunedin, S. Island / New Zealand.

Geoplana subquadrangulata : von Graff, 1899 : 372-373. S. Island / New Zealand.

Geoplana subquadrangulata : Dendy, 1901 : 222, 237-238, 240. Clinton Valley, Head of Lake Te Anau, Westland, Toitoi, and Invercargill, S. Island ; Chatham Island (ca. 750 km E of Christchurch) / New Zealand.

Geoplana subquadrangulata : Dendy, 1904 : 307.

Geoplana subquadrangulata : Dendy, 1909 : 672.

Geoplana subquadrangulata var. *enderbyensis* n. var. Dendy, 1909 : 672. Enderby Island / The Antarctic.

Geoplana subquadrangulata : Fyfe, 1944 : 291.

Artioposthia subquadrangulata : Fyfe, 1946 : 137-138 ; pl. 7, fig. 2 (FCA). Dendy's samples (British Museum collection) from Christchurch and Ashburton, Woodhaugh, Long Beach, Dunedin and Bluff, S. Island / New Zealand.

Artioposthia subquadrangulata : Fyfe, 1947 : 521. Syn. *Geoplana suteri* Dendy, 1897.

Artioposthia subquadrangulata : Fyfe, 1953 : 6. Dundas Islet, Auckland Island / New Zealand.

Geoplana subquadrangulata, var. *enderbyensis* : Fyfe, 1953 : 5.

Note : See *Artioposthia suteri* (Dendy, 1897).

?*Artioposthia suteri* (Dendy, 1897)

Geoplana suteri n. sp. Dendy, 1897 : 263-264. Dunedin, S. Island / New Zealand.

Geoplana suteri : Dendy, 1901 : 239-240. Invercargill, Toitoi, and Southland, S. Island / New Zealand.

Geoplana suteri : Dendy, 1904 : 307.

Geoplana suteri : Fyfe, 1947 : 521. Syn. of *Artioposthia subquadrangulata* (Dendy, 1895).

Note: Fyfe (1947, p. 521), who examined the type and cotype specimens of Dendy's *Geoplana suteri* (British Museum collection), considered the species is a synonym of *Artioposthia subquadriangulata* (Dendy, 1895). Her conclusion was based upon only external features of samples of both species.

Artioposthia triangulata (Dendy, 1895)

- Geoplana triangulata* n. sp. Dendy, 1895 a : 395-396. Christchurch, S. Island / New Zealand.
Geoplana triangulata : Dendy, 1895 d : 115-116.
Geoplana triangulata : Gamble, 1896 : 38.
Geoplana triangulata : von Graff, 1899 : 354.
Geoplana triangulata : Steel, 1900 a : 573.
Geoplana triangulata : Dendy, 1901 : 224. St. Martin's, Christchurch, S. Island / New Zealand.
Geoplana triangulata : Dendy, 1904 : 307.
Artioposthia triangulata : Fyfe, 1937 : 99-126, figs. 1-3 (HI, FCA, FGO); pls. 14-16, figs. 1-27 (FCA, FGO, HI, PCA). Otago, S. Island / New Zealand.
Artioposthia triangulata : Fyfe, 1944 : 292-293.
Artioposthia triangulata : Fyfe, 1947 : 518-519.
Artioposthia triangulata : Fyfe, 1953 : 7.
Artioposthia triangulata : de Beauchamp, 1961 : 122.
Artioposthia triangulata : Reynoldson, 1970 : 547. North Ireland / U. K.
Artioposthia triangulata : Jones, 1981 a : 71-71.
Artioposthia triangulata : Jones, 1981 b : 387.
Artioposthia triangulata : Anderson, 1986 : 141-143, 145. Belfast (Antrim, Armagh, Down, East Donegal, Londonderry, and Tyrone), North Ireland / U. K.
Artioposthia triangulata : Jones, 1988 : 513. North Ireland, Scotland and England / U. K.
Artioposthia triangulata : Reynoldson, 1974 : 214. North Ireland / U. K.
Artioposthia triangulata : Willis & Edwards, 1977 : 111-116, fig. 7 a-b (DB and cocoons). Belfast, North Ireland ; Edinburgh, Scotland ; Lanarkshire, England / U. K.
Artioposthia triangulata : Jones, 1978 : 20. Belfast, North Ireland / U. K.
Artioposthia triangulata : Ball & Reynoldson, 1981 : 106, fig. 31 (DB). Scotland and England / U. K.

Note: See *Artioposthia australis* (Dendy, 1985).

Genus *Australopacifica* Ogren et Kawakatsu, gen. nov. (collective group)

Australopacifica n. g. Ogren & Kawakatsu: described in the present paper as a collective group. See pages 33. Cf. ICZN (3rd Ed., 1985, Art. 42 (b) (i)).

Australopacifica adae (Dendy, 1891) comb. nov.

- Geoplana adae* n. sp. Dendy, 1891 : 73-74, 80 ; pl. 7, fig. 7 (DB). Macedon, Warburton, Victoria / Australia.
Geoplana adae : Spencer, 1891 : 91.
Geoplana adae var. *extralineata* n. var. Dendy, 1892 a : 38. Narre Warren, South Gippsland, Victoria / Australia.
Geoplana adae : Dendy, 1892 b : 41.
Geoplana adae : Dendy, 1892 e : 26-27, 37-38, 41 ; pl. 4, figs. 3-3 a (DB). Croydon and Fern Tree Gully, Victoria / Australia.
Geoplana adae : Dendy, 1892 f : 371. Silver Falls, Mt. Wellington, Tasmania / Australia.

Geoplana adae var. *fusca* n. var. Dendy, 1894 a : 182-183. Lake St. Clair, Tasmania / Australia.

Geoplana Adae : Dendy, 1894 b : 421. Tasmania / Australia.

Geoplana Adae var. *fusca* : Dendy, 1894 b : 421. Lake St. Clair, Tasmania / Australia.

Geoplana adae : von Graff, 1899 : 354-356. Australia.

Geoplana Adae : Steel, 1990 b : 619.

Geoplana Adae var. *fusca* : Steel, 1900 b : 619.

Geoplana adae : Smith & Convey, 1970 : 98.

Geoplana adae var. *extralineata* : Smith & Convey, 1970 : 98.

Geoplana adae var. *fusca* : Smith & Convey, 1970 : 98.

Geoplana adae : Winsor, 1973 c : 441. Victoria / Australia.

Geoplana adae : Winsor, 1976 : 61.

Geoplana adae : Winsor, 1977 : 140, 142, 144. East Highlands and Macedon Ranges, Victoria / Australia.

Australopacifica albolineata (Steel, 1897) comb. nov.

Geoplana albolineata n. sp. Steel, 1897 a : 109-110, 119 ; pl. vii, fig. 8 (DB). Bundanoon, New South Wales / Australia.

Australopacifica alfordensis (Dendy, 1896) comb. nov.

Geoplana alfordensis n. sp. Dendy, 1896 : 212. Springburn, Mount Somers, S. Island / New Zealand.

Geoplana alfordensis : von Graff, 1899 : 378. Mt. Somers, S. Island / New Zealand.

Geoplana alfordensis : Dendy, 1904 : 307.

Australopacifica antarctica (Dendy, 1909) comb. nov.

Geoplana antarctica n. sp. Dendy, 1909 : 673. Enderby Island (?) / The Antarctic.

Geoplana antarctica : Fyfe, 1953 : 5.

Australopacifica arenicola (Steel, 1900) comb. nov.

Geoplana arenicola n. sp. Steel, 1900 a : 564-565, 580 ; pl. XXXIV, fig. 2 (DVB). Near Perth, Western Australia / Australia.

Australopacifica atrata (Steel, 1897) comb. nov.

Geoplana atrata n. sp. Steel, 1897 a : 105, 119 ; pl. vii, fig. 10 (DVB). Upper Manning River, New South Wales / Australia.

Geoplana atrata : Winsor, 1973 b : 101-102, fig. 1 (DB). The Plenty River, Lower Plenty, Victoria / Australia.

Geoplana atrata : Winsor, 1973 c : 441. Victoria / Australia.

Geoplana atrata : Winsor, 1977 : 140.

Geoplana atrata : Winsor, 1979 : 155-157, fig. 2 A-B (DH, CP). Royal Botanic Gardens, Melbourne, Victoria / Australia.

Australopacifica aucklandica (Dendy, 1901) comb. nov.

Geoplana aucklandica n. sp. Dendy, 1901 : 235. Old Cemetery Gully, Auckland, N. Island / New Zealand.

Geoplana aucklandica : Dendy, 1904 : 307.

Geoplana aucklandica : Dendy, 1911 : 100.

[nec *Geoplana aucklandica* Dendy, 1909]. See ? *Kontikia marrineri* (Dendy, 1911).

Australopacifica aurantia (Whitehouse, 1915) comb. nov.

Pelmatoplana aurantia n. sp. Whitehouse, 1915 : 462-463 ; pl. XXIX, fig. 21-26 (DVB, DVH, CP,

AE). Rotung, Abor Country / India.

Australopacifica austiniiana (Schröder, 1924) comb. nov.

Geoplana austiniiana n. sp. Schröder, 1924 : 260, 267, 197; taf. III, fig. 15 a-c (DB, DH, AE).

Koné-Fluss / New Caledonia (Neu-Caledonien).

Australopacifica balfouri (von Graff, 1899) comb. nov.

Geoplana Tasmaniana : Dendy, 1894 a : 178-180. Parattah, Mount Wellington, near Newtown Falls, and North Coast, Tasmania / Australia. Misidentification.

Geoplana Tasmaniana : Dendy, 1894 b : 421. Misidentification.

Geoplana balfouri n. sp. von Graff, 1899 : 375-376; taf. V, figs. 31-33 (CP in color). Parattah, Mount Wellington, Newtown Falls and North Coast, Tasmania / Australia.

Geoplana balfouri : Steel, 1900 b : 619, 624-625. Syn. of *Planaria Tasmaniana* Darwin, 1844.

Geoplana balfouri : Dendy, 1915 : 698. Syn. of *Planaria Tasmaniana* Darwin, 1844.

Note: Since Steel's (1900 b) and Dendy's (1915) discussions were only based upon external features of animals of both species, we defer the taxonomic conclusion. See *Australopacifica tasmaniana* (Darwin, 1844).

Australopacifica barringtonensis (Wood, 1926) comb. nov.

Geoplana barringtonensis n. sp. Wood, 1926 : 610-612. Barrington Tops, the Mount Royal Range, 257 km N of Sydney, New South Wales / Australia.

Australopacifica bicolor (von Graff, 1899) comb. nov.

Geoplana variegata : Dendy, 1892 a : 124-125, 129; pl. 11, fig. 2 (DB). Gympie (the Marry River), Burnett River, Cooran, Queensland / Australia. Misidentification. [nec *Geoplana variegata* Fletcher et Hamilton, 1888].

Geoplana bicolor n. sp. von Graff, 1899 : 384-386. Queensland / Australia.

Geoplana bicolor : Winsor, 1973 a : 264-265.

Note: See *Australopacifica variegata* (Fletcher et Hamilton, 1888).

Australopacifica bimaculata (Kaburaki, 1922) comb. nov.

Geoplana bimaculata n. sp. Kaburaki, 1922 : 2-3, 48, 54; pl. I, fig. 1 (DB in color). Nikkō, Tochigi Pref., Honshū / Japan.

Geoplana bimaculata : Kaburaki, 1936 : 506.

Geoplana bimaculata : Tu, 1940 : 219, 247. Japan.

Geoplana bimaculata : Marcus, 1953 : 54.

Geoplana bimaculata : Okugawa, 1953 : 41.

Geoplana bimaculata : Uchida, 1965 : 65.

Geoplana bimaculata : Kawakatsu, 1972 : 165.

Geoplana bimaculata : Kawakatsu, 1983 : 54-55, table 1.

Geoplana bimaculata : Kawakatsu, 1988 : 165.

Australopacifica blomefieldi (von Graff, 1899) comb. nov.

Pelmatoplana blomefieldi n. sp. von Graff, 1899 : 394. Nossibé / Madagascar.

Pelmatoplana blomefieldi : Mell, 1903 : 194.

Australopacifica buettneri (von Graff, 1899) comb. nov.

Geoplana buettneri nom. nud. Collin, 1893 : 14.

Pelmatoplana buettneri n. sp. von Graff, 1899 : 395; taf. V, figs. 17-18 (CP in color). Togo (République du Togo).

Pelmatoplana büttneri : von Graff, 1899 : taf. V, figs. 17-18. Cited above.

Pelmatoplana buettneri : Mell, 1904 : 471.

Pelmatoplana buettneri : C. G. Froehlich, 1967 : 156.

Australopacifica castanea (von Graff, 1899) comb. nov.

Artioposthia castanea n. sp. von Graff, 1899: 406-407; taf. II, fig. 8 (VH in color). Philippines.

Artioposthia castanea: Tu, 1940: 219, 247.

Australopacifica challengereri (von Graff, 1899) comb. nov.

? Young of *Geoplana Traversii*: Moseley, 1877: 284. Wellington, N. Island / New Zealand.

Geoplana challengereri n. sp. von Graff, 1899: 370. Wellington, N. Island / New Zealand.

Geoplana challengereri: Dendy, 1904: 307.

Australopacifica chamissoniana (Schröder, 1924) comb. nov.

Geoplana chamissoniana n. sp. Schröder, 1924: 260, 273-274, 297; taf. III, fig. 11 a-g (DB, DVB, CP, AE). Ciu, Canala (alt. 300 m) / New Caledonia (Neu-Caledonien).

Australopacifica citrina (Wood, 1926) comb. nov.

Geoplana citrina n. sp. Wood, 1926: 609-610, fig. 2 (DH, AE). Barrington Tops, the Mount Royal Range, 257 km N of Sydney, New South Wales / Australia.

Australopacifica comitatis (Dendy, 1915) comb. nov.

Geoplana comitatis n. sp. Dendy, 1915: 696-697. Near Perth, West Australia / Australia.

Australopacifica cooperi (Dendy, 1901) comb. nov.

Geoplana cooperi n. sp. Dendy, 1901: 239-240. Omaha, Auckland Province, N. Island / New Zealand.

Geoplana cooperi: Dendy, 1904: 308.

Australopacifica coxii (Fletcher et Hamilton, 1888) comb. nov.

Rhynchodemus Coxii n. sp. Fletcher & Hamilton, 1888: 371-372. Mt. Wilson, New South Wales / Australia.

Geoplana coxii: Dendy, 1895 b: 734.

Geoplana coxi: von Graff, 1899: 350. Australia.

Coenoplana coxii: Jones, 1987: 57.

Geoplana coxii: Ogren & Kawakatsu, 1988 b: 59, 69.

Coenoplana coxii: Jones, 1988: 513-514. Isles of Scilly, England / U. K.

Australopacifica cucullata (Dendy, 1897) comb. nov.

Geoplana cucullata n. sp. Dendy, 1897: 259-260. Lake Mahinapua, near Hokitika, S. Island / New Zealand.

Geoplana cucullata: Dendy, 1901: Near Jackson's, Teremakau, Westland, S. Island / New Zealand.

Geoplana cucullata: Dendy, 1904: 308.

Geoplana cucullata: Fyfe, 1947: 519-520.

Artioposthia cucullata: Fyfe, 1947: 520.

Note: Fyfe (1947, pp. 519-520), who examined Dendy's samples (British Museum collection), considered that *Geoplana cucullata* is a juvenile form of *Artioposthia australis* (Dendy, 1896). Since she did not examine the fully sexually mature specimens of the former, we defer the taxonomic conclusion. See *Artioposthia australis* (Dendy, 1896).

Australopacifica daemeli (von Graff, 1899) comb. nov.

Geoplana daemeli n. sp. von Graff, 1899: 361; taf. II, fig. 9 (VB in color). Rockhampton, Queensland; Sydney, New South Wales; Adelaide, South Australia / Australia.

Australopacifica dakini (Dendy, 1915) comb. nov.

Geoplana dakini n. sp. Dendy, 1915: 694-695. Near Perth, Western Australia / Australia.

Australopacifica dendyi (Spencer, 1891) comb. nov.

Geoplana dendyi n. sp. Spencer, 1891: 85-87, 91-92; pl. 11, figs. 1-5 (DVB, DH, CP). Victoria / Australia.

Geoplana dendyi: Dendy, 1892 b: 41.

Geoplana dendyi: Dendy, 1892 e: 26-27, 30-31. Between Marysville and the Source of the Yarra, and Croajingolong, Victoria / Australia.

Geoplana dendyi: von Graff, 1899: 366. Victoria / Australia.

Geoplana dendyi: Smith & Convey, 1970: 99.

Geoplana dendyi: Winsor, 1973 c: 441. Victoria / Australia.

Geoplana dendyi: Winsor, 1976: 15, 61. Mitta Mitta Valley, Victoria / Australia.

Geoplana dendyi: Winsor, 1977: 140, 144-145. East Highlands, Victoria / Australia.

Caenoplana dendyi: Ogren, 1989: 141.

Australopacifica dietrichiana (Schröder, 1924) comb. nov.

Geoplana dietrichiana n. sp. Schröder, 1924: 260, 275-276, 296; taf. I, fig. 6 a-c (DB, CP, AE).

Oubatche (alt. 600 m); Holz and Steinen; Mt. Ignambi-Wald (alt. 700-800 m); Boréaré / New Caledonia (Neu-Caledonien).

Australopacifica dubia (Dendy, 1982) comb. nov.

Geoplana dubia n. sp. Dendy, 1892 c: 36. Narre Warren, South Gippsland, Victoria / Australia.

Geoplana dubia: von Graff, 1899: 377-378; taf. VI, figs. 11-12 (CP in color). South Gippsland, Victoria / Australia.

Geoplana dubia: Smith & Convey, 1970: 99.

Geoplana dubia: Winsor, 1973 c: 441. Victoria / Australia.

Geoplana dubia: Winsor, 1977: 140, 144: East Highlands, Victoria / Australia.

Australopacifica eschscholtziana (Schröder, 1924) comb. nov.

Geoplana eschscholtziana n. sp. Schröder, 1924: 260, 274-275, 297; taf. III, fig. 13 a-e (DVH, CP, AE). Tchalabel; Mt. Ignabi (alt. 300 m); Mt. Painé (alt. 500 m); Koné / New Caledonia (Neu-Caledonien).

Australopacifica fagicola (Dendy, 1901) comb. nov.

Geoplana fagicola n. sp. Dendy, 1901: 233. Clinton Valley, head of Lake Te Anau, S. Island / New Zealand.

Geoplana fagicola Dendy, 1909: 307.

Geoplana fagicola: Fyfe, 1944: 290-292. Syn. of *Geoplana graffii* Dendy, 1895.

Note: Fyfe (1944, pp. 290-291) considered *Geoplana fagicola* (Dendy, 1901) is a synonym of *Geoplana graffii* Dendy, 1895. See *Newzelandia graffii* (Dendy, 1895).

Australopacifica flavigraea (Dendy, 1915) comb. nov.

Geoplana flavigraea n. sp. Dendy, 1915: 695-696. Near Perth, West Australia / Australia.

Australopacifica flavimarginata (Dendy, 1897) comb. nov.

Geoplana flavimarginata n. sp. Dendy, 1897: 259. Wellington, N. Island / New Zealand.

Geoplana flavimarginata: Dendy, 1904: 306.

Geoplana flavimarginata: Fyfe, 1947: 519-520.

Artioposthia flavimarginata: Fyfe, 1947: 520.

Note: Fyfe (1947, pp. 519-520), who examined Dendy's samples (British Museum collection), considered that *Geoplana flavimarginata* is a juvenile form of *Artioposthia australis* (Dendy, 1896). Since she did not examine the fully sexually mature specimens of the former, we defer the taxonomic conclusion. See *Artioposthia australis* (Dendy, 1896).

Australopacifica flynni (Dendy, 1915) comb. nov.

Geoplana sp.: Dendy, 1892 f: 372. Hill at foot of Mt. Wellington, near Hobart, Tasmania / Australia.

Geoplana sp. (of Dendy, 1892, from Tasmania): von Graff, 1899: 372.

Geoplana flynni: n. sp. Dendy, 1915: 701-702. Maria Island and Hobart, Tasmania / Australia.

Geoplana sp.: Dendy, 1915: 702.

Note: Dendy (1915, p. 702) wrote: "I think that the specimen which I described [1892] under the name *Geoplana* sp., from near Hobart, probably belongs to this species." (Namely, *Geoplana flynni* added by authors.) "Von Graff [1899] referred this specimen to the Victorian *G. quadrangulata* var. *wellingtoni*, but there was very little justification for so doing, or, I fear, for my own comparison of it with *G. quadrangulata* and *G. ventropunctata*."

Australopacifica frosti (Spencer, 1891) comb. nov.

Geoplana frosti n. sp. Spencer, 1891: 85, 87-88, 91-92; pl. 11, figs. 6-9 (DVB). The Yarra and the Thompson River, Victoria / Australia.

Geoplana frosti: Dendy, 1892 d: 44.

Geoplana frosti: Dendy, 1892 e: 26-27, 31, 38. Mt. Wellington, Gippsland, Victoria / Australia.

Geoplana frosti: Smith & Convey, 1970: 99.

Caenoplana frosti: Ogren, 1989: 141.

Geoplana frosti: Winsor, 1973 c: 441. Victoria / Australia.

Note: von Graff (1899, pp. 354-356) considered this species is a synonym of *Geoplana adae* Dendy, 1891. See *Australopacifica adae* (Dendy, 1891).

Australopacifica fuscodorsalis (Steel, 1900) comb. nov.

Geoplana fusco-dorsalis n. sp. Steel, 1900 a: 564, 580; pl. XXXIV, fig. 1 (DB). Near Perth, Western Australia / Australia.

Geoplana fusco-dorsalis: Dendy, 1915: 696.

Australopacifica gamblei (von Graff, 1899) comb. nov.

Geoplana gamblei nom. nud. von Graff, 1897 a: 113-114. Nord-Celebes (Sulawesi) / Indonesia.

Geoplana gamblei n. sp. von Graff, 1899: 373; taf. XIX, figs. 11-14 (DVB, DH, AE, CP in color). Matinangkette, Nord-Celebes (Sulawesi) / Indonesia.

Australopacifica gelatinosa (Dendy, 1895) comb. nov.

Geoplana gelatinosa n. sp. Dendy, 1895 c: 186-187. Jackson's, the Teremakau River, W of Otira Gorge, S. Island / New Zealand.

Geoplana gelatinosa: Dendy, 1895 a: 396.

Geoplana gelatinosa: Dendy, 1895 d: 115-116. von Graff (1899, p. 352) cited as pp. 17-18.

Geoplana gelatinosa: Gamble, 1896: 33.

Geoplana gelatinosa: von Graff, 1899: 352-353.

Geoplana gelatinosa: Dendy, 1901: 226.

Geoplana gelatinosa: Dendy, 1904: 307.

Geoplana gelatinosa: von Graff, 1917: 3336.

Australopacifica graminicola (Steel, 1900) comb. nov.

Geoplana graminicola n. sp. Steel, 1900 a: 566-567, 580; pl. XXXIV, fig. 9 (DB). Petersham, near Sydney, New South Wales / Australia.

Geoplana graminicola: Smith & Convey, 1970: 100.

Geoplana graminicola: Winsor, 1979: 159.

Australopacifica greeni (von Graff, 1899) comb. nov.

Pelmatoplaena greeni n. sp. von Graff, 1899: 393; taf. IV, figs. 1-3 (DB, CP in color). Punduloya, Rambodda, Ceylon / Sri Lanka.

Australopacifica gregoryana (Schröder, 1924) comb. nov.

Geoplana gregoryana n. sp. Schröder, 1924: 260, 266-267, 297; taf. III, figs. 14 a-c (DB, DH, AE). Mt. Panié / New Caledonia (Neu-Caledonien).

Australopacifica grubei (von Graff, 1899) comb. nov.

Artioposthia grubei n. sp. von Graff, 1899: 406; taf. II, figs. 3-7 (DH, VB, CP in color). Australia.

Artioposthia grubei: von Graff, 1912: taf. XXXII, fig. 27 (VB).

Artioposthia grubei: von Graff, 1914: 2908.

Artioposthia grubei: E. M. Froehlich, 1978: 10.

Note: The material examined by von Graff (1899) was retained in Naturwiss. Museum in Hamburg (M. G. 6098; labeled "Geoplana unistriata" ms. by Ed. Grube).

Australopacifica guentheri (von Graff, 1899) comb. nov.

Pelmatoplaena guentheri n. sp. von Graff, 1899: 394; taf. III, figs. 17-20 (DB, CP in color). Punduloya, Rambodda, Ceylon / Sri Lanka.

Pelmatoplaena güntheri: von Graff, 1899: taf. III, figs. 17-20. Cited above.

Pelmatoplaena güntheri: Bresslau, 1930: 57, fig. 26-1 (DB).

Australopacifica hamiltoni (Dendy, 1895) comb. nov.

Geoplana hamiltoni n. sp. Dendy, 1895 c: 186. Napier, Hawke's Bay, N. Island / New Zealand.

Geoplana hamiltoni: von Graff, 1899: 358. New Zealand.

Geoplana hamiltoni: Dendy, 1904: 307.

Geoplana hamiltoni: Fyfe, 1944: 290-291. Syn. of *Geoplana graffii* Dendy, 1895.

Note: See *Newzealandia graffii* (Dendy, 1895).

Australopacifica hillii (Steel, 1897) comb. nov.

Geoplana Hillii n. sp. Steel, 1897 a: 105-106, 109, 119; pl. vii, fig. 5 (DB). Bundanoon, New South Wales / Australia.

Australopacifica himalayensis (Whitehouse, 1919) comb. nov.

Pelmatoplaena himalayense n. sp. Whitehouse, 1919: 37; pl. XI, figs. 32-34 (DH, CP). Darjiling and Soom (alt. 1525-2135 m) / India. Cf. ICZN (3rd Ed., 1985; Art. 31 (b), Art. 32 (d), App. D, IV, 22 (a)).

Australopacifica hoggi (Dendy, 1891) comb. nov.

Geoplana hoggi n. sp. Dendy, 1891: 75-76, 80; pl. 7, figs. 4-5 (DB). Macedon, Victoria / Australia.

Geoplana hoggi: Spencer, 1891: 84-85, 89, 91. Spelling error.

Geoplana hoggi: Dendy, 1892 b: 41.

Geoplana hoggi: Dendy, 1892 e: 26-27, 34. Macedon and Creswick, Victoria / Australia.

Geoplana hoggi: von Graff, 1899: 342-343; taf. VI, figs. 42-45 (CP in color), XXVI, fig. 6 (HI).

Geoplana hoggi: Meixner, 1906: 666.

Geoplana hoggi: von Graff, 1916: 3157.

Geoplana hoggi: von Graff, 1917: 3355.

Geoplana hoggi: Frieb, 1923: 512.

Geoplana hoggi: Smith & Convey, 1970: 100.

Geoplana hoggi: Winsor, 1973 c: 441. Victoria / Australia.

- Geoplana hoggi*: Winsor, 1977: 139-141, 143-145. Otway Region, Victoria / Australia.
- Australopacifica howitti* (Dendy, 1892) comb. nov.
- Geoplana howitti* n. sp. Dendy, 1892 a: 37.
- Geoplana howitti* var. *obsoleta* n. var. Dendy, 1892 a: 37. Near Narre Warren, South Gippsland, Victoria / Australia.
- Geoplana howitti* var. *obsoleta*: Dendy, 1892 b: 41.
- Geoplana howitti* n. sp. Dendy, 1892 d: 43. The Upper Wellington River, Mt. Wellington, Gippsland, Victoria / Australia.
- Geoplana howitti*: Dendy, 1892 e: 26-27, 39-41; pl. 4, fig. (DB). The Upper Wellington River, Mt. Wellington, Gippsland, Victoria / Australia.
- Geoplana howitti*: Dendy, 1894 a: 187.
- Geoplana howitti* var. *obsoleta*: Dendy, 1894 a: 187.
- Geoplana howitti*: von Graff, 1899: 383-384; taf. VI, figs. 28-30 (CP in color). Victoria / Australia.
- Geoplana howitti*: Smith & Convey, 1970: 100.
- Geoplana howittii* var. *obsoleta*: Smith & Convey, 1970: 100. Spelling error.
- Geoplana howitti*: Winsor, 1973 a: 264-265. .
- Geoplana howitti*: Winsor, 1977: 139-145. Otway Region and East Highlands, Victoria / Australia.
- Australopacifica humberti* (von Graff, 1899) comb. nov.
- Pelmatoplana humberti* n. sp. von Graff, 1899: 392; taf. III, fig. 32 (DB in color). Paradenya, Ceylon / Sri Lanka.
- Pelmatoplana humberti*: de Beauchamp, 1926: 353.
- Australopacifica huttoni* (von Graff, 1899) comb. nov.
- Geoplana huttoni* n. sp. von Graff, 1899: 352; taf. VI, fig. 27 (DB in color). New Zealand.
- Geoplana huttoni*: Dendy, 1904: 307.
- Geoplana huttoni*: Schröder, 1924: 260, 262, 265-266, 296; taf. I, figs. 7 a-d (DB, DVH, CP, AE). Canala / New Caledonia (Neu-Caledonien).
- Australopacifica ijimai* (von Graff, 1899) comb. nov.
- Pelmatoplana ijimai* n. sp. von Graff, 1899: 391-392; taf. VII, figs. 24-26 (DB, CP, AE in color). Tjibodas, Java ; Manindjan, Sumatra / Indonesia.
- Pelmatoplana ijimai*: Busson, 1903: 385, 393.
- Australopacifica inflata* (von Graff, 1899) comb. nov.
- Pelmatoplana inflata* n. sp. von Graff, 1899: 393; taf. IV, fig. 22 (DB in color). Philippines.
- Pelmatoplana inflata*: Tu, 1940: 220, 247.
- Australopacifica iris* (Dendy, 1896) comb. nov.
- Geoplana iris* (in part) n. sp. Dendy, 1896: 213. Mt. Somers, S. Island / New Zealand.
- Geoplana iris* (in part): von Graff, 1899: 359-360. S. Island / New Zealand.
- Geoplana iris* (in part): Dendy, 1901: 231. Near Jackson's, Westland, S. Island / New Zealand.
- Geoplana iris* (in part): Dendy, 1904: 307.
- Geoplana iris* (in part): Fyfe, 1944: 288-290. S. Island / New Zealand. Syn. of *Geoplana graffii* (Dendy, 1895).
- Geoplana iris* (in part): Fyfe, 1947-522-523. Peel Forest (British Museum collection), S. Island / New Zealand. Syn. of *Geoplana graffii* Dendy, 1895.
- Note: [nec *Geoplana iris* Dendy, 1896 (in part), in Fyfe (1944, 1947)]. See *Newzealandia iris* (Dendy, 1896).

Australopacifica jacksoniana (Dendy, 1897) comb. nov.

Geoplana jacksoniana n. sp. Dendy, 1897: 262-263. Jackson's, on the Teremakau, S. Island / New Zealand.

Geoplana jacksoniana : Dendy, 1904: 307.

Geoplana jacksoniana : Fyfe, 1944: 290-291. Syn. of *Geoplana graffii* Dendy, 1895.

Note: See *Newzealandia graffii* (Dendy, 1895).

Australopacifica korotneffi (von Graff, 1899) comb. nov.

Geoplana korotneffi n. sp. von Graff, 1899: 343-344; taf. V, figs. 5-7 (DVB, CP in color). Buitenzorg, Java / Indonesia.

Geoplana korotneffi : Ritter-Záhony, 1905: 163.

Geoplana korotneffi : von Graff, 1914: 2953.

Geoplana korotneffi : Hyman, 1940 a: 349.

Kontikia korotneffi : C. G. Froehlich, 1955 a: 201, 207.

Australopacifica kotzebueana (Schröder, 1924) comb. nov.

Pelmatoplana kotzebueana n. sp. Schröder, 1924: 260, 277, 297; taf. III, fig. 12 a-e (DB, DH, CP, AE). Ouvéa, Fayaotué, Loyalty-Inseln / Loyalties (France).

Australopacifica krausi (von Graff, 1899) comb. nov.

Geoplana krausi n. sp. von Graff, 1899: 362; taf. II, fig. 28 (DB in color). Buitenzorg, Java / Indonesia.

Australopacifica laingii (Dendy, 1895) comb. nov.

Geoplana Laingii n. sp. Dendy, 1895 a: 397. Near Lake Taupo, N. Island / New Zealand.

Geoplana laingii n. sp. Dendy, 1895 c: 185. Near Lake Taupo, N. Island / New Zealand.

Geoplana laingi : von Graff, 1899: 371. New Zealand.

Geoplana laingii : Dendy, 1904: 307.

Australopacifica lapidicola (Stimpson, 1857) comb. nov.

Geoplana lapidicola n. sp. Stimpson, 1857: 30. Insulam "Loo Choo" (i. e., Okinawa Island), the Southwest Islands of Japan / Japan.

Geoplana lapidicola : Diesing, 1861: 510.

Geoplana lapidicola : Humbart & Claperède, 1862: 297.

Geoplana lapidicola : Moseley, 1877 a: 289.

Geoplana lapidicola : von Graff, 1899: 370-371. ?Liukiu-Insel, Okinawa / Japan.

Geoplana lapidicola : Kaburaki, 1922: 2-3, 48.

Geoplana lapidicola : Tu, 1940: 220, 247. Loo-Choo / Japan.

Geoplana lapidicola : Marcus, 1953: 54.

Geoplana lapidicola : Okugawa, 1953: 41.

Geoplana lapidicola : Kawakatsu, 1983: 54-55, table 1.

Geoplana lapidicola : Lue & Kawakatsu, 1986: 320.

Australopacifica lateropunctata (Dendy, 1901) comb. nov.

Geoplana latero-punctata n. sp. Dendy, 1901: 232. Whangamarino, Chathan Island (ca. 750 km E of Christchurch) / New Zealand.

Geoplana lateropunctata : Dendy, 1904: 307.

Australopacifica latissima (Dendy, 1896) comb. nov.

Geoplana latissima n. sp. Dendy, 1896 a: 211-212. Mt. Somers, S. Island / New Zealand.

Geoplana latissima : von Graff, 1899: 348-349.

Geoplana latissima : Dendy, 1904: 308.

Geoplana latissima : Fyfe, 1947 : 519-520.

Artioposthia latissima : Fyfe, 1947 : 520.

Note: Fyfe (1947, pp. 519-520), who examined Dendy's samples (British Museum collection), considered that *Geoplana latissima* is a juvenile form of *Artioposthia australis* (Dendy, 1896). Since she did not examine the sexual specimen of the former, we defer the taxonomic conclusion. See *Artioposthia australis* (Dendy, 1896).

Australopacifica leichhardtiana (Schröder, 1924) comb. nov.

Geoplana leichhardtiana n. sp. Schröder, 1924 : 260, 275, 297 ; taf. I, fig. 5 a-e (DVB, DVH, AE).

Yaté and Wald near Prony / New Caledonia (Neu-Caledonien).

Australopacifica leuckarti (von Graff, 1899) comb. nov.

Geoplana leuckarti nom. nud. von Graff, 1897 a : 113-114. Nord-Celebes (Sulawesi) / Indonesia.

Geoplana leuckarti n. sp. von Graff, 1899 : 348 ; taf. XIX, figs. 4-5 (DB, CP in color). Bone-Stock (Nord-Celebes), Sulawesi / Indonesia.

Australopacifica lucasi (Dendy, 1891) comb. nov.

Geoplana lucasi n. sp. Dendy, 1891 : 74. Croajingolong (alt. 1200 m), Victoria / Australia.

Geoplana lucasi : Spencer, 1891 : 91.

Geoplana lucasi : Dendy, 1892 d : 43.

Geoplana lucasi : Dendy, 1892 e : 26-27, 40-41 ; pl. 4, fig. 4 (DB). Mt. Wellington, Gippsland, Victoria / Australia.

Geoplana lucasi : Dendy, 1894 a : 180-181. Lake St. Clair, Tasmania / Australia.

Geoplana Lucasi : Dendy, 1894 b : 421. Victoria / Australia.

Geoplana lucasi : von Graff, 1899 : 350-351 ; taf. IV, fig. 18 (CP in color).

Geoplana Dovei : Steel, 1900 a : 573. nom. nud.

Geoplana Dovei : Steel, 1900 b : 619-623, 631 ; pl. XLI, fig. 1 (DB). Table Cape, Tasmania / Australia.

Geoplana Lucasi : Steel, 1900 b : 619-620.

Geoplana lucasi : Smith & Convey, 1970 : 100.

Geoplana lucasi : Winsor, 1973 a : 265.

Geoplana lucasi : Winsor, 1977 : 40, 142, 144. East Highlands, Macedon Ranges, Victoria / Australia.

Note: Steel (1900 a, b) considered that Dendy's (1894 a) record of *Geoplana lucasi* from Tasmania should be separated from Victorian animals. He gave a new name *Geoplana Dovei* Steel, 1900, for Tasmanian animals.

Australopacifica lyra (Steel, 1900) comb. nov.

Geoplana lyra n. sp. Steel, 1900 b : 619, 623-624, 631 ; pls. XLI, fig. 2 (DB). Table Cape, Tasmania / Australia.

Australopacifica maculosa (Whitehouse, 1919) comb. nov.

Pelmatoplana maculosa n. sp. Whitehouse, 1919 : 38-39 ; pl. XI, figs. 37-38 (DVH). Pattipola, Ceylon / Sri Lanka.

Australopacifica martensi (von Graff, 1899) comb. nov.

Pelmatoplana martensi nom. nud. von Graff, 1897 a : 113-114. Süd-Celebes, Sulawesi / Indonesia.

Pelmatoplana martensi n. sp. von Graff, 1899 : 393-394 ; taf. XIX, figs. 15-16 (DB, VH in color). Loka and Lompobatang (alt. 2000 m), Süd-Celebes, Sulawesi / Indonesia.

Australopacifica mediolineata (Dendy, 1891) comb. nov.

Geoplana mediolineata n. sp. Dendy, 1891: 66, 76-77; pl. 7, figs. 1-3 a (DB, DH). Macedon, Warburton, Walhalla, Victoria / Australia.

Geoplana mediolineata: Spencer, 1891: 84-86, 91, 93; pl. XII, figs. 15, 15 a (DB). Marysville and Yarraquelle, Victoria / Australia.

Geoplana mediolineata: Dendy, 1892 b: 41.

Geoplana mediolineata: Dendy, 1892 e: 26-27, 32-33. Crydon and Creswick, Victoria / Australia.

Geoplana mediolineata: Steel, 1897 a: 106, 111.

Geoplana mediolineata: von Graff, 1899: 371-372; taf. V, fig. 10 (DH, AE in color). Victoria / Australia.

Geoplana mediolineata: Steel, 1900 a: 577-580; pl. XXXIV, figs. 4-5 (DH, CP).

Geoplana mediolineata var. *simularis* n. var. Steel, 1900 a: 577-580; pl. XXXIV, fig. 6 (CP). Near Adelaide, South Australia; Armadale, Darling Ranges, Western Australia / Australia.

Geoplana mediolineata: Steel, 1900 b: 624.

Geoplana mediolineata var. *simularis*: Dendy, 1915: 695.

Geoplana mediolineata: Smith & Convey, 1970: 100.

Geoplana mediolineata: Winsor, 1973 c: 441. Victoria / Australia.

Geoplana mediolineata: Winsor, 1977: 139-145. Otway Region, East Highlands and Macedon Ranges, Victoria / Australia.

Australopacifica melanochroa (Steel, 1900) comb. nov.

Geoplana melanochroa n. sp. Steel, 1900 a: 566, 580; pl. XXXIV, fig. 3 (DB). Armadale, Darling Ranges, Western Australia / Australia.

Australopacifica meridionalis von Graff, 1899) comb. nov.

Geoplana subquadrangleata variety: Dendy, 1895 a: 398. Bluff, S. Island / New Zealand. Misidentification.

Geoplana subquadrangleata variety; Dendy, 1895 c: 188. Bluff, S. Island / New Zealand. Misidentification.

Geoplana meridionalis n. sp. von Graff, 1899: 377. Bluff, S. Island / New Zealand.

Geoplana meridionalis: Dendy, 1904: 307.

Australopacifica metschnikoffi (von Graff, 1899) comb. nov.

Geoplana metschnikoffi. nom. nud. von Graff, 1897 a: 113-114. North Celebes / Indonesia.

Geoplana metschnikoffi n. sp. von Graff, 1899: 360; taf. XIX, figs. 1-3 (DH, CP in color). Bone-Thale, North Celebes (Sulawesi) / Indonesia.

Australopacifica minor (Dendy, 1892) comb. nov.

Geoplana minor n. sp. Dendy, 1892 c: 125-126. Burnett River and Cooran, Queensland / Australia.

Geoplana minor: von Graff, 1899: 364-365. Australia.

Geoplana minor: Smith & Convey, 1970: 100.

Australopacifica m'mahoni (Dendy, 1891) comb. nov.

Geoplana m'mahoni n. sp. Dendy, 1891: 66, 74-75. M'Mahon's Creek, Upper Yarra, Victoria / Australia.

Geoplana m'mahoni: Spencer, 1891: 85, 91. Near Marysville, Victoria / Australia.

Geoplana m'mahoni: Dendy, 1892 e: 26.

Geoplana m'mahoni: Dendy, 1892 e: 27, 33, 41; pl. 4, fig. 1 (DB). Fern Tree Gully, Victoria /

Australia.

Geoplana m'mahoni: Dendy, 1892 b : 41.

Geoplana m'mahoni: Smith & Convey, 1970 : 101.

Geoplana macmahoni: von Graff, 1899 : 378-379 ; taf. VI, figs. 36-37 (CP in color). Australia.

Geoplana m'mahoni: Winsor, 1973 c : 441. Victoria / Australia.

Geoplana m'mahoni: Winsor, 1977 : 139-140, 143-145. Otway Region and East Highlands, Victoria / Australia.

Note: Dendy's (1891) original specific name was "m'mahoni". It should be spelled as "mmahoni". Cf. ICZN (3rd Ed., 1985, Art. 32 (d), (i), (2)).

Australopacifica moebiusi (von Graff, 1899) comb. nov.

Geoplana moebiusi n. sp. von Graff, 1899 : 386 ; taf. II, figs. 18-21 (DVB, VH in color). Auckland-Inseln (Auckland Islands) / New Zealand.

Geoplana moebiusi: Dendy, 1904 : 307.

Geoplana moebiusi: Dendy, 1909 : 672.

Geoplana moebiusi: Fyfe, 1953 : 5.

Australopacifica mortoni (Dendy, 1894) comb. nov.

Geoplana mortoni n. sp. Dendy, 1894 a : 181-182. Parattah, Tasmania / Australia.

Geoplana Mortoni n. sp. Dendy, 1894 b : 421.

Geoplana mortoni: von Graff, 1899 : 349 ; taf. II, figs. 31-32 (VB, CP in color). Tasmania / Australia.

Geoplana Mortoni: Steel, 1900 a : 580 ; pl. XXXIV, fig. 10 (CP).

Geoplana Mortoni: Steel, 1900 b : 619, 621, 628-629, 631 ; pl. LXI, figs. 6-7 (DB). Trevallyn-Hills, near Launceston, and Table Cape, Tasmania / Australia.

Geoplana mortoni: Dendy, 1915 : 701. Near Great Lake, Tasmania / Australia.

Geoplana mortoni: von Graff, 1916 : 3157.

Geoplana mortoni: Smith & Convey, 1970 : 101.

Australopacifica muelleriana (Schröder, 1924) comb. nov.

Geoplana mülleriana n. sp. Schröder, 1924 : 260, 276, 297 ; taf. III, fig. 16 a-b (DB, CP). Canala / New Caledonia (Neu-Caledonien).

Australopacifica nichollsi (Dendy, 1915) comb. nov.

Geoplana nichollsi n. sp. Dendy, 1915 : 699-701. Maria Island and the Great Lake, Tasmania / Australia.

Note: See *Artioposthia diemenensis* (Dendy, 1904).

Australopacifica ornata (Fletcher et Hamilton, 1888) comb. nov.

Geoplana ornata n. sp. Fletcher & Hamilton, 1888 : 368-369, 374 ; pl. V, fig. 7 (DB). Hartley Vale, New South Wales / Australia.

Geoplana ornata: von Graff, 1899 : 359. Australia.

Australopacifica parva (Steel, 1897) comb. nov.

Geoplana parva n. sp. Steel, 1897 a : 113-114, 119 ; pl. vi, fig. 1 (DVB). The Nerang River, South Queensland / Australia.

Geoplana parva: Steel, 1897 b : 121.

Australopacifica ponderosa (Steel, 1897) comb. nov.

Geoplana ponderosa n. sp. Steel, 1897 a : 106-108, 119 ; pl. vi, fig. 3 (DB). Bundanoon, New South Wales / Australia.

Australopacifica pulverulenta (von Graff, 1899) comb. nov.

Geoplana pulverulenta n. sp. von Graff, 1899 : 350 ; taf. III, fig. 35 (DB in color). Philippines.
Geoplana pulverulenta : Tu, 1940 : 220, 247. Philippines.

Australopacifica purpurea (Dendy, 1895) comb. nov.

Geoplana purpurea n. sp. Dendy, 1895 a : 399. Ashburton, S. Island / New Zealand.

Geoplana purpurea n. sp. Dendy, 1895 c : 182. Ashburton, S. Island / New Zealand.

Geoplana purpurea : von Graff, 1899 : 365-366. Asburton and Springburn, Mt. Somers, S. Island / New Zealand.

Geoplana purpurea : Dendy, 1904 : 307.

Coenoplana purpurea : Jones, 1987 : 57.

Coenoplana purpurea : Jones, 1988 : 515 : Hothouses in Liverpool, England / U.K.

Caenoplana (olim *Geoplana*) *purpurea* : Ogren, 1989 : 141.

Caenoplana purpurea : Ogren & Kawakatsu, 1989 a : 56.

Note: *Geoplana purpurea* Dendy, 1895, probably belongs to *Caenoplana* on basis of external similarities to *Caenoplana coerulea* Moseley, 1877.

Australopacifica quadrangulata (Dendy, 1891) comb. nov.

Geoplana quadrangulata n. sp. Dendy, 1891 : 66, 77, 80 ; pl. 7, figs. 6-6 a (DVB). Macedon, Victoria / Australia.

Geoplana quadrangulata : Spencer, 1891 : 91.

Geoplana quadrangulata : Dendy, 1892 e : 26-27, 35. Macedon and Creswick, Victoria / Australia.

Geoplana quadrangulata : Dendy, 1894 a : 180.

Geoplana quadrangulata, var. : Dendy, 1895 b : 732. Blackheath, Blue Mountains, New South Wales / Australia.

Geoplana quadrangulata : von Graff, 1899 : 368-369 ; taf. IV, figs. 15-17 (CP in color).

Geoplana quadrangulata : Dendy, 1915 : 700, 702.

Geoplana quadrangulata : Fyfe, 1953 : 12.

Geoplana quadrangulata : Smith & Convey, 1970 : 101.

Geoplana quadrangulata : Winsor, 1973 c : 441. Victoria / Australia.

Geoplana quadrangulata : Winsor, 1977 : 140-141, 143-145. Otway Region and Macedon Range, Victoria / Australia.

Australopacifica quinque-lineata (Fletcher et Hamilton, 1888) comb. nov.

Geoplana quinque-lineata n. sp. Fletcher et Hamilton, 1888 : 359, 366-367, 374 ; pl. V, figs. 4-5 (DB), 15-16 (AE). Parramatta, Spring Wood, Capertea, Gunta Wang, Beaudesert Hills, and Biraganbil Hills, New South Wales ; Sandhurst, Victoria / Australia.

Geoplana quinque-lineata : Dendy, 1891 : 65, 71-72. Otway Forest, Victoria / Australia.

Geoplana quinque-lineata : Spencer, 1891 : 91.

Geoplana quinque-lineata : Bergendal, 1892 : 7.

Geoplana quinque-lineata : Dendy, 1892 b : 41.

Geoplana quinque-lineata : Dendy, 1892 e : 26-27, 32. Ballarat, Creswick and Heidelberg, Victoria / Australia.

Geoplana quinque-lineata : Dendy, 1894 a : 179, 185. Mount Lofty, South Australia / Australia.

Geoplana quinque-lineata : Dendy, 1894 b : 422. Mt. Lofty, South Australia / Australia.

Geoplana quinque-lineata : Dendy, 1895 b : 731. Wentworth Falls and Blackheath, Blue Mountains, New South Wales / Australia.

Geoplana quinque-lineata : Dendy, 1896 a : 212. Springburn, Mount Somers, S. Island / New

Zealand.

Geoplana quinquelineata : Steel, 1897 a : 109-111, 119.

Geoplana quinquelineata var. *accentuata* n. var. Steel, 1897 a : 110-111, 119 ; pl. vii, figs. 6-7 (DB). Blue Mountain and Bundanoon, New South Wales / Australia.

Geoplana quinquelineata : von Graff, 1899 : 374-375 ; taf. V, figs. 15-16 (CP in color). Australia and New Zealand.

Geoplana quinquelineata : Steel, 1900 a : 567-568, 578-579 : pl. XXXIV, figs. 7-8 (CP). Adelaide, Southern Australia ; Armadale, Darling Ranges, West Australia / Australia.

Geoplana quinquelineata var. *accentuata* : Steel, 1900 a : 578.

Geoplana quinquelineata, var. nov. : Steel, 1900 a : 567-568.

Geoplana quinquelineata : Dendy, 1904 : 307.

Geoplana quinquelineata : Dendy, 1915 : 695, 698-699. Near Great Lake, Tasmania / Australia.

Geoplana quinquelineata : von Graff, 1916 : 3151-3152.

Geoplana quinquelineata : Winsor, 1973 c : 94, fig. (DB), 441. Melbourne, Victoria / Australia.

Geoplana quinquelineata : Winsor, 1976 : 15, 61. Mitta Mitta Valley, Victoria / Australia.

Geoplana quinquelineata : Winsor, 1977 : 140-145. Otway Region, Victoria / Australia.

Australopacifica regina (Dendy, 1892) comb. nov.

Geoplana regina n. sp. Dendy, 1892 c : 126-127 ; pl. 11, figs. 1, 1 a-b (DB, CP). Gympie (Mary River), Queensland / Australia.

Artioposthia regina : von Graff, 1899 : 407-408. Australia.

Geoplana regina : Smith & Convey, 1970 : 101.

Australopacifica robusta (Steel, 1897) comb. nov.

Geoplana robusta n. sp. Steel, 1897 a : 108-109, 119 ; pl. vi, fig. 4 (DB). Bundanoon, New South Wales / Australia.

Geoplana robusta : Winsor, 1977 : 140.

Australopacifica rotunda (Whitehouse, 1919) comb. nov.

Pelmatoplana rotunda n. sp. Whitehouse, 1919 : 35-36 ; pl. XI, fig. 27 (DB). Bagarkote, Ku-maon, Western Himalayas (alt. 915 m) / India.

Australopacifica rouxiiana (Schröder, 1924) comb. nov.

Geoplana rouxiiana n. sp. Schröder, 1924 : 260-261, 296 ; taf. I, fig. 2 a-d (DB, DH, AE). Lifou, Képénéé, Loyalty islands (Loyalty-Inseln) / France.

Australopacifica sanguinea (Moseley, 1877) comb. nov.

Caenoplana sanguinea n. sp. Moseley, 1877 a : 285. Parramatta, near Sydney, New South Wales / Australia.

Coenoplana sanguinea : Moseley, 1877 a : 280, 289. Spelling error.

Rhynchodemus sp. : Moseley, 1877 b : 11. See also von Graff, 1899 : 363.

Geoplana sanguinea : Fletcher & Hamilton, 1888 : 363.

Geoplana rubicunda n. sp. Fletcher & Hamilton, 1888 : 353, 355, 370-371. Springwood, Sydney, New South Wales / Australia.

Geoplana sanguinea : Dendy, 1892 e : 25-27, 28-29. Castlemaine, Victoria / Australia.

Geoplana (Coenoplana) sanguinea : Dendy, 1892 e : 29.

Geoplana rubicunda : Dendy, 1892 e : 29. Syn. of *Geoplana sanguinea* (Moseley, 1877).

Geoplana sanguinea : Dendy, 1895 c : 178-179. Victoria and New South Wales / Australia ; Dunedin, Wellington, Napier, and near Auckland, S. and N. Islands / New Zealand.

Geoplana rubicunda : Dendy, 1895 c : 179. Syn. of *Geoplana sanguinea* (Moseley, 1877).

- Geoplana sanguinea*: Dendy, 1897: 258. Lake Mahina-pua / New Zealand.
- Geoplana sanguinea*: Steel, 1897 a: 109.
- Geoplana sanguinea*: von Graff, 1899: 363-364. Victoria and New South Wales / Australia; New Zealand.
- Geoplana sanguinea*: Steel, 1900 a: 569.
- Geoplana sanguinea*: Steel, 1900 b: 619, 629-630. Launceston and Table Cape, Tasmania / Australia.
- Geoplana sanguinea*: Dendy, 1901: 223-224. Near Jackson's, Westland, S. Island / New Zealand.
- Geoplana sanguinea*: von Graff, 1913: 2707.
- Geoplana sanguinea*: von Graff, 1917: 3336.
- Geoplana sanguinea*: Fyfe, 1948: 64-66, fig. 1 (FCA). New South Wales, Victoria and Tasmania / Australia. Syn. *Geoplana rubicunda* Fletcher et Hamilton, 1888; *Geoplana alba* Dendy, 1891.
- Coenoplana sanguinea*: C. G. Froehlich, 1955 a: 200.
- Geoplana sanguinea*: Pope & McMichael, 1961: 304. Sydney, New South Wales / Australia.
- Geoplana sanguinea*: Winsor, 1973 a: 265.
- Geoplana sanguinea*: Winsor, 1973 c: 441. Victoria / Australia.
- Geoplana sanguinea*: Winsor, 1976: 61.
- Geoplana sanguinea*: Winsor, 1977: 139-145. Otway Region, Eastern Highlands and Macedon Ranges, Victoria ; Tasmania / Australia.
- Geoplana sanguinea*: Winsor, 1979: 155, 158, fig. 4 (DB, AE). Royal Botanic Gardens, Melbourne, Victoria / Australia.
- Geoplana rubicunda*: Winsor, 1979: 158.
- Geoplana sanguinea*: Ball & Reynoldson, 1981: 104-105.
- Geoplana sanguinea*: Jones, 1981 b: 837, 841-843.
- Geoplana sanguinea*: Cannon, 1986: 69, fig. (DB).
- Caenoplana sanguinea*: Ogren & Kawakatsu, 1988 c: 100.
- Caenoplana sanguinea*: Winsor, 1990: 29.
- Note: Mr. Winsor (in litt.) will place *Caenoplana sanguinea* Moseley, 1877, into a new genus to be proposed by his Ms. Thus, the species is now tentatively placed in the collective group *Australopacifica* in this Index until his paper is published. See *Caenoplana alba* (Dendy, 1891); *Australopacifica typhlops* (Dendy, 1893).
- Australopacifica sarasiniana* (Schröder, 1924) comb. nov.
- Geoplana sarasiniana* n. sp. Schröder, 1924: 260-263, 296; taf. I, fig. 1 a-e (DB, DH, CP, AE). Mt. Humboldt (alt. 1100 m) and Ngoï-Tal / New Caledonia (Neu-Caledonien).
- Australopacifica scaphoidea* (Steel, 1900) comb. nov.
- Geoplana elegans* n. sp. Steel, 1897 a: 111-114, 119; pl. vi, fig. 2 (DVB). The Nerang River, South Queensland / Australia. [nec *Planaria elegans* Darwin, 1844; *Geoplana elegans* Schultze et Müller, 1857].
- Geoplana scaphoidea* nom. nov. Steel, 1990 a: 567.
- Note: See *Geoplana (Barreirana) elegans* (Darwin, 1844); *Notogynaphallia muelleri* (Diesing, 1861).
- Australopacifica semoniana* (Schröder, 1924) comb. nov.
- Geoplana semoniana* n. sp. Schröder, 1924: 260, 264, 296; taf. I, fig. 3 a-b (DB, AE). Maré, Néetché / Loyalty Islands (Loyalty-Inseln) / France.
- Australopacifica sowerbyi* (von Graff, 1899) comb. nov.

Geoplana sowerbyi n. sp. von Graff, 1899 : 352 ; taf. VI, fig. 31-32 (DB, VH in color). New Caledonia (Nouvelle Calédonie).

Geoplana sowerbyi : Schröder, 1924 : 260, 267-269, 297 ; taf. II, figs. 10 a-k (DB, DVH, CP, AE). Oubache, Hienghène, Mt. Painé / New Caledonia (Neu-Caldonien).

Australopacifica spectabilis (Dendy, 1895) comb. nov.

Geoplana spectabilis n. sp. Dendy, 1895 c : 185-186. Wedestown, near Wellington, N. Island / New Zealand.

Geoplana spectabilis : von Graff, 1899 : 356. New Zealand.

Geoplana spectabilis : Dendy, 1904 : 307.

Australopacifica splendens (Dendy, 1895) comb. nov.

Geoplana splendens n. sp. Dendy, 1895 c : 1895 c : 183-184. Jackson's, the Teremakau River, W of Otira, S. Island / New Zealand.

Geoplana splendens : Dendy, 1895 a : 396.

Geoplana splendens : Gamble, 1896 : 33.

Geoplana splendens : Dendy, 1897 : 263.

Geoplana splendens : von Graff, 1899 : 357. New Zealand.

Geoplana splendens : Dendy, 1904 : 307.

Australopacifica striata Whitehouse, 1919) comb. nov.

Pelmatoplana striata n. sp. Whitehouse, 1919 : 39, pl. XI, figs. 39-41 (DVH, CP). Maddathoray, Travancore / India.

Note : Whitehouse (1919, p. 39) wrote : "No eyes can be distinguished."

Australopacifica subpallida (Hyman, 1939) comb. nov.

Geoplana subpallida n. sp. Hyman, 1939 b : 119-120, figs. 4-5 (DVB, CP). Koolan Mts. (alt. 549 m), Oahu Island, Hawaii / U.S.A.

Geoplana subpalida : Mead, 1963 : 308. Spelling error.

Australopacifica subviridis (Moseley, 1877) comb. nov.

Coenoplana subviridis n. sp. Moseley, 1877 a : 280, 289. Paramatta and Camden, New South Wales / Australia. Spelling error.

Caenoplana subviridis n. sp. Moseley, 1877 a : 285.

Coenoplana subviridis : Fletcher & Hamilton, 1888 : 351, 363.

Geoplana subviridis : Fletcher & Hamilton, 1888 : 363-364 ; pl. V, figs. 2 and 2' (DB, CP). Seven Hills, the Hunter River, Hartley Vale, Mullamuddy, near Mudgee, New South Wales / Australia.

Geoplana subviridis : von Graff, 1899 : 383 ; taf. VI, figs. 38-40 (CP in color). New South Wales / Australia.

Coenoplana subviridis : C.G. Froehrich, 1955 a : 200.

Geoplana subviridis : Winsor, 1973 a : 264-265.

Australopacifica sugdeni (Dendy, 1891) comb. nov.

Geoplana sugdeni n. sp. Dendy, 1891 : 66, 76, 80 ; pl. 7, figs. 12-14 (DB). Macedon, Victoria / Australia.

Geoplana sugdeni : Spencer, 1891 : 91.

Geoplana sugdeni : Dendy, 1892 e : 41.

Geoplana sugdeni : Dendy, 1892 e : 26-27, 32. Creswick, Macedon and Warragul, Victoria / Australia.

Geoplana sugdeni : von Graff, 1899 : 362. Victoria / Australia.

- Geoplana Sugdeni*: Steel, 1900 a : 572.
- Geoplana Sugdeni*: Steel, 1900 b : 619, 630. Table Cape, Tasmania / Australia.
- Geoplana sugdeni*: von Graff, 1917 : 3341.
- Geoplana sugdeni*: Smith & Convey, 1970 : 101.
- Geoplana sugdeni*: Winsor, 1973 c : 441. Victoria / Australia.
- Geoplana sugdeni*: Winsor, 1977 : 140, 141, 143-145. Otway Region, Macedon Range, Victoria and Tasmania / Australia.
- Geoplana sugdeni*: Green, 1984 : 52. Ordnance Point, Tasmania / Australia.
- Australopacifica sulphurea (Fletcher et Hamilton, 1888) comb. nov.**
- Geoplana sulphureus* n. sp. Fletcher & Hamilton, 1888 : 365-366. Mt. Wilson, Hartley Vale, New South Wales / Australia.
- Geoplana sulphureus*: Spencer, 1891 : 85, 89, 91-92 ; pl. 12, fig. 14-14 a (DVB). Mt. Wilson, Hartley Vale, New South Wales ; Ridge between Thompson and Yarra River, Victoria / Australia.
- Geoplana sulphurea*: Dendy, 1892 d : 44.
- Geoplana sulphurea*: Dendy, 1892 e : 26-27, 34. Otway Forest, Croydon, Walhalla, Croajingolong, Fern Tree Gully, and the Upper Wellington, Victoria / Australia.
- Geoplana sulphurea*: Dendy, 1895 a : 399. Albert Park, Auckland, N. Island / New Zealand.
- Geoplana sulphurea*: Dendy, 1895 b : 730-731. Blackheath, the Blue Mountains, New South Wales / Australia.
- Geoplana sulphurea*: Dendy, 1895 c : 183. Albert Park, Auckland, N. Island / New Zealand.
- Geoplana sulphurea*: von Graff, 1899 : 380-381 ; taf. VI, figs. 13-18 (CP in color). New South Wales and Victoria / Australia ; Auckland, N. Island / New Zealand.
- Geoplana sulphurea*: Dendy, 1904 : 307.
- Geoplana sulphurea*: Meixner, 1906 : 666-668.
- Geoplana sulphurea*: von Graff, 1912 : taf. XXXII, figs. 31-36 (CP).
- Geoplana sulphurea*: Winsor, 1973 c : 441. Victoria / Australia.
- Geoplana sulphurea*: Winsor, 1976 : 15, 61 : Mitta Mitta Valley, Victoria / Australia.
- Geoplana sulphurea*: Winsor, 1977 : 139-141, 143-145. Otway Region and East Highlands, Victoria / Australia.
- Australopacifica tasmaniana (Darwin, 1844) comb. nov.**
- Planaria Tasmaniana* n. sp. Darwin, 1844 : 242, 244, 246. Van Diemen's Land, Hobart, Tasmania / Australia.
- Polycelis tasmanica*: Diesing, 1850 : 193. Cf. Ogren & Kawakatsu, 1990 b (p. 80).
- Geoplana Tasmanica*: Stimpson, 1857 : 25.
- Geoplana Tasmaniana*: Schultze & Müller, 1857 : 31.
- Geoplana Tasmaniana*: Schultze, 1857 : 7.
- Geoplana tasmanica*: Diesing, 1861 : 511.
- Geoplana Tasmaniana*: Grube, 1867 : 62.
- Geoplana Tasmaniana*: Moseley, 1877 a : 289.
- Planaria Tasmaniana*: Fletcher & Hamilton, 1888 : 349.
- Geoplana Tasmaniana*: Fletcher & Hamilton, 1888 : 361.
- Geoplana (Planaria) tasmaniana*: Dendy, 1892 f : 369-370, 374.
- Planaria Tasmaniana*: Randolph, 1897 : 369.
- Geoplana tasmaniana*: von Graff, 1899 : 370.

Geoplana Tasmaniana : Steel, 1900 b : 619-620, 624-626, 631 ; pl. XLI, figs. 3-4 (DVB). Trevallyn-Hills, near Launceston, Tasmania / Australia. Syn. *Geoplana balfouri* von Graff, 1899.

Geoplana Tasmaniana var. *flavicincta* n. var. Steel, 1900 b : 626-627, 631 ; pl. XLI, fig. 5 (DB). Trevallyn-Hills, near Launceston, Tasmania / Australia.

Geoplana tasmaniana : Dendy, 1915 : 694, 696-698, 701. Maria Island and Great Lake, Tasmania / Australia. Syn. *Geoplana balfouri* von Graff, 1899.

Note: The animals reported under the name of "Planaria" or "Geoplana" tasmaniana (or Tasmaniana) have been collected various times by native researchers (see the list), but have not been redescribed in detail. It is unfortunate that after 147 years there is no published account of the copulatory apparatus of Darwin's original species. In his correspondence to the writers, Mr. Winsor (in litt.) suggests that the Darwin's species very likely belongs in the genus *Artioposthia*. Thus, it may be that in a few years with his efforts, we may know the real taxonomic position of this very old species.

At this time it would be good to know if the types and specimens of Darwin's (1844) species still exist in some museums. None are listed in the Catalogue of triclad types in the National Museum of Victoria, Australia, by Smith & Convey (1970). Perhaps in the future more efforts will be expanded toward redescribing these old Australian species and making more accurate classifications. See *Australopacifica balfouri* (von Graff, 1899).

Australopacifica tenuis (Dendy, 1895) comb. nov.

Geoplana tenuis n. sp. Dendy, 1895 c : 188-189. Nelson, S. Island / New Zealand.

Geoplana tenuis : von Graff, 1899 : 377. S. Island / New Zealand.

Geoplana tenuis : Dendy, 1904 : 307.

Australopacifica testacea (Hutton, 1880) comb. nov.

Rhynchodemus testaceus n. sp. Hutton, 1880 : 277. Dunedin and Wellington, S. and N. Islands / New Zealand.

Geoplana sanguinea : Dendy, 1895 a : 395. Misidentification.

Geoplana sanguinea : Dendy, 1895 b : 730. Misidentification.

Geoplana sanguinea : Dendy, 1895 c : 178-179. Misidentification.

Rhynchodemus testaceus : Dendy, 1895 d : 113-114.

Coenoplana sanguinea : Dendy, 1895 d : 113-114. Misidentification.

Geoplana testacea : von Graff, 1899 : 353-354 ; taf. II, figs. 12-16 (DB, CP, AE in color).

Geoplana testacea : Dendy, 1904 : 306.

Geoplana testacea : Ogren & Kawakatsu, 1988 a : 59, 81.

Australopacifica treubi (von Graff, 1899) comb. nov.

Pelmatoplana treubi n. sp. von Graff, 1899 : 392-393 ; taf. V, figs. 13-14 (CP in color). Buitenzorg, Java / Indonesia.

Pelmatoplana treubi : E. M. Froehlich, 1978 : 31.

Australopacifica trifasciata (Steel, 1897) comb. nov.

Geoplana trifasciata n. sp. Steel, 1897 b : 120-122 ; pl. vii, fig. 9 (DB). The Navua River, Viti Levu / Fiji.

Geoplana trifasciata : Steel, 1900 a : 569.

Australopacifica typhlops (Dendy, 1894) comb. nov.

Geoplana alba : Dendy, 1892 f : 370-371. Silver Falls, Mt. Wellington, Tasmania / Australia. Misidentification.

Geoplana alba : Dendy, 1894 c : 184. Misidentification.

Geoplana typhlops n. sp. Dendy, 1894 c : 184-185. Mt. Wellington, Hobart and Parattah, Tasmania / Australia.

Geoplana typhlops : Dendy, 1894 b : 421-423. Tasmania / Australia.

Geoplana typhlops : Dendy, 1895 d : 116. Cf. von Graff (1899, p. 365).

Geoplana typhlops : von Graff, 1899 : 365. Tasmania / Australia.

Geoplana typhlops (= *G. alba*) : Steel, 1900 b : 629-630.

Geoplana typhlops : Dendy, 1915 : 701. Hobart and Parattah; Maria Island and the Great Lake, Tasmania / Australia. Syn. *Geoplana alba* Dendy, 1891.

Geoplana typhlops : von Graff, 1917 : 3338.

Geoplana typhlops : Smith & Convey, 1970 : 102.

Geoplana typhlops : Winsor, 1976 : 15, 61. Mitta Mitta Valley, Victoria / Australia.

Geoplana typhlops : Winsor, 1979 : 158.

Geoplana typhlops : Winsor, 1980 : 195, fig. 2 (DB). Hobart, Tasmania / Australia.

Note: See *Caenoplana alba* (Dendy, 1891); *Australopacifica sanguinea* (Moseley, 1877).

Australopacifica variegata (Fletcher et Hamilton, 1888) comb. nov.

Geoplana variegata n. sp. Fletcher & Hamilton, 1888 : 364-365, 374 ; pl. V, figs. 3-3' (DHB, CP).

Cumberland, Springwood, Mt. Wilson, Hartley Vale, Capertee, and Burrawang, New South Wales / Australia.

Geoplana variegata : Dendy, 1894 a : 183-184. Bedlam Heights, Tasmania / Australia.

Geoplana variegata : Dendy, 1894 b : 421. Queensland and New South Wales / Australia.

Geoplana variegata : Dendy, 1895 b : 731. Wentworth Falls and Blackheath, Blue Mountains, New South Wales / Australia.

Geoplana variegata : von Graff, 1899 : 382-383 ; taf. VI, fig. 41 (CP in color). New South Wales and Tasmania / Australia.

Geoplana variegata : Steel, 1900 b : 619.

Geoplana variegata : Winsor, 1973 a : 264-265, fig. 1 (CP). Gippsland, Victoria / Australia.

Geoplana variegata : Winsor, 1977 : 140, 144. East Highlands, Victoria / Australia.

Australopacifica ventropunctata (Dendy, 1892) comb. nov.

Geoplana ventropunctata n. sp. Dendy, 1892 e : 26-27, 35-36, 41 ; pl. 4, figs. 2-2 a (DB). Fern Tree Gully, Victoria / Australia.

Geoplana ventropunctata : Dendy, 1892 b : 41.

Geoplana ventropunctata : von Graff, 1899 : 358-359 ; taf. IV, fig. 34 (CP in color).

Geoplana ventropunctata : Dendy, 1915 : 702.

Geoplana ventropunctata : Marcus, 1951 : 100, 130.

Geoplana ventropunctata : Fyfe, 1953 : 12.

Geoplana ventropunctata : Smith & Convey, 1970 : 102.

Geoplana ventropunctata : Winsor, 1973 c : 441. Victoria / Australia.

Geoplana ventropunctata : Winsor, 1977 : 144. East Highlands, Macedon Ranges, Victoria / Australia.

Australopacifica virgata (Fletcher et Hamilton, 1888) comb. nov.

Geoplana virgata n. sp. Fletcher & Hamilton, 1888 : 369. Haltley Vale, New South Wales / Australia.

Geoplana virgata : von Graff, 1899 : 359. Australia.

Australopacifica viridis (Fletcher et Hamilton, 1888) comb. nov.

Geoplana viridis n. sp. Fletcher & Hamilton, 1888 : 354, 367-368, 374 ; pl. V, figs. 6, 13-14 (DB),

AE). Guntawang (the Gudgeong River), New South Wales / Australia.

Geoplana viridis : von Graff, 1899 : 351-352.

Australopacifica walhalla (Dendy, 1891) comb. nov.

Geoplana walhalla n. sp. Dendy, 1891 : 66, 78. Walhalla, Victoria / Australia.

Geoplana walhalla : Spencer, 1891 : 85, 88, 91-92 ; pl. 12, figs. 11-13 (DVB). Walhalla, Victoria / Australia.

Geoplana walhalla : Dendy, 1892 e : 26-27, 31. Marysville and the Yarra, Victoria / Australia.

Geoplana walhalla : Dendy, 1892 f : 371-372. Silver Falls, Mt. Wellington, Tasmania / Australia.

Geoplana Walhalla : Dendy, 1894 b : 421. Victoria and Tasmania / Australia.

Geoplana walhalla : von Graff, 1899 : 360-361. Australia.

Geoplana walhalla : Steel, 1900 b : 619.

Geoplana walhalla : Smith & Convey, 1970 : 102.

Geoplana walhalla : Winsor, 1973 c : 441. Victoria / Australia.

Geoplana walhalla : Winsor, 1977 : 140, 144. East Highlands, Victoria and Tasmania / Australia.

Caenoplana walhalla : Ogren, 1989 : 141.

Australopacifica warragulensis (von Graff, 1899) comb. nov.

Geoplana m'mahoni variety. Dendy, 1892 e : 27, 33. Between Lilydale and Seville, Warragul, Victoria / Australia.

Geoplana warragulensis n. sp. von Graff, 1899 : 379 ; taf. VI, figs. 9-10 (DH in color). Victoria / Australia.

Geoplana warregulensis : von Linden, 1900 : 559. Spelling error.

Geoplana warrugulensis : Winsor, 1973 c : 441. Victoria / Australia. Spelling error.

Geoplana warragulensis : Winsor, 1877 : 140.

Australopacifica wellingtoni (Dendy, 1892) comb. nov.

Geoplana quadrangulata : Dendy, 1892 d : 43. Upper Wellington River, Victoria / Australia. Misidentification.

Geoplana quadrangulata var. *wellingtoni* n. var. Dendy, 1892 e : 26-27, 35-36. Mt. Wellington, Victoria / Australia.

Geoplana quadrangulata var. *wellingtoni* : Dendy, 1892 b : 41.

Geoplana wellingtoni : von Graff, 1899 : 369-370 ; taf. IV, figs. 36-38 (CP in color). Victoria and Tasmania / Australia.

Geoplana Wellingtoni : Steel, 1900 b : 619.

Geoplana quadrangulata var. *wellingtoni* : Dendy, 1915 : 702.

Geoplana wellingtoni : Marcus, 1951 : 100, 130.

Geoplana quadrangulata var. *wellingtoni* : Smith & Convey, 1970 : 101.

Geoplana wellingtoni : Winsor, 1976 : 61.

Australopacifica willeyi (Busson, 1903) comb. nov.

Pelmatoplana willeyi n. sp. Busson, 1903 : 375-404, fig. 1 (FCA), 420 ; taf. I, figs. 1-7 (DVB, CP, HI, FCA). Lifu, Loyalty Island (Îles Loyauté) / Loyalties (France).

Pelmatoplana willeyi : von Graff, 1915 : 3039.

Pelmatoplana willeyi : von Graff, 1917 : taf. XLVII, fig. 3 (FGO), LVII, figs. 1-2 (FCA).

Pelmatoplana willeyi : Meixner, 1928 : 592, 600.

Pelmatoplana willeyi : de Beauchamp, 1929 : 8.

Pelmatopla *willeyi*: de Beauchamp, 1930 a : 79.

Pelmatopla *willeyi*: de Beauchamp, 1930 b : 698.

Pelmatopla *willeyi*: Marcus, 1951 : 78-79, 123.

Pelmatopla *willeyi*: Winsor, 1990 : 20.

Note: Judging from the internal features of musculature and copulatory apparatus of *Pelmatopla* *willeyi* Busson, 1903, the species should be placed in the same genus as that of *Caenopla* *sanguinea* Moseley, 1877. The latter will be placed in a new genus to be proposed by Winsor (Ms., in litt). Thus, the former is now tentatively placed in the collective group *Australopacifica* in this Index until Mr. Winsor's paper is published.

Australopacifica *zebra* (Schröder, 1924) comb. nov.

Geoplana *zebra* n. sp. Schröder, 1924 : 260, 265, 296; taf. I, figs. 4 a-c (DVB, CP). Mt. Canala / New Caledonia (Neu-Caledonien).

Genus *Caenopla* Moseley, 1877

Caenopla n. g. Moseley, 1877 a : 285.

Type species: *Caenopla* *coerulea* Moseley, 1877.

Syn. *Geoplana* (in part): von Graff, 1896 a : 64.

Literature: Moseley, 1877 a : 285; C. G. Froehlich, 1955 a : 200, 246; Ogren & Kawakatsu, 1988 b : 85-86; Ogren & Kawakatsu, 1988 c : 100-101.

Caenopla *alba* (Dendy, 1891)

Geoplana *alba* n. sp. Dendy, 1891 : 66, 75, 80; pl. 7, figs. 10-11 (DB). M'Mahon's Creek, Warragul, Macedon, Croajingolong, Victoria / Australia. [nec *Geoplana* *alba* Dendy, 1892, from Tasmania (= *Geoplana* *typhlops* Dendy, 1893)].

Geoplana *alba*: Spencer, 1891 : 85, 88-89, 91, 93; pl. 12, figs. 16-17 (DB). Macedon to the E of Mt. Ellery, New South Wales / Australia.

Geoplana *alba* var. *roseolineata* n. var. Dendy, 1892 a : 36-37. Korumburra to Loch, South Gippsland, Victoria / Australia. Syn. of *Geoplana* *sanguinea* var. *alba* (Dendy, 1891).

Geoplana *alba*: Dendy, 1892 e : 26-29. Cryodon, Fern-Tree Gully, Ballart and the Upper Wellington River, Victoria / Australia.

Geoplana *alba*: Dendy, 1892 b : 41-42, 45; pl. 5, figs. 4-5 (HI).

Geoplana *alba*: Gamble, 1896 : 38.

Geoplana *sanguinea* (in part): von Graff, 1899 : 363-364. Australia; New Zealand.

Geoplana *alba*: Smith & Convey, 1970 : 98.

Geoplana *alba* var. *roseolineata*: Smith & Convey, 1970 : 98.

Geoplana *alba*: Winsor, 1979 : 158.

Geoplana *sanguinea* var. *alba*: Ball & Reynoldson, 1981 : 104-105, fig. 30 (DB). Tresco, Isles of Scilly / U. K.

Geoplana *sanguinea* var. *alba*: Jones, 1981 b : 837-843, figs. 1-3 (DB, FGO, FCA). Rowesfield, Tresco, Isles of Scilly / U. K.

Geoplana *alba*: Jones, 1981 b : 837-838, 841-843.

Geoplana *sanguinea* var. *alba*: O'Connell, O'Connell & Jones, 1983 : 95. Marlay, Rathfarham, Dublin, N. Ireland / U. K.

Geoplana *sanguinea*: Cotton, 1985 : 546. N. Ireland / U. K.

Geoplana *sanguinea*: Anderson, 1986 : 141-142, 145. Belfast (Antrim and Down), Dublin, West

Mayo, N. Ireland / U. K.

Coenoplana sanguinea : Jones, 1988 : 513-514, fig. 4 (a map showing the geographical distribution in the British Isles). N. Ireland ; Isles of Scilly, Isle of Man, and Dorset, England / U. K.

Caenoplana alba : Ogren & Kawakatsu, 1988 c : 100.

Caenoplana sanguinea alba : Ogren & Kawakatsu, 1988 c : 100.

Note: See *Australopacifica sanguinea* (Moseley, 1877) ; *Australopacifica typhlops* (Dendy, 1893).

Caenoplana chapmani Ogren et Kawakatsu, 1988

Caenoplana chapmani n. sp. Ogren & Kawakatsu, 1988 c : 94-101, figs. 1-5 (DVB, DH, AE, FCA, PCA, maps showing the location of the type locality). The Bone Wells passage, "Tranquility" in Selminum Tem Cave, Mt. Aiyang, 45 km SWS of Telefomin, the highlands of Papua New Guinea / Papua New Guinea.

Caenoplana chapmani : Ogren, 1990 : 141.

Caenoplana chapmani : Winsor, 1990 : 29.

Caenoplana coerulea Moseley, 1877

The species is now classified into the following two subspecies:

Caenoplana coerulea coerulea Moseley, 1877. The nominate subspecies is recorded from south-eastern parts of Australia and New Zealand.

Caenoplana coerulea vaga (Hyman, 1943). This subspecies is recorded from California and Texas in the United States as an exotic species ; a record from Georgia is uncertain.

Caenoplana coerulea coerulea Moseley, 1877

Caenoplana coerulea n. sp. Moseley, 1877 a : 285. Parramatta, near Sydney, New South Wales / Australia.

Caenoplana coerulea : Moseley, 1877 a : 280, 289. Spelling error.

Rhynchodemus sp. : Moseley, 1877 b : 11. See also von Graff, 1899 : 341.

Coenoplana coerulea : Fletcher & Hamilton, 1888 : 351.

Geoplana caerulea : Fletcher & Hamilton, 1888 : 353, 361-363. Sydney, Parramatta, Ryde, Springwood, Mt. Wilson, and the Hunter River, New South Wales ; Cairns, North Queensland / Australia. Spelling error.

Geoplana coerulea : Fletcher & Hamilton, 1888 : 374 ; pl. V, fig. 1 (DB).

Geoplana coerulea : Dendy, 1891 : 65, 70-71. Croajingolong, Victoria / Australia.

Geoplana cerulea : Spencer, 1891 : 91. Spelling error.

Geoplana coerulea : Dendy, 1892 b : 41-43, 45 ; pl. 5, figs. 1-3 (AE, HI).

Geoplana coerulea : Dendy, 1892 e : 26-27, 29-30 ; pl. 4, fig. 7 (DB). Toorak, Melbourne, Victoria / Australia.

Geoplana coerulea : Dendy, 1892 c : 123-124. Gympie (Marry River), Burnett River and Cooran, Queensland / Australia.

Geoplana coerulea : Hallez, 1893 : 113. Cited from von Graff, 1899 : 341.

Geoplana coerulea var. : Dendy, 1895 a : 399. "Blue-tipped" variety. New Zealand.

Geoplana coerulea : Dendy, 1895 b : 730. Blackheath and Wentworth Falls, Blue Mountains, New South Wales / Australia.

Geoplana coerulea var. : Dendy, 1895 c : 181-182. Sydney, New South Wales / Australia ; Albert Park, Auckland, N. Island / New Zealand.

Geoplana coerulea : Dendy, 1895 d : 118. See also von Graff, 1899 : 341.

Geoplana caerulea : Dendy, 1895 d : 118. Spelling error.

Geoplana coerulea: von Graff, 1899: 341-342; taf. XXVII, fig. 3 (HI). Australia and New Zealand.

Geoplana coerulea: Gamble, 1896: 33, 37.

Geoplana coerulea: Steel, 1900 a: 572.

Geoplana coerulea: von Graff, 1913: 2707.

Geoplana coerulea: von Graff, 1914: 2911, 2954.

Coenoplana caerulea: Wood, 1926: 609. Spelling error.

Geoplana caerulea: Wood 1926: 609, fig. 1 (DH, AE). Barrington Tops, the Mount Royal Range, 257 km N of Sydney, New South Wales / Australia. Spelling error.

Geoplana caerulea var. *typica* n. var. Wood, 1926: 609. Spelling error.

Geoplana caerulea: Pope, 1949: The second half page of the leaflet (without pagination), fig. (DB). Sydney, New South Wales / Australia. Spelling error.

Coenoplana caerulea: C. G. Froehlich, 1955 a: 200.

Geoplana caerulea: Pope & McMichael, 1961: 304. Sydney, New South Wales / Australia. Spelling error.

Geoplana caerulea: Winsor, 1977: 144-145. Eastern Highlands, Victoria / Australia. Spelling error.

Geoplana caerulea: Winsor, 1979: 155, 157-158, fig. 3 A-C (DB, DH, CP). Royal Botanic Gardens, Melbourne, Victoria / Australia. Spelling error.

Geoplana caerulea: Winsor, 1980: 194-195, fig. 1 (DB). Townsville, Queensland / Australia. Spelling error.

Caenoplana caerulea: Ogren & Kawakatsu, 1988 b: 51, 85-86.

Caenoplana caerulea: Ogren & Kawakatsu, 1988 c: 100.

Caenoplana caerulea: Ogren, 1989: 135-138, 140, fig. 8 (HI), 141-142. Australia (British Museum collection).

Caenoplana caerulea caerulea: Ogren, 1989: 142.

Geoplana caerulea: Ogren, 1989: 136-137, 139, 141-142.

Geoplana caerulea var. *typica* (sic): Ogren, 1989: 141.

Caenoplana caerulea caerulea: Ogren, 1990 a: 23.

Caenoplana caerulea: Winsor, 1990: 29.

Caenoplana caerulea: Ogren & Darlington, 1991: 227.

Caenoplana caerulea vaga (Hyman, 1943)

Geoplana vaga n. sp. Hyman, 1943: 3-5 (DV, DH, FCA), 20. Pasadena, Berkeley, California / U. S. A.

Geoplana vaga: Hyman, 1954: 14.

Geoplana vaga: C. G. Froehlich, 1967: 156.

Geoplana vaga: Olewine, 1972: 88. Statesboro, Bulloch County, Georgia / U. S. U.

Geoplana vaga: Barnwell, 1978: 151-152. San Antonio, Texas / U. S. A.

Geoplana vaga: Mead, 1979: 74.

Geoplana vaga: Daly & Darlington, 1981: 83.

Caenoplana caerulea vaga: Ogren, 1989: 135, 137, 142.

Caenoplana vaga: Ogren, 1989: 137, figs. 1-6 (DVH, HI), 139, fig. 7 (FCA), 140-142. U. S. A. (American Museum of Natural History collection).

Geoplana vaga: Ogren, 1989: 135-136, 141.

Geoplana vaga: Ball & Sluys, 1990: 138-139.

Kontikia vaga : Ball & Sluys, 1990 : 138-139, 146-147, fig. 7-4 C (FCA).

Caenoplana coerulea vaga : Ogren, 1990 a : 23.

Caenoplana vaga : Ogren, 1990 a : 23.

Caenoplana vaga : Ogren & Darlington, 1991 : 227, 232.

Caenoplana dendyi (Spencer, 1891)

See *Australopacifica dendyi* (Spencer, 1891).

Caenoplana frosti (Spencer, 1891)

See *Australopacifica frosti* (Spencer, 1891).

Caenoplana garveyi (Dendy, 1901)

See *Artioposthia garveyi* (Dendy, 1901).

Caenoplana graffi (Froehlich, 1959)

Geoplana nephelis von Graff, 1896 b : 84, fig. 10 (FCA).

Geoplana nephelis (in part) : von Graff, 1899 : 191, fig. 41 (FCA), 239, fig. 83 (FCA), 337-338 ; taf. II, figs. 23-24 (DH, CP, AE in color), XXVI, figs. 1-3 (HI). Valparaiso / Chile. [nec *Geoplana Nephelis* Schultze et Müller, 1857].

Geoplana nephelis : Böhmig, 1902 : 24. Valparaiso / Chile.

Geoplana nephelis (in part) : von Graff, 1913 : 2806.

Geoplana nephelis (in part) : von Graff, 1915 : 3020, fig. 134 (FCA), 3074, 3076, 3119.

Geoplana nephelis : Goetsch, 1933 : 245, 257, 285, 287.

Geoplana nephelis : E. M. Froehlich, 1955 a : 319, 331.

Geoplana nephelis : E. M. Froehlich, 1955 b : 211.

Geoplana nephelis (in part) : C. G. Froehlich, 1959 : 233, 236-237, 240.

?*Coenoplana graffi* nom. nov. C. G. Froehlich, 1959 : 237, 240. Museu do Berlin (= Berliner Museum).

Geoplana nephelis : E. M. Froehlich, 1978 : 28.

Caenoplana graffi : Ogren & Kawakatsu, 1990 b : 157.

Note: Concerning the taxonomic status of this species (and *Geoplana Nephelis* Müller, 1857), C. G. Froehlich (1959, pp. 236-237) wrote: "Graff (1899, p. 337) put into this species (*i. e.*, *G. nephelis*) a material from the Berlin Museum that had no data about its provenance, and a material collected by Michaelsen in Chile. The material from the Berlin Museum was analysed anatomically by Graff. It presents ventral testes, part of the male efferent system ventral to the nerve plate, and longitudinal parenchymal muscles in the peripheral parenchyma (Graff, *l. c.*, pl. 26 figs. 1-2). Besides, the copulatory apparatus presents a general resemblance to that of ?*Coenoplana munda* (Graff, *l. c.*, p. 191 fig. 41 and 42). As we have already indicated (C. G. Froehlich, 1955a, p. 200), the provenance of the material from the Berlin Museum must be sought in the Indo-Pacific region, and it cannot be *G. nephelis* Fr. Müll. because it isn't even a *Geoplana*. It may be put tentatively into the genus *Coenoplana* Moseley, 1877 (cf. C. G. Froehlich, *l. c.*, pp. 200, 246), and we rename it ?*Coenoplana graffi*, nom. nov. As regards the material from Chile, without an anatomical study it cannot be called *G. nephelis* with any certainty, for the land planarian fauna of Chile differs considerably from that of Brazil. *G. nephelis*, Graff is, in conclusion, heterogeneous, and the possibility that at least the Chilean material could remain in Müller's species is remote."

It is true that von Graff's (1899) histological and anatomical figures are based upon the material from the Berliner Museum (F. 85 ohne Fundortsangabe). He also used the material from the Hamburger Museum (Coll. Michaelsen No. 12): "von W. Michaelsen am 23. Juni 1893 unter Steinen im Garten des Hospitals von Valparaiso (Chile) gefunden". Since there is no evidence that von Graff's (*op. cit.*) Berlin Museum material was originated from the Indo-Pacific region as supposed by Dr. C. G.

Froehlich, we considered tentatively his new name *Coenoplana graffi* may be given for the Chilean species. See also *Pseudogeoplana nephelis* (Schultze et Müller, 1857). Cf. Ogren & Kawakatsu, 1990 b.

Caenoplana? (or *Kontikia?*) *quadrilineata* (Haslauer-Gamisch, 1982)

See *Kontikia quadrilineata* (Haslauer-Gamisch, 1982).

Caenoplana? (or *Kontikia?*) *renschi* (Haslauer-Gamisch, 1982)

See *Kontikia renschi* (Haslauer-Gamisch, 1982).

Caenoplana? (or *Kontikia?*) *steinboecki* (Haslauer-Gamisch, 1982)

See *Caenoplana steinboecki* (Haslauer-Gamisch, 1982).

Caenoplana micholitzi (von Graff, 1899) comb. nov.

Geoplana micholitzi n. sp. von Graff, 1899 : 189, fig. 39 (FCA), 335-336 ; taf. VI, figs. 5-8 (DB, CP in color), XXVI, fig. 8 (HI), XXVII, figs. 1-2 (HI), LVIII, fig. 39 (FCA). Insel Sjerra der Timor Laut (Tenimber-Gruppe) / Indonesia.

Geoplana micholitzi : Busson, 1903 : 402.

Geoplana micholitzi : Meixner, 1906 : 666.

Geoplana micholitzi : von Graff, 1912 : taf. XXXIII, figs. 4-7 (DB, CP).

Geoplana micholitzi : von Graff, 1915 : 3075.

Geoplana micholitzi : von Graff, 1917 : 3338, 3355.

Geoplana micholitzi : Frieb, 1923 : 512.

Kontikia micholitzi : Ogren, 1990 a : 27.

Caenoplana munda (Fletcher et Hamilton, 1888)

Geoplana munda n. sp. Fletcher & Hamilton, 1888 : 369-370 ; pl. V, fig. 8 (DB). Hartley Vale, New South Wales / Australia.

Geoplana munda : Dendy, 1891 : 73. Otway Forest, Victoria / Australia.

Geoplana munda : Spencer, 1891 : 85, 89-91 ; taf. XII, figs. 10, 10 A (DB). Victoria / Australia.

Geoplana munda : Dendy, 1892 b : 41.

Geoplana munda : Dendy, 1892 e : 26-27, 36-37. Creswick and Heidelberg, Victoria / Australia.

Geoplana munda : Dendy, 1894 a : 182. Parattah, Tasmania / Australia.

Geoplana munda : Dendy, 1894 b : 421.

Geoplana munda : von Graff, 1899 : 191, fig. 42 (FCA), 338-340 ; taf. VI, fig. 46 (CP in color) ; XXVI, figs. 1-7 (HI in color) ; XXV, figs. 1-11 (FCA, HI in color) ; LVIII, fig. 42 (FCA). Australia.

Geoplana munda : Steel, 1900 b : 619.

Geoplana munda : Dendy, 1901 : 222, 236-237. Invercargill and Toitoi, Southland, S. Island / New Zealand.

Geoplana munda : Dendy, 1904 : 307.

Geoplana munda : von Graff, 1912 : taf. XL, fig. 1 (HI), XLVII, fig. 1 (HI).

Geoplana munda : von Graff, 1913 : 3764-2765, 2796, 2806-2807.

Geoplana munda : von Graff, 1914 : 2907, 2917, 2953-2954.

Geoplana munda : von Graff, 1915 : 2976, 2991, 2944.

Geoplana munda : Schröder, 1924 : 282.

?*Coenoplana munda* : C. G. Froehlich, 1959 : 237.

Geoplana munda : Winsor, 1973 b : 102.

Geoplana munda : Winsor, 1973 c : 441. Victoria / Australia.

Geoplana munda : Winsor, 1976 : 15, 61. Mitta Mitta Valley, Victoria / Australia.

Geoplana munda : Winsor, 1977 : 139-145. Otway Region, Eastern Highlands and Macedon

Regions, Victoria / Australia.

Geoplana munda : E. M. Froehlich, 1978 : 9.

Caenoplana purpurea (Dendy, 1895)

See *Australopacifica purpurea* (Dendy, 1895).

Caenoplana sanguinea alba (Dendy, 1891)

See *Caenoplana alba* (Dendy, 1891).

Caenoplana sanguinea sanguinea (Moseley, 1877)

See *Australopacifica sanguinea* (Moseley, 1877).

Caenoplana sieboldi (von Graff, 1899) comb. nov.

Geoplana sieboldi nom. nud. von Graff, 1897 a : 113-114. Nord- and Süd Celebes (Sulawesi) / Indonesia.

Geoplana sieboldi nom. nud. von Graff, 1898 : 119.

Geoplana sieboldi n. sp. Krsmanović, 1898 : 179-210, taf. VII, fig. 7 (FCA), VIII, figs. 9-13 (HI). Loka, Süd Celebes (Sulawesi) / Indonesia.

Geoplana sieboldi n. sp. von Graff, 1899 : 380 ; taf. XIX, figs. 6-10 (DVB, CP in color). Loka, Lompobatang (alt. 1200 m), Nord-Celebes (Sulawesi) / Indonesia.

Geoplana sieboldi : von Graff, 1912 : taf. XXXVII, fig. 1 (HI), XLIX, fig. 13 (FGO), LI, fig. 7 (FCA).

Geoplana sieboldi : von Graff, 1913 : 2741.

Geoplana sieboldi : von Graff, 1914 : 2896, 2933.

Geoplana sieboldi : von Graff, 1915 : 2986, 2992, 2994, 3017.

Geoplana sieboldi : von Graff, 1916 : 3201.

Geoplana sieboldi : Sluys, 1989 a : 10, 21.

Geoplana sieboldi : Sluys, 1989 c : 5, 34.

Note: There is a technical problem about the author of *Geoplana sieboldi*. Originally, von Graff (1897 a, pp. 113-114) listed the name of *Geoplana sieboldi* n. sp. from Nord- and Süd-Celebes, but without technical description. Later, von Graff (1898, p. 119) again used the name of *Geoplana sieboldi* n. sp. (Lokon Nord-Celebes u. Loka Süd-Celebes). In the same year, Krasmanović (1898), a Swedish zoologist who studied land planarians at the Zool.-zootom. Institut der Universität Graz under the guidance of von Graff and Böhmig, published a detailed taxonomic paper consisting of descriptions of *Geoplana sieboldi* and *Geoplana steenstrupi*. Schematic figures of copulatory apparatus and histological figures of both species accompany this paper (pls. VII and VIII). However, he wrote as follows (p. 181) : "Im Sommersemester 1897 überug mir Herr Prof. Dr. V. GRAFF die Untersuchung zweier Exemplare der von P. und F. SARASIN auf Celebes erbeuteten und in seiner Monographie als Nr. 131 *Geoplana sieboldi* nov. spec. zu beschreibenden Landplanarien." "... mit den typischen in V. GRAFF's Taf. XIX, Fig. 6 u. 7 gezeichneten Exemplaren der *Geoplana sieboldi* überein."

In his monograph von Graff (1899, p. 380) listed the species as follows: "131. *Geoplana sieboldi* nov. spec. / Habitusbilder Taf. XIX Fig. 6-8. / *Geoplana sieboldi* MS. Graff 155 p. 113-114. — 1897. / — — — K. Krasmanović, Beitr. zur Anatomie der Landplanarien, Zeitschr. f. wiss. Zool. LXV. Bd. Leipzig 1898, p. 179-210, tab. VII fig. 7, tab. VIII fig. 9-13."

It is clear that von Graff's (1897 a, 1898) mention of *Geoplana sieboldi* is a nomen nudum (cf. IZN, 3rd Ed., 1985, Arts. 12 and 13). Although the real publishing date of von Graff's 1899 monograph is uncertain — "Graz, am 5. August 1899," is printed at the end of 'Vorwort' on page XII —, but the manuscript was completed well before this since it was available to Krasmanović as per the above quotation from his 1898 paper. However, the publication of Krasmanović's 1898 paper including a

suitable description of *Geoplana sieboldi* was undoubtedly earlier than von Graff's monograph (cf. ICZN, Art. 10). Thus, the author of *Geoplana sieboldi* in *sensu stricto* seems to be Krasmanović, 1898 (cf. ICZN, Art. 50).

As was already pointed out by von Graff (1899, p. 380, footnote 1), *Geoplana steenstrupi* Krasmanović, 1898, from the same collection sites as *Geoplana sieboldi* has similar external features. If new studies in the future conclude that these species are actually conspecific, the former has nomenclatural priority. In our present Index (Part II) to avoid confusion, *Geoplana sieboldi* will remain as usually attributed to von Graff with the above reservation and will be listed as *Caenoplana sieboldi* (von Graff, 1899).

Caenoplana spenceri (Dendy, 1890)

Geoplana spenceri n. sp. Dendy, 1890 a : 50-95 ; taf. 7, figs. 1-9 (DVB, HI), 8, figs. 10-15 (HI), 9, figs. 16-29 (HI), 10, figs. 30-49 (HI, FCA). McMahon's Creek, the Upper Yarra, Victoria / Australia.

Geoplana spenceri : Dendy, 1890 b : 132. Walhalla, North Gippsland, Victoria / Australia.

Geoplana spenceri : Spencer, 1891 : 84-86. Victoria / Australia.

Geoplana spenceri : Dendy, 1892 b : 41-42, pl. 5, fig. 8 (AE).

Geoplana spenceri : Dendy, 1892 e : 26-27, 29.

Geoplana spenceri : von Graff, 1899 : 340-341. Australia.

Geoplana spenceri : Steel, 1900 a : 570, 573.

Geoplana spenceri : von Graff, 1913 : 2707, 2796.

Geoplana spenceri : von Graff, 1914 : 2892, 2896, 2908, 2950.

Geoplana spenceri : von Graff, 1917 : 3341, 3355.

Geoplana spenceri : Fyfe, 1937 : 114, 117.

Geoplana spenceri : Fyfe, 1956 : 514.

Geoplana spenceri : Smith & Convèy, 1970 : 101.

Geoplana spenceri : Winsor, 1973 a : 265.

Geoplana spenceri : Winsor, 1973 c : 441. Melbourne, Victoria / Australia.

Geoplana spenceri : Winsor, 1976 : 61.

Geoplana spenceri : Winsor, 1977 : 140, 142, 144-145. Eastern Highlands, Victoria / Australia.

Geoplana spenceri : E. M. Froehlich, 1978 : 9.

Caenoplana spenceri : Ogren, 1989 : 138, 141.

Geoplana spenceri : Ogren, 1989 : 141.

Caenoplana steenstrupi (Krsmanović, 1898) comb. nov.

Geoplana steenstrupi n. sp. Krsmanović, 1898 : 179-210 ; taf. VII, figs. 1-6 (FCA, HI), VIII, figs. 8, 14 (HI). Lompobatang, Nord-Celebes (Sulawesi) / Indonesia.

Geoplana steenstrupi : von Graff, 1899 : 380-381, footnote 1. See also pages 132, 141, 151, 153-154, 157, 159, 161-163, 165, 173, 193, 250. Variation of *Geoplana sieboldi*, in Krsmanović (1898).

Geoplana steenstrupi : Busson, 1903 : 426.

Geoplana steenstrupi : von Graff, 1913 : 2796.

Geoplana steenstrupi : von Graff, 1914 : 2896, 2933.

Geoplana steenstrupi : von Graff, 1915 : 2985.

Geoplana steenstrupi : Fuhrmann, 1916 : 482. Host of a *Gregarina* species.

Geoplana steenstrupi : von Graff, 1916 : 3200.

Geoplana steenstrupi : von Graff, 1917 : 3355.

Geoplana steenstrupi: de Beauchamp, 1947 : 1-4, figs. 1-2 A-B (DVB, DH, AE, FCA). Lompe Battang, Célebes (Sulawesi) / Indonesia.

Geoplana steenstrupi: Puytorac & Grain, 1960 : 198.

Geoplana steenstrupi: Sluys, 1989 c : 34.

Note: See *Caenoplana sieboldi* (von Graff, 1889).

Caenoplana steinboecki (Haslauer-Gamisch, 1982) comb. nov.

Elattodemus steinböckii n. sp. Haslauer-Gamisch, 1982 : 57-58, 63-64, figs. 7 a-c, 8 (DH, FCA). Swele, Ost-Lombok (Pulau Lombok) / Indonesia.

Caenoplana? (or *Kontikia?*) *steinboecki*: Ogren & Kawakatsu, 1988 a : 51, 58-59.

Caenoplana subviridis Moseley, 1877

See *Australopacifica subviridis* (Moseley, 1877).

Caenoplana vaga (Hyman, 1943)

See *Caenoplana coerulea vaga* (Hyman, 1943).

Caenoplana walhalla (Dendy, 1891)

See *Australopacifica walhalla* (Dendy, 1891).

Genus *Coenoplana* - See under Caenoplaninae

Coenoplana caerulea Moseley, 1877

See *Caenoplana coerulea coerulea* Moseley, 1877.

Coenoplana coerulea Moseley, 1877

See *Caenoplana coerulea coerulea* Moseley, 1877, *Caenoplana coerulea vaga* (Hyman, 1943).

Coenoplana coxii (Fletcher et Hamilton, 1888)

See *Australopacifica coxii* (Fletcher et Hamilton, 1888).

?*Coenoplana graffi* Froehlich, 1959

See *Caenoplana graffi* Froehlich, 1959.

?*Coenoplana munda* (Fletcher et Hamilton, 1888)

See *Caenoplana munda* (Fletcher et Hamilton, 1888).

Coenoplana purpurea (Dendy, 1895)

See *Australopacifica purpurea* (Dendy, 1895); *Caenoplana purpurea* (Dendy, 1895).

Coenoplana sanguinea Moseley, 1877

See *Australopacifica sanguinea* (Moseley, 1877).

Coenoplana sanguinea Moseley, 1877

See *Australopacifica sanguinea* (Moseley, 1877).

Coenoplana subviridis Moseley, 1877

See *Australopacifica subviridis* (Moseley, 1877); *Caenoplana subviridis* Moseley, 1877.

Genus *Coleocephalus* Fyfe, 1953

Coleocephalus n. g. Fyfe, 1953 : 12.

Type species: *Coleocephalus fusca* Fyfe, 1953.

Literature: Fyfe, 1953 : 12. Here placed under the subfamily Caenoplaninae in the family Geoplanidae Stimpson, 1857.

Coleocephalus fuscus Fyfe, 1953

Coleocephalus fusca n. sp. Fyfe, 1953 : 12-13, 20 (pl. IV), figs. 1-5 (DVB, AE, CP, HI, FCA).

Horseshoe Lake, Ranui Cove, Port Ross, Enderby Island, Auckland Islands / New Zealand.

Note: The generic name *Coleocephalus* is a masculine noun. Cf. ICZN (3rd Ed., 1985; Art. 30 (a), (iii), Examples).

Genus *Elattodemus* (syn. of *Caenoplana*)

Cf. Ogren & Kawakatsu, 1988 b (p. 58).

Elattodemus steinböckii Haslauer-Gamisch, 1982

See *Caenoplana steinboecki* (Haslauer-Gamisch, 1982).

Genus *Endeavouria* Ogren et Kawakatsu, gen. nov.

Endeavouria n. g. Ogren & Kawakatsu: described in the present paper. See page 32.

Type species: *Geoplana septemlineata* Hyman, 1939.

Literature: Hyman, 1939.

Endeavouria septemlineata (Hyman, 1939) comb. nov.

Geoplana septemlineata n. sp. Hyman, 1939 a: 116-119, figs. 1-3 (DB, AE, CP, FCA), 120. Lulumahu Mt. (alt. 549 m), Koolau Mts. (alt. 549 m) and Kipapa Ridge (alt. 732 m), Oahu Island, Hawaii / U. S. A.

Geoplana septemlineata: de Beauchamp, 1947: 4.

Geoplana septemlineata: Alicata, 1962: 7, pl. 1, fig. 1-f (DB). Hawaii / U. S. A.

Geoplana septemlineata: Mead, 1963: 305, 308.

Geoplana septemlineata: Kawakatsu, 1972: 165.

Geoplana septemlineata: Mead, 1979: 71-73, fig. 71 (*Achatina fulica* being fatally attacked by nearly 50 specimens of *G. septemlineata*). Hawaii / U. S. A.

Geoplana septemlineata: Kawakatsu, 1983: 60.

Geoplana septemlineata: Muniappan, 1983: 45.

Geoplana septemlineata: Takeda, 1985: 269.

Kontikia (= *Geoplana*) *septemlineata*: Waterhouse & Norris, 1987: 270-273.

Geoplana septemlineata: Kaneda & Nagai, 1988: 4-5.

Geoplana septemlineata: Kawakatsu, 1988: 165.

Geoplana septemlineata: Kaneda, Kitagawa & Ichinohe, 1990: 527.

Geoplana septemlineata: Muniappan, 1990: 180.

Genus *Geoplana* - See under Geoplaninae

Cf. Ogren & Kawakatsu, 1990 b (p. 98).

Geoplana adae Dendy, 1891

See *Australopacifica adae* (Dendy, 1891).

Geoplana adae var. *extralineata* Dendy, 1892

See *Australopacifica adae* (Dendy, 1891).

Geoplana adae var. *fusca* Dendy, 1894

See *Australopacifica adae* (Dendy, 1891).

Geoplana agricola Dendy, 1895

- See *Newzealandia agricola* (Dendy, 1895).
- Geoplana agricola* var. *maori* Dendy, 1901
See *Newzealandia agricola* (Dendy, 1895).
- Geoplana alba* Dendy, 1891
See *Caenoplana alba* (Dendy, 1891).
- Geoplana alba* Dendy, 1891, in Dendy, 1892 and 1894
See *Australopacifica typhlops* (Dendy, 1893).
- Geoplana alba* var. *roseolineata* Dendy, 1892
See *Caenoplana abla* (Dendy, 1891).
- Geoplana albolineata* Steel, 1897
See *Australopacifica albolineata* (Steel, 1897).
- Geoplana alfordensis* Dendy, 1896
See *Australopacifica alfordensis* (Dendy, 1896).
- Geoplana antarctica* Dendy, 1909
See *Australopacifica antarctica* (Dendy, 1909).
- Geoplana arenicola* Steel, 1900
See *Australopacifica arenicola* (Steel, 1900).
- Geoplana ashleyi* Fyfe, 1953
See *Kontikia ashleyi* (Fyfe, 1953).
- Geoplana assimilis* von Graff, 1899
See *Kontikia assimilis* (von Graff, 1899).
- Geoplana atrata* Steel, 1897
See *Australopacifica atrata* (Steel, 1897).
- Geoplana aucklandica* Dendy, 1901
See *Australopacifica aucklandica* (Dendy, 1901).
- Geoplana aucklandica* Dendy, 1909
See ? *Kontikia marrineri* (Dendy, 1911).
- Geoplana austiniiana* Schröder, 1924
See *Australopacifica austiniiana* (Schröder, 1924).
- Geoplana balfouri* von Graff, 1899
See *Australopacifica balfouri* (von Graff, 1899).
- Geoplana barringtonensis* Wood, 1926
See *Australopacifica barringtonensis* (Wood, 1926).
- Geoplana bicolor* von Graff, 1899
See *Australopacifica bicolor* (von Graff, 1899).
- Geoplana bimaculata* Kaburaki, 1922
See *Australopacifica bimaculata* (Kaburaki, 1922).
- Geoplana büttneri* Collin, 1893
See *Australopacifica buettneri* (von Graff, 1899).
- Geoplana caerulea* (Moseley, 1877)
See *Caenoplana coerulea coerulea* Moseley, 1877.
- Geoplana caerulea* var. *typica* Wood, 1926
See *Caenoplana coerulea coerulea* Moseley, 1877.
- Geoplana canaliculata* von Graff, 1899
See ? *Kontikia canaliculata* (von Graff, 1899).

Geoplana challengerii von Graff, 1899

See *Australopacifica challengerii* (von Graff, 1899).

Geoplana chamissoniana Schröder, 1924

See *Australopacifica chamissoniana* (Schröder, 1924).

Geoplana circularis Fyfe, 1956

See *Kontikia circularis* (Fyfe, 1956).

Geoplana citrina Wood, 1926

See *Australopacifica citrina* (Wood, 1926).

Geoplana (Coenoplana) sanguinea (Moseley, 1877)

See *Australopacifica sanguinea* (Moseley, 1877).

Geoplana coerulea (Moseley, 1877)

See *Caenoplana coerulea coerulea* Moseley, 1877.

Geoplana coerulea var. Dendy, 1985

See *Caenoplana coerulea coerulea* Moseley, 1877.

Geoplana comitatis Dendy, 1915

See *Australopacifica comitatis* (Dendy, 1915).

Geoplana cookiana Schröder, 1924

See *Kontikia cookiana* (Schröder, 1924).

Geoplana cooperi Dendy, 1901

See *Australopacifica cooperi* (Dendy, 1901).

Geoplana coxi (Fletcher et Hamilton, 1888)

See *Australopacifica coxii* (Fletcher et Hamilton, 1888).

Geoplana coxii (Fletcher et Hamilton, 1888)

See *Australopacifica coxii* (Fletcher et Hamilton, 1888).

Geoplana cucullata Dendy, 1897

See *Australopacifica cucullata* (Dendy, 1897).

Geoplana cyanea Fyfe, 1956

See *Kontikia cyanea* (Fyfe, 1956).

Geoplana daemeli von Graff, 1899

See *Australopacifica daemeli* (von Graff, 1899).

Geoplana dakini Dendy, 1915

See *Australopacifica dakini* (Dendy, 1915).

Geoplana dendyi Spencer, 1891

See *Australopacifica dendyi* (Spencer, 1891).

Geoplana diemenensis Dendy, 1894

See *Artioposthia diemenensis* (Dendy, 1894).

Geoplana dietrichiana Schröder, 1924

See *Australopacifica dietrichiana* (Schröder, 1924).

Geoplana Dovei Steel, 1900

See *Australopacifica lucasi* (Dendy, 1891).

Geoplana dubia Dendy, 1892

See *Australopacifica dubia* (Dendy, 1891).

Geoplana elegans Steel, 1897

See *Australopacifica scaphoidea* (Steel, 1900).

Geoplana eschscholtziana Schröder, 1924

- See *Australopacifica eschscholtziana* (Schröder, 1924).
- Geoplana exulans* Dendy, 1901
See *Artioposthia exulans* (Dendy, 1901).
- Geoplana fagicola* Dendy, 1901
See *Australopacifica fagicola* (Dendy, 1901).
- Geoplana flavilineata* Dendy, 1915
See *Australopacifica flavilineata* (Dendy, 1915).
- Geoplana flavimarginata* Dendy, 1897
See *Australopacifica flavimarginata* (Dendy, 1897).
- Geoplana fletcheri* Dendy, 1891
See *Artioposthia fletcheri* (Dendy, 1891).
- Geoplana Fletcheri* Dendy, 1891
See *Artioposthia fletcheri* (Dendy, 1891).
- Geoplana fletcheri* var. *adelaideensis* Dendy, 1892
See *Artioposthia adelaideensis* (Dendy, 1892).
- Geoplana Fletcheri* var. *Adelaideensis* Dendy, 1894
See *Artioposthia adelaideensis* (Dendy, 1892).
- Geoplana fletcheri* var. *borealis* Dendy, 1895
See *Artioposthia adelaideensis* (Dendy, 1892).
- Geoplana flynni* Dendy, 1915
See *Australopacifica flynni* (Dendy, 1915).
- Geoplana forsterorum* Schröder, 1924
See *Kontikia forsterorum* (Schröder, 1924).
- Geoplana frosti* Spencer, 1891
See *Australopacifica frosti* (Spencer, 1891).
- Geoplana fusco-dorsalis* Steel, 1900
See *Australopacifica fuscodorsalis* (Steel, 1900).
- Geoplana gamblei* von Graff, 1899
See *Australopacifica gamblei* (von Graff, 1899).
- Geoplana garveyi* Dendy, 1901
See *Artioposthia garveyi* (Dendy, 1901).
- Geoplana gelatinosa* Dendy, 1895
See *Australopacifica gelatinosa* (Dendy, 1895).
- Geoplana graffi* Dendy, 1895
See *Newzealandia graffi* (Dendy, 1895).
- Geoplana graffi* Dendy, 1895
See *Newzealandia graffi* (Dendy, 1895).
- Geoplana Graffi* Dendy, 1895
See *Newzealandia graffi* (Dendy, 1895).
- Geoplana graffi* var. *angusta* Dendy, 1901
See *Newzealandia graffi* (Dendy, 1895).
- Geoplana graffi* var. *castanea* Dendy, 1901
See *Newzealandia graffi* (Dendy, 1895).
- Geoplana graffi* var. *clintonensis* Dendy, 1901
See *Newzealandia graffi* (Dendy, 1895).

- Geoplana graffii* var. *clintonis* Dendy, 1901, in Fyfe, 1946
See *Newzealandia moseleyi* (Hutton, 1880).
- Geoplana graffii* var. *dorsomarmorata* Dendy, 1901
See *Newzealandia graffii* (Dendy, 1895).
- Geoplana graffii* var. *dorso-marmorata* Dendy, 1901
See *Newzealandia graffii* (Dendy, 1895).
- Geoplana graffii* var. *nigrescens* Dendy, 1901
See *Newzealandia graffii* (Dendy, 1895).
- Geoplana graffii* var. *nigrescens* Dendy, 1901, in Fyfe, 1947
See *Newzealandia iris* (Dendy, 1896).
- Geoplana graffii* var. *nodosa* Dendy, 1901
See *Newzealandia graffii* (Dendy, 1895).
- Geoplana graffii* var. *occidentalis* Dendy, 1897
See *Newzealandia graffii* (Dendy, 1895).
- Geoplana graffii* var. *ocellata* Dendy, 1901
See *Newzealandia graffii* (Dendy, 1895).
- Geoplana graffii* var. *otiraensis* Dendy, 1897
See *Newzealandia graffii* (Dendy, 1895).
- Geoplana graffii* var. *otiraensis* Dendy, 1897, in Fyfe, 1947
See *Newzealandia iris* (Dendy, 1896).
- Geoplana graffii* var. *somersii* Dendy, 1896
See *Newzealandia graffii* (Dendy, 1895).
- Geoplana graffii* var. *wharekauriensis* Dendy, 1901
See *Newzealandia graffii* (Dendy, 1895).
- Geoplana graminicola* Steel, 1900
See *Australopacifica graminicola* (Steel, 1900).
- Geoplana gregoryana* Schröder, 1924
See *Australopacifica gregoryana* (Schröder, 1924).
- Geoplana hamiltoni* Dendy, 1895
See *Australopacifica hamiltoni* (Dendy, 1895).
- Geoplana Hillii* Steel, 1897
See *Australopacifica hillii* (Steel, 1897).
- Geoplana hoggi* Dendy, 1891
See *Australopacifica hoggii* (Dendy, 1891).
- Geoplana hogii* Dendy, 1891
See *Australopacifica hoggii* (Dendy, 1891).
- Geoplana howesi* Dendy, 1901
See *Artioposthia howesi* (Dendy, 1901).
- Geoplana howitti* Dendy, 1892
See *Australopacifica howitti* (Dendy, 1892).
- Geoplana huttoni* von Graff, 1899
See *Australopacifica huttoni* (von Graff, 1899).
- Geoplana inaequabilis* Fyfe, 1956

- See *Newzealandia inaequabilis* (Fyfe, 1956).
- Geoplana inaequalistriata* Dendy, 1895
See *Newzealandia inaequalistriata* (Dendy, 1895).
- Geoplana insularis* Prudhoe, 1949
See *Australopacifica insularis* (Prudhoe, 1949).
- Geoplana iris* Dendy, 1896
See *Newzealandia iris* (Dendy, 1896).
- Geoplana iris* Dendy, 1896, in Dendy, 1896 (in part) and von Graff, 1899 (in part)
See *Australopacifica iris* (Dendy, 1896).
- Geoplana iris* Dendy, 1896 (in part), in Dendy, 1896, von Graff, 1899 and Fyfe, 1944
See *Newzealandia iris* (Dendy, 1896).
- Geoplana iris* Dendy, 1896 (in part), in Fyfe, 1944 and 1947
See *Australopacifica iris* (Dendy, 1896).
- Geoplana jacksoniana* Dendy, 1897
See *Australopacifica jacksoniana* (Dendy, 1897).
- Geoplana kenneli* von Graff, 1899
See *Kontikia kenneli* (von Graff, 1899).
- Geoplana korotneffi* von Graff, 1899
See *Australopacifica korotneffi* (von Graff, 1899).
- Geoplana krausi* von Graff, 1899
See *Australopacifica krausi* (von Graff, 1899).
- Geoplana laingi* Dendy, 1895
See *Australopacifica laingii* (Dendy, 1895).
- Geoplana laingii* Dendy, 1895
See *Australopacifica laingii* (Dendy, 1895).
- Geoplana Laingii* Dendy, 1895
See *Australopacifica laingii* (Dendy, 1895).
- Geoplana lapidicola* Stimpson, 1857
See *Australopacifica lapidicola* (Stimpson, 1857).
- Geoplana lateropunctata* Dendy, 1901
See *Australopacifica lateropunctata* (Dendy, 1901).
- Geoplana latero-punctata* Dendy, 1901
See *Australopacifica lateropunctata* (Dendy, 1901).
- Geoplana latissima* Dendy, 1896
See *Australopacifica latissima* (Dendy, 1896).
- Geoplana leichhardtiана* Schröder, 1924
See *Australopacifica leichhardtiана* (Schröder, 1924).
- Geoplana leuckarti* von Graff, 1899
See *Australopacifica leuckarti* (von Graff, 1899).
- Geoplana lucasi* Dendy, 1891
See *Australopacifica lucasi* (Dendy, 1891).
- Geoplana Lucasi* Dendy, 1891
See *Australopacifica lucasi* (Dendy, 1891).
- Geoplana lyra* Steel, 1900
See *Australopacifica lyra* (Steel, 1900).

Geoplana macmahoni Dendy, 1891

See *Australopacifica mmahoni* (Dendy, 1891).

Geoplana mariae Dendy, 1895

See *Artioposthia mariae* (Dendy, 1895).

Geoplana Mariae Dendy, 1895

See *Artioposthia mariae* (Dendy, 1895).

Geoplana Marioe Dendy, 1895

See *Artioposthia mariae* (Dendy, 1895).

Geoplana marrineri Dendy, 1911

See ? *Kontikia marrineri* (Dendy, 1911).

Geoplana mediolineata Dendy, 1891

See *Australopacifica mediolineata* (Dendy, 1891).

Geoplana mediolineata var. *simularis* Steel, 1900

See *Australopacifica mediolineata* (Dendy, 1891).

Geoplana melanochroa Steel, 1900

See *Australopacifica melanochroa* (Steel, 1900).

Geoplana meridionalis von Graff, 1899

See *Australopacifica meridionalis* (von Graff, 1899).

Geoplana metschnikoffi von Graff, 1899

See *Australopacifica metschnikoffi* (von Graff, 1899).

Geoplana mexicana Hyman, 1939

See *Kontikia mexicana* (Hyman, 1939).

Geoplana micholitzi von Graff, 1899

See *Caenoplana micholitzi* (von Graff, 1899).

Geoplana minor Dendy, 1892

See *Australopacifica minor* (Dendy, 1892).

Geoplana m'mahoni Dendy, 1891

See *Australopacifica mmahoni* (Dendy, 1891).

Geoplana m'mahoni Dendy, 1891

See *Australopacifica mmahoni* (Dendy, 1891).

Geoplana m'mahoni variety in Dendy, 1892

See *Australopacifica warragulensis* (von Graff, 1899).

Geoplana moebiusi von Graff, 1899

See *Australopacifica moebiusi* (von Graff, 1899).

Geoplana mortoni Dendy, 1894

See *Australopacifica mortoni* (Dendy, 1894).

Geoplana Mortoni Dendy, 1894

See *Australopacifica mortoni* (Dendy, 1894).

Geoplana moseleyi Hutton, 1880

See *Newzealandia moseleyi* (Hutton, 1880).

Geoplana Moseleyi Hutton, 1880

See *Newzealandia moseleyi* (Hutton, 1880).

Geoplana mülleriana Schröder, 1924

See *Australopacifica muelleriana* (Schröder, 1924).

Geoplana munda Fletcher et Hamilton, 1888

- See *Caenoplana munda* (Fletcher et Hamilton, 1888).
- Geoplana nasta* Loman, 1890
See *Kontikia nasuta* (Loman, 1890).
- Geoplana nephelis* Schultze et Müller, 1857 (in part), in von Graff, 1899
See *Caenoplana graffi* Froehlich, 1959.
- Geoplana nichollsi* Dendy, 1915
See *Australopacifica nicholisi* (Dendy, 1915).
- Geoplana ornata* Fletcher et Hamilton, 1888
See *Australopacifica ornata* (Fletcher et Hamilton, 1888).
- Geoplana parva* Steel, 1897
See *Australopacifica parva* (Steel, 1897).
- Geoplana pelewensis* von Graff, 1899
See *Kontikia pelewensis* (von Graff, 1899).
- Geoplana (Planaria) tasmaniana* (Darwin, 1844)
See *Australopacifica tasmaniana* (Darwin, 1844).
- Geoplana ponderosa* Steel, 1897
See *Australopacifica ponderosa* (Steel, 1897).
- Geoplana pulverulenta* von Graff, 1899
See *Australopacifica pulverulenta* (von Graff, 1899).
- Geoplana purpurea* Dendy, 1895
See *Australopacifica purpurea* (Dendy, 1895).
- Geoplana quadrangulata* Dendy, 1891
See *Australopacifica quadrangulata* (Dendy, 1891).
- Geoplana quadrangulata* Dendy, 1891, in Dendy, 1892
See *Australopacifica wellingtoni* (Dendy, 1891).
- Geoplana quadrangulata*, var. in Dendy, 1895
See *Australopacifica quadrangulata* (Dendy, 1891).
- Geoplana quadrangulata* var. *wellingtoni* Dendy, 1892
See *Australopacifica wellingtoni* (Dendy, 1891).
- Geoplana quinque-lineata* Fletcher et Hamilton, 1888
See *Australopacifica quinque-lineata* (Fletcher et Hamilton, 1888).
- Geoplana quinque-lineata* var. *accentuata* Steel, 1897
See *Australopacifica quinque-lineata* (Fletcher et Hamilton, 1888).
- Geoplana quinque-lineata*, var. nov. in Steel, 1900
See *Australopacifica quinque-lineata* (Fletcher et Hamilton, 1888).
- Geoplana ranuui* Fyfe, 1953
See *Kontikia ranuui* (Fyfe, 1953).
- Geoplana regina* Dendy, 1892
See *Australopacifica regina* (Dendy, 1892).
- Geoplana robusta* Steel, 1897
See *Australopacifica robusta* (Steel, 1897).
- Geoplana rouxiана* Schröder, 1924
See *Australopacifica rouxiана* (Schröder, 1924).
- Geoplana rubicunda* Fletcher et Hamilton, 1888
See *Australopacifica sanguinea* (Moseley, 1877).

- Geoplana sanguinea* (Moseley, 1877)
See *Australopacifica sanguinea* (Moseley, 1877).
- Geoplana sanguinea* Moseley, 1877, in Dendy, 1895
See *Australopacifica testacea* (Hutton, 1880).
- Geoplana sanguinea* Moseley, 1877 (in part), in von Graff (1899)
See *Caenoplana alba* (Dendy, 1891).
- Geoplana sanguinea* var. *alba* Dendy, 1891
See *Caenoplana alba* (Dendy, 1891).
- Geoplana sarasiniana* Schröder, 1924
See *Australopacifica sarasiniana* (Schröder, 1924).
- Geoplana scaphoidea* Steel, 1900
See *Australopacifica scaphoidea* (Steel, 1900).
- Geoplana semoniana* Schröder, 1924
See *Australopacifica semoniana* (Schröder, 1924).
- Geoplana septemlineata* Hyman, 1939
See *Endeavouria septemlineata* (Hyman, 1939).
- Geoplana sieboldi* von Graff, 1899
See *Caenoplana sieboldi* (von Graff, 1899).
- Geoplana sowerbyi* von Graff, 1899
See *Australopacifica sowerbyi* (von Graff, 1899).
- Geoplana spectabilis* Dendy, 1895
See *Australopacifica spectabilis* (Dendy, 1895).
- Geoplana spenceri* Dendy, 1890
See *Caenoplana spenceri* (Dendy, 1890).
- Geoplana splendens* Dendy, 1895
See *Australopacifica splendens* (Dendy, 1895).
- Geoplana steenstrupi* Krsmanović, 1898
See *Caenoplana steenstrupi* (Krsmanović, 1898).
- Geoplana subpallida* Hyman, 1939
See *Australopacifica subpallida* (Hyman, 1939).
- Geoplana subquadrangulata* Dendy, 1895
See *Artioposthia subquadrangulata* (Dendy, 1895).
- Geoplana subquadrangulata* var. *enderbyensis* Dendy, 1909
See *Artioposthia subquadrangulata* (Dendy, 1895).
- Geoplana subquadrangulata* variety in Dendy, 1895
See *Australopacifica meridionalis* (von Graff, 1899).
- Geoplana subviridis* (Moseley, 1877)
See *Australopacifica subviridis* (Moseley, 1877).
- Geoplana sugdeni* Dendy, 1891
See *Australopacifica sugdeni* (Dendy, 1891).
- Geoplana sulphurea* Fletcher et Hamilton, 1888
See *Australopacifica sulphurea* (Fletcher et Hamilton, 1888).
- Geoplana sulphureus* Fletcher et Hamilton, 1888
See *Australopacifica sulphurea* (Fletcher et Hamilton, 1888).
- Geoplana suteri* Dendy, 1897

- See ?*Artioposthia suteri* (Dendy, 1897).
- Geoplana tasmaniana* (Darwin, 1844)
- See *Australopacifica tasmaniana* (Darwin, 1844).
- Geoplana Tasmaniana* (Darwin, 1844)
- See *Australopacifica tasmaniana* (Darwin, 1844).
- Geoplana Tasmaniana* (Darwin, 1844) in Dendy, 1894
- See *Australopacifica balfouri* (von Graff, 1899).
- Geoplana Tasmaniana* var. *flavicincta* Steel, 1900
- See *Australopacifica tasmaniana* (Darwin, 1844).
- Geoplana Tasmanica* (Darwin, 1844)
- See *Australopacifica tasmaniana* (Darwin, 1844).
- Geoplana tenuis* Dendy, 1895
- See *Australopacifica tenuis* (Dendy, 1895).
- Geoplana testacea* (Hutton, 1880)
- See *Australopacifica testacea* (Hutton, 1880).
- Geoplana traversi* Moseley, 1877
- See *Kontikia traversii* (Moseley, 1877).
- Geoplana traversii* Moseley, 1877
- See *Kontikia traversii* (Moseley, 1877).
- Geoplana Traversii* Moseley, 1877
- See *Kontikia traversii* (Moseley, 1877).
- Geoplana triangulata* Dendy, 1895
- See *Artioposthia triangulata* (Dendy, 1895).
- Geoplana triangulata* var. *australis* Dendy, 1895
- See *Artioposthia australis* (Dendy, 1895).
- Geoplana trifasciata* Steel, 1897
- See *Australopacifica trifasciata* (Steel, 1897).
- Geoplana typhlops* Dendy, 1894
- See *Australopacifica typhlops* (Dendy, 1894).
- Geoplana vaga* Hyman, 1943
- See *Caenoplana coerulea vaga* (Hyman, 1943).
- Geoplana variegata* Fletcher et Hamilton, 1888
- See *Australopacifica variegata* (Fletcher et Hamilton, 1888).
- Geoplana variegata* Fletcher et Hamilton, 1888, in Dendy, 1892
- See *Australopacifica bicolor* (von Graff, 1899).
- Geoplana ventrolineata* Dendy, 1892
- See *Kontikia ventrolineata* (Dendy, 1892).
- Geoplana ventropunctata* Dendy, 1892
- See *Australopacifica ventropunctata* (Dendy, 1892).
- Geoplana virgata* Fletcher et Hamilton, 1888
- See *Australopacifica virgata* (Fletcher et Hamilton, 1888).
- Geoplana viridis* Fletcher et Hamilton, 1888
- See *Australopacifica viridis* (Fletcher et Hamilton, 1888).
- Geoplana walhalla* Dendy, 1891
- See *Australopacifica walhalla* (Dendy, 1891).

Geoplana Walhalla Dendy, 1891

See *Australopacifica walhalla* (Dendy, 1891).

Geoplana warragulensis von Graff, 1899

See *Australopacifica warragulensis* (von Graff, 1899).

Geoplana Wellingtoni Dendy, 1892

See *Australopacifica wellingtoni* (Dendy, 1891).

Geoplana whartoni Gulliver, 1879

See *Kontikia whartoni* (Gulliver, 1879).

Geoplana Whartoni Gulliver, 1879

See *Kontikia whartoni* (Gulliver, 1879).

Geoplana zebra Schröder, 1924

See *Australopacifica zebra* (Schröder, 1924).

Genus *Kontikia* Froehlich, 1955

Kontikia n. g. C. G. Froehlich, 1955 a : 199.

Type species: *Kontikia orana* Froehlich, 1955.

Literature: C. G. Froehlich, 1955 a : 199-208; C. G. Froehlich, 1967; E. M. & C. G. Froehlich, 1972; Jones, 1981 a : 71-79; Sluys, 1983 : 433-442; Winsor, 1986 : 9-16; Ogren, 1990 a : 23; Ogren & Kawakatsu, Ms.

Kontikia andersoni Jones, 1981

Kontikia andersoni n. sp. Jones, 1981 a : 71-79, figs. 1-3 (DVB, DH, AE, FGO, FCA). County Antrim, Northern Ireland / U. K.

Kontikia andersoni: Ball & Reynoldson, 1981 : 107-108, fig. 32 (DB). Lough Neagh, Northern Ireland / U. K.

Kontikia andersoni: Jones, 1981 b : 837.

Kontikia andersoni: Sluys, 1983 : 441.

Kontikia andersoni: Jones, 1988 : 513. N. Ireland; Isles of Scilly and Isle of Man, England / U. K.

Kontikia andersoni: Ogren, 1990 a : 27.

Kontikia ashleyi (Fyfe, 1953) comb. nov.

Geoplana ashleyi n. sp. Fyfe, 1953 : 8-9, 11, 17, pl. I, fig. 2 (FCA), 19, pl. III, fig. 1 (FGO). Mount Ashley, Auckland Islands / New Zealand.

Kontikia assimilis (von Graff, 1899)

Geoplana assimilis n. sp. von Graff, 1899 : 190, fig. 40 (FCA), 344; taf. II, fig. 33 (CP in color). Philippines.

Geoplana assimilis: von Graff, 1915 : 3075-3076.

Geoplana assimilis: Hyman, 1940 a : 349.

Geoplana assimilis: Tu, 1940 : 219, 247. Philippines.

Kontikia assimilis: C. G. Froehlich, 1955 a : 201, 246.

Kontikia assimilis: Jones, 1981 a : 78.

Kontikia assimilis: Sluys, 1983 : 442.

Kontikia assimilis: Ogren, 1990 a : 47.

Kontikia bulbosa Sluys, 1983

Kontikia bulbosa n. sp. Sluys, 1983 : 433-442, figs. 1-5 (DB, DH, AE, FCA, FGO, HI). Porto da

Cruz and Machico, Ilha da Madeira / Portugal.

Kontikia bulbosa: Ball & De Vries, 1983: 196-197, fig. 1 (DB, AE and Idiogram). Ilha da Madeira / Portugal. 2x = 12.

Kontikia bulbosa: Slyus, 1989 a : 10, 21.

Kontikia bulbosa: Almeida, Yamada & Froehlich, 1990 : 48.

Kontikia bulbosa: Ogern, 1990 a : 27.

?*Kontikia canaliculata* (von Graff, 1899)

Geoplana canaliculata n. sp. von Graff, 1899: 345 ; taf. IV, figs. 19-21 (DVB in color), XXVI, fig. 7 (HI). Philippines.

Geoplana canaliculata: Tu, 1940 : 290, 247. Philippines.

Geoplana canaliculata: Hyman, 1940 a : 349.

Geoplana ?canaliculata: Prudhoe, 1949 b : 250-251, fig. 3 (DVB). Hivoa, Matauna (alt. 1190 m), Marquesas (Îles Marquises) / France.

Kontikia canaliculata: C. G. Froehlich, 1955 a : 201, 246.

Kontikia canaliculata: Jones, 1981 a : 78.

Kontikia canaliculata: Sluys, 1983 : 442.

Kontikia canaliculata: Ogren, 1990 a : 27.

Note: The taxonomic description of this species placed in *Kontikia* by C. G. Froehlich (1955 a) still lacks many known details of internal histology and copulatory apparatus to verify generic allocation. Ventral testes and copulatory apparatus with penis papilla according to von Graff (1899) resemble *Kontikia assimilis* (von Graff, 1899).

Kontikia circularis (Fyfe, 1956) comb. nov.

Geoplana circularis n. sp. Fyfe, 1956 : 511-513, fig. 4 A-D (DH, AE, CP, HI, FCA). Kohukohu, near Auckland, N. Island / New Zealand.

Kontikia cookiana (Schröder, 1924)

Geoplana cookiana n. sp. Schröder, 1924 : 260, 269-270, 296 ; taf. II, fig. 8 a-p (DB, DVH, CP, AE). Mt. Canala (alt. 700 m) and Yatè / New Caledonia (Neu-Caledonien); Ouvéa, Fayaoué; Lifou, Képénéé; Maré, Néetché and Raouah, Loyalty Island (Loyalty-Inseln) / France.

Geoplana cookiana: Kawakatsu, 1969 : 1-3, 9-11, figs. 4 A and B (DVB, CP, FCA); pl. 1, fig. H (PCA). Valee de la Thi (alt. 500 m), Region des Monts Koghis, near Numéa / New Caledonia.

Kontikia cookiana: Ogren, 1990 a : 27.

Geoplana cookiana: Winsor, 1990 : 20

Kontikia cyanea (Fyfe, 1956) comb. nov.

Geoplana cyanea n. sp. Fyfe, 1956 : 513-514, fig. 5 A-D (DH, AE, CP, HI, FCA). Nepier, N. Island / New Zealand.

Kontikia forsterorum (Schröder, 1924)

Geoplana forsterorum n. sp. Schröder, 1924 : 260, 270-273, 280-294, figs. 1-15 (HI, FCA); 297 ; taf. II, fig. 9 a-h (DB, DVH, CP, AE). Oubatche; Mt. Ignambi (alt. 1300 m); Ciu, Canala; Mt. Canala (alt. 700-800 m); Koné / New Caledonia (Neu-Caledonien); Macé, Néetché, Raouah, Médou, Loyalty Islands (Loyalty-Inseln) / France.

Geoplana forsterorum: Mead, 1979 : 74.

Geoplana forsterorum: Ash, 1976 : 169-171. Numea / New Caledonia.

Geoplana forsterorum: Kawakatsu, 1983 : 60. New Caledonia.

Kontikia forsterorum : Waterhouse & Morris, 1987 : 272. New Caledonia.

Geoplana forsterorum : Winsor, 1990 : 20.

Note : This land planarian contains larvae of *Angiostrongylus cantonensis* (cf. Ash, 1976).

Kontikia (= *Geoplana*) *septemlineata* (Hyman, 1939)

See *Endeavouria septemlineata* (Hyman, 1939).

Kontikia insularis (Prudhoe, 1949)

Geoplana insularis n. sp. Prudhoe, 1949 b : 248-250, figs. 1-2 (DVB, FCA). Uahuka, Tauhee-puta (alt. 524 m), Marquesas (Îles Marquises) / France.

Geoplana insularis : Marcus, 1951 : 100.

Kontikia insularis : de Beauchamp, 1955 : 312-313.

Kontikia insularis : C. G. Froehlich, 1955 a : 200, 207, 246-247.

Kontikia insularis : Sluys, 1983 : 442.

Kontikia insularis : Ogren, 1900 a : 27.

Kontikia kenneli (von Graff, 1899)

Geoplana kenneli n. sp. von Graff, 1899 : 188, fig. 37 (FCA), 346; taf. V, figs. 8-9 (DB in color), XXVII, figs. 4-6 (HI), LVIII, fig. 37 (FCA). Trinidad / Trinidad and Tobago.

Geoplana kenneli : von Graff, 1912 : taf. LXI, fig. 14 (FCA).

Geoplana kenneli : von Graff, 1913 : 2792, fig. 36 (HI), 2793.

Geoplana kenneli : von Graff, 1914 : 2953.

Geoplana kenneli : von Graff, 1915 : 3095.

Geoplana kenneli : Schirch, 1929 : 30, 32.

Geoplana kenneli : Riester, 1938 : 44.

Geoplana kenneli : de Beauchamp, 1939 b : 77.

Geoplana kenneli : Prudhoe, 1949 a : 427.

Geoplana kenneli : Marcus, 1951 : 70.

Kontikia Kenneli : de Beauchamp, 1955 : 310.

Kontikia kenneli : C. G. Froehlich, 1955 a : 200-201, 207, 243, 246.

Geoplana kenneli : E. M. Froehlich, 1955 a : 293.

Kontikia kenneli : du Bois-Reymond Marcus & Marcus, 1959 : 53.

Kontikia kenneli : Hyman, 1962 : 1.

Kontikia kenneli : C. G. Froehlich, 1967 : 161.

Kontikia kenneli : Jones, 1981 a : 78.

Kontikia kenneli : Sluys, 1983 : 441-442.

Kontikia kenneli : Ogren, 1990 a : 27.

Note : Winsor (1986, p. 9) considered that *Geoplana kenneli* in Schrich, 1929, may be a synonym of *Kontikia orana* Froehlich, 1955.

Kontikia korotneffi (von Graff, 1899)

See *Australopacifica korotneffi* (von Graff, 1899).

?*Kontikia marrineri* (Dendy, 1911) comb. nov.

Geoplana aucklandica n. sp. Dendy, 1909 : 673. Auckland Island (ca. 320 km S of S. Island in the Antarctic) / New Zealand.

Geoplana marrineri nom. nov. Dendy, 1911 : 100.

Geoplana aucklandica : Fyfe, 1953 : 5-8, fig. 1 (CP), 8-9, 12, 14, 17, pl. I, fig. 1 (FCA), 19, pl. III, fig. 3 (FGO). Enderby Island, Horseshoe Lake, Musgrake and Stony Peak, Auckland Islands / New Zealand. [nec *Geoplana aucklandica* Dendy, 1901.]

Note: Dendy (1911) proposed the replacement name for his *Geoplana aucklandica* Dendy, 1909, because this species was a junior homonym of *Geoplana aucklandica* Dendy, 1901. See *Australopacifica aucklandica* (Dendy, 1901).

Kontikia mexicana (Hyman, 1939)

Geoplana mexicana n. sp. Hyman, 1939 b : 424-426, fig. 48 B-C (DB, AE, FCA). Mexico.

Geoplana mexicana: Hyman, 1940 b : 105.

Geoplana mexicana: Hyman, 1943 : 1-3, figs. 1-2 (DB, AE, FCA), 20. Pasadena, Carmel Valley, Berkeley, California / U. S. A.

Geoplana mexicana: Hyman, 1951 : 102, fig. 32 A (DB, AE).

Geoplana mexicana: du Bois-Reymond Marcus, 1951 : 228.

Geoplana mexicana: Marcus, 1953 : 54.

Geoplana mexicana: C. G. Froehlich, 1955 a : 200.

Geoplana mexicana?: de Beauchamp, 1958 : 359-360. Gueymadas and São Vicente, Île Mederè (Ilha da Madeira) / Portugal.

Kontikia sp.: du Bois-Reymond Marcus & Marcus, 1959 : 31-33, 38, 41, figs. 13-16 (DH, CP, HI). Ribeiro Sêco near Funchal, Casadas Queimadas (alt. 880 m), Encumeada (alt. 800 m) and Faial, Madeira / Portugal.

Geoplana mexicana: du Bois-Reymond Marcus & Marcus, 1959 : 52.

Geoplana mexicana? in de Beauchamp, 1955 : du Bois-Reymond Marcus & Marcus, 1959 : 52.

Kontikia sp. in du Bois-Reymond Marcus & Marcus, 1959 (= *Geoplana mexicana* Hyman?): C. G. Froehlich, 1967 : 156.

Geoplana mexicana: E. M. Froehlich, 1978 : 15.

Geoplana mexicana: Mead, 1979 : 74.

Kontikia sp. (*mexicana?*): Jones, 1981 a : 78.

Geoplana mexicana? in de Beauchamp, 1958 : Sluys, 1983 : 434.

Kontikia sp. in du Bois-Reymond Marcus & Marcus, 1959 : Sluys, 1983 : 434.

Kontikia mexicana: Sluys, 1983 : 440-442.

Kontikia mexicana: Ogren & Kohn, 1989 : 112A.

Geoplana mexicana: Ball & Sluys, 1990 : 138-139.

Kontikia mexicana: Ball & Sluys, 1990 : 138-139, 143, fig. 7-1 F (DH), 146-147, fig. 7-4 A (FCA).

Kontikia mexicana: Ogren, 1990 a : 23-28, figs. 1-7 (DVH, AE, CP, HI, FGO, FCA). Mexico and U. S. A.

Kontikia mexicana: Ogren, 1990 b : 41.

Kontikia mexicana: Ogren & Darlington, 1991 : 226, 232.

Kontikia micholitzi (von Graff, 1899)

See *Caenoplana micholitzi* (von Graff, 1899).

Kontikia nasuta (Loman, 1890)

Geoplana nasuta n. sp. Loman, 1890 : 143-156 ; taf. XII, fig. 11 (DB, DH), XIII, figs. 16-18 (HI, FCA). Fort de Koch, Sumatra / Indonesia.

Geoplana nasuta: von Graff, 1899 : 188, fig. 38 (FCA), 346-347 ; taf. XXVII, figs. 8-11 (FGO, HI), LVIII, fig. 38 (FCA). Sumatra / Indonesia.

Geoplana nasuta: von Graff, 1912 : taf. XLIII, fig. 6 (FGO), LI, fig. 6 (FCA), LXI, fig. 10 (FGO).

Kontikia nasuta: von Graff, 1914 : 2891, 2958.

Geoplana nasuta: von Graff, 1915 : 3017, 3028, 3085.

Geoplana nasuta: Prudhoe, 1949 b : 249-250.

- Kontikia nasuta* : de Beauchamp, 1955 : 312.
- Kontikia nasuta* : C. G. Froehlich, 1955 a : 200, 208, 246.
- Kontikia nasuta* : Jones, 1981 a : 78.
- Kontikia nasuta* : Sluys, 1983 : 442.
- Kontikia nasuta?* : Winsor, 1985 : 27. Rakata, Krakatau Island / Indonesia.
- Geoplana nasuta* : Sluys, 1989 a : 10, 21.
- Kontikia orana* Froehlich, 1955
- Kontikia orana* n. sp. C. G. Froehlich, 1955 a : 195, 199-208, 241, 243, 245-247 ; Pls. I-III, figs. 1-17 (DVB, VH, AE, HI, FGO, FCA). Via Dutra, Rio de Janeiro ; Jardim Europa, Ubatuba, Vila Atlântica and Itanhaen, São Paulo ; Baía de Paranguguá, Paraná ; Bulsque, Santa Catarina / Brazil.
- Kontikia orana* : de Beauchamp, 1955 : 312.
- Kontikia orana* : C. G. Froehlich, 1955 c : 265, 270.
- Kontikia orana* : C. G. Froehlich, 1956 a : 314. Ubatuba, Rio de Janeiro / Brazil.
- Kontikia orana* : C. G. Froehlich, 1956 b : 187.
- Kontikia orana* : du Bois-Reymond Marcus & Marcus, 1959 : 53.
- Kontikia orana* : C. G. Froehlich, 1967 : 161.
- Kontikia orana* : E. M. & C. G. Froehlich, 1972 : 30-31, 34, 42. Serra do Navio, Território do Amapá (Amazonas) / Brazil.
- Kontikia orana* : Jones, 1981 b : 78.
- Kontikia orana* : Sluys, 1983 : 442.
- Kontikia orana* : Winsor, 1986 : 9-11, figs. 1-2 (DB, FCA). Aitkenvale, Kelso and Queens Gardens, Townsville, Queensland / Australia.
- Kontikia orana* : Ogren & Kawakatsu, 1988 a : 59.
- Kontikia orana* : Ogren, 1989 : 135.
- Kontikia orana* : Sluys, 1989 a : 10, 21.
- Kontikia orana* : Ogren, 1990 a : 27.
- Kontikia orana* : Ogren, 1990 b : 41.
- Kontikia pelewensis* (von Graff, 1899)
- Geoplana pelewensis* n. sp. von Graff, 1899 : 348 ; taf. IV, fig. 4 (DB in color), XXVII, fig. 7 (FGO). Peleliu (Palau-Archipel) / U. S. A. (a US trusteeship).
- Geoplana pelewensis* : Laidlaw, 1906 : 579.
- Geoplana pelewensis* : Hyman, 1940 a : 347-349, figs. 1-3 (DV, AE, HI, FCA). Jokaj Islet, Ponape ; Angaur, Palau Islands ; Olov, Yap Islands ; Caroline Islands / U. S. A. (a US trusteeship).
- Kontikia pelewensis* : C. G. Froehlich, 1955 a : 201, 207, 246.
- Kontikia pelewensis* : Sluys, 1983 : 442.
- Kontikia pelewensis* : Ogren, 1990 a : 27.
- Kontikia quadrilineata* (Haslauer-Gamisch, 1982) comb. nov.
- Platydemus quadrilineatus* n. sp. Haslauer-Gamisch, 1982 : 52-53, 60-61, figs. 1 a-d, 2 (DH, CP, FCA, etc.). Narmade, West-Lombok (Pulau Lombok) / Indonesia.
- Caenoplaena?* (or *Kontikia?*) *quadrilineata* : Ogren & Kawakatsu, 1988 a : 51, 59, 65-66.
- Kontikia ranuii* (Fyfe, 1953) comb. nov.
- Geoplana ranuii* n. sp. Fyfe, 1953 : 10-12, fig. 3 (CP), 18 (pl. II), fig. 2 (FCA). Campbell Island and the Auckland Islands / New Zealand.

Kontikia renschi (Haslauer-Gamisch, 1982) comb. nov.

Platydemus renschi n. sp. Haslauer-Gamisch, 1982 : 53-55, 61-62, figs. 3 a-b, 4 (DB, AE, FCA).

Geli Moetor, Flores / Indonesia.

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

Kontikia traversii (Moseley, 1877)

Geoplana Traversii n. sp. Moseley, 1877 a : 275-280, 284, 288 ; pl. XX, figs. 1-9 (FGO, AE, HI).

Wellington, N. Island / New Zealand.

Geoplana Traversii var.? : Moseley, 1877 a : 284. Wellington, N. Island / New Zealand.

Geoplana traversii : Hutton, 1879 a : 315. Wellington, N. Island / New Zealand.

Geoplana traversii : Hector, 1893 : 255, 528. Wellington, N. Island ; Nelson, S. Island / New Zealand.

Geoplana Traversii : Dendy, 1895 a : 394.

Geoplana traversii : Dendy, 1895 c : 180.

Geoplana traversi : von Graff, 1899 : 336-337 ; taf. V, fig. 19. New Zealand.

Geoplana traversii : Dendy, 1904 : 307.

Geoplana traversi : von Graff, 1913 : 2820.

Geoplana traversii : Fyfe, 1937 : 100.

Kontikia traversii : Ogren, 1990 a : 27.

Note : Cf. ICZN (3rd Ed., 1985 ; Art. 33 (d) ; see also Ogren & Kawakatsu, 1989, p. 91).

Kontikia ventrolineata (Dendy, 1892)

Geoplana ventrolineata n. sp. Dendy, 1892 a : 35-36. St. Kilda, Victoria / Australia.

Geoplana ventrolineata : Dendy, 1892 b : 41-46 ; pl. 5, figs. 6-7 (VH, HI). Victoria / Australia.

Geoplana ventrolineata : Dendy, 1895 d : 118. Cf. von Graff (1899, p. 367).

Geoplana ventrolineata : von Graff, 1899 : 367-368 ; taf. III, figs. 15-16 (DVB in color). Australia.

Geoplana ventrolineata : Smith & Convey, 1970 : 102.

Geoplana ventrolineata : Winsor, 1973 b : 102.

Geoplana ventrolineata : Winsor, 1973 c : 441. Victoria / Australia.

Geoplana ventrolineata : Winsor, 1977 : 140.

Geoplana ventrolineata : Winsor, 1979 : 155-159, fig. 5 A-B (DH, AE, CP). Royal Botanic Gardens, Melbourne, Victoria / Australia.

Kontikia ventrolineata : Waterhouse & Norris, 1987 : 271. Hawaii / U.S. A.

Note : Waterhouse & Norris (1987, p. 271) wrote : "An Australian species *Kontikia ventrolineata* also occurs with *K. septemlineata* in Hawaii (L. Winsor pers. comm. 1986)". See *Endeavouria septemlineata* (Hyman, 1939).

Kontikia whartoni (Gulliver, 1879)

Geoplana whartoni n. sp. Gulliver, 1879 : 562 ; pl. IV, fig. 1 (DB). Rodriguez Island, Mascarene Islands / India.

Geoplana whartoni : von Graff, 1899 : 347 ; taf. IV, figs. 12-14 (DB, CP, AE in color), XXVI, fig. 4 (HI).

Geoplana whartoni : Mell, 1903 : 193-194.

Geoplana whartoni : Laidlaw, 1906 : 579.

Geoplana whartoni : von Graff, 1913 : 2753.

Geoplana whartoni : von Graff, 1915 : 3094-3095, 3128-3129.

Geoplana whartoni : Kaburaki, 1920 : 129-134, fig. 1 (FCA). Rodriguez Island, Mascarene Islands / India.

Geoplana whartoni: Snell & Tams, 1920: 287. Rodrigues Island, Mascarene Islands / India.
Geoplana whartoni: Steinböck, 1924: 461, 475-476.
Geoplana whartoni: Steinböck, 1925: 172-173, fig. 2 (HI), 178.
Geoplana whartoni: Meixner, 1928: 598, fig. 12 (HI).
Geoplana whartoni: Fyfe, 1937: 114.
Geoplana whartoni: de Beauchamp, 1939 a: 335.
Geoplana Whartoni: de Beauchamp, 1955: 307-313, figs. 1-2 (FCA). Ste Rose ; Ste Suzanne ; St Denis ; St-Pierre ; St-Gilles, La Réunion (Mascarene Islands) / France.
Kontikia whartoni: C. G. Froehlich, 1955 a: 200, 207, 246.
Kontikia whartoni: Kawakatsu, 1972: 165.
Kontikia whartoni: Jones, 1981 a: 78.
Kontikia whartoni: Sluys, 1983: 442.
Kontikia whartoni: Winsor, 1986: 10.
Kontikia whartoni: Kawakatsu, 1988: 165.
Kontikia whartoni: Ogren, 1990 a: 27.

Genus *Newzealandia* Ogren et Kawakatsu, gen. nov.

Newzealandia n.g. Ogren & Kawakatsu: described in the present paper. See page 33.

Type species: *Geoplana inaequabilis* Fyfe, 1956.

Literature: Fyfe, 1956.

Newzealandia agricola (Dendy, 1895) comb. nov.

Geoplana agricola n. var. Dendy, 1895 c: 184-185. Lincoln Agricultural College, Christchurch, S. Island / New Zealand.

Geoplana agricola: von Graff, 1899: 366-367. Christchurch, S. Island / New Zealand.

Geoplana agricola: Dendy, 1901: 232-233. St. Martin's, near Christchurch, S. Island / New Zealand.

Geoplana agricola var. *maori* n. var. Dendy, 1901: 233. St. Martin's, near Christchurch, S. Island / New Zealand.

Geoplana agricola: Dendy, 1904: 307.

Geoplana agricola var. *maori*: Dendy, 1904: 307.

Geoplana agricola: Fyfe, 1944: 288, 290. Syn. of *Geoplana graffii* Dendy, 1895.

Note: Fyfe (1944, pp. 288, 290), who examined Dendy's samples (British Museum collection), considered that *Geoplana agricola* (Dendy, 1895) is a synonym of *Geoplana graffii* Dendy, 1895. However, we defer the taxonomic conclusion. See *Newzealandia graffii* (Dendy, 1895).

Newzealandia graffii (Dendy, 1895) comb. nov.

Geoplana Graffii n. sp. Dendy, 1895 a: 397. Christchurch, Ashburton and Dunedin, S. Island / New Zealand.

Geoplana graffii n. sp. Dendy, 1895 c: 179-180. Christchurch, Ashburton and Rapaki, S. Island / New Zealand.

Geoplana graffii var. *somersii* n. var. Dendy, 1896 a: 212-213. Mt. Somers, Chatham Islands, S. Island / New Zealand.

Geoplana graffii var. *occidentalis* n. var. Dendy, 1897: 260-261. Otira and Lake Mahinapua, S. Island / New Zealand.

Geoplana graffii var. *otiraensis* n. var. Dendy, 1897: 261. Otira and Lake Mahinapua, S.

Island / New Zealand.

Geoplana graffii : von Graff, 1899 : 356-357. New Zealand.

Geoplana graffii : Dendy, 1901 : 222, 224-225, 227-229, 231. Whangamarino, Chatham Islands (ca. 750 km E of Christchurch); Toitoi and near Jackson's, Westland, S. Island / New Zealand.

Geoplana graffii var. *wharekauriensis* n. var. Dendy, 1901 : 222, 226-227. Wharekauri, Chatham Island / New Zealand.

Geoplana graffii var. *somersii* : Dendy, 1901 : 225, 227.

Geoplana graffii var. *castanea* n. var. Dendy, 1901 : 225-226, 229-230. Near Invercargill, S. Island / New Zealand.

Geoplana graffii var. *ocellata* n. var. Dendy, 1901 : 226. Paradise (Lake Wakatipu), S. Island / New Zealand.

Geoplana graffii var. *nodosa* n. var. Dendy, 1901 : 227-228. Invercargill, S. Island / New Zealand.

Geoplana graffii var. *dorso-marmorata* n. var. Dendy, 1901 : 228. Nuggets (between Otago Harbour and the Bluff), S. Island / New Zealand.

Geoplana graffii var. *clintonensis* n. var. Dendy, 1901 : 228. Clinton Valley, head of Lake Te Anau, S. Island / New Zealand.

Geoplana graffii var. *angusta* n. var. Dendy, 1901 : 228-230. Nuggets, Toitoi, near Invercargill, S. Island / New Zealand.

Geoplana graffii var. *otiraensis* : Dendy, 1901 : 230. Near Jackson's, Westland, S. Island / New Zealand.

Geoplana graffii var. *nigrescens* n. var. Dendy, 1901 : 230-231. Teremakau Flat, near Jackson's, Westland, S. Island / New Zealand.

Geoplana graffii var. *occidentalis* : Dendy, 1901 : 231. Teremakau Flat, near Jackson's, Westland, S. Island / New Zealand.

Geoplana graffii : Dendy, 1904 : 307.

Geoplana graffii var. *somersii* : Dendy, 1904 : 307.

Geoplana graffii var. *nodosa* : Dendy, 1904 : 307.

Geoplana graffii var. *angusta* : Dendy, 1904 : 307.

Geoplana graffii var. *clintonensis* : Dendy, 1904 : 307.

Geoplana graffii var. *occidentalis* : Dendy, 1904 : 307.

Geoplana graffii var. *otiraensis* : Dendy, 1904 : 307.

Geoplana graffii var. *nigrescens* : Dendy, 1904 : 307.

Geoplana graffii var. *castanea* : Dendy, 1904 : 307.

Geoplana graffii var. *ocellata* : Dendy, 1904 : 307.

Geoplana graffii var. *wharekauriensis* : Dendy, 1904 : 307.

Geoplana graffii var. *dorsomarmorata* : Dendy, 1904 : 307.

Geoplana graffii : Fyfe, 1944 : 288-291 ; pl. 39, fig. 1 (FCA). Dendy's samples (British Museum collection). Dunedin, S. Island / New Zealand.

Geoplana graffii var. *occidentalis* : Fyfe, 1944 : 288, 290. Elevation in rank within the species.

Geoplana graffii var. *nodosa* : Fyfe, 1944 : 288, 290. Elevation in rank within the species.

Geoplana graffii var. *wharekauriensis* : Fyfe, 1944 : 288, 290. Elevation in rank within the species.

Geoplana graffii var. *castanea* : Fyfe, 1944 : 290-291. Elevation in rank within the species.

Geoplana graffii var. *dorsomarmorata* : Fyfe, 1944 : 290-291. Elevation in rank within the species.

Geoplana graffii var. *clintonis* : Fyfe, 1944 : 290-291. Elevation in rank within the species.

Geoplana graffii var. *ocellata* : Fyfe, 1944 : 290-291. Elevation in rank within the species.

Geoplana graffii var. *somersii* : Fyfe, 1944 : 291. Elevation in rank within the species.

Geoplana graffii var. *occidentalis* : Fyfe, 1944 : 291. Elevation in rank within the species.

Geoplana graffii var. *otiraensis* : Fyfe, 1944 : 291. Elevation in rank within the species.

Geoplana graffii : Fyfe, 1946 : 135. Syn. of *Geoplana moseleyi* Hutton, 1880.

Geoplana graffii var. *somersii* : Fyfe, 1946 : 135. Syn. of *Geoplana moseleyi* Hutton, 1880.

Geoplana graffii var. *clintonis* : Fyfe, 1946 : 135. Syn. of *Geoplana moseleyi* Hutton, 1880.

Geoplana graffii var. *dorsomarmorata* : Fyfe, 1946 : 135. Syn. of *Geoplana moseleyi* Hutton, 1880.

Geoplana graffii var. *otiraensis* : Fyfe, 1947 : 522-523. Syn. of *Geoplana iris* Dendy, 1896.

Geoplana graffii var. *nigrescens* : Fyfe, 1947 : 522-523. Syn. of *Geoplana iris* Dendy, 1896.

Note : Fyfe (1946, 1947) considered *Geoplana graffii* Dendy, 1895, is a synonym of *Geoplana moseleyi* Hutton, 1880.

See *Newzealandia moseleyi* (Hutton, 1880); *Newzealandia iris* (Dendy, 1896); *Australopacifica iris* (Dendy, 1896).

Newzealandia inaequabilis (Fyfe, 1956) comb. nov.

Geoplana inaequabilis n. sp. Fyfe, 1956 : 507-509, fig. 2 A-D (DH, AE, FGO, FCA). Kohukohu, near Auckland, N. Island / New Zealand.

Newzealandia inaequalistriata (Dendy, 1895) comb. nov.

Geoplana inaequalistriata n. sp. Dendy, 1895 a : 398. Christchurch, S. Island / New Zealand.

Geoplana inaequalistriata n. sp. Dendy, 1895 c : 182-183. St. Albans Road, Christchurch, S. Island / New Zealand.

Geoplana inaequalistriata : Dendy, 1896 a : 213-214. Springburn, Mt. Somers, S. Island / New Zealand.

Geoplana inaequalistriata : Dendy, 1897 : 262. Jackson's, Teremakau, S. Island / New Zealand.

Geoplana inaequalistriata : von Graff, 1899 : 367. New Zealand.

Geoplana inaequalistriata : Dendy, 1904 : 307.

Geoplana inaequalistriata : Fyfe, 1944 : 288, 290.

Note : Dendy (1897, p. 262) wrote: "I also obtained one planarian at Jackson's, on the Teremakau, which may possibly belong to the species, but it is not quite typical, and in some respects resembles *G. graffii*."

Fyfe (1944 pp. 288, 290), who examined Dendy's samples (British Museum collection), considered that *Geoplana inaequalistriata* Dendy, 1895, is a synonym of *Geoplana graffii* Dendy, 1895. See *Newzealandia graffii* (Dendy, 1895).

Newzealandia iris (Dendy, 1896) comb. nov.

Geoplana iris n. sp. Dendy, 1896 b : 213. Mt. Somers, S. Island / New Zealand.

Geoplana iris (in part) : von Graff, 1899 : 359-360. S. Island / New Zealand.

Geoplana iris (in part) : Dendy, 1901 : 231. Near Jackson's, Westland, S. Island / New Zealand.

Geoplana iris (in part) : Dendy, 1904 : 307.

Geoplana iris (in part) : Fyfe, 1944 : 288-290. S. Island / New Zealand. [nec *Geoplana graffii* (Dendy, 1895)].

Geoplana iris : Fyfe, 1947 : 522-523; pl. 47, fig. 2 (FCA). Springburn (British Museum collection) and Morrison's Creek, Dunedin, S. Island / New Zealand.

Geoplana graffii var. *otiraensis* : Fyfe, 1947 : 522-523. Syn. of *Geoplana iris* Dendy, 1896.

Geoplana graffii var. *nigrescens* : Fyfe, 1947: 522-523. Syn. of *Geoplana iris* Dendy, 1896.

Note: Fyfe (1944, pp. 288-290), who examined Dendy's samples of *Geoplana iris* (British Museum collection), considered that this specific name was given for non-homogenous animals. Later, she (Fyfe, 1947, pp. 522-523) separated Dendy's species into 2 species: *Geoplana iris* Dendy, 1896, and *Geoplana graffii* Dendy, 1895. See *Australopacifica iris* (Dendy, 1896); *Newzealandia graffii* (Dendy, 1895); *Newzealandia moseleyi* (Hutton, 1880).

Newzealandia moseleyi (Hutton, 1880) comb. nov.

Geoplana moseleyi n. sp. Hutton, 1880: 277. Dunedin, N. Island / New Zealand.

Geoplana Moseleyi : Fletcher & Hamilton, 1888: 353. [nec *Rhynchodemus Moseleyi* Fletcher et Hamilton, 1888; *Platydemus moseleyi* (Fletcher et Hamilton, 1888)]. Cf. Ogren & Kawakatsu (1988 c, pp. 65, 73).

Geoplana Moseleyi : Dendy, 1895 a: 395.

Geoplana moseleyi : Dendy, 1895 c: 180.

Geoplana Moseleyi : Dendy, 1895 d: 114.

Geoplana moseleyi : Dendy, 1897: 261-262. Dunedin, N. Island / New Zealand. Syn.? *Geoplana graffii* Dendy, 1895; *Geoplana iris* Dendy, 1896.

Geoplana moseleyi : von Graff, 1899: 386; taf. VI, figs. 33-35 (DVB in color). New Zealand.

Geoplana moseleyi : Dendy, 1901: 225.

Geoplana moseleyi : Dendy, 1904: 307.

Geoplana moseleyi : Fyfe, 1944: 291. Syn.? *Geoplana graffii* Dendy, 1895.

Geoplana moseleyi : Fyfe, 1946: 135. Dendy's samples (British Museum collection) from New Zealand. Syn. *Geoplana graffii* Dendy, 1895; *Geoplana graffii* var. *somersii* Dendy, 1896; *Geoplana graffii* var. *clintonis* [sic] Dendy, 1901; *Geoplana graffii* var. *dorsomarmorata* Dendy, 1901.

Geoplana moseleyi : Fyfe, 1956: 505-507, 509, fig. 1 A-B (FCA). Kohukohu, Opunake, Kapiti Island, Akatarawa divide, Jackson's Bay, Rahu, Franz Josef, Otira, Christchurch, Palmerston South, Dunedin district, Fortrose district, Invercargill, Tuatapere, Doubtful Sound, and Chatham Islands, N. and S. Islands / New Zealand.

Note: Fyfe (1944, 1946, 1947), who examined Dendy's samples (British Museum collection), considered that *Geoplana graffii* Dendy, 1895, and its varieties are synonyms of *Geoplana moseleyi* Hutton, 1880. To avoid confusion, *Geoplana graffii* Dendy, 1895, is listed as an independent species in this Index. Each of varieties of that species is included under the name of *Newzealandia graffii* (Dendy, 1895). See *Newzealandia iris* (Dendy, 1896); *Australopacifica iris* (Dendy, 1896); *Newzealandia graffii* (Dendy, 1895).

Genus *Pimea* Winsor, 1990

Pimea n. g. Winsor, 1990: 20.

Type species: *Pimea monticola* Winsor, 1990.

Literature: Winsor, 1990.

Pimea monticola Winsor, 1990

Pimea monticola n. sp. Winsor, 1990: 19-30, figs. 1-11 (DVB, DVH, AE, HI, FCA, PCA). Mt. Aoupinié (alt. 1000 m), Central Highlands / New Caledonia (Nouvelle Calédonie).

Genus *Platydemus* - Rhynchodeminae in the family Rhynchodemidae

Cf. Ogren & Kawakatsu, 1988 b (p. 61).

Platydemus quadrilineatus Haslauer-Gamisch, 1982

See *Kontikia quadrilineata* (Haslauer-Gamisch, 1982).

Platydemus renschi Haslauer-Gamisch, 1982

See *Kontikia renschi* (Haslauer-Gamisch, 1982).

Genus *Timyma* E. M. Froehlich, 1978

Timyma n. g. E. M. Froehlich, 1978 : 14.

Type species: *Timyma juliae* E. M. Froehlich, 1978.

Literature: E. M. Froehlich, 1978 : 14.

Timyma juliae E. M. Froehlich, 1978

Timyma juliae n. sp. E. M. Froehlich, 1978 : 14-19, 46-49, figs. 10-17 (VB, DVH, AE, CP, HI, FGO, FCA), 74-77, figs. 72-74 (photos, HI). Fray Jorge, Provincia de Coquimbo, Norte Chico / Chile.

Subfamily PELMATOPLANINAE OGREN et KAWAKATSU, subfam. nov.

Pelmatoplaninae n. subfam. Ogren & Kawakatsu: described in the present paper. See page: 33.

Type genus: *Pelmatopla* VON GRAFF, 1896.

Genus *Amblyplana* - Microplaninae in the family Rhynchodemidae

Cf. Ogren & Kawakatsu, 1989 (p. 53)

Amblyplana braueri von Graff, 1899

See *Pelmatopla braueri* (von Graff. 1899).

Amblyplana maheensis von Graff, 1899

See *Pelmatopla maheensis* (von Graff, 1899).

Amblyplana mahéensis von Graff, 1899

See *Pelmatopla mahéensis* (von Graff, 1899).

Genus *Beauchampius* Ogren et Kawakatsu, gen. nov.

Beauchampius n. g. Ogren & Kawakatsu: described in the present paper. See page 34.

Type species: *Pelmatopla trimeni* von Graff, 1899.

Beauchampius bangoianus (de Beauchamp, 1939) comb. nov.

Pelmatopla bangoiana n. sp. de Beauchamp, 1939 a : 299, 329-331, fig. 13 (FCA), 332. Bangoï and Caûda, Annam / Vietnam.

Beauchampius coonoorensis (de Beauchamp, 1930) comb. nov.

Pelmatopla coonoorensis n. sp. de Beauchamp, 1930 b : 673, 696-698, fig. 14 (DH, AE), 740, 742, 746 ; pl. 8, fig. 1 (FCA). Coonoor, Nilgiris / India.

Pelmatopla coonoorensis : de Beauchamp, 1939 a : 324, 326, 336.

Pelmatopla coonoorensis : de Beauchamp, 1961 : 115, fig. 58 H (DH, AE).

Permatopla coonoorensis : Kawakatsu & Basil, 1971 : 46. Spelling error.

Beauchampius crassus (de Beauchamp, 1939) comb. nov.

Pelmatopla *crassa* n. sp. de Beauchamp, 1939 a : 299, 319-322, fig. 8 (DB, AE, FCA), 331-338 ; pl. VII, fig. 7 (DH, AE). Bana (alt. 1400 m), Dalat (1500 m) and Djiring (1000 m), Annam / Vietnam.

Beauchampius dawydoffi (de Beauchamp, 1939) comb. nov.

Pelmatopla *dawydoffi* n. sp. de Beauchamp, 1939 a : 299, 324-326, 331-332, fig. 10 (FCA). Pha-Ho, Tonkin: Arbre bryoé and Caûda, Annam / Vietnam.

Beauchampius indosinicus (de Beauchamp, 1939) comb. nov.

Pelmatopla *indosinica* n. sp. de Beauchamp, 1939 a : 299, 326-329, 331-332, 336, figs. 11-12 (FCA). Pic Lang-Biang (2200 m), Dalat (alt. 1500 m), Arbre broyé, and Varella, annam / Vietnam ; Poulo-Dama, Méam / Cambodia.

Beauchampius nilgiriensis (Whitehouse, 1919) comb. nov.

Cotyloplana *nilgiriense* n. sp. Whitehouse, 1919 : 34 ; pl. XI, figs. 23 and 23a (DB, VH). Nilgiri Hills / India.

Pelmatopla *nilgiriensis* : de Beauchamp, 1930 b : 673, 699-702, figs. 15-16 (DH, AE, HI, FCA), 730, fig. 27 A (FCA), 742. Pumbarai, Palnis / India.

Pelmatopla *nilgiriensis* : Ogren & Kawakatsu, 1988 b : 52, 60.

Beauchampius sarasinorum (von Graff, 1899) comb. nov.

Pelmatopla *sarasinorum* nom. nud. von Graff, 1896 b : 81. Ceylon / Sri Lanka.

Pelmatopla *sarasinorum* n. sp. von Graff, 1899 : 198, fig. 49 (FCA), 389 ; taf. IV, figs. 10-11 (DVB, AE in color), LVIII, fig. 49 (FCA). Ceylon / Sri Lanka.

Pelmatopla *sarasinorum* : Busson, 1903 : 393-395, 398.

Pelmatopla *sarasinorum* : von Graff, 1914 : 2959.

Pelmatopla *sarasinorum* : von Graff, 1915 : 3077.

Pelmatopla *sarasinorum* : Whitehouse, 1919 : 30-31 ; pl. XI, figs. 11-12 (DVH). Ceylon / Sri Lanka.

Pelmatopla *sarasinorum* : de Beauchamp, 1926 : 356.

Pelmatopla *sarasinorum* : de Beauchamp, 1929 : 8.

Pelmatopla *sarasinorum* : de Beauchamp, 1930 b : 698, 740.

Beauchampius sondaica (Loman, 1890) comb. nov.

Geoplana *sondaica* n. sp. Loman, 1890 : 133-134 ; taf. XII, fig. 13 a-c (DB, CP) ; taf. XIII, fig. 14 (DB), figs. 16-18 (FGO, HI, FCA). Buitenzorg, Java ; Singkarah, Sumatra / Indonesia.

Pelmatopla *sondaica* : von Graff, 1899 : 389-391 ; taf. IV, figs. 5-9 (DB, CP in color), XXVIII, figs. 1-3 (HI). Singkarah, Sumatra / Indonesia ; Singapore.

Pelmatopla *sondaica* : Schmidt, 1902 : 554.

Pelmatopla *sondaica* : Busson, 1903 : 375, 377-378, 385, 393-395, 402.

Pelmatopla *sondaica* : Laidlow, 1903 : 116. Kuala Aring, Kelantan / Malaysia ; Singapore.

Pelmatopla *sondaica* : Mell, 1903 : 193-194.

Pelmatopla *sondaica* : Ritter-Záhony, 1905 : 163.

Pelmatopla *sondaica* : von Graff, 1913 : 2724, 2757, 2787, fig. 30 (HI).

Pelmatopla *sondaica* : von Graff, 1914 : 2933, 2954.

Pelmatopla *sondaica* : Whitehouse, 1915 : 463.

Pelmatopla *sondaica* : von Graff, 1915 : 3080, fig. 147 (FCA).

Geoplana *sondaica* : von Graff, 1916 : 3224.

Pelmatopla *sondaica* : Steinböck, 1924 : 480.

Pelmatopla *sondaica* : Meixner, 1928 : 592, 594.

Pelmatopla *sondaica* : de Beauchamp, 1929 : 8. Buitenzorg, Java / Indonesia.
Pelmatopla *sondaica* : de Beauchamp, 1930 a : 77. Klakah, Java / Indonesia.
Pelmatopla *sondaica* : de Beauchamp, 1930 b : 673, 696, 742. Coonoor, Nilgiris / India ; Péra-deniya, Ceylon / Sri Lanka.

Pelmatopla *sondaica* : de Beauchamp, 1939 a : 331.

Pelmatopla *sondaica* : Tu, 1940 : 220, 247. Singapore.

Pelmatopla *sondaica* : de Beauchamp, 1948 : 157.

Pelmatopla *sondaica* : de Beauchamp, 1961 : 120.

Pelmatopla *sondaica* : Ogren & Kawakatsu, 1988 b : 59-60.

Pelmatopla *sondaica* : Ogren & Kawakatsu, 1989 a : 59, 86-87.

Pelmatopla *sondaica* : Sluys, 1989 a : 22.

Pelmatopla *sondaica* : Sluys, 1989 c : 34.

Beauchampius trimeni (von Graff, 1899) comb. nov.

Pelmatopla *trimeni* nom. nud. von Graff, 1896 b : 81. Ceylon / Sri Lanka.

Pelmatopla *trimeni* n. sp. von Graff, 1899 : 197, fig. 48 (FCA), 388 ; taf. IV, figs. 27-28 (VH, CP in color), XXVIII, figs. 7-10 (FGO, HI). Ceylon / Sri Lanka.

Pelmatopla *trimeni* : Busson, 1903 : 380-381, 394-395.

Pelmatopla *trimeni* : von Graff, 1914 : 2959.

Pelmatopla *trimeni* : von Graff, 1915 : 3035, 3040-3041, 3047, fig. 144 (FCA), 3077.

Pelmatopla *trimeni* : de Beauchamp, 1926 : 356.

Pelmatopla *trimeni* : Meixner, 1928 : 592-593.

Pelmatopla *trimeni* : de Beauchamp, 1930 b : 698, 740.

Genus *Cotyloplana* - Rhynchodeminae in the family Rhynchodemidae

Cf. Ogren & Kawakatsu, 1988 b (p. 51).

Cotyloplana nilgiriense Whitehouse, 1919

See *Beauchampius nilgiriensis* (Whitehouse, 1919). *Cotyloplana nilgiriensis* is the correct spelling. Cf. IZN (1985 ; Art. 31 (b)).

Genus *Geoplana* - See under Geoplaninae

Geoplana sondaica Loman, 1890

See *Beauchampius sondaica* (Loman, 1890).

Geoplana sondaica Loman, 1890

See *Beauchampius sondaica* (Loman, 1890).

Genus *Pelmatolana* von Graff, 1896

Pelmatopla n. g. von Graff, 1896 : 65.

Type species : *Pelmatopla moluccana* von Graff, 1899.

Literature : von Graff, 1896 : 65 ; von Graff, 1899 : 387 ; von Graff, 1916 : 3224.

Here placed under *Pelmatopla* and *Beauchampius* (in part) in the Geoplanidae.

Pelmatopla bangoiiana de Beauchamp, 1939

See *Beauchampius bangolianus* (de Beauchamp, 1939).

Pelmatopiana bogoriensis von Graff, 1899.

Pelmatopiana bogoriensis n. sp. von Graff, 1899 : 392, taf. II, figs. 36-37 (DB, CP in color).

Buitenzorg, Java / Indonesia.

Pelmatopiana bogoriensis : von Graff, 1917 : taf. XXXII, figs. 20-21 (DB, CP).

Pelmatopiana bogoriensis : de Beauchamp, 1926 : 353.

Pelmatopiana bogoriensis : de Beauchamp, 1930 a : 77-79, fig. 3 (FCA). Tjibodas, Tjiböröm ; Rigole, lac Ngebel ; Sarangan, Kali Pagergede (alt. 1410 m) ; Cascade du lac Bedali, Colocase, Java / Indonesia.

Pelmatopiana bogoriensis : de Beauchamp, 1939 a : 329.

Pelmatopiana braueri (von Graff, 1899)

Amblyplana braueri n. sp. von Graff, 1899 : 512 ; taf. XVIII, figs. 22-23 (DB, CP in color).

Praslin Island / Seychelle.

Pelmatopiana braueri : Mell, 1903 : 202-205, 235 ; taf. XXXI, fig. 2 (FCA). Praslin, Seychellen / Seychelle.

Pelmatopiana braueri : Mell, 1904 : 481.

Pelmatopiana braueri : Bendle, 1909 : 297.

Pelmatopiana braueri : Meixner, 1921 : 371.

Pelmatopiana braueri : Steinböck, 1924 : 475.

Pelmatopiana braueri : Meixner, 1928 : 592.

Pelmatopiana braueri : de Beauchamp, 1930 a : 79.

Pelmatopiana braueri : de Beauchamp, 1930 b : 729, 740.

Pelmatopiana braueri : Prudhoe, 1949 b : 250.

Amblyplana braueri : Ogren & Kawakatsu, 1989 a : 53-54, 87.

Pelmatopiana coonoorensis de Beauchamp, 1930

See *Beauchampius coonoorensis* (de Beauchamp, 1930).

Pelmatopiana crassa de Beauchamp, 1939

See *Beauchampius crassus* (de Beauchamp, 1939).

Pelmatopiana dawydoffi de Beauchamp, 1939

See *Beauchampius dawydoffi* (de Beauchamp, 1939).

Pelmatopiana graffi Fuhrmann, 1914

Pelmatopiana graffi n. sp. Fuhrmann, 1914 : 783-785, 792 ; pls. XVI, figs. 28-29 (DVB), XVII, fig. 6 (HI). Cafetal la Camelia near Angelopolis and Guaca (alt. 1480-1820 m) / Colombia.

Pelmatopiana graffi : C. G. Froehlich, 1967 : 160.

Pelmatopiana indosinica de Beauchamp, 1939

See *Beauchampius indosinicu*s (de Beauchamp, 1939).

Pelmatopiana maheensis (von Graff, 1899)

Amblyplana mahéensis n. sp. von Graff, 1899 : 510 ; taf. XVIII, figs. 26-27 (DB, CP in color).

Mahé Island / Seychelle.

Pelmatopiana mahéensis : Schmidt, 1902 : 545, 564 ; taf. XXXIII, fig. 7 (HI).

Pelmatopiana mahéensis : Mell, 1903 : 149-202, figs. 1-2 (HI) ; taf. XXXI, fig. 1 (FCA). Wäldern b. Mahé, Seychellen / Seychelle.

Pelmatopiana mahéensis : Mell, 1904 : 481.

Pelmatopiana mahéensis : Bendle, 1909 : 297.

Pelmatopiana maheensis : von Graff, 1913 : 2725, 2755.

- Pelmatopiana maheensis* : von Graff, 1914 : 2929.
Pelmatopiana maheensis : von Graff, 1917 : taf. XLVI, fig. 5 (HI).
Pelmatopiana mahéensis : Kaburaki, 1920 : 129.
Pelmatopiana mahéensis : Meixner, 1921 : 371.
Pelmatopiana mahéensis : Steinböck, 1924 : 475, 487.
Pelmatopiana mahéensis : Meixner, 1928 : 592.
Pelmatopiana maheensis : de Beauchamp, 1929 : 8.
Pelmatopiana maheensis : de Beauchamp, 1930 b : 697, 729, 740.
Pelmatopiana maheensis : de Beauchamp, 1939 a : 320.
Pelmatopiana maheensis : Prudhoe, 1949 b : 250.
Amblyplana maheensis : Ogren & Kawakatsu, 1989 a : 55, 87.
Pelmatopiana maheensis : Sluys, 1989 c : 34.
- Pelmatopiana mahéensis* (von Graff, 1899)
See *Pelmatopiana maheensis* (von Graff, 1899).
- Pelmatopiana mahéensis* (von Graff, 1899)
See *Pelmatopiana maheensis* (von Graff, 1899).
- Pelmatopiana moluccana* von Graff, 1899
Coenoplana? spec.? Moseley, 1877 a : 280-281, 289. Ternate Island, Moluccas (North Maluku Kepulauan) / Indonesia.
Pelmatopiana moluccana n. sp. von Graff, 1899 : 196, fig. 47 (FCA), 387-388 ; taf. IV, figs. 23-24 (DH, CP in color), XXVIII, figs. 4-6 (HI). Sjerra Island, Timorlaut Islands / Indonesia.
Pelmatopiana moluccana : Busson, 1903 : 380, 385, 392, 394, 398, 402.
Pelmatopiana moluccana : de Beauchamp, 1925 : 69.
Pelmatopiana moluccana : de Beauchamp, 1926 : 356.
Pelmatopiana moluccana : de Beauchamp, 1930 a : 79.
Pelmatopiana moluccana : de Beauchamp, 1939 a : 329.
- Pelmatopiana nilgiriensis* (Whitehouse, 1919)
See *Beauchampius nilgiriensis* (Whitehouse, 1919).
- Pelmatopiana pseudophallus* de Beauchamp, 1939
Pelmatopiana pseudophallus n. sp. de Beauchamp, 1939 a : 299, 322-324, fig. 9 (DH, AE, FCA), 331, 334. Dalat (alt. 1500 m), Annam / Vietnam.
- Pelmatopiana sarasinorum* von Graff, 1899
See *Beauchampius sarasinorum* (von Graff, 1899).
- Pelmatopiana sondaica* (Loman, 1890)
See *Beauchampius sondaica* (Loman, 1890).
- Pelmatopiana sondaica* (Loman, 1890)
See *Pelmatopiana sondaica* (Loman, 1980).
- Pelmatopiana trimeni* von Graff, 1899
See *Beauchampius trimeni* (von Graff, 1899).

Genus *Pelmatopiana* - See under Pelmatoplaninae

- Pelmatopiana aurantia* Whitehouse, 1915
See *Australopacifica aurantia* (Whitehouse, 1915).
Pelmatopiana blomefieldi von Graff, 1899

- See *Australopacifica blomefieldi* (von Graff, 1899).
- Pelmatoplana bogoriensis* von Graff, 1899
See *Australopacifica bogoriensis* (von Graff, 1899).
- Pelmatoplana buettneri* von Graff, 1899
See *Australopacifica buettneri* (von Graff, 1899).
- Pelmatoplana büttneri* von Graff, 1899
See *Australopacifica büttneri* (von Graff, 1899).
- Pelmatoplana greeni* von Graff, 1899
See *Australopacifica greeni* (von Graff, 1899).
- Pelmatoplana guentheri* von Graff, 1899
See *Australopacifica guentheri* (von Graff, 1899).
- Pelmatoplana güntneri* von Graff, 1899
See *Australopacifica güntneri* (von Graff, 1899).
- Pelmatoplana himalayensis* Whitehouse, 1919
See *Australopacifica himalayensis* (Whitehouse, 1919).
- Pelmatoplana humberti* von Graff, 1899
See *Australopacifica humberti* (von Graff, 1899).
- Pelmatoplana ijimai* von Graff, 1899
See *Australopacifica ijimai* (von Graff, 1899).
- Pelmatoplana inflata* von Graff, 1899
See *Australopacifica inflata* (von Graff, 1899).
- Pelmatoplana kotzebueana* Schröder, 1924
See *Australopacifica kotzebueana* (Schröder, 1924).
- Pelmatoplana maculosa* Whitehouse, 1919
See *Australopacifica maculosa* (Whitehouse, 1919).
- Pelmatoplana martensi* von Graff, 1899
See *Australopacifica martensi* (von Graff, 1899).
- Pelmatoplana rotunda* Whitehouse, 1919
See *Australopacifica rotunda* (Whitehouse, 1919).
- Pelmatoplana striata* Whitehouse, 1919
See *Australopacifica striata* (Whitehouse, 1919).
- Pelmatoplana treubi* von Graff, 1899
See *Australopacifica treubi* (von Graff, 1899).
- Pelmatoplana willeyi* Busson, 1903
See *Australopacifica willeyi* (Busson, 1903).

Genus *Planaria* (Paludicola or Probursalia)

Cf. Ogren & Kawakatsu, 1987 (p. 111), 1988 b (pp. 60-61), 1989 (p. 87).

Planaria Tasmaniana Darwin, 1844

See *Australopacifica tasmaniana* (Darwin, 1844).

Genus *Polyclisis* (Paludicola or Probursalia)

Cf. Kenk, 1974 (p. 54).

Polycelis tasmanica (Darwin, 1844)

See *Australopacifica tasmaniana* (Darwin, 1844).

Genus *Rhynchodemus* - See under Rhynchodeminae in the family Rhynchodemidae

Rhynchodemus Coxii Fletcher et Hamilton, 1888

See *Australopacifica coxii* (Fletcher et Hamilton, 1888).

Rhynchodemus testaceus Hutton, 1880

See *Australopacifica testacea* (Hutton, 1880).

UNDESCRIPTED CAENOPLANINAE AND PELMATOPLANINAE SPECIES

Artioposthia sp. of Dr. Fyfe. E. M. Froehlich, 1978.

Artioposthia sp. E. M. Froehlich, 1978: 19. New Zealand?

See *Australopacifica* sp. of Dr. Fyfe. E. M. Froehlich, 1978.

Australopacifica sp. of Annam (Vietnam) de Beauchamp, 1939.

Pelmatopla sp. de Beauchamp, 1939 a: 320. Kontum, Annam / Vietnam; Poulo Dama / Cambodge.

Australopacifica sp. of Dr. Fyfe, in E. M. Froehlich, 1978.

See *Artioposthia* sp. of Dr. Fyfe.

Australopacifica sp. of Johore (Malaysia) de Beauchamp, 1940.

Pelmatopla sp. de Beauchamp, 1940: 117. Gunong Pulay, Johore / Malaysia.

Australopacifica sp. of Madurai (India) Kawakatsu & Basil, 1971.

Permatopla sp. (Species of Madurai). Kawakatsu & Basil, 1971: 43, fig. 2 (DH, AE), 46.
Madurai, Tamil / India. Spelling error.

Permatopla sp. (species of Madurai). Kawakatsu & Basil, 1976: 51-53, fig. 1 F-G (DH, AE).
Madurai, Tamil / India. Spelling error.

Australopacifica sp. of Melbourne (Australia). Winsor, 1979.

Geoplana sp. Winsor, 1979: 159, fig. 6 A-C (DB, DH, AE, CP). Royal Botanic Gardens, Melbourne, Victoria / Australia.

Australopacifica sp. of Queensland (Australia). Winsor, 1980.

Geoplana sp. Winsor, 1980: 195. Lamington National Park, Queensland / Australia.

Australopacifica sp. of Victoria (Australia). Winsor, 1977.

Geoplana sp. Winsor, 1977: 141, 143-145. Otway Region, Victoria and Tasmania / Australia.

Australopacifica? spp. of Toscano (Italy). Minelli, 1976.

Geoplana spp. Toscano. Minelli, 1976: 97. Toscana / Italy.

Geoplana spp. Jones, 1981 a: 71. Citation of Minelli (1976).

Coenopla sp? of New South Wales. von Graff, 1899.

Coenopla sp. =var. of *Coenopla subviridis*? von Graff, 1899: 392. Paramatta, New South Wales, Chall: Exped. 1887.

Note: This undescribed species seems to be *Rhynchodemus* sp. Moseley, 1877 (b. p. 11). See *Caenopla coerulea coerulea* Moseley, 1877; *Australopacifica sanguinea* (Moseley, 1877).

Moseley (1879, p. 279) wrote: "..... a special genus, *Coenopla*, which has affinities with the genus *Rhynchodemus* of India and the Cape of Good Hope." See also Moseley (1892, p. 242; *Caenopla* was used in this book).

Coenoplana? sp.? of Ternata Moluccas. Moseley, 1877.

Coenoplana? sp.? Moseley, 1877 a : 289. Ternate Moluccas. =Ternate Island, North Maluku (=Maluku Kepulauan) / Indonesia.

Coenoplana? spec? Moseley, 1877.

See *Pelmatopiana moluccana* von Graff, 1899.

Geoplana sp. of Melbourne (Australia) Winsor, 1979.

See *Australopacifica* sp. of Melbourne (Australia) Winsor, 1979.

Geoplana sp. of Queensland (Australia) Winsor, 1980.

See *Australopacifica* sp. of Queensland (Australia) Winsor, 1980.

Geoplana sp. of Tasmania (Australia). Dendy, 1915.

Geoplana sp.: Dendy, 1892 f: 372. Hill at foot of Mt. Wellington, near Hobart, Tasmania / Australia.

Geoplana sp.: von Graff, 1899 : 372.

Geoplana sp.: Dendy, 1915 : 702.

See *Australopacifica flynni* (Dendy, 1915); *Australopacifica wellingtoni* (Dendy, 1891).

Geoplana sp. of Victoria (Australia) Winsor, 1977.

See *Australopacifica* sp. of Victoria (Australia) Winsor, 1977.

Geoplana spp. of Toscano (Italy) Minelli, 1976.

See *Australopacifica?* spp. of Toscano (Italy) Minelli, 1976.

Kontikia sp. of Madeira du Bois-Reymond Marcus & Marcus, 1959.

See *Kontikia mexicana* (Hyman, 1939).

Pelmatopiana sp. of Annam (Vietnam) de Beauchamp, 1939.

See *Australopacifica* sp. of Annam (Vietnam) de Beauchamp, 1939.

Pelmatopiana sp. of Johore (Malaysia) de Beauchamp, 1940.

See *Australopacifica* sp. of Johore (Malaysia) de Beauchamp, 1940.

Pelmatopiana sp. of Madurai (India) Kawakatsu & Basil, 1971.

See *Australopacifica* sp. of Madurai (India) Kawakatsu & Basil, 1971.

Rhynchodemus sp. Moseley, 1877.

See *Australopacifica sanguinea* (Moseley, 1866). See also *Coenoplana* sp.? of New South Wales.

Rhynchodemus sp. in Moseley, 1877.

See *Caenoplana coerulea coerulea* Moseley, 1877.

?Young of *Geoplana Traversii* of Wellington (New Zealand) Moseley, 1877.

?Young of *Geoplana Traversii*: Moseley, 1877 a : 284. Wellington (by collections from the 'Challenger').

?Young of *Geoplana Traversii*: von Graff, 1899 : 370.

Note: See *Australopacifica challengerii* (von Graff, 1899).

SPECIES TRANSFERRED INTO THE GENUS *BIPALIUM* (BIPALIIDAE) FROM THE GENUS *PELMATOPLANA* (GEOPLANIDAE)

Bipalium glandulosum (de Beauchamp, 1925) comb. nov.

Pelmatopiana glandulosa n. sp. de Beauchamp, 1925 : 69-70, fig. 5 (FCA). Sarawak, Borneo / Indonesia.

Pelmatopiana glandulosa: de Beauchamp, 1926 : 353-356, fig. 14 (FCA), 356, 358 ; pl. 13, figs. 8-9 (DB, AE, FCA). Lundu, Sarawak, Borneo / Indonesia.

Pelmatopla *glandulosa* : Mexiner, 1928 : 592, 594, 600.

Pelmatopla *glandulosa* : de Beauchamp, 1929 : 8.

Pelmatopla *glandulosa* : Tu, 1940 : 220, 247.

Pelmatopla *glandulosa* : C. G. Froehlich, 1967 : 154.

Note : Although this species lacks the lunate anterior of the genus *Bipalium*, its male and female parts of the copulatory apparatus resembles this genus and should be transferred there.

Pelmatopla *glandulosa* de Beauchamp, 1925

See *Bipalium* *glandulosa* (de Beauchamp, 1925).

CLASSIFICATION OF THE FAMILY GEOPLANIDAE EMPLOYED IN THE GEOPLANIDAE INDEX

Family G E O P L A N I D A E STIMPSON, 1857

Synonymy : Polycelidea DIESING, 1861 ; Geoplanida HALLEZ, 1892 ; Geoplanida + Polycladida HALLEZ, 1893

Subfamily GEOPLANINAE STIMPSON, 1857

Genus *GEOPLANA* STIMPSON, 1857

Subgenus *Geoplana* STIMPSON, 1857

Subgenus *Barreirana* OGREN et KAWAKATSU, 1990

Genus *GIGANTEA* OGREN et KAWAKATSU, 1990

Genus *PASIPHA* OGREN et KAWAKATSU, 1990

Genus *NOTOGYNAPHALLIA* OGREN et KAWAKATSU, 1990

Genus *AMAGA* OGREN et KAWAKATSU, 1990

Genus *CHOERADOPLANA* VON GRAFF, 1896

Genus *GEOBIA* DIESING, 1861

Genus *ISSOCA* C. G. FROEHЛИCH, 1955

Genus *CUSANA* E. M. FROEHЛИCH, 1978

Genus *LIANA* E. M. FROEHЛИCH, 1978

Genus *ENTEROSYRINGA* OGREN et KAWAKATSU, 1990

Genus *XERAPOA* C. G. FROEHЛИCH, 1955

Genus *POLYCLADUS* BLANCHARD, 1845

Genus *PSEUDOGEOPLANA* OGREN et KAWAKATSU, 1990 (collective group)

Subfamily CAENOPLANINAE OGREN et KAWAKATSU, subfam. nov.

Genus *CAENOPLANA* MOSELEY, 1877

Synonym : *Elattodemus* HASLAUER-GAMISCH, 1982

Genus *KONTIKIA* C. G. FROEHЛИCH, 1955

Genus *PIMEA* WINSOR, 1990

Genus *TIMYMA* E. M. FROEHЛИCH, 1978

Genus *ENDEAVOURIA* OGREN et KAWAKATSU, gen. nov.

New Genus to be proposed by WINSOR (not yet published)

Genus *ARTIOPOSTHIA* VON GRAFF, 1896

Genus *COLEOCEPHALUS* FYFE, 1953

Genus *NEWZEALANDIA* OGREN et KAWAKATSU, gen. nov.

Genus *AUSTRALOPACIFICA* OGREN et KAWAKATSU, gen. nov. (collective group)

Subfamily PELMATOPLANINAE OGREN et KAWAKATSU, subfam. nov.

Genus *PELMATOPLANA* VON GRAFF, 1896

Genus *BEAUCHAMPIUS* OGREN et KAWAKATSU, gen. nov.

ADDITIONS TO PART I OF THE GEOPLANIDAE INDEX

Family GEOPLANIDAE STIMPSON, 1857

Suafamily GEOPLANINAE STIMPSON, 1857

Genus *Geoplana* Stimpson, 1857

Subgenus *Geoplana* Stimpson, 1857

Cf. Ogren & Kawakatsu, 1990 b (pp. 85-86).

Geoplana (*Geoplana*) *arkalabamensis* Ogren et Darlington, 1991

Geoplana sp.: Daly & Darlington, 1991: 83, fig. 1 B (DB). Arkansas / U. S. A.

Geoplana sp.: Ogren, 1990 a: 27.

Geoplana arkalabamensis n. sp. Ogren & Darlington, 1991: 228-235, figs. 1-12 (DVH, AE, DH, HI, FGO, FCA). Monroeville, Monroe Co., Alabama and Little Rock, Pulaski Co., Arkansas / U. S. A.

Geoplana (*Geoplana*) *mixopulla* Ogren et Kawakatsu, 1990

Geoplanidae sp.: Kawakatsu, 1991: fig. 11-8 (FGO).

Note: A modificatory schematic figure based upon von Graff's (1899, p. 148, fig. 13) original figure of "*Geoplana pulla*" was employed in this Japanese article. Cf. Ogren & Kawakatsu, 1990 b (pp. 126-127).

Geoplana sp. of Arkansas (U. S. A.) Daly & Darlington, 1991

See *Geoplana* (*Geoplana*) *arkalabamensis* Ogren et Darlington, 1991.

THE FAMILIES, GENERA AND SPECIES ERRONEOUSLY DESCRIBED UNDER TRICLADIDA TERRICOLA

Family GEOPALUDICOLIDAE KOMÁREK, 1919

Type genus: *Geopaludicolina* KOMÁREK, 1919

Paludicola or Probursalia. Cf. Kenk, 1930, 1974.

Genus *Dugesia* Girard, 1850

Dugesia n. g. Girard, 1850: 265.

Type species: *Planaria gonocephala* Dugès, 1830.

Paludicola or Probursalia. Cf. Kenk, 1974.

Dugesia absoloni (Komárek, 1919)

Geopaludicolia absoloni n. sp. Komárek, 1919: 4, 32-41, 45-46, 50; taf. III, figs. 28-39 (DVE, HI, FCA). Höhle "Golubinka", Mosorplanina in Zentral-Dalmatien bei Split (alt. 1200 m), Balkan Peninsula / Yugoslavia.

Geopaludicolia absoloni: Komárek, 1920: 822, 824-828.

Geopaludicolia absoloni: Steinböck, 1924: 461.

Planaria (*Geopaludicolia*) *absoloni*: Meixner, 1928: 572, 577, footnote 2.

Euplanaria (*Geopaludicolia*) *absoloni*: Kenk, 1930: 292.

Euplanaria Absoloni : de Beauchamp, 1932 : 331-333. Grotte Golubiaka, Moorplanina (alt. 1200 m), Split, Dalmatie centrale / Yugoslavia.

Dugesia absoloni : Kenk, 1974 : 21, 32.

Note: de Beauchamp (1932) examined 2 sexual specimens including the type species. The taxonomic position of this eyeless species is clear from the schematic figures of the copulatory apparatus given by Komárek (1919).

Genus *Euplanaria* Hesse, 1897

Euplanaria n. g. Hesse, 1897 : 549.

Type species: *Planaria gonocephala* Dugès, 1830.

Synonym of *Dugesia*. Paludicola or Probursalia. Cf. Kenk, 1974.

Euplanaria Absoloni (Komárek, 1919)

See *Dugesia absoloni* (Komárek, 1919); *Geopaludicola absoloni* Komárek, 1919; *Euplanaria (Geopaludicola) absoloni* (Komárek, 1919); *Planaria (Geopaludicola) absoloni* (Komárek, 1919).

Euplanaria (Geopaludicola) absoloni (Komárek, 1919)

See *Dugesia absoloni* (Komárek, 1919); *Geopaludicola absoloni* Komárek, 1919; *Euplanaria Absoloni* (Komárek, 1919); *Planaria (Geopaludicola) absoloni* (Komárek, 1919).

Genus *Geopaludicola* Komárek, 1919

Geopaludicola n. g. Komárek, 1919 : 4, 32.

Type species: *Geopaludicola absoloni* Komárek, 1919.

Literature: Komárek, 1920 : 822; Meixner, 1928 : 572; Kenk, 1930 : 292; Kenk, 1974 : 21, 32. Here placed under *Dugesia* in the family Dugesiidae Ball, 1974. Paludicola or Probursalia.

Geopaludicola absoloni Komárek, 1919

See *Dugesia absoloni* (Komárek, 1919); *Planaria (Geopaludicola) absoloni* (Komárek, 1919); *Euplanaria (Geopaludicola) absoloni* (Komárek, 1919); *Euplanaria Absoloni* (Komárek, 1919).

Genus *Planaria* Müller, 1776

Paludicola or Probursalia. See page 94.

Planaria (Geopaludicola) absoloni (Komámek, 1919)

See *Dugesia absoloni* (Komárek, 1919); *Geopaludicola absoloni* Komárek, 1919; *Euplanaria (Geopaludicola) absoloni* (Komárek, 1919); *Euplanaria Absoloni* (Komárek, 1919).

Family CEPHALOCEROIDEA - See under LEIMACOPSIDAE

Family LEIMACOPSIDE DIESING, 1861

Type genus: *Leimacopsis* DIESING, 1861

Cephaloceroidea (in part) : Diesing, 1850.

Prosthercerida (in part) : Schmarda, 1859. See also Schmarda, 1871.

Leimacopsidae n. fam. Diesing, 1861.

Limacopsidae : von Graff, 1899.

Genus *Leimacopsis* Diesing, 1861

Leimacopsis n. g. Diesing, 1861 : 519.

Type species : *Prostheceraeus terricola* Schmarda, 1859.

Syn. *Limacopsis* : von Graff, 1899 : 291.

Literature : von Graff, 1896 a : 63 ; von Graff, 1899 : 291.

Note: The family Leimacopsidae Diesing, 1861, was introduced for the single species *Leimacopsis terricola* (Schmarda, 1859) (*olim Prostheceraeus*) which was assigned originally to the Polycladida by Schmarda (1859), then placed into the Turbellaria by Diesing (1861). This species is a nomen dubium and cannot be formally allocated with certainty to Mollusca, Turbellaria, Polycladida, or any known group. However, some features mentioned by Schmarda (1859) are also found in certain Polycladida.

Leimacopsis terricola (Schmarda, 1859)

Prostheceraeus terricola n. sp. Schmarda, 1859 : 30-31 ; taf. VI, fig. 69 (DB in color). Quindiu-Passes, Grunde / Colombia.

Leimacopsis terricola : Diesing, 1861 : 519.

Prostheceraeus terricola : Humbert & Claparède, 1862 : 299, note.

Leimacopsis terricola : Leuckart, 1863 : 174.

Prostheceraeus : Schmarda, 1871 : 268.

Leimacopsis terricola : Gamble, 1896 : 37.

Leimacopsis terricola : Moseley, 1877 a : 287.

Prostheraceus terricola : Moseley, 1877 a : 287. Spelling error.

Leimacopsis terricola : Hallez, 1892 : 21.

Leimacopsis terricola : Hallez, 1893 : 57, 111-112.

Leimacopsis terricola : von Graff, 1896 a : 63.

Limacopsis terricola : von Graff, 1899 : 291.

Limacopsis terricola : von Graff, 1912 : taf. XXXIII, fig. 1 (DB in color).

Leimacopsis terricola : von Graff, 1913 : 2786.

Limacopsis terricola : Fuhrmann, 1914 : 748.

Prostheceraeus terricola : Stummer-Traunfels, 1933 : 3485, footnote 1.

Limacopsis terricola : Hyman, 1962 : 1.

Limacopsis terricola : Crezée, 1982 : 735.

Prostheceraeus terricola : Prudhoe, 1985 : 190, 230.

Limacopsis : Cannon, 1986 : 68.

Note: According to Dr. E. M. Froehlich (in litt.), members of the São Paulo team (the late Dr. E. Marcus, the late Dr. E. du Bois-Reymond Marcus, Drs. C. G. and E. M. Froehlich, and Dr. D. D. Corrêa) considered for many years *Leimacopsis terricola* is a slug. The late Dr. L. H. Hyman may also expressed the same opinion in conversation with Dr. E. M. Froehlich. It is however their opinions have not been published formally. Sometimes Kawakatsu received mixed samples of preserved land planarians with slugs from local collectors. In recent papers, Crezée (1982) and Prudhoe (1985) considered the Schmarda's species as a land planarian. Cannon (1986, p. 68) wrote: "... and *Limacopsis* Diesing 1862 (originally *Leimacopsis*) not

recorded since originally described, with two tentacles and numerous eyes, are sometimes assigned to monotypic families."

Schmarda's (1859) original description and an enlarged, black-and-white figure of *Prostheceraeus terricola* were employed as a cover illustration in a paper by Kawakatsu, Oki, Tamura, Ogren, Yamada & Murayama (1990).

Family LIMACOPSIDAE - See under LEIMACOPSIDAE

Genus *Limacopsis* - See under *Leimacopsis*

Limacopsis terricola (Schmarda, 1859)

See *Leimacopsis terricola* (Schmarda, 1859).

Genus *Prostheceraeus* Schmarda, 1859

Prostheceraeus n. g. Schmarda, 1859 : 30.

Type species: *Prostheceraeus terricola* Schmarda, 1859.

Here placed under *Leimacopsis*. Probably Arionidae or Milacidae or Philomycidae (Gastropoda, Pulmonata, Stylommatophora, Sigmurethura).

Prostheceraeus terricola Schmarda, 1859

See *Leimacopsis terricola* (Schmarda, 1859).

Geoplana sp. of Ceylon. Grube (British Museum collection)

Geoplana sp.: Pantin, 1953 : 207-208.

Geoplana sp.: Gibson & Ogren, 1990 : 24.

Note: This species was finally identified as a Nemertea, *Baseodiscus lumbrioides* (von Graff, 1899), by Gibson & Ogren (1990). Cf. Pantin (1953); Ogren & Kawakatsu (1988 b, p. 85).

It was clearly demonstrated that *Nematodemus lumbrioides* von Graff, 1899, was not a land planarian species.

* * * * *

Continued in next issue of the Bulletin of Fuji Women's College, No. 30, Ser. II (1992).

* * * * *

Note added in the final proof:

The authors have been preparing the present Geoplanidae Index, Part II, for several years and the manuscript was completed by middle of 1990. We have also communicated regularly and freely concerning our progress and problems and have received valuable suggestions from Dr. Eudoxia M. FROEHLICH and Mr. Leigh WINSOR. It has been our desire to include a new genus suggested by Mr. WINSOR (in litt.) when his descriptive manuscript was published. However, our paper was already in press by the beginning of May, 1991, and only limited changes could be made. Recently, we learned by letter from Mr. WINSOR (5th June, 1991; in litt.) that he had finally completed his manuscript

entitled "A provisional classification of Australian terrestrial geoplanid flatworms (Tricladida; Terricola; Geoplanidae)" which was submitted to the Victorian Naturalist. He stated that his manuscript has been reviewed and accepted for publication in vol. 108, late in 1991. He was kind to send us a manuscript photocopy for study. We are very pleased to learn of his proposed new genera and classification largely of Australian species. Unfortunately, we are not able to include the specific new taxa in our present publication which is now in the final proof stages. Moreover, by remaining silent we will avoid the possibility of publishing his new genera before their actual date of issue. Therefore, we will include our discussion and presentation of Mr. WINSOR's second 1991 paper in a later publication. Our final report of this indices series will be entitled "Additions, corrections and geographic distribution of families, subfamilies and genera of land planarians of the World (Turbellaria, Tricladida, Terricola)" (by OGREN, KAWAKATSU & FROEHLICH, Ms.). Bull. Fuji Women's College, No. 30, Ser. II. 1992.

* * * * *

Addresses of the Authors:

Dr. Robert E. OGREN, Professor of Biology, Emeritus, Wilkes University, Wilkes-Barre, Pennsylvania 18766, U. S. A. (Home address: 88 Lathrop Street, Kingston, Pennsylvania 18704, U. S. A.)

Dr. Masaharu KAWAKATSU, Professor of Biology, Biological Laboratory, Fuji Women's College, Kita-16, Nishi-2, Kita-ku, Sapporo (Hokkaidō) 001, Japan.

December 25, 1991.