

*Catalogue of copepods associated
with marine invertebrates at Nosy Bé,
northwestern Madagascar, and vicinity*

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ABSTRACT

In the region of Nosy Bé, Madagascar, 244 species of copepods are associated with 270 species of marine invertebrates, from the intertidal zone to a depth of 50 meters. These copepods are listed with their hosts and localities where found.

KEYWORDS : Copepods — Catalogue — Associations with marine invertebrates — Madagascar.

RÉSUMÉ

CATALOGUE DES COPÉPODES ASSOCIÉS À DES INVERTÉBRÉS MARINS À NOSY BÉ ET RÉGIONS AVOISINANTES
(NORD-OUEST DE MADAGASCAR)

Dans la région de Nosy Bé, Madagascar, 244 espèces de copépodes s'associent aux 270 espèces d'invertébrés marins, de la zone intertidale jusqu'à une profondeur de 50 mètres. Une liste de ces copépodes avec leurs hôtes et localités est présentée.

MOTS CLÉS : Copépodes — Inventaire faunistique — Associations aux invertébrés marins — Madagascar.

INTRODUCTION

Many copepods are associated with shallow-water marine invertebrates, especially in tropical or subtropical regions (GOTTO, 1979; HUMES, 1994 a). Such copepods, mostly Poecilostomatoidea and Siphonostomatoidea, but including several Cyclopoida and Harpacticoida, have been intensively studied in the vicinity of Nosy Bé, approximately 13°20' S,

48°15' E, in northwestern Madagascar, where field work was carried out over a period of 27 months in 1955, 1960, 1963-1964, and 1967. Collections were made from intertidal areas to a depth of 50 m by snorkeling and SCUBA diving.

This work resulted in the description and cataloguing of 244 species of copepods, 228 (93 %) of them new. These are associated with 270 host species of invertebrates, including various Porifera, Cnida-

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ria, Mollusca, Annelida, Crustacea, Echinodermata, and Ascidiacea. Seven species of *Hemicyclops* are from intertidal burrows made by unknown invertebrates, presumably crustaceans or polychaetes. (Several species of Cyclopoida from Ascidiacea have not yet been studied.)

This catalogue includes all species known at present in the region of Nosy Bé, and indicates the abundance of species of associated copepods and their various invertebrate hosts.

The numbers in figures 1 and 2 refer to the 61 areas where the copepods were collected : 1, Ambafaho ; 2, Ambanoro ; 3, Ambariobe ; 4, Ambariotelot ; 5, Ambariotsimaramara ; 6, Ambatoloaka ; 7, Ambato Rano ; 8, Ampasindava ; 9, Ampombilava ; 10, Ampassipohe ; 11, Andilana ; 12, Andraikarekabe ; 13, Ankazoberavina ; 14, Antafiabe ; 15, Antafianambity ; 16, Ankify ; 17, Antany Mora (îles Radama) ; 18, Antsakoabe ; 19, Antsiabe ; 20, Bamoko ; 21, Banc de Cinq Mètres ; 22, Banc de Dzamandzar ; 23, Banc de la Lanterne ; 24, Banc des Frères (near îles Mitsio) ; 25, Banc du Touareg ; 26, Bay of Ampasindava ; 27, Befifika ; 28, Befotaka ; 29, black buoy north of Nosy Varona ; 30, Boloboxo (Nosy Faly) ; 31, harbor at Hellville ; 32, Madirokely ; 33, Navetsy ; 34, north of Ankazoberavina ; 35, north of Nosy Sakatia ; 36, northeast of Nosy Faly ; 37, Nosy Faly ; 38, Nosy Fanihy ; 39, Nosy Iranja ; 40, Nosy Kisimany ; 41, Nosy Mamoko ; 42, Nosy N'Tangam (sometimes spelled Nosy Tanga) ; 43, Nosy Taolankena ; 44, Nosy Ovy (îles Radama) ; 45, Nosy Roty ; 46, Nosy Sakatia, southern end ; 47, pass between Nosy Bé and Nosy Komba ; 48, Pointe à la Fièvre ; 49, Pointe Ambarionaomby ; 50, Pointe Andemby (Nosy Faly) ; 51, Pointe Antsamantsara ; 52, Pointe de Tafondro ; 53, Pointe Lokobe ; 54, Pointe Mahatsinjo ; 55, Rocher du N.E. ; 56, Sanitary ; 57, south of Nosy Bé ; 58, south of Tany Kely ; 59, southwest of Nosy Bé ; 60, south of Nosy Bé ; 61, Tany Kely.

For each species of copepod the localities where it and its host (or hosts) was found are indicated by numbers within parentheses. References in [] contain records in addition to those found in the original description.

CATALOGUE

HARPACTICOIDA

CANCRINCOLIDAE

Pholetiscus rectiseta Humes, 1956. From *Sesarma meinerli* de Man (2, and Andjiabe, 65 km east of Nosy Bé on the mainland of Madagascar, not shown in fig. 1).

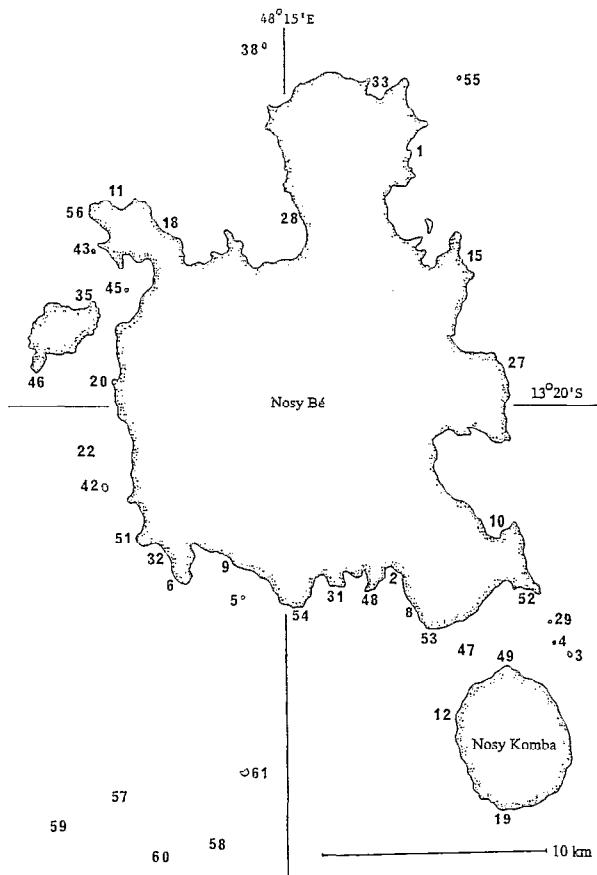


FIG. 1. — Localities where collections of copepods from invertebrates were made at Nosy Bé, Nosy Komba, and small islands in the vicinity.

Sites de récolte de copépodes sur des invertébrés à Nosy Bé, Nosy Komba et les petites îles avoisinantes.

CANUELLIDAE

Sunaristes dardani Humes and Ho, 1969. From *Dardanus megistos* (Herbst) (2, 3, 6, 15, 16, 20, 27, 40, 42, 48, 50); *Dardanus deformis* (H. Milne Edwards) (3); *Dardanus guttatus* (Olivier) (42, 51, 56); *Dardanus lagopodes* (Forskål) (42, 53); *Calcinus latens* (Randall) (42).

Sunaristes inaequalis Humes and Ho, 1969. From *Dardanus megistos* (Herbst) (3, 18); unidentified hermit crabs (16).

PELTIDIIDAE

Alteuthellopsis corallina Humes, 1981. From *Merulina ampliata* (52); *Platygyra daedala* (Ellis and Solander) (3); *Platygyra* sp. (3); *Astreopora* sp. (54).

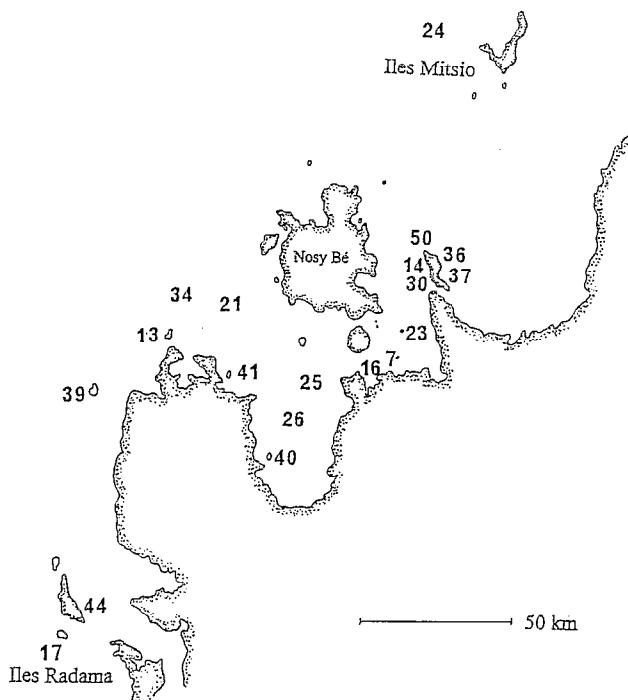


FIG. 2. — Localities from Radama to Mitsio islands where collections of copepods from invertebrates were made.
Localisation des récoltes de collection de copépodes des îles Radama aux îles Mitsio.

PORCELLIDIIDAE

Porcellidium brevicaudatum Thompson and A. Scott, 1903 [HUMES and HO, 1969 c]. From *Dardanus megistos* (Herbst) (2, 16, 18, 27, 33, 42, 49, 61); *Dardanus guttatus* (Olivier) (16, 33, 42, 51); *Dardanus lagopodes* (Forskål) (53).

Porcellidium echinophilum Humes and Gelerman, 1962. From *Echinometra mathaei* (Blainville) (49).

TISBIDAE

Paraidya occulta Humes and Ho, 1969. From *Dardanus megistos* (Herbst) (2, 40, 42, 49, 50, 51, 53, 61); *Dardanus guttatus* (Olivier) (33, 51).

CYCLOPOIDA

NOTODELPHYIDAE

Bysone operculatus Stock and Humes, 1970. From *Parerythropodium fulvum* (Forskål) ssp. *fuscum* (Thomson and Henderson) (51).

Demoixys affinis Stock and Humes, 1970. From *Parerythropodium fulvum* (Forskål) ssp. *fuscum* (Thomson and Henderson) (51).

Paranotodelphys procax Stock and Humes, 1970. From *Parerythropodium fulvum* (Forskål) ssp. *fuscum* (Thomson and Henderson) (51).

Thoracodelphys uniseta Stock and Humes, 1970. From *Parerythropodium fulvum* (Forskål) ssp. *fuscum* (Thomson and Henderson) (16).

ASCIDICOLIDAE

Haplostoma humesi Ooishi, 1995. From *aplidium* sp. (6).

POECILOSTOMATOIDA

ANTHESSIIDAE

Anthesius alatus Humes and Stock, 1965 (The three species associated with *Tridacna*, *A. alatus*, *A. amicalis*, and *A. solidus*, are considered by NAIR (1988) to belong to his new genus *Tridacnophilus*.) From *Tridacna squamosa* (Lamarck) (3, 49).

Anthesius amicalis Humes and Stock, 1965. From *Tridacna squamosa* (Lamarck) (3, 4, 5, 41, 49, 52, 53).

Anthesius distensus Humes and Ho, 1965. From *Pteria macroptera* Lamarck (4, 9, 49, 53, 61).

Anthesius dolabellae Humes and Ho, 1965. From *Dolabella scapula* (Martijn) (4, 37, 42, 49, 61).

Anthesius pinnae Humes, 1959. From *Pinna muricata* Linnaeus (53).

Anthesius solidus Humes and Stock, 1965. From *Tridacna squamosa* (Lamarck) (3, 5, 41, 49, 52, 53).

Anthesius stylocheili Humes and Ho, 1965. From *Stylocheilus longicauda* (Quoy and Gaimard) (16).

CLAUSIDIIDAE

Conchyliurus sp. From *Antigone puerpera* Linnaeus (53).

Cotylomolgus lepidonoti Humes and Ho, 1967. From *Lepidonotus cristatus* (Grube) (6, 18, 27, 33).

Hemicyclops acanthophorus Humes, in press. From burrows (28).

Hemicyclops acanthosquillae Humes, 1965. From *Acanthosquilla* sp. (later described as *A. humesi* Manning, 1968) (18).

Hemicyclops amplicaudatus Humes, 1965. From burrows of *Axius* (*Neaxius*) *acanthus* A. Milne Edwards (11, 18, 33, 39, 42).

Hemicyclops apiculus Humes, in press. From *Favia* sp. (48); *Dendrophyllia micracanthus* Klunzinger, var. *grandis* Crossland (42).

Hemicyclops axiophilus Humes, 1965. From burrows of *Axius* (*Neaxius*) *acanthus* A. Milne Edwards (11, 18, 33, 39, 42).

Hemicyclops biflagellatus Humes, 1965. From burrows (10).

Hemicyclops carinifer Humes, 1965. From burrows (2, 10, 14, 19, 20, 28, 30, 32, 40, 45, 46, 48, 49).

Hemicyclops diremptus Humes, 1965. From burrows (10, 14, 28, 30, 32, 40, 45, 48, 49).

Hemicyclops kombensis Humes, 1965. From burrows (19, 32, 45, 49).

Hemicyclops perinsignis Humes, 1973. From sponge, *Agelas* sp. (61).

Hemicyclops vicinalis Humes, in press. From shells occupied by *Dardanus guttatus* (Olivier).

Hemicyclops visendus Humes, Cressey and Goding, 1958. From *Upogebia* (*Upogebia*) sp.

Hippomolgus cognatus Humes and Ho, 1967. From *Tubipora musica* (Linnaeus) (48, 49).

Hippomolgus latipes Humes and Ho, 1967. From *Tubipora musica* (Linnaeus) (49).

LICHOMOLGIDAE

Acanthomolgus arctatus Humes, 1974. From *Echinogorgia sasappo* (Esper) (19, 42, 53, 61).

Acanthomolgus astrictus Humes and Stock, 1973 [HUMES and STOCK, 1973]. From *Acanthogorgia aspera* (Pourtales) (13, 21, 44, 53, 61); *Muricella rubra robusta* Thomson and Simpson (42, 61).

Acanthomolgus combinatus Humes, 1974. From *Echinogorgia sasappo* (Esper) (19, 42, 53, 61).

Acanthomolgus cuneipes (Humes and Ho, 1968). From *Dendronephthya mucronata* (Pütter) (9); *Stereonephthya acaulis* Verseveldt (1, 9, 12, 61).

Acanthomolgus exilipes (Humes and Ho, 1968). From *Dendronephthya köllikeri* Kükenthal (44); *Dendronephthya mucronata* (Pütter) (9, 17, 19, 61); *Dendronephthya regia* Verseveldt (21, 57); *Dendronephthya stocki* Verseveldt (21, 34); *Dendronephthya speciosa* Kükenthal (13, 49); *Stereonephthya cordylophora* Verseveldt (34); *Dendronephthya* sp. (24).

Acanthomolgus fissisetiger (Humes and Ho, 1968) [HUMES and STOCK, 1973]. From *Stereonephthya acaulis* Verseveldt (= *S. papyracea* Verseveldt) (1, 9, 12, 25, 61); *Lemnalia elegans* (May) (53); *Lemnalia humesi* Verseveldt (53).

Acanthomolgus gentilis (Humes and Ho, 1968) [HUMES and STOCK, 1973]. From *Dendronephthya mucronata* (Pütter) (9, 13, 17, 35, 51, 55, 61); *Dendronephthya köllikeri* Kükenthal (44); *Dendronephthya lokobensis* Verseveldt (51); *Dendronephthya speciosa* Kükenthal (49, 61); *Dendronephthya stocki* Verseveldt (61); *Dendronephthya* sp. (24); *Stereonephthya acaulis* Verseveldt (6, 9, 12, 51, 53, 49, 61); *Stereonephthya papyracea* Kükenthal (61); *Umbellulifera striata* (Thompson and Henderson) (53).

Acanthomolgus hales Humes and Stock, 1973 [HUMES, 1974; HUMES and STOCK, 1973]. From *Solenocaulon tortuosum* Gray (47).

Acanthomolgus hians (Humes and Ho, 1968). From *Siphonogorgia pendula* Studer (19, 22); *Siphonogorgia pichoni* Verseveldt (29, 61).

Acanthomolgus longispinifer (Humes and Ho, 1968) [HUMES and STOCK, 1973]. From *Siphonogorgia pendula* Studer (19, 22); *Siphonogorgia pichoni* Verseveldt (29, 61).

Acanthomolgus mopsellae Humes, 1974. From *Mopsella rubeola* Wright and Studer (53).

Acanthomolgus planeti Humes and Stock, 1973. From *Umbellulifera striata* (Thompson and Henderson) (47, 59).

Acanthomolgus telestophilus (Humes and Ho, 1968). From *Telesto arborea* Wright and Studer (17); *Coelogorgia palmosa* Milne Edwards and Haime (3, 48).

Acanthomolgus varirostratus (Humes and Ho, 1968) [HUMES and STOCK, 1973]. From *Dendronephthya cirsum* Kükenthal (35); *Dendronephthya köllikeri* Kükenthal (44); *Dendronephthya lokobensis* Verseveldt (47); *Dendronephthya mucronata* (Pütter) (9, 17, 24, 34, 35, 51, 55, 61); *Dendronephthya regia* Verseveldt (21, 34); *Dendronephthya speciosa* Kükenthal (55); *Dendronephthya stocki* Verseveldt (21, 34, 61); *Dendronephthya* sp. (24); *Stereonephthya cordylophora* Verseveldt (34).

Acanthomolgus verseveldti (Humes and Ho, 1968) [HUMES and STOCK, 1973]. From *Xenia lepida* Verseveldt (53); *Helexoxenia elisabethae* Kölliker (49, 53); *Helexoxenia fuscescens* (Hemprich and Ehrenberg) (21).

Alcyonomolgus dissimilis (Humes, 1982). From *Sarcophyton acutangulum* Verseveldt (9, 42, 51, 61).

Alcyonomolgus incisus (Humes and Ho, 1968) [HUMES and STOCK, 1973]. From *Sarcophyton ehrenbergi* Marenzeller (11, 51).

Alcyonomolgus insolens (Humes and Ho, 1968). From *Lobophytum crassum* Marenzeller (1, 5, 42).

Alcyonomolgus lumellifer Humes, 1990. From *Lobophytum pauciflorum* (Ehrenberg) (47).

Alcyonomolgus sarcophyticus (Humes, 1982). From *Sarcophyton acutangulum* (Von Marenzeller) (9, 42, 51, 61); *Sarcophyton glaucum* (Quoy and Gaimard) (4, 48); *Sarcophyton cornispiculatum* Verseveldt (49).

Amarda compta Humes and Stock, 1973. From *Favia* sp. (3, 9).

Amarda cultrata Humes and Stock, 1973. From *Favia* sp. (3, 4, 9, 48).

Anchimolgus digitatus (Humes and Ho, 1968) [HUMES and STOCK, 1973]. From *Favia* sp. (43); *Goniopora* sp. (49).

Anchimolgus prolixipes (Humes and Ho, 1968) [HUMES and STOCK, 1973]. From *Goniopora* sp. (54); *Porites* sp. (9).

Andrianellus exsertidens Humes and Stock, 1973. From *Favia* sp. (4); *Platygyra daedala* (Ellis and Solander) (48).

Anisomolgus protonitus (Humes and Frost, 1964) [HUMES, 1982; HUMES and STOCK, 1973]. From *Sarcophyton glaucum* (Quoy and Gaimard) (4, 16, 42, 51, 48, 49); *Sarcophyton* sp. (16).

Asctomolgus plicatus Humes and Stock, 1973.
From *Studeriotes semperi* (Studer) (47).

Colobomolgus cristatus (Humes and Ho, 1968)
[HUMES and STOCK, 1973]. From *Sinularia leptoclados* Hemprich and Ehrenberg (11, 16, 39, 54).

Colobomolgus dentipes (Thompson and A. Scott, 1903) [HUMES and HO, 1968 a; HUMES and STOCK, 1973]. From *Sinularia humesi* Verseveldt (9).

Colobomolgus laboutei Humes and Stock, 1973.
From *Sinularia leptoclados* Hemprich and Ehrenberg (11, 16).

Contomolgus lokobeensis Humes and Stock, 1973.
From *Studeriotes semperi* (Studer) (47); *Dendronephtha stocki* Verseveldt (34).

Critomolgus audens (Humes, 1959). From *Platydoris scaber* (Cuvier) (48).

Critomolgus foxi (Gurney, 1927) [HUMES and HO, 1968 a; HUMES and STOCK, 1973]. From *Cladiella krempfi* Hickson (52); *Cladiella laciniosa* (Tixier-Durivault) (40, 52); *Cladiella latissima* (Tixier-Durivault) (25, 52); *Cladiella pachyclados* (Klunzinger) (4); *Cladiella sphaerophora* (Hemprich and Ehrenberg) (42).

Crilomolgus gemmatus Humes, 1964. From *Stoichactis giganteum* (Forskål) (11, 32, 54).

Crilomolgus magnificus Humes, 1964. From *Stoichactis giganteum* (Forskål) (11, 32, 54).

Critomolgus pteropadus (Humes, 1978). From *Ptereoides oblongum* Gray (29, 47).

Critomolgus virgulariae (Humes, 1978). From *Virgularia juncea* (Pallas) (6, 29, 47).

Doridicola aculeatus (Humes and Ho, 1968) [HUMES and STOCK, 1973]. From *Litophyton arbo-reum* Forskål (12); *Nephthea aberrans* Verseveldt (61); *Nephthea amenacea* Studer (19, 52); *Nephthea bumastia* Verseveldt (53); *Nephthea crassa* Kükenthal (54, 61); *Nephthea filamentosa* Verseveldt (61); *Nephthea galbuloides* Verseveldt (49, 61); *Nephthea lanteraria* Verseveldt (23); *Nephthea sphaerophora* Kükenthal (53); *Nephthea tixierae* Verseveldt (44); *Stereonephthya nosybearia* Verseveldt (55); *Stereonephthya scaphis* Verseveldt (34).

Doridicola antheliae (Humes and Stock, 1973) [HUMES, 1990 a]. From *Anthelia glauca* Lamarck (31, 44); *Anthelia ternatana* (Schenk) (25).

Doridicola cinctus Humes and Stock, 1973 [HUMES, 1974]. From *Psammogorgia ramosa* Kükenthal (4, 35, 39, 55).

Doridicola commodus (Humes, 1964) [HUMES and STOCK, 1973]. From *Hexabranchus orbicularis* Abraham (42); *Hexabranchus* sp. cf. *H. marginatus* (18, 42).

Doridicola cuspis (Humes, 1964). From *Radianthus ritteri* (Kwietnieski) (3, 53); *Stoichactis giganteum* (Forskål) (11, 32, 42, 46, 54).

Doridicola hetaericus (Humes and Ho, 1968)

[HUMES and STOCK, 1973]. From *Cladiella krempfi* Hickson (52); *Cladiella laciniosa* (Tixier-Durivault) (52); *Cladiella pachyclados* (Klunzinger) (4).

Doridicola inaequalis (Humes and Ho, 1966). From *Palythoa tuberculosa* (Esper) (4); *Palythoa liscia* Haddon and Duerden (49).

Doridicola inflatiseta Humes and Stock, 1973.
From *Onchidium* ? sp. (2, 4, 49, 53, 54, 61).

Doridicola micropus Humes, 1973. From *Astroboa nuda* (Lyman) (47).

Doridicola patulus (Humes, 1959) [Humes and Stock, 1973]. From *Phyllidia trilineata* (Cuvier) (3, 61); *Cenometra emendatrix* (Bell) (61).

Doridicola securiger (Humes, 1964) [HUMES and STOCK, 1973]. From *Asteronotus cespitosus* (van Hasselt) (10, 15); *Doris mabilla* Abraham (4, 48, 54).

Doridicola sensilis (Humes, 1964). From *Trevelyania rubromaculata* Bergh (3, 40, 54).

Doridicola singularipes (Humes and Ho, 1968) [HUMES and STOCK, 1973]. From *Parerythropodium rubiginosum* Verseveldt (3, 54); *Parerythropodium* sp. (48).

Doridicola spinulifer (Humes and Frost, 1964) [HUMES and STOCK, 1973]. From *Lemnalia africana* (May) (49); *Lemnalia amabilis* Tixier-Durivault (49); *Lemnalia longiramus* Verseveldt (31); *Lemnalia digitata* (May) (3, 29); *Lemnalia cervicornis* (May) (21, 22); *Lemnalia crassicaulis* Verseveldt (21); *Lemnalia elegans* (May) (30); *Lemnalia flava* (May) (4, 49); *Lemnalia africana* (May) (31); *Lemnalia tenuis* Verseveldt (21); *Lemnalia madagascarensis* Verseveldt (24); *Lemnalia* sp. (53); *Paralemnalia clavata* Verseveldt (3); *Paralemnalia thyrsoides* (Hemprich and Ehrenberg) (11, 25, 31, 51); *Sinularia polydactyla* (Hemprich and Ehrenberg) (3).

Doridicola venustus (Humes, 1959) [HUMES and STOCK, 1973]. From *Cenometra emendatrix* (Bell) (61); *Phyllidia trilineata* Cuvier (3).

Ecpysarion (= *Schedomolgus*) *lobophorum* (Humes and Ho, 1968). From *Acropora cytherea* Dana (11); *Acropora scherzeriana* Brueggemann (53); *Acropora* sp. (3).

Gelastomolgus spondyli Humes, 1968. From *Spondylus varians* Sowerby (53, 61); *Plerogyra* sp. (61).

Haplonolgus montiporae Humes and Ho, 1968 [HUMES and STOCK, 1973]. From *Montipora sinensis* Bernard (43); *Montipora* sp. cf. *M. stellata* Bernard (9); *Montipora* sp. (6, 52).

Indomolgus brevisetosus Humes and Ho, 1966.
From *Palythoa tuberculosa* (Esper) (4, 7, 49, 61).

Indomolgus diversus Humes and Ho, 1966. From *Palythoa tuberculosa* (Esper) (4, 5); *Palythoa liscia* Haddon and Duerden (7, 49, 61).

Indomolgus mutatus Humes and Ho, 1966. From *Palythoa tuberculosa* (Esper) (15).

Kelleria pectinata (A. Scott, 1909) [HUMES and Ho,

- 1969 a]. From burrows of *Axius (Neaxius) acanthus* A. Milne Edwards (11). *Kelleria regalis* Gurney, 1927 [HUMES and Ho, 1969 a]. From intertidal burrows (2, 10, 30, 45). *Lichomolgus asaphidis* Humes, 1959. From *Asaphis rugosa* Lamarck (2); *Solen conneus* Lamarck (54); *Standella solanderi* Gray (2). *Lichomolgus chamarum* Humes, 1968a. From *Chama iostoma* Conrad (3, 53). *Macrochiron lobatum* Humes and De Maria, 1969. From *Lytocarpus phoeniceus* (Busk) (3, 4, 21). *Macrochiron lytocarpi* Humes, 1966. From *Lytocarpus philippinus* (Kirchenpauer) (3, 9, 39, 47, 49, 51, 53, 61). *Macrochiron rostratum* Humes, 1966. From *Aglaophenia delicatula* (Busk) (21); *Lytocarpus philippinus* (Kirchenpauer) (3, 9, 39, 47, 49, 53, 61); *Lytocarpus phoeniceus* (Busk) (4, 21); *Lytocarpus spectabilis* Allman (3); *Gymnangium gracilicaulis* (Jäderholm) (24); *Gymnangium hians* (Busk) (3, 4). *Macrochiron valgum* Humes, 1966. From *Gymnangium hians* (Busk) (3, 4, 23, 53); *Gymnangium gracilicaulis* (Jäderholm) (24); *Lytocarpus philippinus* (Kirchenpauer) (3, 53); *Lytocarpus spectabilis* Allman (3). *Macrochiron vervoorti* Humes and De Maria, 1969. From *Aglaophenia cupressina* Lamouroux (49). *Meringomolgus devolutus* Humes and Stock, 1973. From *Sinularia leptoclados* (Hemprich and Ehrenberg) (16). *Meringomolgus facetus* Humes and Stock, 1973. From *Sinularia polydactyla* (Hemprich and Ehrenberg) (3, 31); *Sinularia minima* Verseveldt (25). *Meringomolgus hamatus* Humes and Stock, 1973. From *Sinularia leptoclados* (Hemprich and Ehrenberg) (11, 16, 39); *Sinularia maxima* Verseveldt (53); *Sinularia humesi* Verseveldt (19, 25). *Monomolgus psammocorae* Humes and Ho, 1967. From *Psammocora contigua* (Esper) (3). *Monomolgus unihastatus* Humes and Frost, 1964 [HUMES and Ho, 1968 b; HUMES and STOCK, 1973]. From *Parerythropodium fulvum* (Forskål) (3); *Porites* sp. cf. *P. andrewsi* Vaughan (4, 32, 52, 53, 61); *Porites* sp. cf. *P. nigrescens* Dana (52); *Porites* sp. (3, 9). *Nasomolgus firmus* Humes and Ho, 1967. From *Sabellastarte magnifica* (Shaw) (4, 18). *Nasomolgus leptus* Humes and Ho, 1967. From *Sabellastarte magnifica* (Shaw) (18). *Nasomolgus parvulus* Humes and Ho, 1967. From *Sabellastarte magnifica* (Shaw) (3, 4, 18). *Nasomolgus rufus* Humes and Ho, 1967. From *Sabellastarte magnifica* (Grube) (3, 4, 18, 61). *Octopicola stocki* Humes, 1963. From *Octopus (Tritaxeopus) cornutus* Owen (54). *Odontomolgus actinophorus* (Humes and Frost, 1964) [HUMES and HO, 1968 b]. From *Pavona angulata* Klunzinger (3, 28); *Pavona cactus* (Forskål) (52); *Pavona danai* (Milne Edwards and Haime) (3, 30); *Pavona? venusta* (Dana) (3). *Odontomolgus campulus* Humes and Ho, 1968 [HUMES and STOCK, 1973]. From *Alveopora* sp. (42). *Odontomolgus rhadinus* (Humes and Ho, 1967) [HUMES and STOCK, 1973]. From *Pavona* sp. (39); *Psammocora contigua* (Esper) (3). *Panjakus hydnophorae* Humes and Stock, 1973. From *Hydnophora* sp. (4, 9, 61); *Hydnophora? exesa* (Pallas) (52); *Hydnophora tenella* Quelch (5). *Panjakus platygryrae* Humes and Stock, 1973. From *Platygyra? lamellina* (Ehrenberg) (4); *Platygyra daedala* (Ellis and Solander) (48, 53); *Platygyra* sp. cf. *daedala* (Ellis and Solander) (3). *Paradoridicola adelphus* (Humes and Ho, 1968). From *Sinularia whiteleggei* Lüttschwager (49, 51, 61); *Sinularia pedunculata* Tixier-Durivault (49, 51); *Sinularia polydactyla* (Ehrenberg) (61). *Paradoridicola angularis* Humes, 1990. From *Alcyonium flaccidum* Tixier-Durivault (21, 31); *Alcyonium utinomii* Verseveldt (31). *Paradoridicola drepanophorus* Humes, 1990. From *Alcyonium flaccidum* Tixier-Durivault (21, 31). *Paradoridicola glabripes* (Humes and Ho, 1968) [HUMES and STOCK, 1973]. From *Xenia macrospiculata* Gohar (21); *Xenia umbellata* Lamarck (11); *Xenia viridis* Schenk (33). *Paradoridicola sinulariae* Humes and Stock, 1973. From *Sinularia arborea* Verseveldt (9, 19, 31, 53, 61). *Paradoridicola squamiger* (Humes and Frost, 1964) [HUMES and Ho, 1968 a; HUMES and Stock, 1973]. From *Sinularia polydactyla* (Ehrenberg) (3, 23); *Sinularia whiteleggei* Lüttschwager (53). *Paradoridicola triquetrus* (Humes and Ho, 1968). From *Anthelia gracilis* (May) (18). *Paramolgus abruptus* Humes, 1990. From *Lobophytum cristagalli* von Marenzeller (61). *Paramolgus clavatus* (Humes and Ho, 1968) [HUMES and STOCK, 1973]. From *Coelogorgia palmosa* Milne Edwards and Haime (3, 10); *Lemnalia longiramus* Verseveldt (31); *Lemnalia cervicornis* (May) (21); *Lemnalia crassicaulis* Verseveldt (21). *Paramolgus congruus* Humes, 1990. From *Parerythropodium fulvum fuscum* (Thomson and Henderson) (3, 51, 54). *Paramolgus constrictus* Humes, 1969. From *Antipathes ericoides* Pallas (11, 13, 61). *Paramolgus ellisellae* Humes, 1974. From *Ellisella ramosa* (Simpson) (24, 34). *Paramolgus insectus* Humes, 1969. From *Antipathes abies* (Linnaeus) (24, 61); *Antipathes myriophylla* Pallas (24); *Antipathes* cf. *A. spinescens* Gray (34, 61). *Paramolgus modicus* Humes, 1990. From *Lobophytum latilobatum* Verseveldt (42).

Paramolgus politus Humes and Ho, 1967. From *Rhodactis rhodostoma* (Ehrenberg) (49).

Paramolgus simulans Humes and Ho, 1967. From *Rhodactis rhodostoma* (Ehrenberg) (49).

Paramolgus spathophorus (Humes and Ho, 1968). From *Sarcophyton trocheliophorum* von Marenzeller (= *S. acutangulum* (von Marenzeller)) (51, 61) [HUMES, 1982; HUMES and STOCK, 1973]; *Sarcophyton glaucum* (Quoy and Gaimard) (4, 16, 47, 61); *Sarcophyton stolidolum* Verseveldt (47).

Paredromolgus decorus (Humes and Frost, 1964) [HUMES and STOCK, 1973]. From *Cladiella laciniosa* (Tixier-Durivault) (52); *Cladiella latissima* (Tixier-Durivault) (25, 52); *Cladiella sphaerophora* (Hemprich and Ehrenberg) (42).

Pennatulicola pterophilus (Stock, 1962). From *Ptereoides sagamiense* Moroff (47).

Plesiomolgus conjunctus (Humes and Ho, 1967) [HUMES and STOCK, 1973]. From *Tubipora musica* (Linnaeus) (48, 49, 61).

Plesiomolgus organicus (Humes and Ho, 1967). From *Tubipora musica* (Linnaeus) (48, 49, 61).

Prionomolgus lanceolatus Humes and Ho, 1968. From *Pachyseris speciosa* (Dana) (5, 49).

Rakotoa proteus Humes and Stock, 1973. From *Favia* sp. (37).

Ravahina tumida (Humes and Ho, 1968). From *Porites* sp. cf. *P. andrewsi* Vaughan (52, 53).

Scambicornus campanulipes (Humes and Cressey, 1961) [HUMES, 1967]. From *Aclinopyga lecanora* (Jaeger) (3, 4, 49); *Actinopyga mauritiana* (Quoy and Gaimard) (18, 38, 43, 46, 51, 53, 61); *Actinopyga miliaris* (Quoy and Gaimard) (3, 6, 51, 53, 54); *Actinopyga echinates* (Jaeger) (53, 61); *Actinopyga* sp. (54); *Diadema setosum* (Leske) (48); *Halodeima alra* (Jaeger) (53).

Scambicornus idoneus (Humes and Cressey, 1961) [HUMES, 1967, 1980; HUMES and STOCK, 1973]. From *Ludwigothuria* (*Holothuria*) *atra* (Jaeger) (37, 48, 53); *Argiodia nobilis* (Selenka) (35, 42, 43, 56, 61); *Holothuria scabra* Jaeger (15).

Scambicornus lobulatus Humes, 1967. From *Bohadschia graeffei* (Semper) (6, 19, 35, 42, 46, 49, 61).

Scambicornus modestus (Humes and Cressey, 1961) [HUMES, 1967]. From *Bohadschia drachi* Cherbonnier (61); *Brandtothuria impatiens* (Forskål) (49); *Holothuria pardalis* Selenka (53); *Microthele difficilis* (Semper) (49); *Stichopus chloronotus* (Brandt) (3, 16, 41, 42, 49, 52, 53, 61); *Stichopus monotuberculatus* (Quoy and Gaimard) (53); *Stichopus variegatus* Semper (16, 52, 53); *Urodermas ehrenbergi* Selenka (49).

Scambicornus poculiferus (Humes and Cressey, 1961) [HUMES, 1967] (This species was regarded by Ho and Kim (1990) as a synonym of *S. nicobaricus* (Sewell, 1949)). From *Synapta maculata* (Chamisso and Eysenhardt) (3, 6, 9, 18, 53).

Scambicornus prolixus Humes, 1980. From *Holothuria edulis* Lesson (53).

Scambicornus subgrandis (Humes and Cressey, 1961). From *Holothuria rugosa* Ludwig (13).

Scambicornus subtilis (Humes and Cressey, 1961). From *Halodeima edulis* (Lesson) (54); *Holothuria curiosa* Ludwig (53); *Opheodesoma grisea* (Semper) (54).

Scambicornus tuberatus (Humes and Cressey, 1961) [HUMES, 1967; HUMES and STOCK, 1973]. From *Bohadschia cousteaui* Cherbonnier (61); *Bohadschia köllikeri* (Semper) (54, 61); *Bohadschia* sp. (53); *Opheodesoma grisea* (Semper) (54); *Thelenota ananas* (Jaeger) (61).

Schedomolgus arcuatus (Humes and Ho, 1968). From *Acropora palifera* (Lamarck) (3, 61).

Spaniomolgus compositus (Humes and Frost, 1964) [HUMES and Ho, 1968 b; HUMES and STOCK, 1973]. From *Serialopora octoptera* Ehrenberg (49); *Serialopora subseriata* Ehrenberg (54); *Serialopora* sp. (3); *Serialopora* sp. (49).

Spaniomolgus crassus (Humes and Ho, 1968). From *Stylophora pistillata* (Esper) (3, 33, 54); *Stylophora mordax* (Dana) (49); *Acropora* sp. (53).

Spaniomolgus geminus (Humes and Ho, 1968) [HUMES and STOCK, 1973]. From *Stylophora mordax* (Dana) (49); *Stylophora pistillata* (Esper) (3, 33, 54); *Stylophora* sp. (49, 51).

Stellicola femineus Humes and Ho, 1967 [HUMES, 1986]. From *Leiaster leachi* Gray (54); *Leiaster speciosus* von Martens (42, 49).

Stellicola holothuriae (Ummerkutty, 1962) [HUMES, 1980]. From *Opheodesoma spectabilis* Fisher (54).

Stellicola oreastriphilus Kossmann, 1877 [HUMES, 1986; HUMES and CRESSEY, 1961; HUMES and HO, 1966]. From *Choriaster granulatus* (Lütken) (44); *Culcita schmidiana* (Retzius) (61); *Pentaceraster mammillatus* (Audouin) (16, 17, 49); *Poraster superbus* (Möbius) (53); *Protereaster lincki* (Blainville) (53); *Protereaster nodosus* (Linnaeus) (6); *Stellaster equestris* (Retzius) (26).

Stellicola pollux Humes and Ho, 1967. From *Lincaria laevigata* (Linnaeus) (44).

Synstellicola affinis (Humes and Ho, 1967) [HUMES, 1986]. From *Luidia* (= *Maculaster*) *maculata* Müller and Troschel (16, 37, 47); *Luidia* (= *Maculaster*) *savignyi* (Audouin) (3, 16, 47); *Retaster cibrosus* von Martens (16).

Synstellicola kossmanni (Humes and Ho, 1967) [HUMES, 1986]. From *Protereaster lincki* (Blainville) (51, 54); *Poraster superbus* (Möbius) (24).

Synstellicola longiseta (Humes and Ho, 1967). From *Mithrodia clavigera* (Lamarck) (49).

Synstellicola pichoni Humes and Ho, 1966. From *Choriaster granulatus* (Lütken) (44, 61).

Telestacicola angoti Humes and Stock, 1973

[HUMES, 1974]. From *Coelogorgia palmosa* Milne Edwards and Haime (3, 53); *Muricella rubra robusta* Thompson and Simpson (53); *Suberogorgia reticulata* (Ellis and Solander) (53); *Suberogorgia suberosa* (Pallas) (49).

Telestacicola lobophyti Humes, 1990. From *Lobophytum pauciflorum* (Ehrenberg) (47).

Temnomolgus eurynotus Humes and Ho, 1966. From *Palythoa tuberculosa* (Esper) (4).

Zamolgas acanthodes Humes and Stock, 1973. From *Sinularia arborea* Verseveldt (9, 19, 31, 53, 61).

Zamolgas tridens Humes and Stock, 1973. From *Cespitularia turgida* Verseveldt (11).

MYICOLIDAE

Ostrincola clavator Humes, 1959. From *Ostrea* sp. (48).

Ostrincola simplex Humes, 1959. (This species was referred by Ho and Kim (1992) to their new genus, *Exostrincola*). From *Ostrea* sp. (48).

Pseudomyicola levius Humes, 1959. From *Arca decussata* Sowerby (48).

Pseudomyicola spinosus (Raffaele and Monticelli, 1885) (= *P. mirabilis* Humes, 1959; = *Midicola ponticus* Sowinsky, 1884, see Stock, 1969) [HUMES, 1968]. From *Arca decussata* Sowerby (48); *Chama iostoma* Conrad (3, 53).

MYTILICOLIDAE

Mytilicola fimbriatus Humes and Ho, 1970. From *Arca decussata* Sowerby (53).

PSEUDANTHESSIIDAE

Kombia angulata Humes, 1962 [Humes and Ho, 1968b; HUMES and STOCK, 1973]. From *Porites* sp. cf. *P. nigrescens* Dana (52); *Porites* (*Synaraea*) sp. (3, 16, 35, 49, 52, 53); *Porites* sp. (4); *Psammocora* sp. (49, 52).

Mecomerinx luculenta (Humes and Cressey, 1961). From *Echinometra mathaei* (Blainville) (53).

Mecomerinx notabilis (Humes and Cressey, 1961). From *Echinometra mathaei* (Blainville) (53).

Pseudanthessius angularis Humes and Ho, 1970. From *Dichrometra* sp. ? *africana* A. H. Clark (3, 49); *Stephanometra indica* (Smith) (19, 49).

Pseudanthessius ferox Humes and Ho, 1967. From *Sabella fusca* (Grube) (3, 12, 54).

Pseudanthessius madrasensis Reddiah, 1966 [HUMES and HO, 1970]. From *Tropiometra carinala* (Lamarck) (6, 7, 25, 42, 49, 51, 54).

Pseudanthessius major Stock, 1967 [HUMES and HO, 1970]. From *Cenometra emendatrix* (Bell) (22, 44, 61); *Dichrometra* sp. ? *africana* A. H. Clark (3, 4, 53, 54); *Heterometra africana* (A. H. Clark) (6, 29, 47, 59); *Lamprometra klinzingeri* (Hartlaub) (49); *Liparome-*

tra? sp. (47, 57); *Stephanometra indica* (Smith) (19, 47).

Pseudanthessius minor Stock, 1967 [HUMES and HO, 1970]. From *Dichrometra* sp. ? *africana* A. H. Clark (53); *Heterometra africana* (A. H. Clark) (29); *Lamprometra klinzingeri* (Hartlaub) (19); *Liparometra* ? sp. (47, 57).

Pseudanthessius procurrens Humes, 1966. From *Phyllacanthus imperialis* (Lamarck) (49).

Pseudanthessius pusillus Humes, 1969. From *Echinodiscus auritus* Leske (16).

Pseudanthessius rostellatus Humes and Ho, 1970. From *Comaster* sp. ? nov. aff. *distinctus* (P. H. Carpenter) (59).

RHYNCHOMOLGIDAE

Rhynchomolgus corallophorus Humes and Ho, 1967. From *Psammocora contigua* (Esper) (3).

SABELLIPHILIDAE

Calypsurion leprum Humes and Ho, 1969. From *Actinopyga lecanora* (Jaeger) (3, 4, 16, 19, 49, 54); *Actinopyga miliaris* (Quoy and Gaimard) (3, 6, 42, 51, 53, 54); *Actinopyga mauritiana* (Quoy and Gaimard) (51).

Calypsurion sentosum Humes and Ho, 1969. From *Bohadschia marmorata* Jaeger (6, 51, 53, 54).

Lecanurius kossmannianus Humes, 1968. From *Actinopyga lecanora* (Jaeger) (4, 16, 19, 42, 49); *Actinopyga miliaris* (Quoy and Gaimard) (6, 51).

Lichotheuria mandibularis Stock, 1968 [HUMES and HO, 1969 b]. From *Argiodia nobilis* (Selenka) (42, 43, 46, 56, 61); *Holothuria scabra* Jaeger (10, 15, 16); *Ludwigothuria atra* (Jaeger) (6, 37, 46, 53, 54); *Ludwigothuria* aff. *fuscopunctata* Semper (26).

Modioticola trabalis (Humes, 1959). From *Arca decussata* Sowerby (48).

Thamnomolgus robustus Humes, 1969 [HUMES and STOCK, 1973]. From *Antipathes abies* (Linnaeus) (24, 61); *Antipathes ericooides* Pallas (46); *Antipathes myriophylla* Pallas (24); *Antipathes* sp. cf. *A. spinescens* Gray (13, 24, 61).

TAENIACANTHIDAE

Echinirrus laxatus Humes and Cressey, 1961. From *Diadema setosum* (Leske) (48).

Echinosocius dentatus Humes and Cressey, 1961. From *Diadema setosum* (Leske) (48).

Echinosocius pectinatus Humes and Cressey, 1961. From *Diadema setosum* (Leske) (48).

VAHINIIDAE

Vahinius petax Humes, 1967 [HUMES, 1969]. From *Antipathes longibrachiata* (van Pesch) (61); *Stichopathes echinulata* Brook (6, 61).

XARIFIIDAE

Orstomella faviae Humes and Ho, 1968. From *Favia* sp. (54).

Orstomella lobophylliae Humes and Ho, 1968. From *Lobophyllia corymbosa* (Forskål) (3); *Lobophyllia costata* (Dana) (3).

Xarifia anomala Humes and Ho, 1968 [HUMES and DOJIRI, 1982]. From *Acropora palifera* (Lamarck) (61); *Acropora* sp. (12).

Xarifia apertipes Humes and Dojiri, 1983. From *Gyrosmilia interrupta* (Ehrenberg) (53); *Montipora verrucosa* (Lamarck) (42).

Xarifia brevicauda Humes and Ho, 1968. From *Alveopora* sp. (42).

Xarifia comata Humes, 1962. From *Pocillopora verrucosa* (Ellis and Solander) (54).

Xarifia compluta Humes and Dojiri, 1983. From *Hydnophora tenella* Quelch (5).

Xarifia decorata Humes and Ho, 1968 [HUMES, 1985]. From *Stylophora pistillata* (Esper) (3, 33, 54); *Stylophora mordax* (Dana) (49).

Xarifia diminuta Humes and Ho, 1967 [HUMES, 1985]. From *Psammocora contigua* (Esper) (3); *Pavona* sp. (39).

Xarifia dispar Humes, 1962 [HUMES, 1985; HUMES and DOJIRI, 1982; HUMES and Ho, 1968c]. From *Echinopora gemmacea* Klunzinger (46, 52); *Echinopora lamellosa* (Esper) (49); *Echinopora* sp. (6).

Xarifia exigua Humes and Ho, 1968. From *Pachyseris speciosa* (Dana) (5).

Xarifia extensa Humes and Dojiri, 1982. From *Montipora* sp. (6).

Xarifia gerlachi Humes, 1962 [HUMES and DOJIRI, 1982]. From *Acropora corymbosa* (Lamarck) (53); *Acropora cytherea* Dana (11, 53); *Acropora* sp. cf. *A. teres* (Verrill) (4); *Acropora* sp. (51).

Xarifia gradata Humes and Dojiri, 1983. From *Physogrya* sp. (54).

Xarifia hamata Humes and Ho, 1968. From *Turbinaria* sp. (43).

Xarifia infrequens Humes, 1962. From *Acropora corymbosa* (Lamarck) (53); *Acropora cytherea* Dana (53).

Xarifia lamellispinosa Humes and Ho, 1968. From *Pachyseris speciosa* (Dana) (5, 49).

Xarifia lissa Humes and Ho, 1968 [HUMES, 1985]. From *Stylophora pistillata* (Esper) (3); *Stylophora mordax* (Dana) (49).

Xarifia longipes Humes, 1962. From *Pavona angulata* Klunzinger (28).

Xarifia minax Humes and Dojiri, 1983. From *Physogrya* sp. (54).

Xarifia obesa Humes and Ho, 1968. From *Pocillopora* sp. (21).

Xarifia reducta Humes, 1962. From *Seriatopora*

octoptera Ehrenberg (49); *Seriatopora caliendrum* Ehrenberg (4).

Xarifia resex Humes and Dojiri, 1983. From *Goniopora* sp. (6).

Xarifia serrata Humes, 1962 [HUMES, 1985; HUMES and Ho, 1968c]. From *Pocillopora bulbosa* Ehrenberg (16); *Pocillopora damicornis* Dana (3, 54); *Pocillopora* sp. cf. *P. verrucosa* (Ellis and Solander) (54); *Seriatopora subseriala* Ehrenberg (54).

Xarifia temnura Humes and Ho, 1968. From *Montipora sinensis* Bernard (43).

Xarifia tenuis Humes, 1962. From *Acropora cytherea* Dana (52).

Xarifia sp. [HUMES, 1985]. From *Galaxea astreata* (Lamarck) (52).

Xarifia sp. [HUMES, 1985]. From *Montipora* sp. cf. *M. stellata* Bernard (9).

Xarifia sp. [HUMES, 1985]. From *Oxypora* sp. (9).

Zazaranus fungiculus Humes and Dojiri, 1983. From *Fungia* sp. (25).

SIPHONOSTOMATOIDA

ASTEROCHERIDAE

Asteropontius bandicola Humes, 1992. From *Antipathes abies* (L.) (13); *Antipathes* cf. *spinescens* Gray (13).

Cholomyzon palpiferum Stock and Humes, 1969. From *Dendrophyllia micranthus* Klunzinger var. *grandis* Crossland (53); *Dendrophyllia nigrescens* Dana (4, 42, 49); *Dendrophyllia* sp. (22, 42).

Collocheres astroboae Stock, 1971 [HUMES, 1973]. From *Astroboa nuda* (Lyman) (47).

Collocheres prionotus Humes, 1990. From *Capillaster multiradiatus* (Linnaeus) (9).

Collocheres uncinatus Stock, 1966 [HUMES, 1990b]. From *Capillaster multiradiatus* (Linnaeus) (9).

Collocherides bleptus Humes, 1993. From *Macrophiothrix* sp. (27).

Helairosyna laciniata Humes, 1991. From *Montipora sinensis* Bernard (43).

Helairosyna sororia Humes, 1991. From *Montipora sinensis* Bernard (43); *Montipora* sp. cf. *M. stellata* Bernard (9).

Helairosyna terpna Humes, 1991. From *Montipora sinensis* Bernard (43); *Montipora* sp. cf. *M. stellata* Bernard (9); *Montipora* sp. (52).

Orecturus excavatus (Humes, 1989). From *Dendrophthora mucronata* (Pütter) (9, 34, 44); *Siphonogorgia pitchoni* Verseveldt (22).

Orecturus grandisetiger Humes, 1992. From *Antipathes ericooides* Pallas (46); *Antipathes longibrachiata* (van Pesch) (61); *Stereonephthya cordylophora* Verseveldt (13).

Orecturus sakalavicus Humes, [Humes, 1994a].

From *Coelo gorgia palmosa* Milne Edwards and Haime (3, 25, 39, 44, 49).

CORALLIOMYZONTIDAE

Coralliomyzon tenens Humes and Stock, 1991.
From *Turbinaria peltata* (Esper) (42).

PENNELLIDAE

Cardiodesetes sp., (copepodids) (see Ho, 1966). From *Ianthina ianthina* (Linnaeus) (6).

NANASPIDIDAE

Nanaspis tonsa Humes and Cressey, 1959 [HUMES, 1980]. From *Stichopus chloronotus* Brandt (3, 16, 42, 49, 52, 53, 61).

STELLICOMITIDAE

Asterocomes indica Padmanabha Rao, 1962 [HUMES, 1971; HUMES and Ho, 1966]. From *Halityle regularis* Fisher (24); *Choriaster granulatus* (Lütken) (44, 61).

Leicomes monozotus Humes, 1971. From *Leiaster speciosus* von Martens (24, 49).

Onychopygus impavidus Humes and Cressey, 1958. From *Acanthaster planci* (Linnaeus) (61).

Stellicomes supplicans Humes, 1971. From *Astero-discus elegans* Gray (24).

Stellicomes tumidulus Humes and Cressey, 1958 [HUMES, 1971, 1986; HUMES and Ho, 1966]. From *Choriaster granulatus* (Lütken) (61); *Halityle regularis* Fisher (24); *Pentaceraster mammillatus* (Audouin) (11, 16, 49); *Poraster superbus* (Möbius) (24, 25); *Protoreaster lincki* (Blainville) (53).

MAJOR GROUPS OF INVERTEBRATES IN THE REGION OF NOSY BÉ AND THEIR ASSOCIATED COPEPOD GENERA

Porifera : *Hemicyclops*.

Hydrozoa : *Macrochiron*.

Actiniaria : *Critomolgus*, *Doridicola*, *Paramolgus*.

Stolonifera : *Hippomolgus*, *Plesiomolgus*.

Alcyonacea : *Acanthomolgus*, *Alcyonomolgus*, *Anisomolgus*, *Bysone*, *Colobomolgus*, *Contomolgus*, *Critomolgus*, *Demoixys*, *Doridicola*, *Meringomolgus*, *Monomolgus*, *Orecturus*, *Paradoridicola*, *Paramolgus*, *Paranotodelphys*, *Paredromolgus*, *Telestacicola*, *Thoracodelphys*, *Zamolgus*.

Pennatulacea : *Critomolgus*, *Pennatulicola*.

Telestacea : *Acanthomolgus*, *Orecturus*, *Paramolgus*, *Telestacicola*.

Zoanthidea : *Doridicola*, *Indomolgus*, *Temnomolgus*.

Gorgonacea : *Acanthomolgus*, *Doridicola*, *Paramolgus*, *Telestacicola*.

Antipatharia : *Asteropontius*, *Orecturus*, *Paramolgus*, *Thamnomolgus*, *Vahinius*.

Scleractinia : *Alteuthellospis*, *Amarda*, *Anchimolgus*, *Andrianellus*, *Cholomyzon*, *Coralliomyzon*, *Hoplomolgus*, *Ephysarion*, *Gelastomolgus*, *Hetairosyna*, *Hemicyclops*, *Kombia*, *Monomolgus*, *Odontomolgus*, *Orecturus*, *Orstromella*, *Panjakus*, *Prionomolgus*, *Rakotoa*, *Ravahina*, *Rhynchomolgus*, *Schedomolgus*, *Spaniomolgus*, *Xarifa*, *Zazaranus*.

Gastropoda : *Anthessius*, *Cardiodesetes*, *Grilomolgus*, *Doridicola*.

Bivalvia : *Anthessius*, *Conchyliurus*, *Gelastomolgus*, *Lichomolgus*, *Modiolicola*, *Mytilicola*, *Ostrincola*, *Pseudomyicola*.

Cephalopoda : *Octopicola*.

Polychaeta : *Cotylomolgus*, *Nasomolgus*, *Pseudanthessius*.

Crustacea : burrows, *Hemicyclops*, *Kelleria*, *Parai-dya*, *Pholeliscus*, *Porcellidium*, *Sunaristes*.

Crinoidea : *Collocheres*, *Doridicola*, *Pseudanthessius*.

Astroidea : *Asterocomes*, *Leicomes*, *Onychopygus*, *Stellicola*, *Stellicomes*, *Synstellicola*.

Ophiuroidea : *Collocheres*, *Collocherides*, *Doridicola*.

Echinoidea : *Echinirurus*, *Echinosocius*, *Mecomerinx*, *Porcellidium*, *Pseudanthessius*, *Scambicornus*.

Holothuroidea : *Calypstarion*, *Lecanurius*, *Licho-thuria*, *Nanaspis*, *Scambicornus*, *Stellicola*.

Asciidae : *Bysone*, *Demoixys*, *Haplostoma*, *Para-notodelphys*, *Thoracodelphys*.

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REFERENCES

- GOTTO (R.V), 1979. — The association of copepods with marine invertebrates. *Adv. Mar. Biol.*, 16 : 1-109.
- HO (J.-S.), 1966. — Larval stages of *Cardiodesmus* sp. (Caligoida: Lernaeoceriformes), a copepod parasitic on fishes. *Trans. Zool. Soc. London*, 22 : 451-577.
- HO (J.-S.), KIM (I.-H.), 1990. — Sabelliphylid copepods (Poecilostomatida) associated with holothurians from Phuket, Thailand. *Phuket Mar. Biol. Cent. Res. Bull.*, 54 : 3-31.
- HO (J.-S.), KIM (I.H.), 1992. — A new genus of poecilostome copepod of the family Myicolidae parasitic in a commercial clam from Malaysia. *J. Nat. Hist.*, 26 : 303-309.
- HUMES (A.G.), 1967. — A new species of *Scambicornus* (Copepoda, Cyclopoida, Lichomolgidae) associated with a holothurian in Madagascar, with notes on several previously described species. *Beaufortia*, 14 : 135-155.
- HUMES (A.G.), 1968. — The cyclopoid copepod *Pseudomyicola spinosus* (Raffaele & Monticelli) from marine pelecypods, chiefly in Bermuda and the West Indies. *Beaufortia*, 14 : 203-226.
- HUMES (A.G.), 1969. — Cyclopoid copepods associated with antipatharian coelenterates in Madagascar. *Zool. Meded.*, 44 : 1-30.
- HUMES (A.G.), 1971. — Cyclopoid copepods (Stellicomitidae) parasitic on sea stars from Madagascar and Eniwetok Atoll. *J. Parasitol.*, 57 : 1330-1343.
- HUMES (A.G.), 1973. — Cyclopoid copepods associated with the ophiuroid *Astroboa nuda* in Madagascar. *Beaufortia*, 21 : 25-35.
- HUMES (A.G.), 1974. — Cyclopoid copepods (Lichomolgidae) from gorgonaceans in Madagascar. *Proc. Biol. Soc. Wash.*, 87 : 411-438.
- HUMES (A.G.), 1980. — A review of the copepods associated with holothurians, including new species from the Indo-Pacific. *Beaufortia*, 30 : 31-123.
- HUMES (A.G.), 1982. — Copepoda (Poecilostomatida, Lichomolgidae) associated with the alcyonacean genus *Sarcophyton* in the Indo-Pacific. *Publ. Seto Mar. Biol. Lab.*, 27 : 25-76.
- HUMES (A.G.), 1985. — A review of the Xarifiidae (Copepoda : Poecilostomatida), parasites of scleractinian corals in the Indo-Pacific. *Bull. Mar. Sci.*, 36 : 467-632.
- HUMES (A.G.), 1986. — Synopsis of copepods associated with asteroid echinoderms, including new species from the Moluccas. *J. Nat. Hist.*, 20 : 981-1020.
- HUMES (A.G.), 1990 a. — Synopsis of lichomolgid copepods (Poecilostomatida) associated with soft corals (Alcyonacea) in the tropical Indo-Pacific. *Zool. Verh.*, 266 : 1-201.
- HUMES (A.G.), 1990 b. — *Collochères* (Copepoda : Siphonostomatida) associated with the crinoid *Capillaster multi-radiatus* in the Indo-Pacific. *Trans. Amer. Microsc. Soc.*, 109 : 61-68.
- HUMES (A.G.), 1994 a. — How many copepods? *Proc. Fifth Intn. Conf. Copepoda. Hydrobiologia*, 292/293 : 1-7.
- HUMES (A.G.), 1994 b. — Copepoda associated with octocorals in northwestern Madagascar, including *Orecturus sakalavicus* n. sp. from the telestacean *Coelogorgia palmosa*. *Trans. Amer. Microsc. Soc.*, 133 : 117-126.
- HUMES (A.G.), in press. — Three new species of *Hemicyclops* (Copepoda : Poecilostomatida : Clausidiidae) from northwestern Madagascar. *Bull. Mus. Natn. Hist. Nat.*, Paris.
- HUMES (A.G.), CRESSEY (R.F.), 1961. — *Lichomolgas oreastriphilus* (Kossmann) copépode cyclopoid parasite des étoiles de mer à Madagascar. *Mem. Inst. Sci. Madagascar*, sér. F, 3 : 83-92.
- HUMES (A.G.), DOJIRI (M.), 1982. — Xarifiidae (Copepoda) parasitic in Indo-Pacific scleractinian corals. *Beaufortia*, 32 : 39-228.
- HUMES (A.G.), HO (J.-S.), 1966. — Cyclopoid copepods associated with the starfish *Choriaster granulatus* (Lütken) in Madagascar. *Cah. ORSTOM*, sér. Océanogr., 4 : 93-108.
- HUMES (A.G.), HO (J.-S.), 1968 a. — Cyclopoid copepods of the genus *Lichomolgas* associated with octocorals of the family Alcyoniidae in Madagascar. *Proc. Biol. Soc. Wash.*, 81 : 635-692.
- HUMES (A.G.), HO (J.-S.), 1968 b. — Lichomolgid copepods (Cyclopoida) associated with corals in Madagascar. *Bull. Mus. Comp. Zool.*, 136 : 353-414.
- HUMES (A.G.), HO (J.-S.), 1968 c. — Xarifiid copepods (Cyclopoida) parasitic in corals in Madagascar. *Bull. Mus. Comp. Zool.*, 136 : 415-460.

- HUMES (A.G.), Ho (J.-S.), 1969 a. — Cyclopoid copepods of the genus *Kelleria* (Lichomolgidae) from intertidal burrows in Madagascar. *Bull. Br. Mus. (Nat. Hist.), Zool.*, 18 : 219-229.
- HUMES (A.G.), Ho (J.-S.), 1969 b. — Cyclopoid copepods parasitic in holothurians in Madagascar. *J. Parasitol.*, 55 : 877-894.
- HUMES (A.G.), Ho (J.-S.), 1969 c. — Harpacticoid copepods of the genera *Porcellidium* and *Paraidya* associated with hermit crabs in Madagascar and Mauritius. *Crustaceana*, 17 : 113-130.
- HUMES (A.G.), Ho (J.-S.), 1970. — Cyclopoid copepods of the genus *Pseudanthessius* associated with crinoids in Madagascar. *Smithson. Contr. Zool.*, 54 : 1-20.
- HUMES (A.G.), STOCK (J.H.), 1973. — A revision of the family Lichomolgidae Kossmann, 1877, cyclopoid copepods mainly associated with marine invertebrates. *Smithson. Contr. Zool.*, 127 : i-v, 1-368.
- NAIR (B.U.), 1988. — *Anthessius* spp. (Anthessiidae) associated with Tridacnidae (Mollusca : Bivalvia) removed to a new genus *Tridachnophilus*. *Hydrobiologia*, 167/168 : 567-569.