



Bibliography of Indonesian Geology

BIBLIOGRAPHY OF THE GEOLOGY OF INDONESIA AND SURROUNDING AREAS

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X. PALEONTOLOGY, BIOSTRATIGRAPHY



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This chapter X of the Bibliography 7.0 contains 288 pages with >2150 papers. These are mainly papers of a more general or regional nature. Numerous additional paleontological papers that deal with faunas/ floras from specific localities are listed under those areas in this Bibliography.

It is organized in six sub-chapters:

- X.1 on modern and sub-recent fauna and flora distributions, information that serves as analog data for interpretations of depositional facies and paleoclimate from fossil assemblages;
- X.2- X.5 on fossil faunas and floras, organized by age;
- X.6 is a large final chapter on mammals and hominids, mainly of Quaternary age.

Four relatively recent introductory review papers on Indonesian fossils were published in 2014 in *Berita Sedimentologi (FOSI/ IAGI)*: Cenozoic biostratigraphy (Van Gorsel, Lunt and Morley BS 29), Cenozoic macrofossils (Van Gorsel, BS 30), Paleozoic and Mesozoic faunas and floras (Van Gorsel, BS31 a, b). Most of this introduction is taken from these papers.

There is a vast amount of literature on the biostratigraphy and paleontology of Indonesia and surrounding Southeast Asia. A 2014 comprehensive reference list of 337 pages, selected from an earlier edition of this Bibliography and issued as a supplement of *Berita Sedimentologi* 29, contained over 3200 papers on Paleozoic- Recent biostratigraphy and paleontology of the region. (online at: http://www.iagi.or.id/fosi/files/2014/04/BS29A_Bibliography_biostrat_hvg_final2.pdf)

Early papers on fossil groups (late 1800's- early 1900's but also later) tended to focus on fossil identifications and taxonomic descriptions. Many of these are still valuable today, especially since many of these studies have not been updated and many of the remote regions have not been revisited. Modern papers tend to deal more with faunal and floral successions (biostratigraphy), interpretation of paleoenvironments (paleoecology), paleoclimate, and geographic faunal/floral provinces (paleobiogeography).

A remarkable comprehensive listing of all fossil species known from Indonesia around 1930 was published by Escher et al. (1931, Professor Martin Memorial volume). This volume also includes reviews of stratigraphy of the Paleozoic by Brouwer, the Mesozoic by Wanner and Tertiary by Leupold and Van der Vlerk. A map of the more important fossil localities in the Indonesian region was compiled by Krijnen (1931), in the same volume.

Updated listings of fossil species reported from Indonesia include:

- foraminifera, by Harsono Pringgoprawiro, Kadar and Skwarko (1998; 3 volumes);
- mollusca, by Skwarko, Sufiati and Limbong (1994; 3 volumes).

Biostratigraphy is still the main tool for age determinations of sedimentary rocks, and good age control is obviously critical for all geology interpretation. Paleobiogeographic patterns provide constraints on the reconstruction of the SE Asia mosaic of tectonic blocks and most papers on this are captured in Chapters I.1 - I.2).

Papers on the various fossil groups are listed in Tables 1-10. These are not complete listings of all relevant papers, and additional titles can be found scattered across the Bibliography 7.0..

X.1. Quaternary-Recent faunas-microfloras and modern distribution

This section X.1 of Bibliography 7.0 mainly contains 546 papers on the taxonomy of modern or sub-recent microfaunas and microfloras as well as papers on their distribution in Recent sediments of SE Asia. For a more extensive introduction see Van Gorsel, Lunt and Morly (2014, *Bertia Sedimentologi* 29).

An understanding of modern biofacies distributions is obviously significant for the interpretation of depositional environments and paleoclimates in the geological rock record. Different microfossil groups and species lived in different environments, and once the distributions of modern counterparts are understood, these can assist in the interpretation of ancient depositional environments, sequence stratigraphy, recognition of displaced faunal elements, etc.

Neogene benthic foram assemblages are sufficiently similar to modern faunas that direct comparisons may be made. Paleogene and older faunas consist mainly of extinct species, so interpretations rely more on comparisons with taxonomically related species or with similar morphotypes. Modern case studies using microfossil biofacies for Miocene paleoenvironmental interpretation in the region include Finger and Drugg (1992) in Central Sumatra, Simmons et al. (1999), Noad and Preece (2014) in North Borneo, etc..

Foraminifera

Foraminifera are the primary tool for facies analysis, particularly the benthic foraminifera. Today these are found from brackish coastal waters down to the deepest marine environments, and their environmental distributions are well documented in numerous studies. Foraminiferal assemblages contain information not only on paleo-water depth, but certain species may also be indicative of substrate, salinity, oxygen levels, paleotemperatures, etc. of sedimentary deposits.



Figure X.1.1. Recent reef flat miliolid foraminifera (Sorites, Peneroplis, planiconvex Cibicides) (Scholle 2003).

Early studies of modern foraminifera distribution off Java were by LeRoy (1939) and Myers (1945). Classic papers on the distribution of foraminifera in deep waters of East Indonesia include Hofker (1978; samples from the 1929 Snellius I expedition), Frerichs (1970; Andaman Sea), Van Marle (1988, 1991; Snellius II expedition) and Villain (1995; Mahakam Delta and Makassar Straits). Among more recent case studies on the distribution of foraminifera in the waters of the Indonesian archipelago are papers by Adisaputra, Barmawidjaya, Rositasari, Suhartati Natsir, etc.. For listings of papers on distributions of modern foraminifera in the waters of Indonesia and surrounding regions see Tables 1 and 2 and the Bibliography.

Major trends in distribution of modern foraminifera in Indonesia and nearby waters include:

1. increase in diversity from marginal marine to a maximum in deep shelf- upper slope environments,

2. increase in percentage of planktonic foraminifera with water depth from 0 in marginal marine to >80% of fauna in bathyal settings
3. decrease in calcareous species below ~2000-3000m where dissolution of calcareous tests starts to become significant (calcareous tests are sometimes subject to dissolution at much shallower depths adjacent to major deltas).

Table 1- FORAMINIFERA RECENT DISTRIBUTION

FAUNA	AREA	REFERENCES
Benthic foraminifera Monographs'	Challenger Exp.1873-1876	Brady 1884, Barker 1960 , Jones 1994
	Durrand Collection	Millett 1898-1904
	Albatross Exped. 1891	Cushman 1921
	Siboga Exped. 1899-1900	Hofker(1927, 1930, 1951
	Snellius Exped. 1929-30	Hofker 1978
	Snellius II Exp. 1984-85	Van Marle 1988-1991
	Recent Indonesia catalog	Adisaputra, Hendrizan & Kholoq 2010
Brackish, estuarine	SE Sulawesi	Horton et al. 2005
	N Borneo	Dhillon 1968, Bronnimann & Keij 1986
	Malay Peninsula	Mahani et al. 2010, 2011, Culver et al. 2012, 2013
Delta front, prodelta, bay	Mahakam Delta, Java- north coast.	Villain 1995, Lambert 2003
	N Borneo	Rositasari 2010
	N Borneo	Ho Kiam Fui 1971
Carbonate environments	NW Java (incl. P. Seribu)	LeRoy 1938, Wijono 1991, Renema 2008, Suhartati 2009
	E Kalimantan	Renema 2006
	SW Sulawesi	Troelstra et al. 1996, Renema & Troelstra 2001, Renema et al. 2001
	Bali, Lombok	Barbin et al. 1987, Adisaputra 1998, 2000, Renema 2003
	PNG	Haig 1979-1993, Langer & Lipps 2003
	Great Barrier Reef	Jell et al. 1965, Renema et al. 2013
	NW Australia	Parker 2009, Parker & Gischler 2011
Shelf seas	Java Sea, Paternoster Platform	Myers 1945, Biswas 1976, Hofker 1978, Boichard et al. 1985, Isnaniawardhani 2009
	Sunda Shelf- S China Sea	Waller 1960, Szarek 2001, Szarek et al. 2006, Suhartati & Muchslin 2012
	Makassar Straits	Adisaputra & Rostyati 2003
	Arafura Sea	Suhartati & Rubiman 2010
Deep marine	East Indonesia	Hofker 1927, 1930, 1951, Van Marle 1988, 1991
	Makassar Straits	Rositasari 2010, Suleiman et al. 2011
	South China Sea-deep	Miao & Thunell 1993, 1996, Jian & Wang 1997, Marquez 1999, Szarek et al. 2009
	Sulu Sea	Rathburn et al. 1994, 1995, Szarek et al. 2007
	Andaman Sea	Frerichs 1970, 1971
	Timor Sea, Indian Ocean	Loeblich & Tappan 1994, Basov & Krashenninnikov 1995, Murgese & De Deckker 2005, De & Gupta 2010

Palynofacies

Palynomorphs can also be grouped into environmental categories, from terrestrial to marine environments, but these do not always not reflect local environment since all pollen and spores are designed to be transported water and wind, away from their source vegetation.

Pollen and spores can be divided into locally sourced and regionally sourced types, provided that the source plants are growing in the depositional locality. Interpretation of depositional environments is thus essentially an exercise in understanding pollen and spore transportation processes. They are, however, very helpful in augmenting environmental interpretations based on foraminifera. If foraminifera are absent, implying non-marine deposition, the locally derived pollen component may indicate the nature of the local depositional environment, but in open marine facies all the pollen is transported.

Pollen and spores are abundant in nearshore environments, but occur in low concentrations in holomarine sediments. However, in deep water turbidites, pollen and spores are as common as in coastal facies, reflecting downslope transport of sediments by gravity flow processes.

Also, it must be emphasized that vegetation is complex, and the same pollen genera may occur in unrelated environments. For instance, the genus *Casuarina* has species which are common along sandy coasts (*C. equisetifolia*) in kerapah swamps and kerangas (*C. nobilis*) and on mountains in Nusa Tenggara (*C. junghuhniana*). The likely source taxon may therefore become clear by association: if it occurs with common *Dacrydium* pollen it is probably derived from kerapah/kerangas, if in sandy sediments with mangroves, probably from sandy coasts, and if from East Java, a montane source should be suspected.

Some common pollen and spore types are from some important vegetation types are as follows (dispersed pollen names in parentheses):

Mangrove belt:	<i>Rhizophora</i> , <i>Bruguiera</i> (= <i>Zonocostites ramonae</i>), <i>Avicennia</i> , <i>Sonneratia alba</i> (= <i>Florschuetzia meridionalis</i>);
Back-mangrove:	<i>Acrotrichum</i> , <i>Sonneratia caseolaris</i> (= <i>Florschuetzia levipoli</i>), <i>Oncosperma</i> , <i>Nypa</i> (= <i>Spinizonocolpites echinatus</i>), <i>Acanthus</i> ;
Freshwater peat swamp:	<i>Blumeodendron</i> , <i>Gonystulus</i> , <i>Cephalomappa</i> , <i>Lophopetalum</i> , <i>Alangium</i> (= <i>Lanagiopollis</i> spp.);
Seasonally inundated swamps:	grasses, <i>Barringtonia</i> (= <i>Marginopollis concinnus</i>), <i>Ceratopteris</i> (= <i>Magnastriatites grandiosus</i>);
Rain forests:	<i>Dipterocarpaceae</i> , many <i>Leguminosae</i> , <i>Rubiaceae</i> and many others;
Open savanna:	<i>Pinus</i> , grasses.
Mountains:	<i>Dacrycarpus imbricatus</i> , <i>Phyllocladus</i> , <i>Picea</i> , <i>Abies</i> ;
Freshwater algae from lakes:	<i>Pediastrum</i> , <i>Botryococcus</i> ;
Marine dinocysts:	<i>Spiniferites</i> , <i>Systematophora</i> , <i>Operculodinium</i> .

Table 2- OTHER MICROFAUNA/FLORA RECENT DISTRIBUTION

FAUNA/ FLORA	AREA	REFERENCES
Ostracodes	Mahakam Delta	Carbonel & Moyes 1987, Carbonel and Hoibian 1988
	Sunda Shelf	Mostafawi 1992
	Java Sea, Bali	Dewi 1997, Mostafawi et al. 2005
	P. Seribu, Jakarta Bay	Watson 1988, Whatley & Watson 1988, Fauzielly et al 2013
	Malacca Straits	Whatley & Zhao 1987, 1988
	Other Indonesia	Muller 1906, Keij 1953, Dewi et al. (many papers)
Pollen, spores and kerogens	SE Asia case studies	Flenley 1973, Haseldonckx 1977, Gastaldo (op. div), Van der Kaars 1991, Chandra 2010, Sun et al. 1999
	N Borneo	Simmons et al. 1999
	E Kalimantan-Mahakam	Hardy & Wrenn 2009
	Sulawesi	Engelhardt et al. 2007
Diatoms (fresh-brackish water)	Lake Toba, Sumatra	Van der Marel 1947
	SE Sulawesi	Horton et al. 2007
	Malay Peninsula	Zong & Kamaludin 2004
Diatoms (deep marine)	Indonesia	Van Iperen et al. 1993, De Deckker & Gingele 2002
	South China sea	Wu et al. 2013
Calcareous nannofossils	SE Asia	Okada 1983, Varol 1985, Fernando et al. 2007
Radiolaria	Banda Sea	Harting 1863, Van de Paverd 1989
Dinoflagellate cysts	Java Sea, etc.	Lirdwitayaprasit 1997a,b, Matsuoka et al. 1999, Kawamura 2004, Furio et al. 2006, 2012, Hessler et al. 2013

X.2. Tertiary

Cenozoic sediments and volcanics cover about $\frac{3}{4}$ of the islands of Indonesia (Van Bemmelen, 1949), so it should not be surprising that the vast majority of paleontological studies has been on Cenozoic micro- and macrofossils. This section X.2 contains >410 papers on Cenozoic faunas and floras of Indonesia and surrounding regions. These tend to be papers of a more general nature, and additional titles on this topic may be found in the various area chapters if the fossils described were from a specific area only. Tables 3,4,5 and 6 list many of the key papers on the various fossil groups.

For more detailed overviews see the two relatively recent papers on Cenozoic fossils of Indonesia: Van Gorsel, Lunt and Morley (2014a; microfaunas/ biostratigraphy) and Van Gorsel (2014b, macrofossils).

Recent faunas from the Indonesian region boast some of the highest diversities in the world (a 'hotspot' region). This is probably also true for some Cenozoic faunas of Indonesia. In a series of monographs and papers between 1879 and 1937, professor Karl Martin of Leiden University and Museum ('Linnaeus of Java') identified 1412 species of Tertiary molluscs from Java alone! The collection of Tertiary corals from Indonesia at Naturalis Museum, Leiden, contains 271 species from 210 localities (Leloux and Renema, 2007).

Tertiary macrofossils in Indonesia are mainly molluscs and corals in marine deposits and plants, petrified wood and fresh-water molluscs in terrestrial deposits.

Today the principal tools for biostratigraphic subdivision of Tertiary sediments in Indonesia differ depending on paleo-environments:

- open marine sediments: planktonic foraminifera, calcareous nannofossils, radiolaria;
- very deep marine sediments, below carbonate compensation depth: radiolaria;
- shallow marine carbonate environments: larger foraminifera;
- shallow marine clastic marine environments: smaller benthic foraminifera, dinoflagellates;
- non-marine and marginal marine environments: palynology (spores and pollen).

Planktonic foraminifera

Planktonic foraminifera are a key group for biostratigraphy of Cretaceous- Recent open marine sediments. The series of evolutionary lineages of planktonic foraminifera (and the zonation schemes based on these), have been summarized in the classic books by Blow (1969, 1979), followed with minor modifications by Bolli and Saunders (1985). The zonation scheme of Blow, with the convenient 'N' (Neogene; 20) zones and 'P' (Paleogene 23 zones) zones has been used by most workers in the oil industry and academia in SE Asia.

The largely similar but 'competing' zonation of Berggren (1972, Wade et al., 2011), with its P (Paleocene), E (Eocene), O (Oligocene), M (Miocene) and Pl (Pliocene) zones, has not found many followers in SE Asia. This is partly because most of the modifications of the earlier Blow zonation proposed herein were more applicable to the Atlantic Ocean area than to the Indo-Pacific province.

The 'standard' zonations can be further refined when adding observations that reflect global or regional changes in climate or paleoceanographic patterns, such as changes in coiling directions of species of *Globorotalia*, *Neoglobobadrina*, *Pulleniatina*, etc. (Bolli & Saunders, 1985), and climate-controlled events like incursions of cold water species.

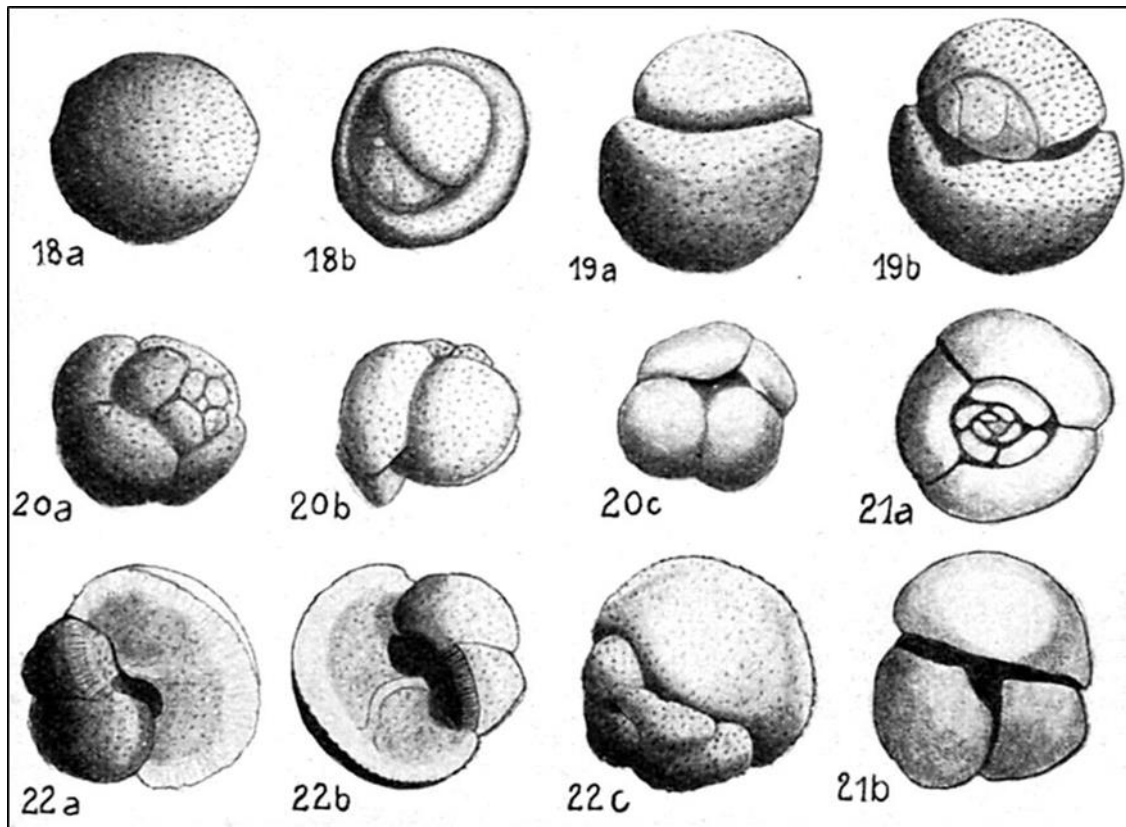


Figure X.2.1. Example of Late Oligocene- Early Miocene planktonic foraminifera from Bulongan, NE Kalimantan (Koch 1926; Koch 1935).

While palynology is the tool of choice for non-marine deposits, it should be realized that spores-pollen are dispersed mainly in downstream direction from where they are produced. Therefore, mangrove pollen, on which much of the Neogene pollen zonation is based, are typically absent in fluvial-alluvial deposits away from the paleo-shoreline.

Smaller benthic foraminifera

Small benthic foraminifera are generally common in samples from all marine and marginal marine facies, and assemblages can be of very high diversity. About 2000 species and subspecies have been described, although many of these are probably synonyms (Lunt 2013). They are primarily used for paleoenvironment and paleobathymetric interpretations.

Classic early taxonomic descriptions of modern benthic foraminifera are the monographs on Recent material from the major oceanographic expeditions to the East Indonesia region, including the Challenger, Albatross, Siboga, Snellius I and Snellius II Expeditions (see Table 2).

Other significant papers include those by Millett (1898-1904) and Loeblich and Tappan (1994) on foraminifera from the Timor Sea. The principal taxonomic works on Neogene benthic foraminifera in the region are papers by LeRoy (1939-1944; Figure X.2.2), Belford (1966) and Whittaker and Hodgkinson (1979). For additional references see Table 3 and the Bibliography.

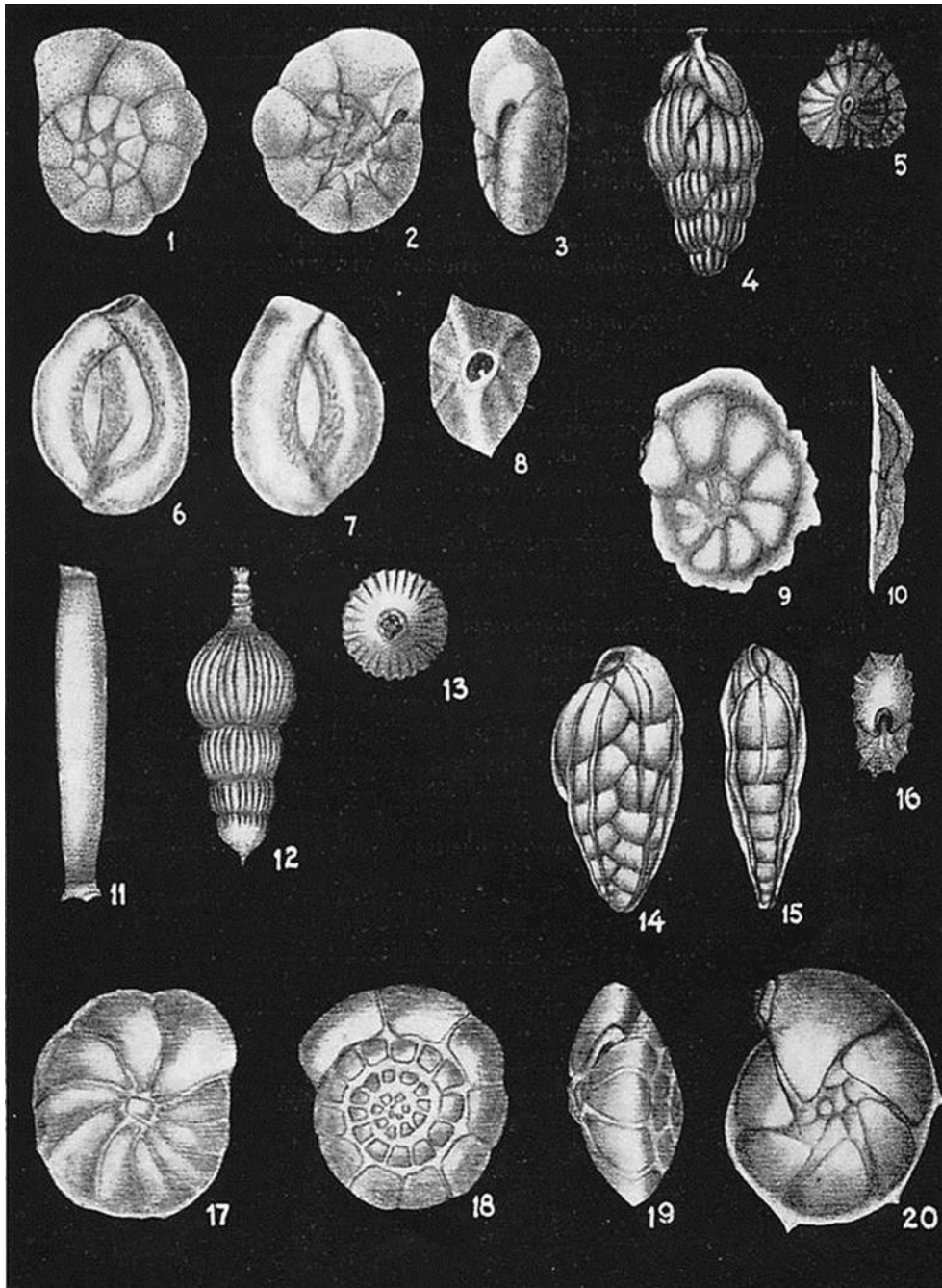


Figure X.2.2. Example of benthic foraminifera assemblage (Early- Middle Miocene Telisa Fm, Central Sumatra; LeRoy 1939).

Smaller benthic foraminifera species in SE Asia tend to have relatively long age ranges and most of their age ranges have not been properly documented. The composition of benthic foraminifera assemblages has not changed much through the Neogene. In most instances highest and lowest occurrences of benthic species in a sedimentary section therefore reflect changes in facies, rather than evolutionary appearance or extinction levels. As a result, benthic foraminifera are of limited use for biostratigraphic age dating.

However, between about 1930 and 1960, the petroleum industry worldwide routinely used benthic foraminifera for correlations between exploration wells. In Indonesia BPM, Stanvac and Caltex all had laboratories with micropaleontologists that primarily used benthic foraminifera, and who tended to work in isolation. In the absence of detailed taxonomic studies, paleontologists generally identified species by genus name and numbers, such as *Rotalia* 5 or *Elphidium* 8. Due to the lack of communication between companies *Rotalia* 2 of BPM was not the same as *Rotalia* 2 of Stanvac.

Most of this early micropaleontological work was deemed proprietary and very little has ever been published. The taxonomic studies by LeRoy (1939 -1944) were an early effort to introduce formal species names for the Neogene foraminifera from the Caltex's oil wells of Sumatra, as well as outcrop sections of Java and East Kalimantan.

Over short distances, correlations based on 'tops' and 'bottoms' of benthic foraminifera were not unreasonable, but they were primarily correlations of facies changes or events like flooding surfaces, with no real age significance. Correlations across lateral facies changes were obviously very difficult. Such benthic foraminifera zonations are no longer used today.

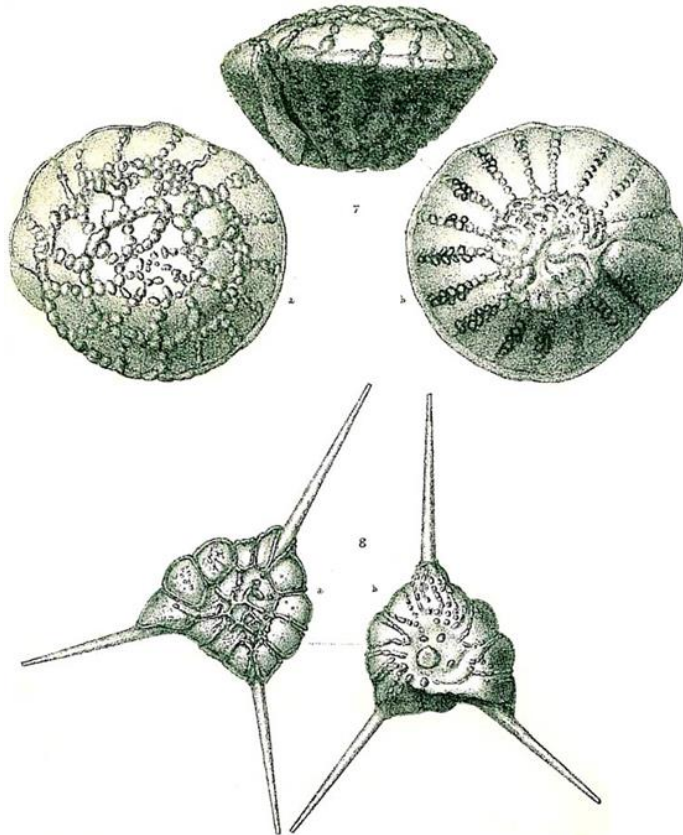


Figure X.2.3.. Recent 'prodelta' benthic foraminifera *Pseudorotalia schroeteriana* (top) and *Asterorotalia trispinosa* (bottom) (from Brady 1884, *Challenger Foraminifera*).

One of the exceptions to the above 'rule' is the use of the evolutionary developments in Late Miocene- Recent larger rotaliid foraminifera (Figure X.2.3 . Rotaliids are common and dominant in delta front- prodelta facies, where planktonic foraminifera are absent or very rare. Following initial work by Huang (1964) in Taiwan, a zonation based on *Ammonia*, *Pseudorotalia* and *Asterorotalia* species was proposed by Billman and Witoelar (1974) in the East Kalimantan region, and subsequently expanded by Billman et al. (1980). It was further documented from the more marine deposits of the NE Java basin and calibrated to planktonic foram zones by Soeka et al. (1980) and Kadar (1992).

Table 3- CENOZOIC PLANKTONIC, SMALLER BENTHIC FORAMINIFERA

FAUNA/FLORA	AREA	REFERENCES
General	Indonesia	Billman & Scrutton 1976, Van Gorsel 1988, Van Gorsel, Lunt and Morley 2014, Lunt 2013a,b
Neogene planktonic foraminifera	General	Blow 1969, 1979, Kennett & Srinivasan 1983, Bolli & Saunders 1984
	Java	Bolli 1966, Blow & Banner 1966, Van der Vlerk & Postuma 1967, Hartono 1960, 1969, Harsono P. 1968, 1983, Blow 1969, 1979, Wibisono 1972, Kadar 1972- 2008, Saint-Marc & Suminta 1979, Van Gorsel & Troelstra 1981, Harsono et al. 1998
	West Papua/ PNG	Belford 1962, 1966, 1967, 1984, 1988
	Sumatra	LeRoy 1948, 1952, Blow & Banner 1966, Kadar et al. 2008
	Andaman Sea	Frerichs 1971
Paleogene planktonic foraminifera	Kalimantan	Thalmann 1942, Baumann 1972
	Java	Hartono 1960, 1969, Purnamaningsih Siregar & Harsono P. 1981
	West Papua	Belford 1966, 1974, 1989
Smaller benthic foraminifera	Sumatra	LeRoy 1939, 1941, 1944
	Java	Koch 1923, Thalmann 1934, 1935, Yabe & Asano 1937, LeRoy 1941, 1944, Van der Sluis & Vletter 1942, Boomgaard 1949, Soeka et al. 1980, Sukandarrumidi 1990, Kadar 1992
	Kalimantan, Sabah	Koch 1926, LeRoy 1941, Mohler 1946, Billman and Witoelar 1974, Billman et al. 1980, Whittaker & Hodgkinson 1979
	Seram, Timor	Fischer 1921, 1927, Koch 1925, Rocha & Ubaldo 1964
	New Guinea	Belford 1962, Haig 1982

Larger foraminifera

By far the most publications on Tertiary microfaunas in Indonesia are dedicated to larger foraminifera. They are the dominant fossils in shallow marine carbonate deposits of Southeast Asia, especially of Eocene and Late Oligocene- Middle Miocene ages. They have been used in biostratigraphy in Indonesia for over a century, and are still the most useful group for age and environmental interpretations in carbonates, which generally contain very few planktonic foraminifera, nannofossils or palynomorphs.

Early classic works on larger foraminifera from Indonesia were by Verbeek, Rutten, Van der Vlerk, Tan Sin Hok, Caudri, Umbgrove, and others. The overall stratigraphic successions of genera and species and their evolutionary trends in most lineages had been identified by these workers by the late 1930's. More recent work on Indonesian larger foraminifera is by Boudagher-Fadel, Lunt, Renema and others. For selected references see Table 4 and the Bibliography.

Larger foraminifera are benthic foraminifera with relatively large and complex calcareous tests. They are generally 2-5mm in diameter; but some specimens of *Cycloclypeus*, *Eulepidina* and *Nummulites* may grow to 5 cm or more.

Most Recent larger foraminifera have a symbiotic relationship with algae or diatoms, which limits their presence to the photic zone (<100m water depth), in clear waters away from clastic influx. Examples of Recent larger foraminifera are shown in Figure X.2.4.



Figure X.2.4.. Modern tropical larger foraminifera: 1. *Alveolina* from Madang lagoon, PNG, 2. *Baculogypsinoidea*? from Great Barrier Reef, Australia. 3. *Marginopora* from French Polynesia. 4. Foraminiferal beach sand from Kiribati (Western Pacific) (Langer 2008).

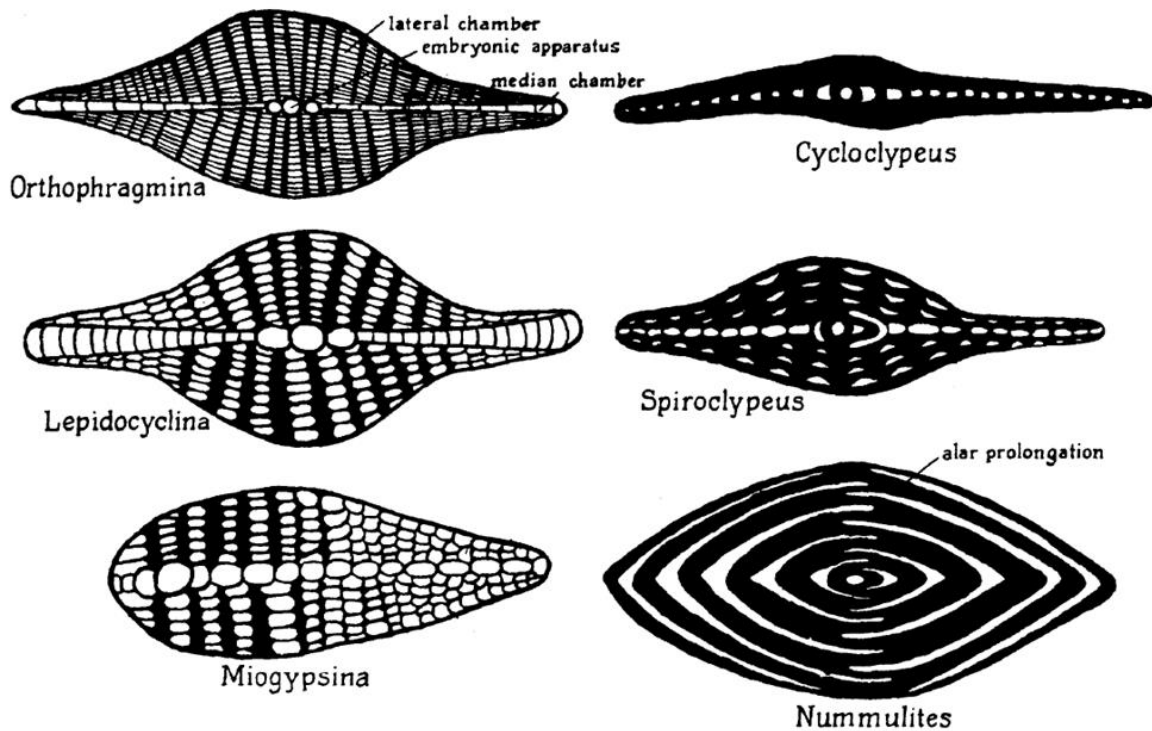


Figure X.2.5. Vertical sections of Cenozoic Indonesian larger foraminifera (Van der Vlerk & Dickerson, 1927).

Larger foraminifera comprise several taxonomically unrelated families. The complex inner structure generally requires study of oriented thin sections through the embryonic stage for accurate identification at the species level, or of the degree of development within an evolutionary series. However, identifications at genus level can generally be made from randomly oriented thin sections or from external features, using a hand lens. For examples of thin sections of Tertiary larger foraminifera from Indonesia see Figure X.2.5.

One of the earliest descriptions of larger foraminifera from SE Asia is on Late Eocene *Nummulites* limestones from SE Kalimantan, West Sumatra and Central Java (Verbeek (1871, 1892; Figure X.2.6).

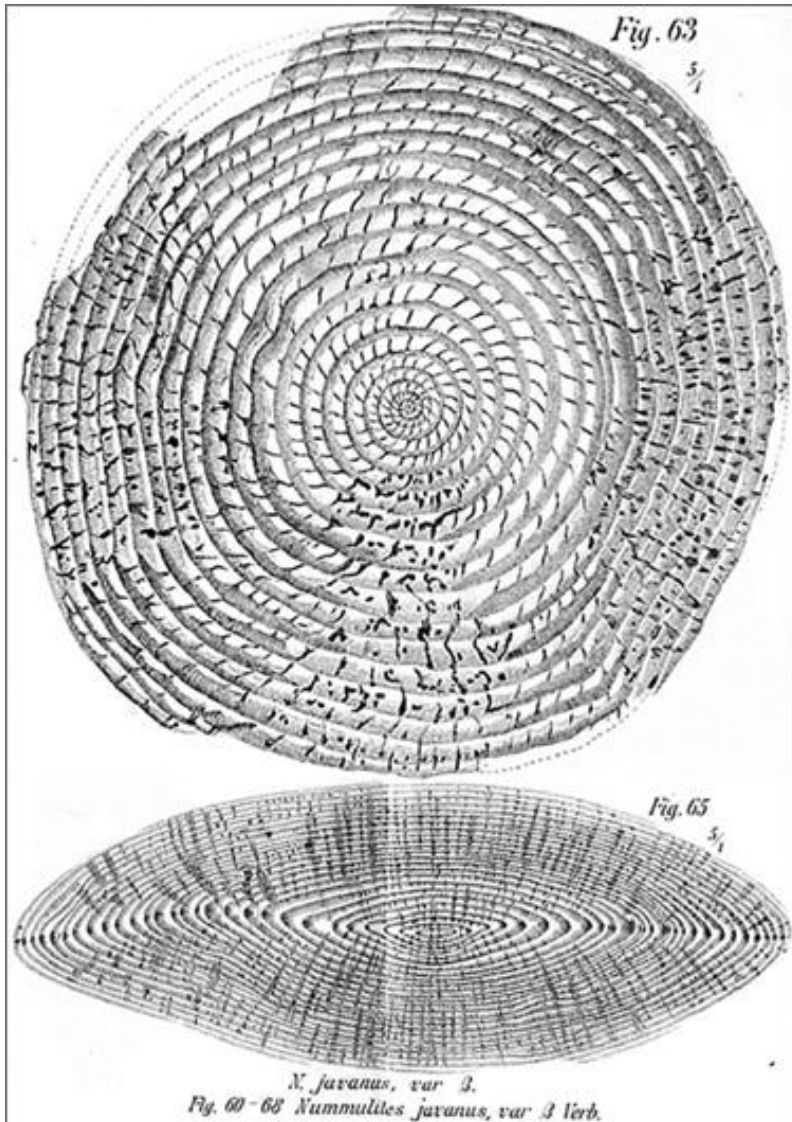


Figure X.2.6. Middle Eocene *Nummulites javanus* (microspheric) from Nanggulan, Central Java (Verbeek and Fennema 1896).

Larger Foraminifera biozonations

The famous Eocene-Recent 'East Indies Letter Classification' is a zonation scheme (zones Ta-Th) based on larger foraminifera and in the youngest part originally also molluscs. It was first proposed by Van der Vlerk and Umbgrove (1927) (Figure X.2.7.) It was further improved by Leupold and Van der Vlerk (1931) and Adams (1970).

Calibration of this larger foraminiferal zonation to the geological time scale has improved significantly over time, first in the 1970's-1980's through correlations of larger foram zones to planktonic foraminifera zones

(Clarke & Blow 1969, Haak and Postuma 1975, Adams 1984, Chaproniere 1984) and later through Strontium isotopes. For the latest ranges and calibration of the Letter Classification to the modern GPTS time scales see Lunt and Allen (2004), Lunt (2013) or Van Gorsel, Lunt and Morley (2014).

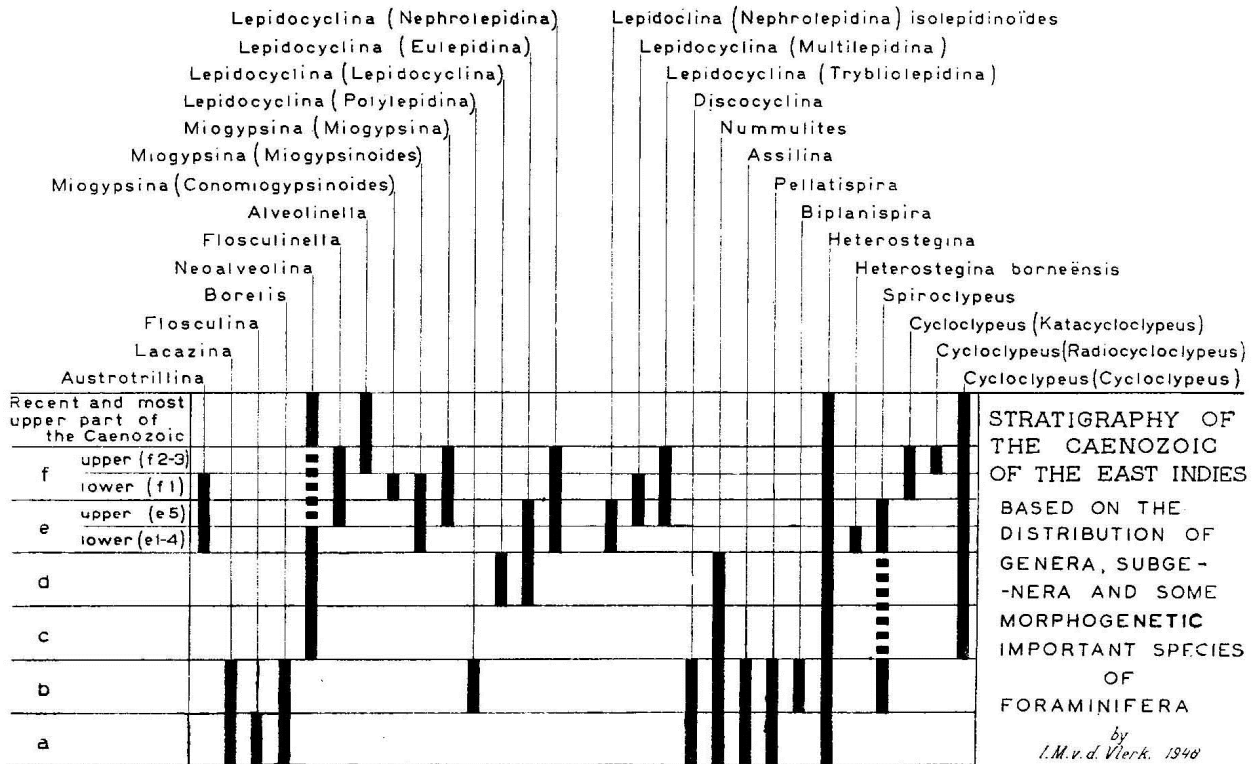


Figure X.2.7 . Distribution chart of Tertiary larger foraminifera that define the 'East Indies Letter zonation' (Van der Vlerk, 1948).

Evolutionary series in larger foraminifera

Indonesia was the birthplace of classic studies on larger foraminifera evolution patterns of *Cycloclypeus*, *Miogypsina* and *Lepidocyclina* (Tan Sin Hok, 1932-1939), which were later refined by Van der Vlerk and others; Table 4).

Many larger foraminifera lineages started from a relatively simple, spirally arranged ancestor, then gradually evolved over millions of years into increasingly complex forms with concentric/ radial chamber growth patterns. These trends are well documented, and identification of evolutionary stages can be very helpful for age determinations.

Examples include (references see Table 4):

- *Heterostegina- Cycloclypeus* (Late Eocene- Recent)
- *Heterostegina- Tansinhokella- Spiroclypeus* (Late Oligocene- Early Miocene)
- *Neorotalia- Miogypsinooides- Miogypsina* (latest Oligocene- Middle Miocene) (Figure X.2.8)
- *Lepidocyclina* embryon evolution (Oligocene- Miocene) (Figure X.2.9).
- *Borelis- Flosculinella- Alveolinella* (Oligocene- Recent)

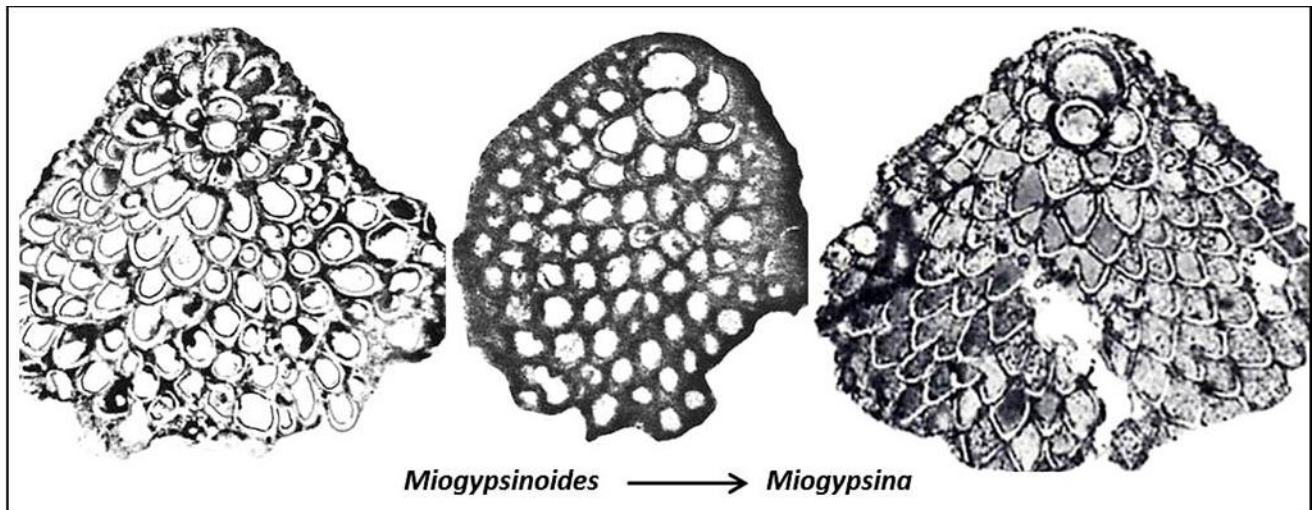


Figure X.2.8. Evolution from Late Oligocene *Miogypsinoidea complanata* with long initial spiral on left (Van der Vlerk 1959) through Early Miocene *Miogypsinoidea dehaartii* (Larat; Van der Vlerk 1924) to advanced Middle Miocene *Miogypsina indonesiensis/antillea* on right (Madura, Schipper and Drooger 1974).

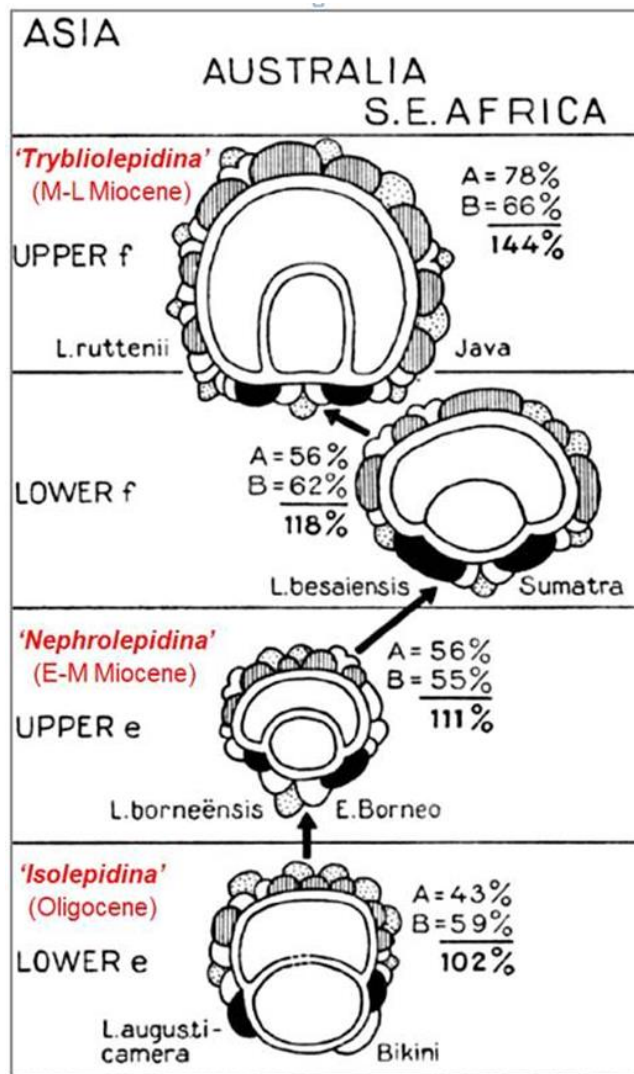


Figure X.2.9. Evolution of *Lepidocyclina* embryonic chambers in Oligocene- Miocene Van der Vlerk (1959).

Table 4 - CENOZOIC LARGER FORAMINIFERA

FAUNA/FLORA	AREA	REFERENCES
Larger foraminifera-	General	Douville 1905-1924, Mohler 1946, Adams 1965-1992, Lunt 2003, Lunt & Allen 2004, Renema 2002
	Letter zonation	Van der Vlerk & Umbgrove 1927, Leupold & Van der Vlerk 1931, Gerth 1935, Tan Sin Hok 1939, Van der Vlerk 1959, Clarke and Blow 1969, Adams 1970, Haak and Postuma 1975, Boudagher-Fadel & Banner 1999, Govindan 2003, Lunt and Allan 2004, Renema 2007, Matsumaru 2011
	<i>Cycloclypeus</i>	Tan Sin Hok 1932, MacGillavry 1962, Drooger 1955, Adams & Frame 1979
	<i>Lepidocyclina</i>	Van der Vlerk 1928, 1959-1973, Scheffen 1932, Tan Sin Hok 1936, Caudri 1939, Van der Vlerk & Postuma 1967, Ho Kiam Fui 1976, Van Vessem 1978, Adams 1987, Ghosh & Saraswati 2002
	<i>Miogypsina</i>	Tan Sin Hok 1936, 1937, Drooger 1953, 1963, 1993, Raju 1974, Schipper & Drooger 1974, De Bock 1976, Adisaputra-Sudinta et al. 1978
	<i>Heterostegina</i> - <i>Spiroclypeus</i>	Van der Vlerk 1925, Tan Sin Hok 1930, 1937, Krijnen 1931, Lunt & Renema 2014
	<i>Austrotrillina</i>	Adams 1968
	<i>Pellatispira</i>	Umbgrove 1928
	Alveolinids	Bakx 1932, Mohler 1949, Ritsema 1951, Wonders & Adams 1991
	Nummulitids	Verbeek 1871, 1874, 1891, Doornink 1932, Renema et al. 2002
	Larger foraminifera-faunal studies	Multiple areas
Sumatra		Verbeek 1871-1891, Brady 1878, Douville 1912, Tappenbeck 1936
Java		Verbeek 1892, Martin 1881, Douville 1916, Hanzawa 1930, 1965, Caudri 1932, 1939, Doornink 1932, Mohler 1949, Cole 1975, Adisaputra et al. 1978, Adisaputra & Coleman 1983, Boudagher-Fadel 1997-2008, Renema 2002, 2007, Sharaf et al. 2006, Umiyatun et al. 2006, Irwansyah et al. 2011, Rahmawati et al. 2012, Lunt 2013
Kalimantan-North Borneo		Verbeek 1871, Von Fritsch 1877, Provale 1908, Rutten 1911-1926, Van der Vlerk 1925, 1929, Tan Sin Hok 1930-1940, Adams 1965, Hashimoto et al. 1973, Hashimoto & Matsumaru 1981, Roohi (1998, Boudagher-Fadel et al. 2000, McMonagle et al. 2011, Cotton et al. 2014, Lunt 2014,
Sulawesi		Crotty & Engelhardt 1993, Boudagher-Fadel 2002, Sudijono 2005
West Papua-Papua New Guinea		Schlumberger 1894, Rutten 1914, 1921, 1925, 1936, Crespin 196), Binnekamp 1973, Bain & Binnekamp 1973, Beldord 1974, Brash et al. 1991, Sudijono 2000
Sumba, Kei islands		Van der Vlerk 1922, 1966, Douville 1923, Caudri 1934, Bursch 1947
Timor		Bakx 1932, Henrici 1934, Hayasaka & Ishizaki 1939, Ritsema 1951, Marks 1954

Calcareous nannoplankton

Calcareous nannofossils are minute calcite platelets that cover unicellular pelagic marine algae (coccolithophorids), and are common in low latitude open marine deposits. Because most of the taxonomic work on was done in the last thirty years, by relatively few workers, this group does not have the taxonomic confusion that existed among some of the foraminifera taxa.

Nannofossils have an advantage over planktonic foraminifera in that they may be found in larger numbers closer to shore, more specimens can be extracted from smaller samples (e.g. side-wall cores), and sample processing is relatively easy. They are relatively simple structures, so identification is relatively easy, although the often subtle differences between species do require some operator experience. On the negative side, due their small size they require high-powered optical microscopes and samples are prone to contamination, both from contaminated lab equipment and from geological reworking. The routine use of this group for age dating of oil well samples from Tertiary basins in Indonesia started in the mid-1970's.

Although some of the earliest pioneering work on nannofossils was done in Indonesia (Tan Sin Hok, 1927; Figure X.2.10), relatively little research work has been done on this group in Indonesia since then. For selected references see Table 5 and the Bibliography.

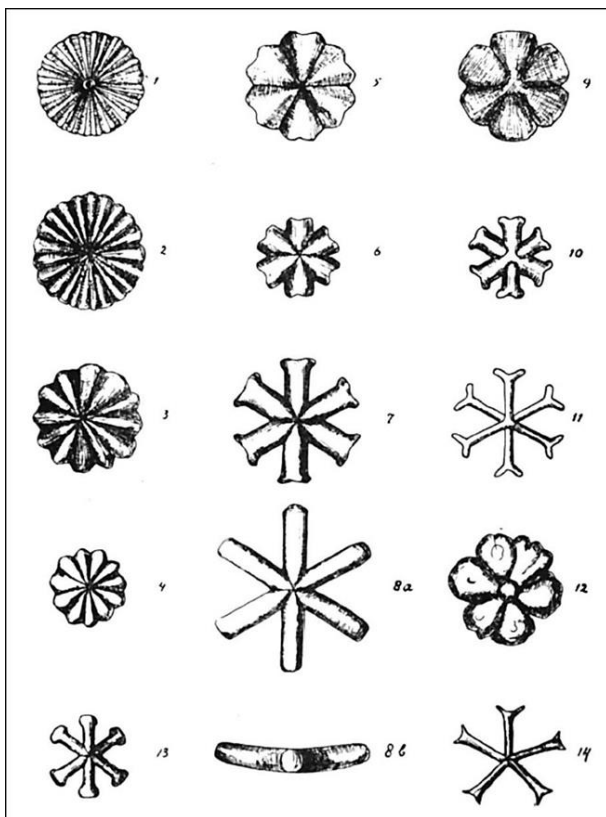


Figure X.2.10. Calcareous nannofossils of *Discoaster* group from the Plio-Pleistocene of Roti and Timor, from the pioneering study of Tan Sin Hok (1927).

Calcareous nannoplankton biozonations

The most widely used nannofossil zonation in the low-latitude Cenozoic is based on the work of Martini (1971). It has a resolution similar to that of planktonic foraminifera, and integration of both tools typically provide a higher stratigraphic resolution either of the methods alone.

The Martini zones are numbered in a similar fashion as used in planktonic foraminifera: Neogene zones NN 1-21 and Paleogene zones NP1-25. Another frequently used zonal scheme is that of Okada & Bukry (1980), using similar zones, but numbered with 'CN' and 'CP' prefixes. Varol (1983) proposed another slightly modified scheme for the Miocene- Recent in Southeast Asia..

In the petroleum basins of Western Indonesia open marine facies with diverse nannofossils can be rare. Prodelta shales may yield only impoverished, *Discoaster*-dominated nannofossil assemblages. For this reason Lambert and Laporte-Galaa (2005) proposed a modified Miocene nannofossil zonation for the Mahakam Delta area, based on species of the *Discoaster* group only.

Ostracoda

Ostracode fossils are the calcareous valves of a class of small crustaceans. Although found in a wide variety of marine and non-marine environments, ostracodes have been much less studied than foraminifera, and are not routinely used in SE Asia biostratigraphy. This is partly because they are usually associated with more numerous and apparently more useful foraminifera, partly because there are very few ostracode specialists. Stratigraphic ranges of ostracode species appears to be poorly documented and many of the Cenozoic species appear to be long-ranging (e.g. Guernet, 1993).

The first paper on fossil ostracodes in Indonesia is by Fyan (1916) from the Pliocene of Timor (Figure X.2.12). The most comprehensive study on Indonesian material is by Kingma (1948), who described 94 species of Late Cenozoic ostracodes from North Sumatra, the Bojonegoro 1 well and the Kendeng zone in East Java, as well as 20 Recent species from the Java Sea. Series of more recent, smaller papers by LeRoy (1939-1945) and Keij (1953-1979) are also of interest. A review of studies and extensive listings of recent and fossil ostracode species described from SE Asia is by Hanai et al. (1980).

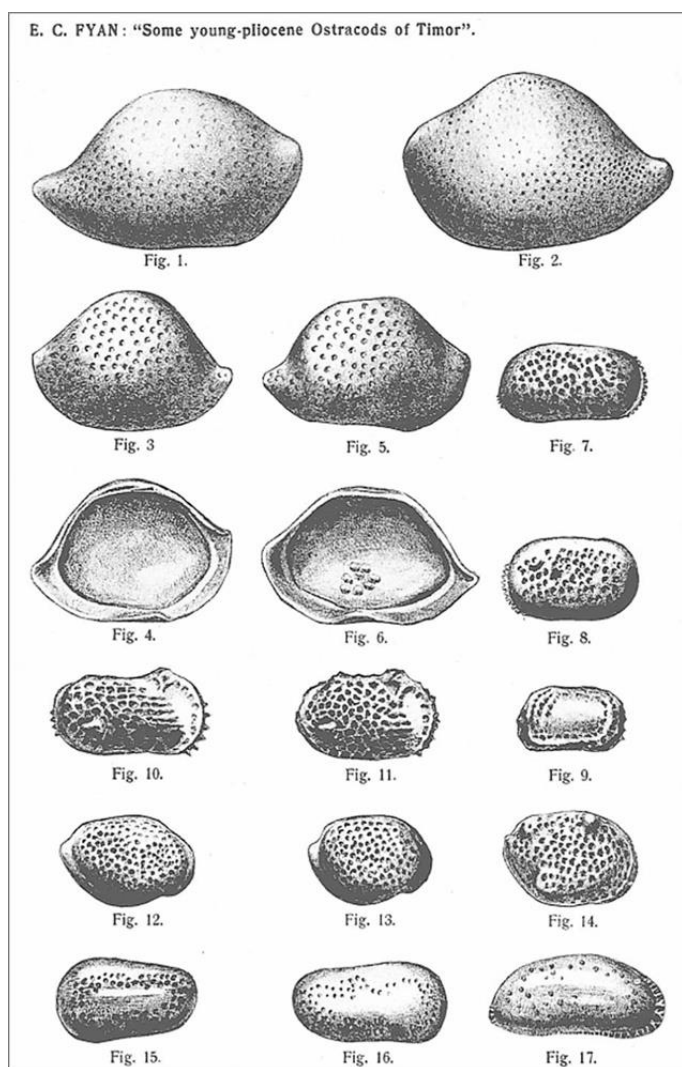


Figure X.2.12. Pliocene ostracodes from Atambua, Timor (Fyan, 1916).

The outer shells of ostracod species may vary between relatively thin, smooth types or thicker and highly ornamented varieties. Both types occur in brackish and marine environments, but smooth types appear to be relatively more common in lower salinity settings.

For selected references on ostracods see Table 5 and the Bibliography. For papers on Recent species and distributions see Carbonel et al. (1987, 1988), Dewi (1993-2008), Mostafawi, Titterton et al. and others.

Diatoms

Diatoms are photosynthetic single-celled algae that build intricate siliceous tests. Some species are benthic forms, others led a planktonic existence, but, being dependent on light, all lived within the photic zone. They are present in a broad range of environments, from fresh water deposits to marginal marine and pelagic oceanic environments. Many taxa have near-global distributions across multiple climate zones.

Fossil diatom floras have been commonly used for biostratigraphic and paleoenvironmental interpretations in oceanic sections, like the Neogene of the Pacific Ocean (Burckle 1972, 1978), but there are very few studies from Indonesia. The first and still most elaborate paper on Cenozoic diatoms from Indonesia is Reinhold (1937), describing 208 species and varieties of marine and lacustrine diatoms from the Neogene of Java (Figure X.2.13). Other examples of applications of fossil diatom biostratigraphic zonation include papers by Ninkovich and Burckle (1979), Siregar (1981) and Burckle (1982), also on Late Neogene Central and East Java material.

Although diatoms are an important part of Recent marine plankton worldwide, they are generally rare in most samples of marine sedimentary rocks in Indonesia, because:

1. diatoms are more abundant in high latitudes; low latitude pelagic oozes are dominated by planktonic foraminifera and calcareous nanofossils, except in areas of diatom algal blooms, as in cold-water upwelling zones.
2. diatoms are relative susceptible to dissolution, both in the water column and under burial diagenesis.

Dissolution of the opaline diatom tests is widespread below burial depths of ~600-1000m (>40-50°C ; Opal-A to Opal CT transition), below which much of the diatom shells are converted to siliceous cement and are the main cause of a Bottom-Simulating Reflector (BSR) on seismic lines over deep water deposits. At greater depths all that remains of diatom tests is microcrystalline quartz in bedded cherts. Diatoms may still be seen occasionally in micropaleontology samples from greater depths as pyritized discs ('*Coscinodiscus*').

Accumulations of the large marine diatom *Ethmodiscus rex* have been documented in Pleistocene glacial intervals in deep marine cores in the Indian Ocean off Sumatra (DeDecker & Gingele 2002) and further West (Broecker et al. 2000), and also in the Equatorial Pacific and Atlantic Oceans. These represent times of increased salinity and supply of silica to the oceanic surface water, under a more arid climate.

Quaternary lacustrine diatomites are known from the Lake Toba area in Sumatra (Samosir Island; Van der Marel 1947) and from Central Java (Darma area, Grandjean & Reinhold, 1933; Kalioso, Sangiran, Reinhold 1937) and East Java (Upper Kalibeng Fm near Kabuh, Krian in Kendeng zone). Such lacustrine diatom-rich deposits are commonly associated with volcanic tuffs that provided additional silica source.

The distribution of modern pelagic marine diatoms in East Indonesia deep water sediments was studied by Van Iperen et al. (1993). Horton et al. (2007) described modern diatom distribution in mangrove swamps of the Tukang Besi islands, SE Sulawesi.

Recent field experiments in Indonesia have shown the potential of producing biofuels from cultures of marine diatoms (Nurachman et al. 2012), which underlines the potential importance of diatoms for marine algal hydrocarbon source rocks.

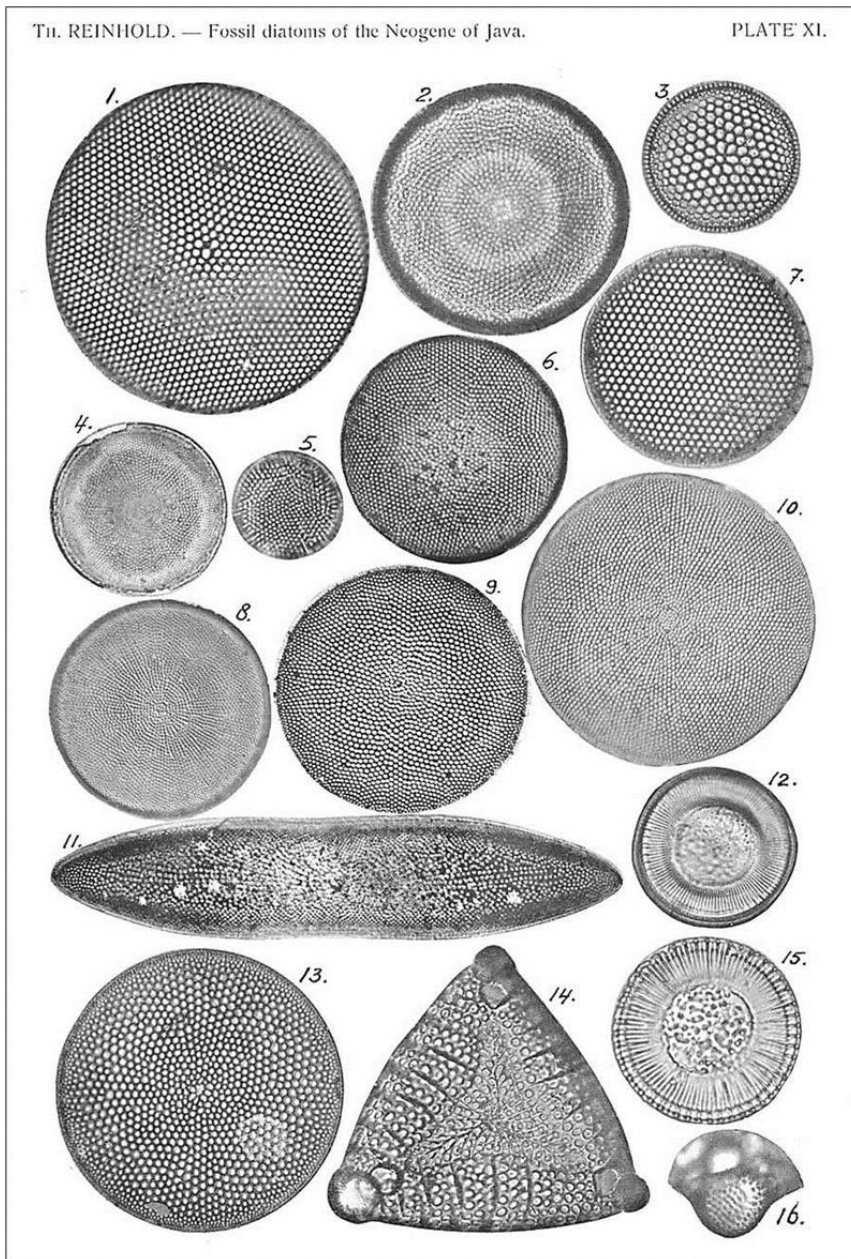


Figure X.2.13. Diatoms from Late Miocene- Pleistocene of Central Java (Reinhold, 1937).

Radiolaria

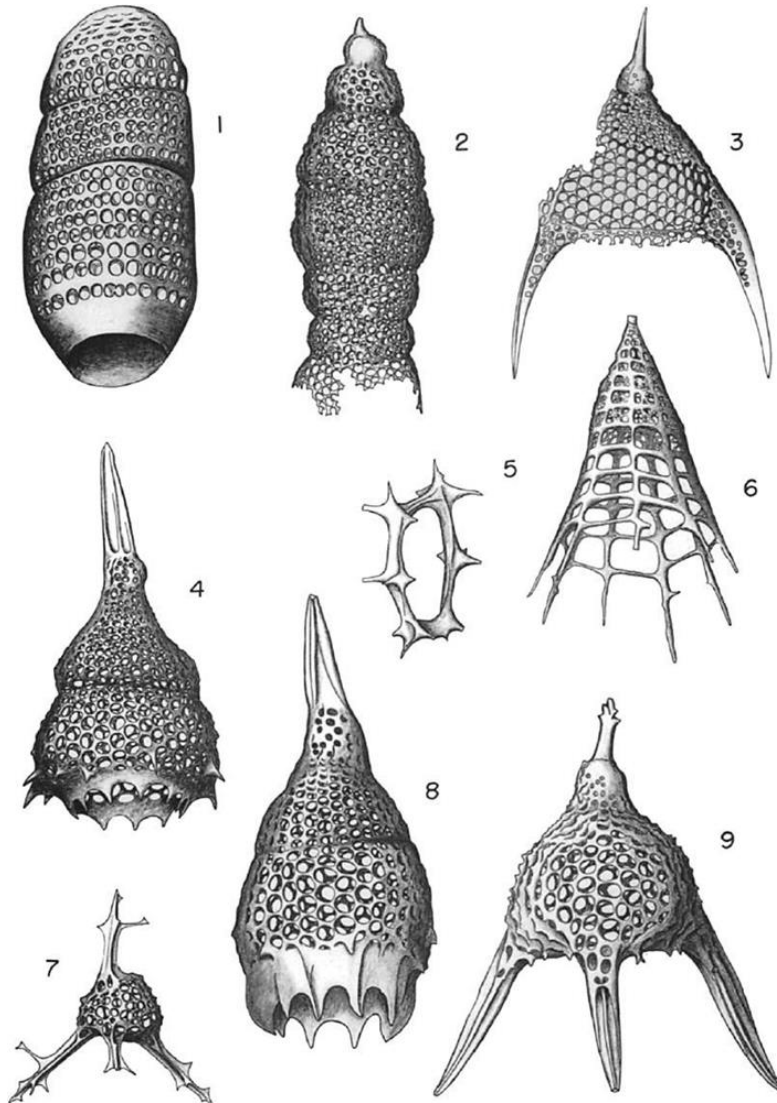
Like diatoms, radiolaria are not common in Cenozoic 'normal' marine' sedimentary rocks from Indonesia, and Cenozoic and Recent radiolaria have received very little attention here. Radiolaria appear to be relatively more common in marine sediments of Mesozoic age in the Indonesian- SE Asia region, and a larger body of work exists for these (Hinde 1902, 1908 and later work by Wakita et al., Jasin Basir, Munasri, etc.). Cenozoic radiolaria are most abundant in deep marine- oceanic deposits in areas of high productivity like upwelling zones.

Harting (1864) published some early descriptions of modern radiolaria species from the deep Banda Sea. More recently, modern radiolaria abundances on the Banda Sea floor were studied by Van de Paverd (1989; peak abundances between 2000-4000m).

Radiolaria are a useful group for Mesozoic- Cenozoic biostratigraphy, but mainly of deep marine deposits. The principal biozonations for Cenozoic radiolaria are by Riedel and Sanfilippo (1978), and Sanfilippo et al. (1985).

Bandung-based Indonesian paleontologist Tan Sin Hok did some of the earliest work on radiolarian faunas in the Timor- Roti islands. However, he did not realize that the samples he analyzed for his Ph.D. Thesis (Tan Sin Hok, 1927), were collected by Tan's thesis advisor Brouwer, were a mixture of Late Neogene and Late Jurassic- Early Cretaceous marls. Because of this, he had come to the erroneous conclusion that radiolaria were not suitable as index fossils, which is far from the truth.

Riedel (1953) described 26 Neogene radiolarian species from true 'post-orogenic' Pliocene-Pliocene marly sediments from Roti island (Brouwer Sample 178; Figure X.2.14), the presence of which Tan had mentioned, but not described in any detail.



Riedel, Mesozoic and late Tertiary Radiolaria of Rotti

Figure X.2.14. Plio-Pleistocene Radiolaria from near Bebalain Roti Island (Riedel 1953, Plate 85).

Cenozoic Palynology (Spores- Pollen)

Palynology is the study of microscopic organic-walled remains of plants and algae that are composed of organic material that does not dissolve in mineral acids. They are collectively known as palynomorphs and, in addition to pollen and pteridophyte spores, also include afungal spores, algal remains (including dinoflagellate cysts), foraminiferal test linings, plant cuticle and chitinous remains of insect skeletons.

Palynomorphs are generally abundant in Cenozoic sediments of Indonesia, except in limestones and tuffs, and are usually the only microfossils present in non-marine sediments. The principal groups in the Tertiary SE Asia

which are useful in stratigraphy are spores and pollen grains from land plants (reflecting vegetation within a catchment), and also cysts of planktonic marine dinoflagellate algae, fresh-water algae, etc.

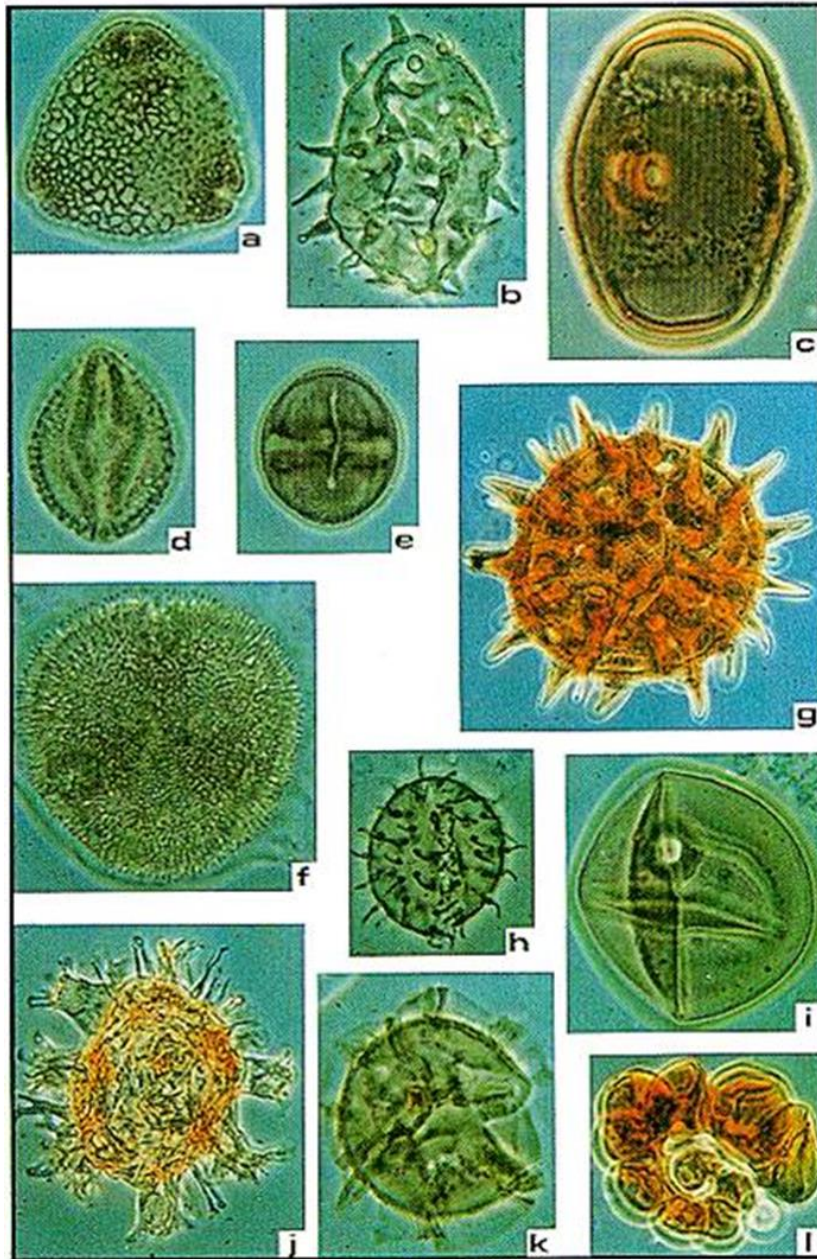


Figure X.2.15. Examples of Neogene pollen and spores from Brunei (a-i) and marine dinoflagellate (j), acritarch (k) and microforaminifer (l).

The flora of SE Asia is extremely diverse, with more than 30,000 higher plant species recorded. These leave a fossil record of about 600 or so pollen and spore types. In most instances, pollen types reflect taxonomic variation at the generic level, but in some plant genera, each species can be identified. This is the case in three genera, *Sonneratia* (a mangrove), *Alangium* (a swamp forest tree) and *Stenochlaena*. Pollen of these three genera are all stratigraphically useful, with fossil pollen of *Sonneratia* being described as the pollen taxon *Florschuetzia*, *Alangium* as *Lanagiopollis*, and *Stenochlaena* as *Stenochlaeniidites*.

Palynomorphs generally withstand normal sediment diagenesis well, but become modified by katagenesis during deep burial to many thousands of feet (or equivalent heating), which will turn the palynomorphs black, This makes identification more difficult, but it also provides a tool to determine the degree of thermal alteration of a rock sample.

Palynology biozonation

Very few of the common Neogene pollen or spore types have well defined stratigraphic ranges. 'Traditional' palynological zones based on the ranges of pollen and spores, are therefore relatively long- ranging: there are only six or seven zones which can be interpreted from the Neogene (Figure X.2.16), where planktonic forams and nannofossils boast around 20 zones. However, quantitative analyses often allow higher resolution zonations at a basin scale, using abundance fluctuations that reflect semi-regional climate and sea level fluctuations.

The first palynology biozonation for the Tertiary of SE Asia was developed by Shell palynologists Gemeraad, Hopping and Muller (1968) and reviewed by Morley (1977). Zonations were further clarified by Morley (1991, 2004 and others). Additional case studies were published by Rahardjo et al. (1994) for Java (Figure x23) and Lelono (2012).

AGE	DIAGNOSTIC SPECIES							POLLEN ZONE OF JAVA ISLAND	ZONAL MARKER	CHARACTERISTIC OF ZONE
	<i>Monopores annulatus</i>	<i>Dacrycarpidites australensis</i>	<i>Stenochlaenites papuanus</i>	<i>Florschuetzia meridionalis</i>	<i>Florschuetzia levipoli</i>	<i>Florschuetzia trilobata</i>	<i>Meyeripollis naharkotensis</i>			
PLEISTOCENE	N 23							<i>Monopores annulatus</i>		Abundant <i>M. annulatus</i> which associates with <i>D. australensis</i> , in the absence of <i>S. papuanus</i> .
	N 22									
PLIOCENE	LATE N 21							<i>Dacrycarpidites australensis</i>	↕ <i>S. papuanus</i> ↕ <i>D. australensis</i>	The presence of <i>D. australensis</i> together with <i>S. papuanus</i> .
	N 20									
	EARLY N 19							<i>Stenochlaenites papuanus</i>		The occurrence of <i>S. papuanus</i> without <i>D. australensis</i> and <i>F. trilobata</i> .
MIOCENE	LATE N 18									
	NN 12									
	LATE N 17									
	NN 11									
	N 16									
	NN 15									
	NN 8									
	MIDDLE N 14									
	NN 7									
	N 13									
N 12										
N 11										
N 10										
N 9										
N 8										
EARLY NN 4										
NN 3										
N 7										
NN 2										
N 6										
N 5										
N 4										
OLIGOCENE	LATE P 16									
	NP 24									
	P 20									
EARLY P 19										
NP 23										
P 18										
EOCENE	LATE P 17									
	NP 22									
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NP 3										
NP 2										
NP 1										
NP 0										

Figure X.2.16. Eocene- Recent palynological zonation of Java (Rahardjo et al. 1994, in Lelono 2012).

Subdivision of the Oligo-Miocene is mainly based on evolutionary changes in *Florschuetzia*, the pollen of the mangrove genus *Sonneratia*, (Figure X.2.16, X.2.17). All of the pollen and spore types used for Neogene zonations reflect pollen variation at the species level. *Phyllocladus hypophyllus* pollen distinguishes the Pleistocene, *Dacrycarpidites australis* pollen first appears in the mid-Pliocene; *Stenochlaeniidites papuanus* pollen is restricted to the late Late Miocene and Pliocene, and species of *Florschuetzia* allow zonation of the Middle and Early Miocene. However, mangrove pollen tend to be absent in supratidal deposits, so the *Florschuetzia* zonation is of limited use in basins dominated by fluvial-alluvial sections, like the onshore Tertiary basins of Thailand (Watanasak, 1990).

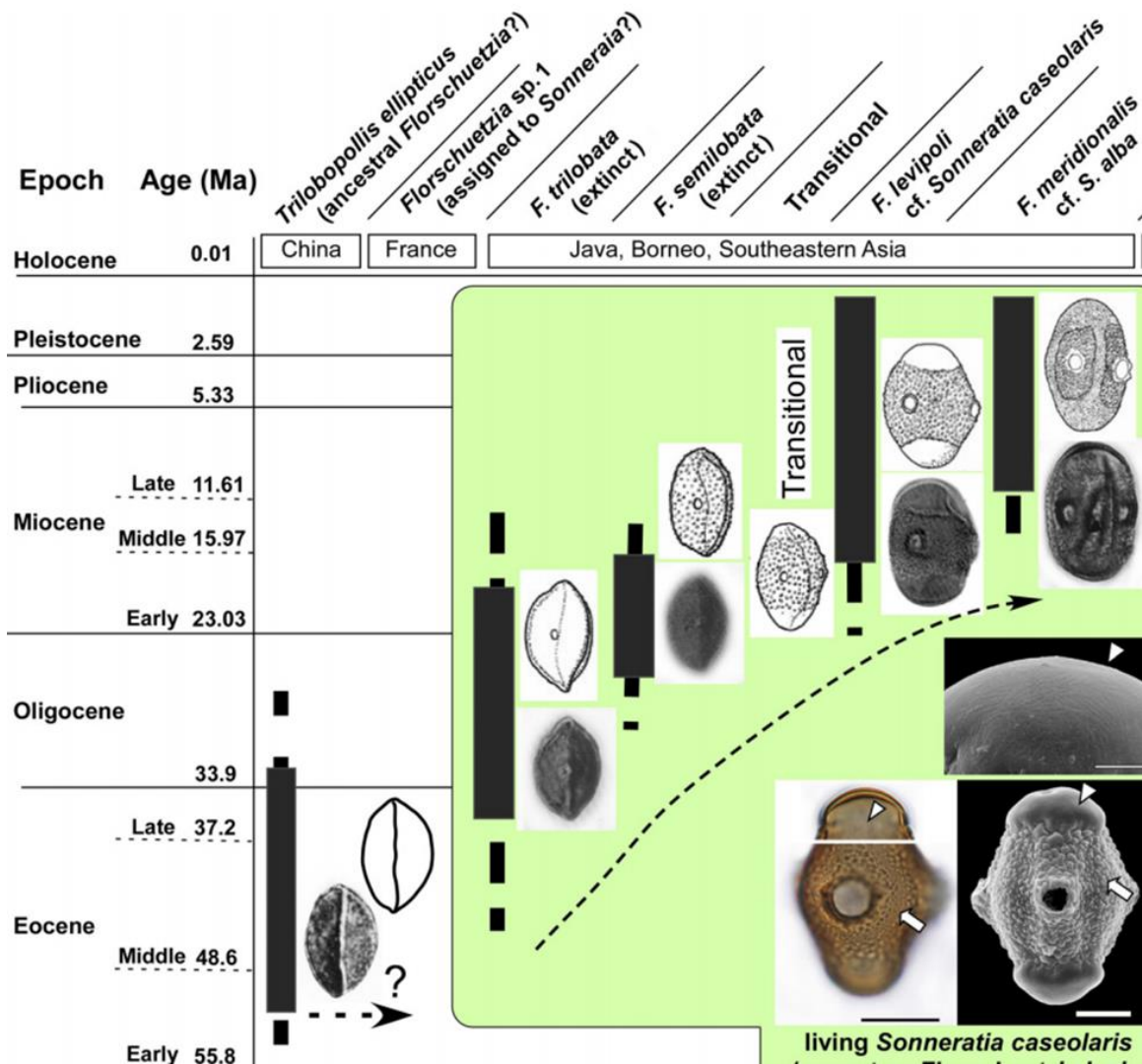


Figure X.2.17. Evolution and stratigraphic ranges of mangrove pollen genus *Florschuetzia*, leading to the modern *Sonneratia* (Germeraad et al. 1968 and Muller 1984, modified by Mao and Foong 2013).

Local higher resolution palynology schemes have been developed as a tool for correlations, using:

1. changes in relative abundances that reflect hinterland climate changes (fluctuations in % of rainforest versus grasses or montane palynomorphs);
2. identification of transgressions, which in fluvio-deltaic series are typically reflected by peaks of mangrove pollen (Morley, 1996).

Examples of this type of quantitative biostratigraphy include Yakzan et al. (1996, Malay Basin), Carter and Morley (1996, Early Miocene, Kutei Basin), Morley et al. (2003, Natuna basin), Morley et al. (2004, Makassar Straits) and Lelono and Morley (2011, Oligocene, East Java Sea).

Most Neogene quantitative palynological events reflect events relating to sequence stratigraphy. High resolution biostratigraphic frameworks involving palynology have usually been presented as sequence biostratigraphic studies (e.g. Morley et al., 2011, etc.).

Some of the long term changes in floral compositions reflect plate tectonic movements. Collisions like those between Indian and Eurasia in the Eocene and New Guinea with East Indonesia plates allowed migrations of India and Australian floral elements into SE Asia (Morley, 1998, 2000, Lelono 2007). The position of the Early-Middle Eocene boundary is based on the appearance of elements of the Proto-Indian flora (Morley 1998). The appearance of *Stenochlaena milnei* type and *Dacrycarpus imbricatus* is related to the collision of the Australian Plate with SE Asia.

The development of a spores-pollen zonation for the Paleogene of Indonesia is still work in progress.

Dinoflagellate cysts are often present in palynology preparations, mainly from marine sediments. They are the primary tool for high-resolution biostratigraphy zonation in mid- and high-latitude Cenozoic basins like the Paleogene of the North Sea, but they are relatively rare and poorly studied in the Cenozoic of SE Asia. A few preliminary case studies by Matsuoka (1981, 1983, 1984), Morgenroth (2000, 2008, 2011) and Besems (1993) do suggest potential utility.

Table 5- OTHER CENOZOIC MICROFAUNA/MICROFLORA		
FAUNA/FLORA	AREA	REFERENCES
Calcareous nannofossils	Indonesia	Panuju 2010
	Kalimantan, N Borneo	Keij 1964, Lambert & Laporte-Galaa 2005, Panuju et al. 2007
	Java	Okada 1981, A. Kadar 1990,1991, Kapid et al. 1991-2003, Siesser et al. 1984, Theodoridis 1984, Nur Hasjim 1988, Rubiyanto & Harsolumakso 1996, Choiriah & Kapid 1999, Panuju & Kapid 2007
	Sulawesi	Kadar & Sudijono 1993, Priyadi & Sudijono 1993
	Roti	Tan Sin Hok 1927, Kamptner 1955, Jafar 1975
	Timor, Tanimbar	Hadiwisastra 1987, Hadiwisastra 1993
	Recent- Banda Sea	Kleine 1990
Ostracodes	multiple areas	Brady 1880, LeRoy 1939, 1941, Kingma 1948, Van den Bold 1950, Keij 1953-1979, Hanai et al. 1980, Keij 1964,
	Java	McKenzie & Sudijono 198x, Solihin et al. 2015,
	Timor	Fyan 1916
	E Kalimantan	Doeglas 1931
	South China Sea	Zhao 2005
Radiolaria	Roti óMio-Pliocene	Tan Sin Hok 1927, Riedel 1953
	Sumatra forearc	Ling & Samuel 1998
	Celebes, Sulu Seas	Scherer 1991a,b
	Waigeo	Ling et al. 1991
Diatoms	Java	Grandjean & Reinhold 1933, Reinhold 1937, Ninkovich & Burckle 1979, P. Siregar 1981, Burckle 1982
	Buton	Reinhold 1952
	Indian Ocean	Jouse & Kazarina 1974, De Decker and Gingele 2002
Spores-Pollen palynology	Zonations	Germeraad et al. 1968, Morley 1977, 1991, 1996, Yakzan et al. 1996, Mao & Foong 2013
	Dispersal, climate	Morley 1998, 2000, 2003, 2007, 2011, 2012, Lelono 2007, 2012
	E Kalimantan, Makassar Straits	Barre de Cruz 1982, Carter & Morley 1995, Polhaupessy 1998, 2007, Morley et al. 2004, 2006, Morley & Morley 2010
	East Java Sea	Lelono & Morley 2011
	Java	Polhaupessy 1980, 2009, Takahashi 1982, Rahardjo et al. 1994, Van der Kaars & Dam 1995, 1997, Lelono 2000, 2001, 2007, 2012
	Natuna Basin	Morley et al. 2003, 2007)
	West Papua, PNG	Lelono 2008, Playford 1982
Dinoflagellate cysts	Java	Matsuoka 1981, 1983, 1984, Morgenroth et al. 2000, 2008, 2011
	NW Borneo	Besems 1993
	Sunda Shelf	Kawamura 2002

Cenozoic Macrofossils

Numerous papers have been published on Cenozoic macrofossils of Indonesia (Table 6). Much of this paleontological literature may be >100 years old, but since these old publications are mainly descriptions of fossils and fossil localities and often contain superb illustrations, they are still valuable today.

In Indonesia Cenozoic macrofossils are mainly represented by molluscs and corals in marine deposits and by plants, petrified wood and fresh-water molluscs in terrestrial deposits. Fossil groups that were important in pre-Cenozoic time like cephalopods and brachiopods are greatly diminished after the end-Cretaceous extinction event. For more detail see Van Gorsel (2014) An introduction to Cenozoic macrofossils of Indonesia in *Berita Sedimentologi* 30.

A key publication on Indonesian fossil genera and species was the Professor Martin memorial volume, edited by Escher et al. (1931). It contains comprehensive listings of all Cenozoic fossil species described from Indonesia, including chapters on Cenozoic molluscs (Van der Vlerk), corals (Gerth), echinoids (Wanner) and plant fossils (Posthumus).

Although theoretically many macrofossil taxa have biostratigraphic value, they have lost their significance as biostratigraphic tools today, primarily because it is much easier to collect an adequate number of microfossils (even in small drill samples) than it is to collect macrofossil assemblages. As a result there are very few active experts in the science of macrofossils and our knowledge on stratigraphic ranges of macrofossil species and their calibrations to modern time scales tend to be remain poorly known.

Molluscs

Molluscs (bivalves and gastropods) are the most common macrofossils in the Cenozoic of Indonesia. Their diversity is overwhelmingly high with about 4000 known Recent species in Indonesia. They are found in depositional environments ranging from fresh water to deep marine. Biogeographically Cenozoic molluscs belong to the Indo-Pacific bioprovince, which is very different from the Mediterranean Province.

Most of the early paleontological studies were dedicated to molluscs and most of these were by Professor Karl Martin of Leiden University, who was nicknamed the 'Linnaeus of Java'. Martin mainly studied collections assembled by geologists/ mining engineers of the 'Dienst Mijnwezen of the East Indies'. He published numerous monographs and papers between 1879 and 1937, especially from Java, from where he identified a total of 1412 species of molluscs. From the Pliocene of North Sumatra 347 species were identified (Martin, 1928), and 232 species from the Pliocene of Timor (Tesch 1915, 1920).

Molluscs were the principal fossil group used for age dating of Cenozoic sediments, until microfossils became the preferred biostratigraphic tools. Martin developed a 'Lyell-type' method of relative age determination, based on the decreasing percentage of living species in increasingly older fossil populations. Percentages of living species by stage were (Van der Vlerk, 1931):

- Eocene: 0 %;
- Early Miocene: 8-20%;
- Late Miocene: 20-50%;
- Pliocene: 50-70%;
- Quaternary: >70%.

This Lyellian percentage method appeared to work reasonably well, but there were anomalies, especially in cases of deep marine mollusc assemblages. For instance, faunas from asphalt-bearing Sampalakosa beds of Buton were initially interpreted as Oligocene by Martin (1933, 1935), because none of the 35 mollusc species was known from the Recent. However, associated foraminifera and diatoms suggested a Late Miocene-Pliocene age, and the molluscs were subsequently recognized as deeper marine fauna, whose modern equivalents were poorly known (Beets 1952).

Oostingh (1938) and Shuto (1978) started building more conventional mollusc biozonations of the Miocene-Pleistocene of Java, based on vertical ranges of species. Many of their zones are based on species of the gastropod genus *Turritella*. Shuto (1978) and Baggio and Sartori (1996) also proposed updates of the Lyellian percentages proposed by Martin. As noted above, neither this mollusc zonation, nor the percentage method are still used for dating Cenozoic sediments today.

Corals

Corals are common in most Oligocene to Recent limestones across Indonesia. The fossil coral collections at Naturalis Museum, Leiden, contain 271 species from 210 localities in SE Asia (mainly Indonesia; Leloux and Renema 2007). However, relatively little work has been done on their biostratigraphic zonations, biofacies and paleobiogeography and most of the taxonomic work is relatively old.

Modern coral reefs in Indonesia have been described fairly extensively, particularly in a series of studies by Umbgrove between 1928 and 1947. Umbgrove identified and described about 150 species of Recent corals and coral reefs around Java, Sumatra and Sulawesi. Key review papers on modern Indonesian coral reefs include Umbgrove (1946, 1947).

Gerth (1921) recognized the Neogene-Recent corals of Indonesia as typical Indo-Pacific assemblages. The Indo-Australian Archipelago today has the highest coral diversity in the world (Renema et al. 2008). Veron et al. (2015) identified the Birds Head- Sulu Sea region as the global center of peak coral diversity.

Most coral species have fairly narrow temperature ranges in which they thrive, and are therefore sensitive to climate changes. Both periods global cooling and extreme warming can negatively affect coral diversity and abundance. Cenozoic corals and coral reefs in Indonesia therefore show distinct periods of diversification and decline (Wilson 2002 and others).

Corals are generally rare in Eocene (too warm?) and Early Oligocene (too cold?) carbonates of SE Asia, which are dominated by larger forams and coralline algae (Wilson and Rosen 1998). The Late Oligocene- Early Miocene was a period of increased coral diversification and relatively wide distribution of coral reefal limestones (Wilson 2002, 2011, Johnson et al. 2011). This was then followed by several steps of declining diversity and carbonate abundance in Middle Miocene and later time.

An elegant review paper on Indonesian Cenozoic corals is Osberger (1956), which includes listings of principal deposits and range charts of species. Notable case studies on Cenozoic fossil corals from Indonesia include:

- Von Fritsch (1877): Eocene corals of SE Kalimantan
- Felix (1913-1921): Miocene-Pleistocene corals from Java, Kalimantan, Timor,
- Gerth (1923): 120 coral species from the Late Tertiary of East Kalimantan
- Gerth (1921, 1933): corals from Eocene- Miocene of Java;
- Umbgrove (1924-1950): corals from Miocene-Pleistocene of Kalimantan, Java, Sumatra, Buton, etc.
- Osberger (1954, 1955): Late Tertiary corals from Java.
- Santodomingo (2014, 2015, 2016): Miocene corals from patch reefs in East Kalimantan.

In an attempt to use corals for relative age dating Umbgrove (1946) and Osberger (1956) used the Lyellian method of increase in percentage of living coral species through time, similar to what Martin used for mollusks: Eocene-Oligocene 0%; Early Miocene, 6-9%; Middle Miocene 15-30%, Late Miocene-Pliocene 30-60% and Pleistocene ~80%.

As argued by Osberger (1956), whilst the overall trend is real, there is too much variability for this method to be reliable for age dating. Also, as with mollusks, these percentages did not hold up well when dealing with less well-known deeper marine assemblages. For instance, corals from the Lower Pleistocene Pucangan Formation of the Kendeng zone of East Java only had 50% known Recent species, which was explained by Umbgrove (1946) as due to the relatively deep water facies with common poorly known solitary species.

Plant fossils

Plant fossils are locally common in Eocene and Mio-Pliocene non-marine deposits of Western Indonesia. Fossilized wood and plant leaves may be found in two settings: (1) in claystones associated with coal beds, fossilized under poorly oxygenated swamp conditions, or (2) in tuff deposits, where entire forests were killed and preserved after major volcanic eruptions, and where silicified tree trunks may still be found in growth position. The latter are particularly common in various silica-rich Late Miocene-Pliocene volcanoclastic deposits of West Java and South Sumatra.

There is an urgent need to renew the study of fossil woods, since mining of Mio-Pliocene fossil wood for ornamental purposes is currently a major extractive industry in West Java, etc., This is a major opportunity to study the taxonomy and taphonomy of these ancient forests, but there is no evidence that this work is being done. These fossils need to be better understood before their localities are destroyed.

Early descriptions of plant fossils include:

- Mio-Pliocene floras from West Java collected by Junghuhn (Goppert, 1854; Figure X.2.18.;
- Eocene plant fossils collected by Verbeek from the Ombilin Basin, C Sumatra (Heer 1874, 1879);
- Eocene plant fossils collected by Verbeek from SE Kalimantan (Geyler, 1877).

Significant papers on petrified wood from Java and Sumatra include (additional references in Table 6:

- papers by Musper (1938, 1939) on age and localities of fossil wood on Sumatra and West Java;
- monographs on Cenozoic woods from SE Asia by Kramer (1974a, b).

Table 6 - CENOZOIC MACROFOSSILS INDONESIA

FAUNA/FLORA	AREA	REFERENCES
General	Indonesia	Escher et al. 1931
Molluscs (bivalves and gastropods)	Indonesia	Van der Vlerk 1931, Beets 1950, Shuto 1977, 1978, Skwarko et al. 1994, Baggio & Sartori 1996, Beu 2005, Robba 2013
	Java	Jenkins 1864, Martin 1879-1932, Boettger 1883, Haanstra & Spiker 1932, Oostingh 1933-1941, Wanner & Hahn 1935, Pannekoek 1936, Schilder 1937, 1941, Van Regteren Altena 1938-1950, Shuto 1974, 1978, 1980, Premonowati 1990, Zacchello 1984, Premonowati 1990, Robba 1996, Scolari 1999, 2001, Bazzacco 2001, Piccoli & Premonowati 2001, Rolando 2001, Van den Hoek Ostende et al. 2002, Hasibuan 2004, Leloux and Wesselingh 2009
	Kalimantan, Borneo	Boettger 1875, Martin 1914, Beets 1941-1986, Cox 1948
	Sumatra	Woodward 1879, Boettger 1880, 1883, Icke & Martin 1907, Martin 1928, Oostingh 1941, Haanstra & Spiker 1932, Wissema 1947
	Sulawesi	Schepman 1907, Beets 1950
	Buton	Martin 1933, 1935, 1937, Beets 1952, Janssen 1999
	Seram, Timor	Fischer 1927, Tesch 1916, 1920, Robba et al. (1989)
	West Papua	Beets 1986
Tertiary Corals	Indonesia	Osberger 1956, Leloux & Renema 2007, Wilson & Rosen 1998, Wilson 2002
	Java	Reuss 1867, Martin 1879, 1880, Felix 1913, Gerth 1921, 1933, Yabe & Eguchi 1941, Umbgrove 1945, 1946a,b, 1950, Osberger 1954, 1955, Premonowati 1990, 1996
	Kalimantan	Von Fritsch 1877, Felix 1921, Gerth 1923, Umbgrove 1929
	Sumatra	Gerth 1925, Umbgrove 1926
	Sulawesi	Von Kutassy 1934
	Buton	Umbgrove 1943
	Timor, Seram	Felix 1915, 1920, Umbgrove 1924
	Flores, Sumba	Umbgrove 1939, Umbgrove 1946
New Guinea	Felix 1912, Gregory & Trench 1916, Yabe & Sugiyama 1942a,b	
Calcareous Algae	Indonesia	Lignac-Grutterink 1943, Johnson & Ferris 1949, Ishijima et al. 1978
	N Borneo	Johnson 1966
Echinoids	Multi-region	Lambert & Jeannet 1935, Jeannet & Martin 1937
	Kalimantan, Java	Von Fritsch 1877, Gerth 1922
	Timor, Aru Islands	Gerth 1927, Currie 1924
Plants, Wood	Indonesia, SE Asia	Krausel 1925, Posthumus 1931, Kramer 1974, Bande & Prakash 1986, Van Konijnenburg et al. 2004
	Java	Goppert 1854, Crie 1888, Krausel 1923, 1926, Den Berger 1927, Musper 1938, 1939, Mandang et al. 1996, 2004, Srivastava & Kagemori 2001

	Kalimantan	Geyler 1875
	Sumatra	Heer 1874, 1879, Krausel 1922, 1929, Den Berger 1923, Musper 1938, 1939, Schweitzer 1958
Fish (pre-Pleistocene)	S Sulawesi	Brouwer & De Beaufort 1923, De Beaufort 1934
	C Sumatra-Eocene	Rutimeyer 1874, Gunther 1876, Von der Marck 1876, Sanders 1934, Musper 1936
	C Java	De Beaufort 1928, Vorstman 1929 (otoliths)
Vertebrates (pre-Pleistocene)	C Sumatra-	Eocene bird skeleton: Lambrecht 1931, Van Tets et al. 1989
	C Sumatra	Oligocene bird tracks: Zaim et al. 2011, Zonneveld et al. 2011, 2012
	Java ó U Miocene	Sea cow: Von Koenigswald 1952
	E Kalimantan	Eocene Anthracocerid and Suidae teeth: Stromer 1931
	Timor- Eocene	Anthracocere skull: Von Koenigswald 1967, Ducrocq 1996
	PNG Miocene	Turtle: Glaessner 1942, Sea cow: Fitzgerald et al. 2013

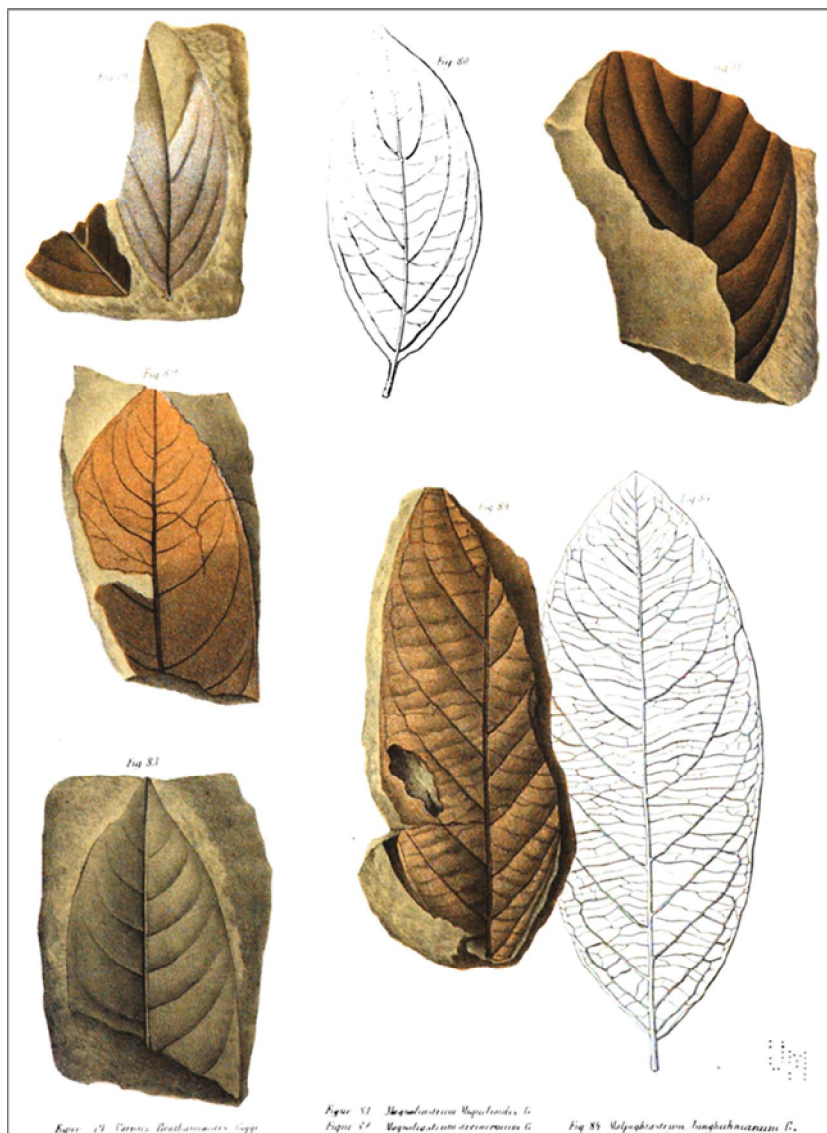


Figure X.2.18. Mio-Pliocene plant fossils from Java, collected by Junghuhn.

X.3. Jurassic- Cretaceous

A significant amount of literature has been published on Mesozoic faunas of Indonesia. This sub-chapter X.3 of Bibliography 7.0 contains 87 papers on Jurassic- Cretaceous faunas and floras of Indonesia and surrounding regions. These tend to be papers of a more general nature, and the majority of references on this topic is in the area chapters if the fossils described were from a specific area only. Most of the key papers on Jurassic and Cretaceous fossil groups papers were flagged in Tables 7 and 8. For a more extensive introduction to Jurassic- Cretaceous faunas and floras in Indonesia see Van Gorsel (2014).

Early reviews of Mesozoic geology and stratigraphy of Indonesia include Wanner (1925, 1931) and Umbgrove (1935, 1938). Mesozoic fossil localities on Sumatra were discussed by Tobler (1923) and Fontaine and Gafoer (1989). Another useful collection of Pretertiary paleontologic studies in SE Asia is Fontaine (1990).

Other 'classic' reviews of Jurassic stratigraphy and key faunas of SE Asia include the papers by Fontaine et al. (1983), Sukanto and Westermann (1992) and Sato (1995).

Many of the paleontological papers from Indonesia are quite old (most of them from the early 1900's), but are still valuable. These include monographs on Jurassic- Cretaceous ammonites, belemnites, brachiopods, bivalve molluscs, etc. More recent work is mainly by Fauzie Hasibuan, Bandung, but mainly on fossils from Misool island.

The Jurassic in East Indonesia is dominated by open marine pelagic facies (Misool, Sula, East Sulawesi, Buton, Timor, etc.) or by marine continental margin deposits, locally rich in ammonites and belemnites (West Papua). In West Indonesia (Sumatra, SW Sarawak), Jurassic shallow marine carbonate and clastic facies are more common.

A characteristic deep marine Late Jurassic pelagic limestone facies with abundant radiolarians and calcispheres is known from Buton, East Sulawesi, Timor, Seram and Misool (Wanner 1940). In these areas the Jurassic is overlain by relatively thin Cretaceous pelagic limestones, often with radiolarian cherts and with common *Globotruncana* planktonic foraminifera in the upper parts.

As noted above, early work on Mesozoic radiolaria was by Tan Sin Hok (1927), from Roti island, although he assumed they were of Late Neogene age. Tan described 141 species and varieties (138 new) from four deep marine radiolarian-rich limestones from the Bebalain area, most of them of Late Jurassic- Early Cretaceous age. Subsequent authors recognized that most of these species were of Mesozoic age (Riedel 1952, 1953), and the samples must have come from the deep marine Jurassic-Cretaceous sediments that unconformably underlie the Plio-Pleistocene marls on Roti and Timor. Many of Tan Sin Hok's new species have since been reported from Late Jurassic-Early Cretaceous deep water sediments, such as the Argo Abyssal Plain (Baumgartner 1993), Tanimbar (Jasin and Haile 1996) and the SW Sulawesi Barru Complex (Munasri 2013).

For age dating of Mesozoic rocks microfossils tend to be more significant than macrofossils. The preferred microfossil groups are:

1. Radiolaria in deep marine deposits;
2. Conodonts in Triassic and older shallow marine carbonates;
3. Dinoflagellate cysts in Late Triassic- Early Cretaceous shallow marine continental margin clastics (widely used in oil exploration wells in NW Australia and New Guinea, but, little of this work has been published for the Indonesian region.
4. Planktonic foraminifera and calcareous nannofossils in Cretaceous and younger open marine deposits;
5. Spores-pollen in non-marine- marginal marine deposits.

Unlike NE Thailand, Jurassic-Cretaceous vertebrate faunas are extremely rare in Indonesia, and limited to marine fish and reptile (*Ichthyosaurus*) fossils.

Jurassic- Cretaceous reefal limestones

Unlike Late Triassic limestones, which are relatively widespread across the entire the Indonesian region, Jurassic and Cretaceous shallow marine reefal limestones are known mainly from the Sundaland region of western Indonesia (Sumatra, Kalimantan- Sarawak). With the exception of some Early Jurassic 'near-reefal' limestones on Timor and in the Kolonodale area of East Sulawesi, no Jurassic- Cretaceous shallow marine reefal limestones are known from the NW Australia- New Guinea domain (or terranes derived from it after Jurassic).

Late Jurassic reefal limestones are known from many localities in West and South Sumatra (all part of 'Woyla terranes?') (Yabe 1946, Fontaine et al. 1983, Beauvais et al. 1988, 1989, Fontaine and Gafoer 1989). Many of these appear to contain the hydrozoan *Cladocropsis mirabilis* and the foram *Pseudocyclammina lituus*. Another key Late Jurassic reefal limestone occurrence is the relatively thick Bau limestone of the West Sarawak- NW Kalimantan border area is (Wolfenden 1965, Beauvais and Fontaine 1990).

These, and similar Jurassic limestones in West Thailand and the Palawan Block (Philippines), are rich in coral and calcisponges and stromatolites, but also have a relatively high mud matrix content, so these are sometimes characterized as 'lime mud mounds' (Beauvais et al. 1985).

Cretaceous Orbitolina

Early to Mid-Cretaceous shallow marine limestones with the larger foram *Orbitolina* and rudist-type molluscs are generally interpreted as low-latitude Tethyan forms. They are also known from Sundaland, The Philippines and Japan, but not from Australia- New Guinea or Eastern Indonesia. In West Indonesia they appear to define a belt of shallow marine deposits along the Early Cretaceous margin of Sundaland:

- numerous localities across Kalimantan and West Sarawak (Martin 1888, 1889, Hofker 1963, Hashimoto and Matsumaru 1977), also Sabah (Leong 1972);
- South Sumatra (Lampung and Gumai Mts= Woyla Terranes?) (Zwierzycki 1931, Musper 1934, Yabe 1946);
- Central Java Lok Ulo accretionary complex (Verbeek 1891, Harloff 1933);
- West Latimojong Mountains, SW Sulawesi (Brouwer 1934).

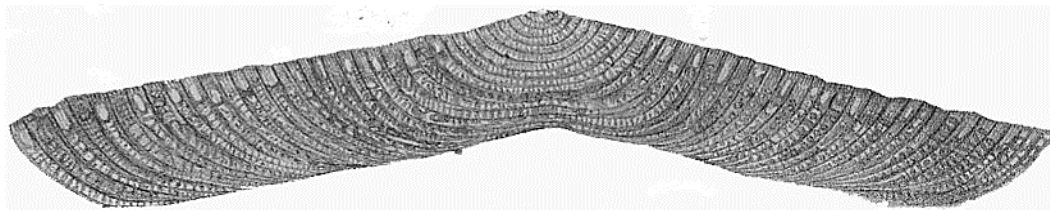


Figure X.2.1. The first illustration of Early Cretaceous larger foram *Orbitolina* from West Kalimantan by Von Fritsch (1879), originally described as *Patellina scutum*.

Table 7 - CRETACEOUS FOSSILS INDONESIA		
FAUNA/FLORA	AREA	REFERENCES
Faunas- General	SE Asia	Hashimoto et al. 1975
	Sumatra	Beauvais et al. 1989
Upper Cretaceous <i>Pseudorbitoides</i>, <i>Omphalocyclus</i>	Birds Head	Visser and Hermes 1962
	Papua New Guinea	Crespin and Belford 1957, Glaessner 1962
	Kalimantan	Van Gorsel 1978
Upper Cretaceous planktonic foraminifera (<i>Globotruncana</i>)	Timor, Leti	Schubert 1915, De Roever 1940, Sartono 1975
	Sula islands	Kholiq et al. 2011
	Misool	Vogler 1941
	Sabah	Adams and Kirk 1962
	Central Java	Asikin et al. 1992
	W Kalimantan	Tan Sin Hok 1936
	SE Sulawesi, Buton	Van der Vlerk 1925, Koolhoven 1932, Keijzer 1945
	PNG	Owen 1973, Haig 1981
Calc. Nannoplankton	Halmahera	Brouwer 1923
	West Papua	Panuju et al. 2010
Molluscs	Sumatra	Baumberger 1923, 1925, Musper 1934
	Kalimantan	Martin 1889, Vogel 1904

	South Sulawesi	Hasibuan and Limbong 2009
	West Papua , PNG	Heinz 1928, Skwarko 1967, Skwarko et al. 1983
Early Cretaceous <i>Orbitolina</i>	Kalimantan	Von Fritsch 1879, Geinitz 1883, Martin 1888, 1889, Hofker 1966, Hashimoto and Matsumaru 1974, Djamal et al. 1995, Bassi et al. 2009
	West Sulawesi	Brouwer 1934
	W Sarawak	Hashimoto and Matsumaru 1977
	Sabah	Leong 1972
	Central Java	Verbeek 1891, Verbeek and Fennema 1896, Harloff 1929
	S Sumatra	Zwierzycki 1931, Musper 1934, Yabe 1946, Beauvais et al. 1989
	Radiolaria	Sarawak, Sabah
C Kalimantan		Hinde 1900, Grunau 1965
SE Kalimantan		Wakita et al. 1998
SW Sulawesi		Wakita et al 1994, 2000, Munasri 1995, 2013
South Central Java		Okamoto et al. 1994, Wakita et al. 1994
Buton		Soeka 1991, Ling and Smith 1995
Roti		Tan Sin Hok 1927, Riedel 1953
Timor		Tan Sin Hok 1927, Clowes 1997, Munasri 1998, Munasri and Sashida 2018
Ungar (Tanimbar)		Jasin and Haile 1996
N Indian Ocean		Renz 1974, Riedel and Sanfilippo 1974, Baumgartner 1993
Lower Cretaceous calpionellids	Buton, Timor	Wanner 1940
	NW Australia	Brunnschweiler 1960
Ammonites	Sumatra	Baumberger 1925
	SW Sarawak	Ishibasi 1982
	W Kalimantan	Krause 1904, 1911, Von Koenigswald 1939
	PNG	Matsumoto and Skwarko 1991, 1993
Lower Cretaceous belemnites	West Papua	Challinor 1989
	NW Australia-SE Asia	Mutterlose 1992
Fish (shark teeth)	Timor	Weiler 1932, De Beaufort 1932
Rudists	NW Borneo	Lau 1973, Fontaine and Ho 1989, Skelton et al. 2011
	SE Kalimantan	Martin 1888
	Misool	Boehm 1924

Table 8- JURASSIC FOSSILS INDONESIA

FAUNA/FLORA	AREA	REFERENCES
Jurassic Stratigraphy	Sumatra	Fontaine et al. 1983
	Indonesia	Wanner 1931, Sato 1975, Sukamto and Westermann 1992
U Jurassic calcispheres (<i>Pithonella</i>)	Seram, Buton, Misool, Timor	Brouwer 1919, Tan Sin Hok 1927, Wanner 1940, Vogler 1940, Bolli 1974
	Buton	Bothe 1927
	Roti	Tan Sin Hok 1927
Late Jurassic limestones with <i>Cladocoropsis</i>, <i>Pseudocyclamina</i>	NW Kalimantan/ Sarawak (Bau Lst)	Wilford and Kho 1965, Wolfenden 1965, Beauvais and Fontaine 1990
	Sumatra	Silvestri 1925, 1932, Yabe 1946, Hanzawa 1947, Bennett et al. 1981, Beauvais 1983, 1989, Bassoulet 1989
	NE Palawan	Fontaine et al. 1983, Bassoulet 1983
U Jurassic corals	Sarawak	Beauvais and Fontaine 1990
	Sumatra	Beauvais 1983, 1989
Late Jurassic shallow marine foraminifera	W Sarawak (Bau Lst)	Bayliss 1966
	Sumatra	Silvestri 1925, 1932, Yabe 1946, Bassoulet 1989,
Middle- Late Jurassic Belemnites	Misool	Stolley 1929, 1935, Challinor 1989, 1991
	Sula Islands	Boehm 1907, 1912, Kruizinga 1921, Stolley 1929, Challinor and Skwarko 1982, Challinor 1989, 1991
	Timor, Roti, Babar	Rothpletz 1892, Stolley 1929, Stevens 1964
	Yamdena	Stolley 1929
	W Papua/ PNG	Challinor 1990
	Central Sulawesi	Stolley 1943
	Indo-Pacific	Stevens 1965
E-M Jurassic bivalves	NW Kalimantan, Sarawak	Martin 1899, Vogel 1896, 1900, Newton 1897, 1903, Tamura and Hon 1977, Hayami 1984
	Timor	Krumbeck 1923
	Misool	Soergel 1913, Wandel 1934, Hasibuan 2004
	PNG	Skwarko 1973, Grant-Mackie et al. 2006
U Jurassic bivalves (<i>Malayomaorica</i>, <i>Inoceramus haasti</i>) (‘anti-tropical’)	Sula, Buru, Seram,	Krumbeck 1923, Wandel 1936
	Timor, Roti	Krumbeck 1922, 1923
	Misool	Krumbeck 1934
	E Sulawesi	Hasibuan and Kosworo 2008
	Papua New Guinea	Glaessner 1945, Edwards and Glaessner 1953
	Australia NW Shelf	Brunnschweiler 1960
M-U Jurassic ammonites	Sula Islands	Kruizinga 1926, Westermann and Callomon 1988
	W Papua- PNG	Boehm 1913, Gerth 1927, 1965, Schluter 1928, Westermann and Getty 1970, Westermann and Callomon 1988, Westermann 1995
	Timor, Roti	Boehm 1908
	Babar	Callomon and Rose 2000
	W Kalimantan	Schairer and Zeiss 1992
E Jurassic ammonites	Yamdena, E Sulawesi	Wanner and Jaworski 1931, Jaworski 1933
	Roti, Timor	Krumbeck 1922
	W Kalimantan	Krause 1911, Hirano et al. 1981
M-U Jurassic Radiolaria	Sumatra	McCarthy et al. 2001

	SE Kalimantan	Wakita et al. 1998
	W Sarawak	Jasin et al. 1996, Jasin and Said 1999
	East Sulawesi	Hojnos 1934
	Sula Islands	Pessagno and Meyerhoff Hull 2002
	Timor, Roti	Sashida et al. 1999, Haig and Bandini 2013
U Jurassic nannofossils	Sula islands	Panuju 2011
	Timor	Kristan-Tollmann 1988a,b
	PNG	Haig 1979
Jurassic- E Cretaceous Dinoflagellate zonations	NW Australia margin	Cookson and Eisenack 1958, 1960, 1974, Helby Morgan and Partridge 1987, 2004, Partridge 2006, Mantle 2009, Mantle and Riding 2010, Riding, Helby et al. 2012
	Papua New Guinea	Davey 1988, 1999, Welsh 1990
	Misool	Helby and Hasibuan 1988, Sarjeant et al. 1992
	Sula Islands	Lelono and Nugrahaningsih 2012
Spores-Pollen	NW Australia margin	Burger 1996
Jurassic Coccoliths	Timor	Kristan-Tollmann 1988
E Jurassic brachiopods	Seram	Wanner and Knipscheer 1951
Lithiotis Limestone	Timor Fatu Limestone	Krumbeck 1923, Geyer 1977, Hayami 1984

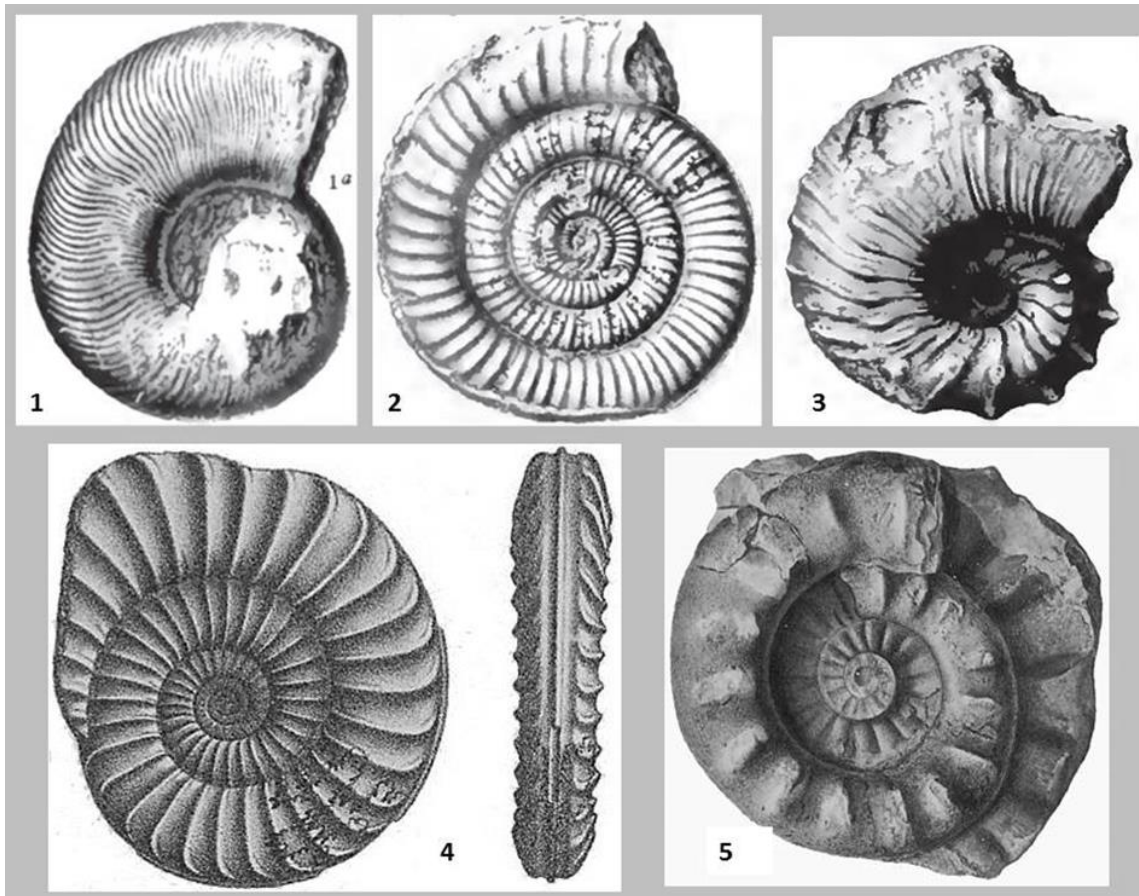


Figure X.2. Early Jurassic ammonites. 1. *Lytoceras rotticum*, 2. *Arietites (Euechioceras) wichmanni* and 3. *Aegoceras subtaylori* 3 from Roti (Krumbeck 1922); 4. *Arietites geometricus* from Batu Baraketak mud volcano, Roti (Rothpletz 1892); 5. *Aegoceras borneense* from West Kalimantan (Krause 1911).

X.4. Triassic

This sub-chapter X.4 of Bibliography 7.0 contains 74 papers on Triassic faunas and floras of the Indonesian region. These tend to be papers of a more general nature, and many more titles on this topic are in the various area chapters if the fossils described are from a specific area only. Many of those papers were flagged in Table 9, which lists most of the key papers on the Triassic fossil groups. Much of this introduction is from Van Gorsel (2014).

A large amount of literature exists on Triassic faunas of Indonesia. Early reviews of Triassic faunas and facies in the Indonesian region include Zwierzycki (1925), Wanner (1931) and Umbgrove (1935). A more recent, brief review of Triassic biostratigraphy and correlations of East Indonesia is by Hasibuan (2010).

Triassic sedimentary and igneous rocks are relatively widespread in Indonesia, both in East and West, especially Late Triassic rocks (Early Triassic is only known from Timor). They represent a wide variety of shallow and deep marine facies, in limestones, clastics and pelagic cherts. Triassic fossils have been described from Timor- Roti, Sumatra, W Kalimantan, E Sulawesi, Buton, Buru, Seram, Ambon, Misool, etc.

Most marine Triassic deposits of SE Asia- Indonesia appear to represent relatively low-latitude depositional settings in and around two branches of the Tethys Ocean (Paleo-Tethys, Mesotethys). Many of the authors of paleontological papers on Triassic faunas from East Indonesia since the early 1900's commented on the Alpine-Tethyan affinity of these Triassic faunas, with remarkable similarities in many of the species and rock facies between Indonesia and the eastern Alps, Himalayas, etc.

Triassic is a period characterized by major extinction events at both its base and at its top.

At many localities in Eastern Indonesia the Middle- Late Triassic is developed in a 'flysch-type' clastic facies, locally overlain by Norian-Rhaetian limestones (Timor, Savu/ Roti, Leti/ Babar, East Sulawesi, Seram, Ambon, Misool, Buru, Buton, etc.).

Triassic shallow marine bivalves

The composition of Triassic bivalve assemblages in the Indonesian region varies depending on facies and paleogeographic setting: (1) shallow marine 'Myophoria faunas' and (2) deep marine, pelagic bivalve faunas characterized by *Daonella*, *Halobia* or *Monotis* (see below).

Shallow marine Middle- Late Triassic bivalve-dominated limestones and sandstones with common *Myophoria*, *Cardita*, *Gervillia*, *Costatoria*, *Paleocardita*, *Indopecten verbeeki*, *Pinna blanfordi*, *Krumbeckiella* = *Timoria timorensis* Krumbeck), etc., have been reported from both West Indonesia (Sumatra) and East Indonesia (Misool, Buru) (Figure 1).

Among the richest assemblages are the *Nucula* marls from Misool (Jaworski 1915). These are generally viewed as 'Tethyan' in nature, but may be assumed to be part of the southern, Gondwana margin of the (Meso-?)Tethys in Triassic time. The bivalve-rich 'Padang Fauna' of West Sumatra, collected by Verbeek NE of Lake Singkarak, was initially described by Boettger (1881) as an Early Eocene age assemblage. It contains *Myophoria*, *Paleocardita globiformis*, *Pinna blanfordi* and *Pecten (Indopecten) verbeeki* and was re-described and re-interpreted by Krumbeck (1914) as Late Triassic in age, with strong affinities to Circum-Mediterranean Carnian faunas,

'*Myophoria* sandstone' is also known from various localities in the central belt of the Malay Peninsula and Singapore (authors in Table 1), in what is now called the Semantan Formation and which are viewed as marine deposits in a foreland basin tied to the closure of the Paleo-Tethys during final E-ward subduction of W Malaya lithosphere beneath Eastern Malaya (Ismail et al. 2007).

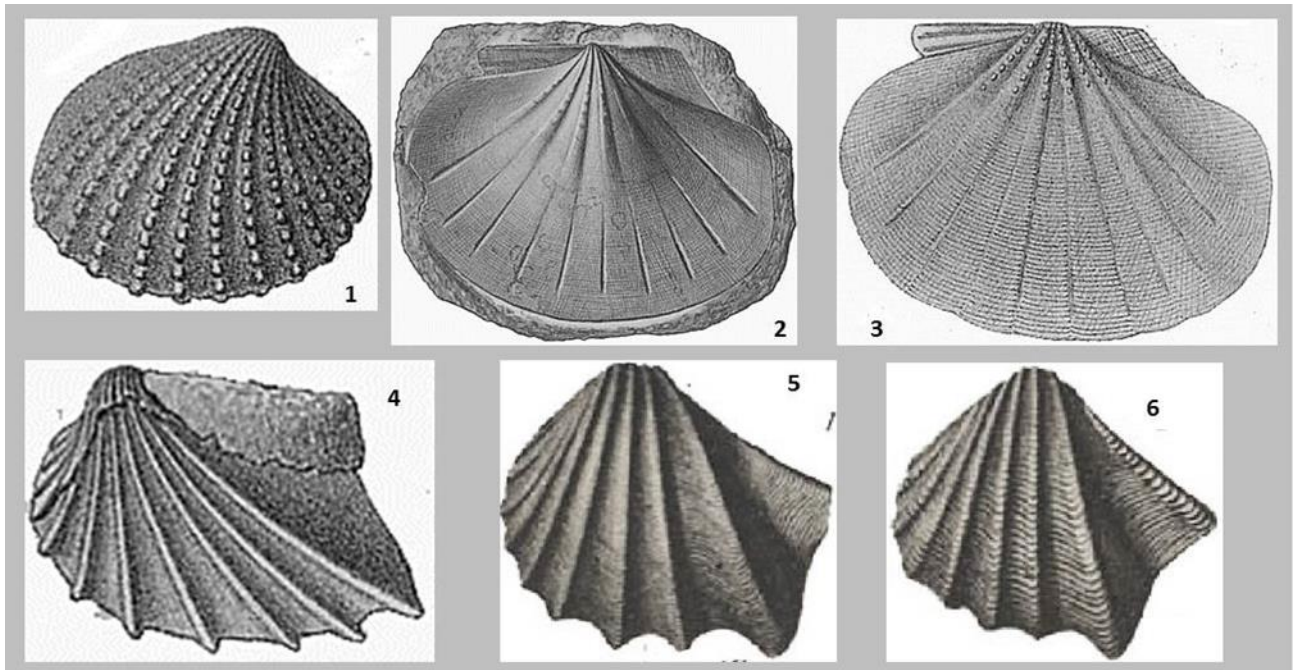


Figure X.4.1. Typical Late Triassic shallow marine bivalves from Sumatra and Misool. 1. *Paleocardita globiformis*, 2-3. *Pecten (Indopecten) verbeeki* and 4. *Myophoria myophoria* from West Sumatra (from Boettger 1881, Krumbeck 1914).. 5-6. *Myophoria vestita* from 'Nucula Marls' of Misool (Jaworski 1915).

Triassic (hemi-)pelagic bivalves

Middle and Late Triassic deep marine shales and pelagic deposits in the Tethyan and Circum-Pacific regions often contain beds with common flat, thin-walled bivalves (also called 'flat clams' or 'paper shells'; Figures X.4.2, X.4.3). Pelagic bivalve assemblages are dominated by *Claraia* in Early Triassic, *Daonella* in Middle Triassic (Early Carnian), *Halobia* in Late Triassic (Carnian- Norian) and *Monotis* in latest Triassic (M Norian-Rhaetian; McRoberts 2010). Where found, they are often abundant and rock-forming. They are important biostratigraphic index fossils.

In Indonesia Triassic pelagic bivalves are found in East Indonesia, in the deep marine deposits of Timor (Krumbeck 1924), Roti, Buton (Sikumbang et al. 1995), Seram (Wanner 1907), Buru, Misool, Babar, etc. In West Indonesia they are known from Sumatra. They are not known from Australia, but this could be due to a scarcity of open marine facies of that age.



Figure X.4.2 .Late Triassic hemi-pelagic bivalves *Monotis salinaria* from Seram (Wanner, 1907)

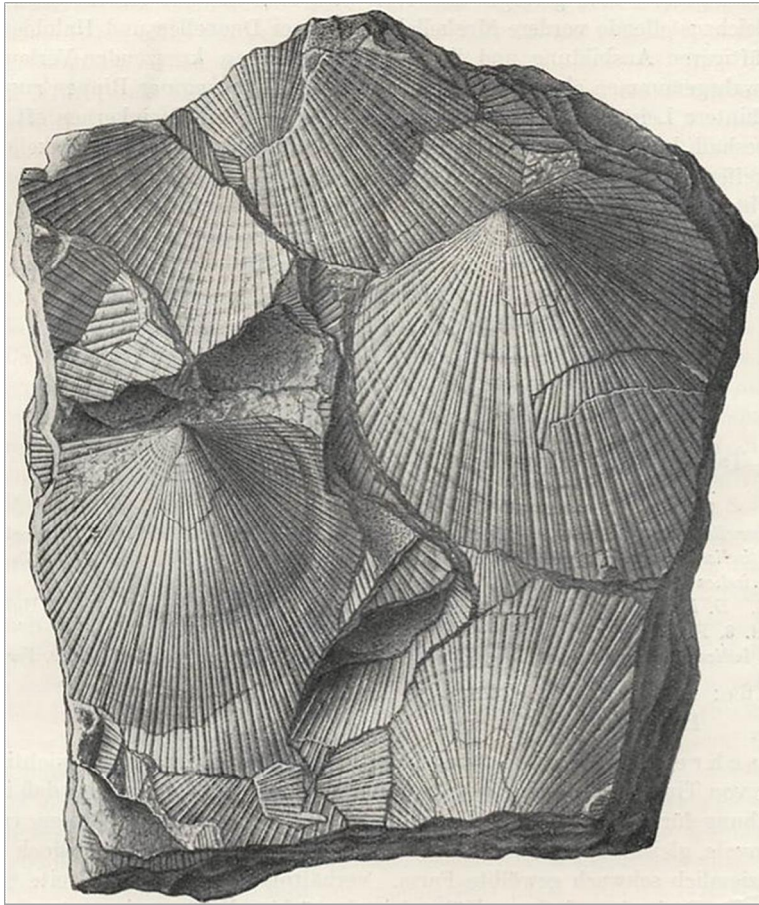


Figure X.4.3. Middle Triassic pelagic thin-shelled molluscs *Daonella indica* from the Baung area, Timor (Krumbeck 1924). Massive hemi-pelagic shell accumulations like these are common in Triassic deep marine deposits across the (Meso-)Tethys Ocean.

These pseudo-pelagic, thin-shelled bivalves may have an 'anti-tropical' geographic distribution, like morphologically and ecologically comparable bivalves in the Late Jurassic (*Buchia*, *Aucella*, *Malayomaorica*) and Cretaceous (*Inoceramus*). Some provinciality between species has been suggested for Late Triassic *Monotis* (Westermann 1973, Thenius 1980, Silberling 1985), with Tethyan Norian assemblages characterized by *Monotis salinaria*.

Triassic ammonoids

Early, Middle and Late Triassic ammonoid assemblages are the most diverse of all ammonoid assemblages in Indonesia, and most of the species are from thin but complete condensed pelagic cephalopod limestones of Timor.

They were described in voluminous monographs by Welter (1922, 1915 and 1914 respectively) and Diener (1923). The Triassic 'Cephalopod Limestone' of Timor is a condensed, pelagic facies commonly called 'Hallstatt-type', and is the only place in Indonesia with a complete marine Triassic succession. Unfortunately the formation is mainly known from isolated blocks in a melange formation, but at Kapan, West Timor, Wanner (1913) observed the transition between Permian crinoid limestone into Early Triassic cephalopod limestone. Restored thickness suggests the entire Triassic in cephalopod limestone facies is very thin (<10m). Many of the fossils in this limestone are coated with a thin manganese layer, reflecting long periods of non-deposition, on a deep sea floor. Timor is the only place in Indonesia with known Early and Middle Triassic ammonoids.

In the Early Triassic ammonoid faunas had to recover from the mass extinction at the end of the Permian, after which new, diverse ammonoid assemblages developed rather rapidly. In Indonesia Early Triassic ammonoid faunas are known only from the cephalopod facies of Timor, from where Welter (1922) described 71 species of genera *Meekoceras*, *Flemingites*, etc.

Middle Triassic ammonoids from Timor were first documented by Welter (1915). As noted by Welter (1922) Early Triassic ammonoid assemblages from West Timor share many similarities with Himalayan-Mediterranean Triassic faunas.

Late Triassic ammonoid faunas of Timor are also extremely rich and diverse and are characterized a.o. by haloritids *Halorites* and *Juvavites*, *Anatomites*, *Amarassites* and many others (Figure X.4.4). Von Arthaber (1926) distinguished 110 species in the Carnian-Norian. Tatzreiter (1981) counted 90 species of trachyostracous ammonoids (not including the more numerous leiostracous ammonoids) in a 1m thick block of condensed Middle Norian limestone at Baun. Wanner (1931) reported 462 species from a 2m thick block of Carnian Cephalopod Limestone at Bihati.

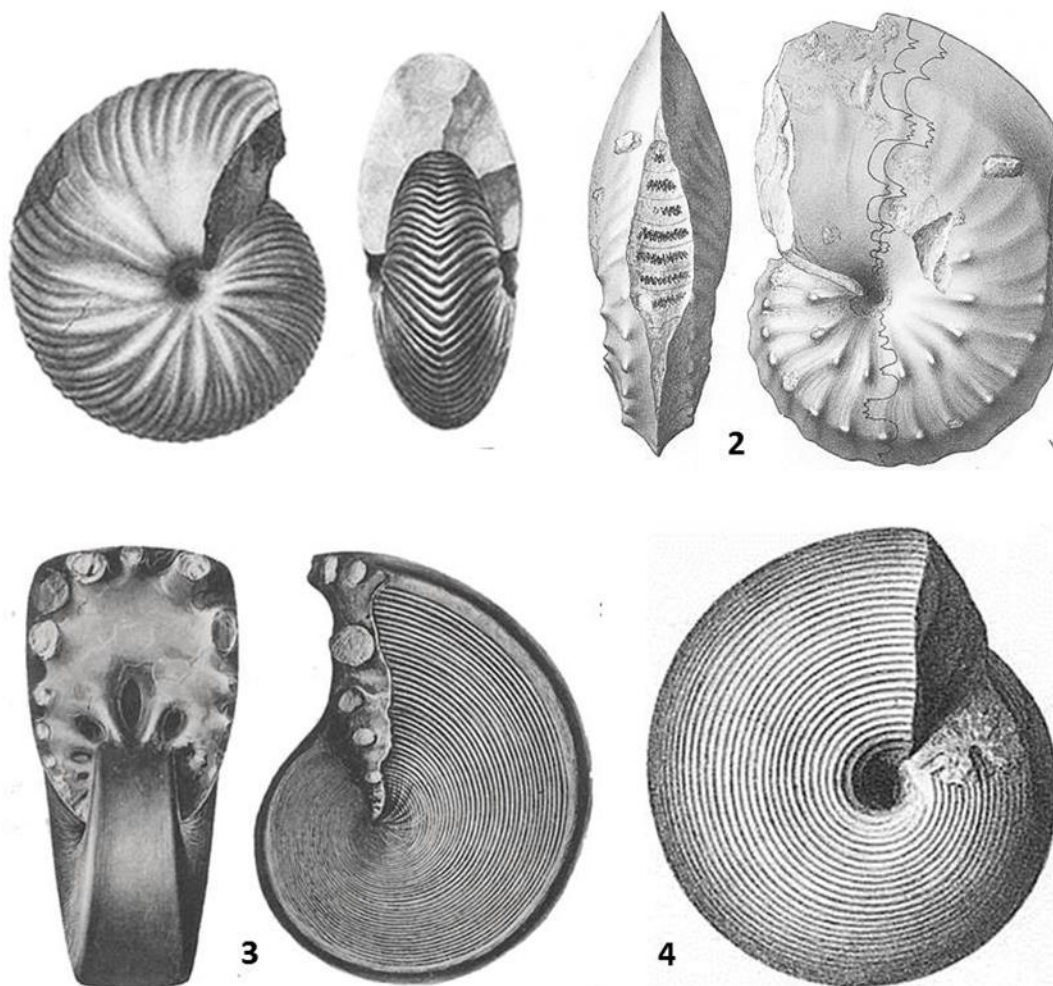


Figure X.4.4. Example of some Late Triassic ammonoids from Timor. 1. *Juvavites sarasinii* from Bihati (Diener 1923), 2. *Neotibetites* (Krumbeck 1913), 3. *Cladiscites crassestriatus* from Bihati (Von Arthaber 1927), 4. *Agathiceras*.

Triassic brachiopods

Late Triassic brachiopod assemblages in East Indonesia often contain the rhynchonellid brachiopod species *Misolia misolia* (Figure X.4.5). The species is typical of Carnian-Norian (and younger?) shelfal marine deposits of the Gondwana margin of the southern/eastern Mesotethys (Dagys, 1993), and has been reported from Oman through the Spiti area of the Himalayas to East Indonesia and the NW Australian margin. In eastern Indonesia it is present in Misool, Timor, East Sulawesi, Buru, Seram, Ambon and Buton (references in Table 9 and the Bibliography).

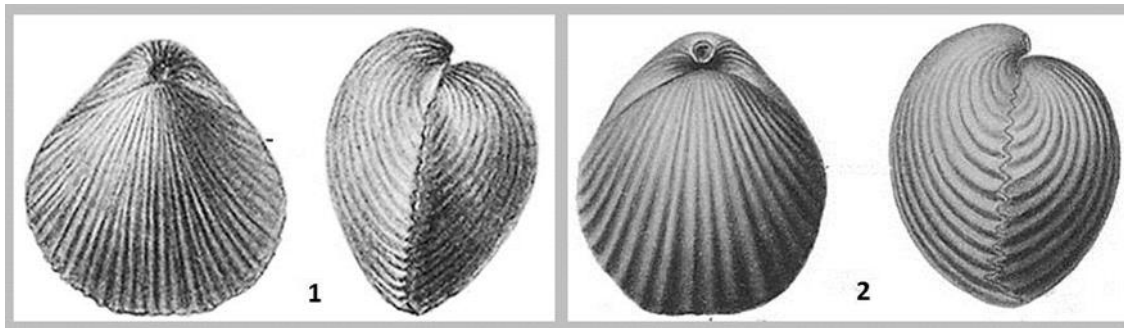


Figure X.4.5. Triassic rhynchonellid brachiopod *Misolia misolia* from Buru (1) and from 'Athyrid Limestone' of Misool (Von Seidlitz, 1913).

Triassic corals

Following the major end-Permian extinction event, corals are relatively rare globally through much of the Triassic. The Late Triassic is a time in which coral reef limestones become common again along the Tethys margins, although calcareous sponges and algae remain important components of these reefal limestones.

In Indonesia Late Triassic corals are known from 'Fau Limestone' of Timor (Vinassa de Regny 1915), the Manusela Limestone of Seram (Wanner 1907, Wilckens 1937) and from Bangka (De Neve and De Roever 1947). Characteristic genera include *Thecosmilia* spp., *Isastraea*, *Retiophyllia* and *Montlivaltia* (Figure 6). Many of the species from Timor are the same as those from the Austrian Alps (Vinassa de Regny 1915).

Late Triassic hydrozoan or stromatoporoid *Lovcenipora*

Upper Triassic reefal limestones in SE Asia often contain a hydrozoan or stromatoporoid named *Lovcenipora vinassai* (Seram, Timor; Wanner 1952; Figure 6). This is a Tethyan taxon, common in the Late Triassic of the Mediterranean. It was erroneously equated with a somewhat similar-looking Late Jurassic Tethyan hydrozoan *Cladacoropsis mirabilis* (Renz 1926), but these are separate taxa (Yabe 1946). It had led workers like Van der Sluis (1949) to erroneously assign a Jurassic age to the Manusela Limestone of Seram, an opinion followed by Van Bemmelen (1949), but fiercely protested by Wanner et al. (1952), but is still somewhat entrenched in Seram geological literature (Kemp 1992, etc.; see also Charlton and Van Gorsel (2014).

In Indonesia Triassic *Lovcenipora* is known from Seram, Buru (Gerth 1910) and from the Fatu Limestones of Timor (Vinassa de Regny 1915, Pia 1924). *Lovcenipora* has also been described from Jurassic- Cretaceous of Sumatra, but in most cases these are misidentifications and should be assigned to *Cladacoropsis mirabilis* (e.g. Yabe 1946).

Heterastridium

Heterastridium is a remarkable Late Triassic hydrozoan fossil that is widespread in the Norian of the Tethys realm. It is a globular fossil, with a diameter typically 1-5cm and is the only hydrozoan colony with a probably (hemi-) pelagic lifestyle. It is locally abundant in the Upper Norian of the Hallstatt limestone in the Carnian Alps. From here it is distributed through the Tethyan belt towards East Indonesia, The Philippines and New Caledonia (Campbell 1974) to the Panthalassan terranes in Japan, New Zealand and North America.

In Indonesia *Heterastridium conglobatum* is locally common on Timor (Gerth 1915, 1942; Figure X.4.6.). It is found mainly in the thin, condensed pelagic 'Cephalopod Limestone', which is mainly composed of ammonites, and which is commonly compared to the 'Hallstatt-facies' of the Northern Calcareous Alps. Other occurrences include East Seram (Gerth 1909, 1942) and Misool (Krumbeck 1913).

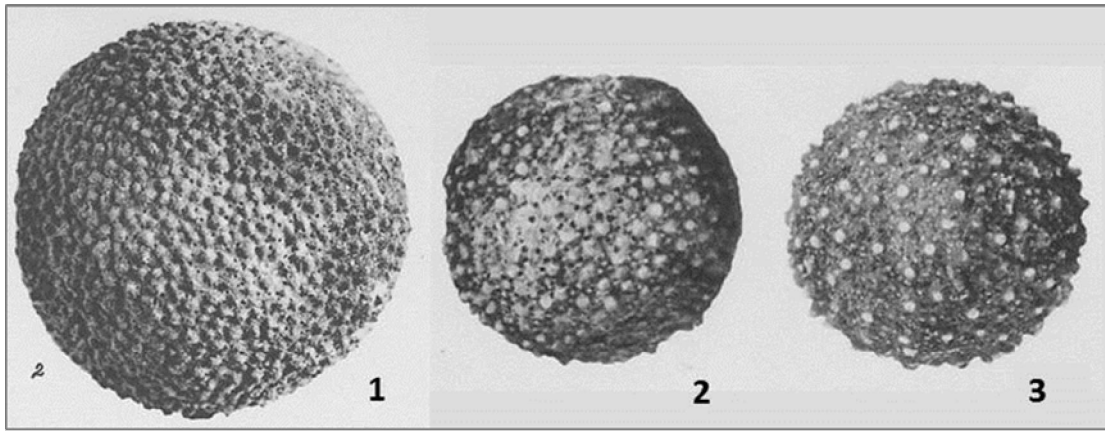


Figure X.4.6. Late Triassic pelagic hydrozoan *Heterastridium conglobatum* from Timor. 1. From Bihati (size ~3.2cm); 2-3 From Oe Batok, Amarassi (size ~2 cm) (Gerth, 1915, 1942).

Late Triassic Krusin/ Tonkin floras

A characteristic Late Triassic floral assemblage is present in Indochina and South China, termed the *Dictyophyllum-Chlathropteris* floristic province and is viewed as a Late Carnian-Norian coastal floristic assemblage. Representatives of this flora are also found in SW Sarawak ('Krusin Flora'; Kon'no 1968, Vozenin-Serra 1983, Kimura 1984), in dredge samples from Reed Bank in the South China Sea (Kudrass et al. 1986) and probably also on Bintan Island, Riau (Jongmans 1951). The floral similarities suggest NW Borneo was closely connected to Indochina in Late Triassic time.

Table 9- TRIASSIC FOSSILS INDONESIA

FAUNA/FLORA	AREA	REFERENCES
Trias faunas, biostratigraphy	General	Wanner 1907, 1931, Zwierzycki 1925, Hasibuan 2008, Charlton et al. 2009 (Timor)
	Timor	Charlton et al. 2009
Late Trias Bintan Flora	Riau Archipelago,	Jongmans 1951, Wade-Murphy et al. 2008
Late Trias Tonkin/ Krusin Flora	N Vietnam, Thailand	Kon'no and Asama 1973, Vozenin-Serra and Franschesci 1999
	Reed Bank, S China Sea	Kudrass et al. 1986
	SW Sarawak	Kon'no 1968, 1972, Kimura 1984
Late Trias Palynofloras	Seram	Martini et al. 2004
Dinoflagellates	Seram	Helby et al. 1987, Martini et al. 2004
	Buru	Gerth 1910
Late Trias corals	Timor	Vinassa de Regny 1915, Roniewicz et al. 2005
	Seram	Wilckens 1937
	Timor, Seram	Gerth 1909, 1915, 1927
Heterastridium (hydrozoan)	Misool	Krumbeck 1913
	Misool	Von Seidlitz 1913, Hasibuan 1990, 2012, MacFarlan et al. 2011
Late Trias brachiopods (incl. Rhaetian <i>Misolia</i>)	Seram	Deninger 1918, Krumbeck 1922, Wanner 1923, 1952
	Buru	Von Seidlitz 1913, Krumbeck 1913
	Ambon	Jaworski 1927
	East Sulawesi	Von Loczy 1934, Von Kutassy 1934
	Buton	Hasibuan 2010
	Timor	Krumbeck 1922, 1924, Grunau 1957

	NW Australia margin	Campbell 1994
M-L Trias pelagic bivalves (<i>Daonella</i>, <i>Halobia</i>, <i>Monotis</i>)	Thailand	Kobayashi and Tokuyama 1959
	W Kalimantan, Sarawak	Vogel 1904, Tamura and Hon 1977, Silberling 1985
	Seram	Krumbeck 1922
	Timor, Roti	Rothpletz 1892, Wanner 1907, Krumbeck 1924, Kutassy 1931, Ichikawa 1958, Gruber in Kristan-Tollmann 1987
	Sumatra	Volz 1899, Krumbeck 1914
	PNG	Skwarko 1967, 1973, Skwarko and Kummel 1974
	M-L Trias shallow marine bivalves (<i>Myophoria</i> assemblages)	W Sumatra
Buru		Krumbeck 1913
Misool		Jaworski 1915
Papua New Guinea		Skwarko 1963, 1973
Malay Peninsula, Singapore		Newton 1903, 1925, Cox 1936, Tokuyama 1961, Kobayashi and Tamura 1968, Tamura 1970, 1973
Gastropods	Timor	Tichy 1979
<i>Lovcenipora</i>	Seram, Buru	Wanner 1907, 1952, Gerth 1910, Pia 1924
	Timor	Vinassa de Regny 1915, Krumbeck 1921, 1924?
	Sumatra	Vinassa de Regny 1915
U Trias foraminifera	Timor	Kristan-Tollmann 1988
	Sumatra	Vachard 1989
	PNG	Kristan-Tollmann 1986, 1990
U Trias belemnites	Timor	Wanner 1911, Von Bulow 1915, Gheyselinck 1934
U Trias ammonites	Timor	Wanner 1911, Welter 1914, 1915, Diener 1923, Kieslinger 1924, Von Arthaber 1926, Tatzreiter 1980, 1981, 1983
	Buru, Seram	Krumbeck 1913, Wanner 1928
E-M Trias ammonites	Timor	Welter 1915, 1922, Kummel 1968, Nakazawa and Bando 1968, Brayard et al. 2009
Trias conodonts	Sumatra	Metcalf et al. 1979, 1989
	Timor	Nogami 1968, Koike 1984, Berry et al. 1984, Nicoll and Foster 1998
M-U Trias radiolaria	Timor	Hinde 1908, Rose 1994, Sashida et al. 1996, 1999
	South Sumatra (Garba)	Putra and Munasri 2016
U Trias dasyclad algae	Seram, Buru	Pia 1924
Norian-Rhaetian reefal limestones	SE Asia	Vachard and Fontaine 1988
	Sumatra	Metcalf et al. 1979, 1989
	Seram, Buru	Wanner 1907, Martini et al. 2004, Charlton and Van Gorsel 2014
	East Sulawesi	Martini et al. 1997
	Banda Sea (Sinta Ridge)	Villeneuve et al. 1993, 1994
	Timor	Welter 1914, 1915, Haig et al. 2007
	Bangka	De Neve and De Roever 1948
	Papua New Guinea	Skwarko et al. 1976, Kristan-Tollman 1986, 1990

X.5. Paleozoic

This sub-chapter X.5 of Bibliography 7.0 contains 106 papers on Paleozoic faunas and floras of the Indonesian region, as well as related forms from mainland SE Asia. These tend to be papers of a more general nature, and many more titles on this topic are in the various area chapters if the fossils described were from a specific area only. Many of those papers were flagged in Tables 10-12, which list most of the key papers on Paleozoic fossils.

A fair body of literature exists on Paleozoic faunas of Indonesia, but much of it is in older and hard-to-find books and papers, and many of the papers are not in English or Indonesian. An early review of Paleozoic stratigraphy is by Brouwer (1931). Much of this introduction is from Van Gorsel (2014) 'Introduction to Paleozoic fossils' in *Berita Sedimentologi* 31.

In the Indonesian region the most complete Paleozoic sedimentary section is in West Papua, South of the Central Range, where older parts of the Australian continental margin sequence are exposed. The oldest fossils are Ordovician-Silurian age corals and graptolites.

In West Indonesia the only Early Paleozoic fossils are the enigmatic occurrence of a Devonian coral and stromatoporoid in limestone blocks in a melange section of uncertain age in NE Kalimantan. Relatively complete Paleozoic successions are known from the 'Sibumasu terrane' along the West part of the Malay Peninsula (Langkawi Islands, etc.), Peninsular Thailand, NW Thailand and East Myanmar, but somehow pre-Permo-Carboniferous rocks have not been reported from Sumatra, much of which is supposed to part of the Sibumasu terrane.

Late Paleozoic (Permian) faunas and floras are more widespread than Early Paleozoic in the Indonesian region. Well-known localities include West Papua (Visser and Hermes 1962), West Sumatra (Fontaine and Gafoer 1989), NW Kalimantan- SW Sarawak (Terbat Limestone; Fontaine 1990, Vachard 1990) and Timor (numerous papers).

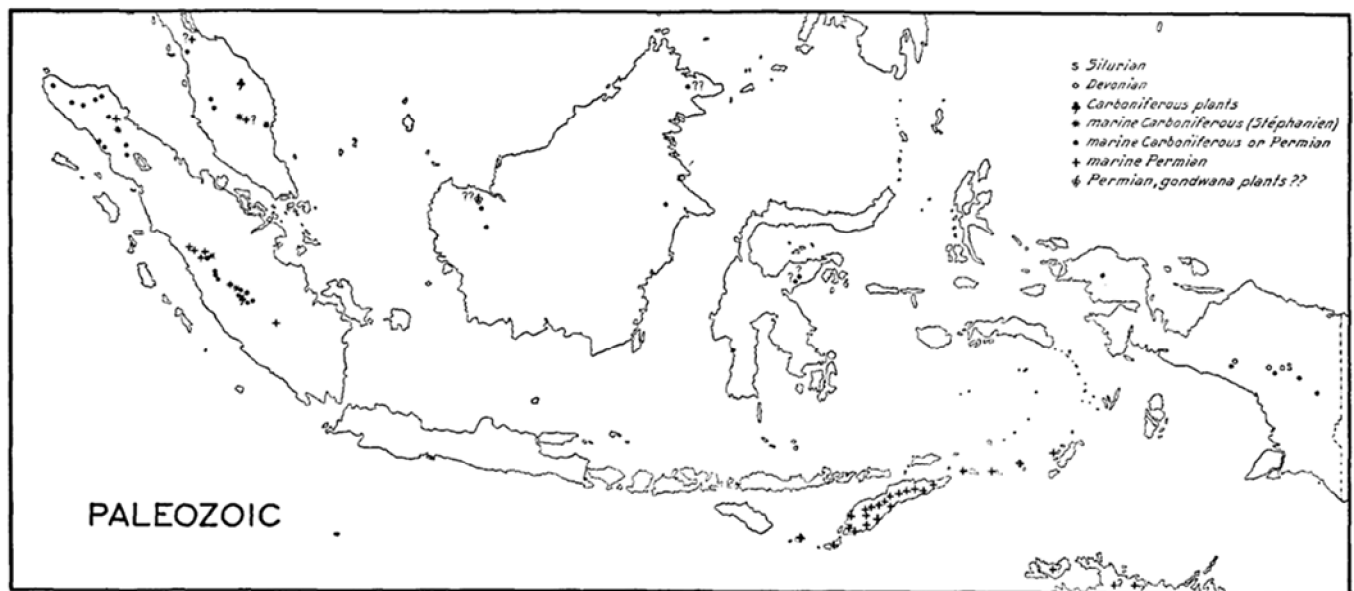


Figure X.5.. Distribution of Paleozoic rocks/ fossils in Indonesia, showing the main Paleozoic outcrop areas on North and West Sumatra, NW Borneo, Timor and West Papua. (Umbgrove 1938).

Early Paleozoic (Ordovician- Devonian)

Early Paleozoic deposits are very rare in Indonesia, where the oldest fossils are Ordovician-Silurian nautiloids, conodonts and graptolites from West Papua. The oldest fossils from Western Indonesia are a Devonian *Heliolites* coral and a stromatoporoid from limestone blocks in a melange deposit in NE Kalimantan (Rutten 1940, 1947, Sugiama and Andria 1999).

A Late Devonian brachiopod and a Permian ammonite were reported from the Kalosi region of C Sulawesi by Brouwer (1919), but their localities were never confirmed. They were believed to probably come from a local Chinese pharmacy by Von Koeningswald (1933).

The oldest fossils described from Indonesian territory are from the Ordovician-Silurian of West Papua. Cambrian and Late Precambrian sediments are probably present in this as well, but no diagnostic fossils have yet been recovered. Studies of Paleozoic fossils from West Papua are few, probably partly because faunas are not abundant and partly because outcrops of Early Paleozoic are in areas with difficult physical and political access. Most of the fossils described are from float samples from rivers draining the southern slopes of the Central Range.

Ordovician fossils reported from West Papua include:

1. Conodonts from 'basement limestone' in oil exploration wells Noordwest 1 and Cross Catalina 1 in the Central Range, including Ordovician *Serratognathus bilobatus* (Nicoll 2006). These limestones are part of the extensive Middle Cambrian- Early Ordovician Goulburn Group of carbonate-dominated shelf sediments, which underlie most of the Arafura Sea and West Papua South of the Central Ranges (Zhen et al. 2012);
2. Llanvirnian graptolites from shale from the Heluk River in the eastern foothills of the Central Range (Fortey and Cocks 1986; not described or illustrated);
3. Possible occurrences of Ordovician-age orthoconic nautiloids of the *Orthoceras*-group, described as *Irianoceras antiquum* by Kobayashi and Burton (1971), but this was deemed to be a junior synonym of *Bactroceras latisiphonatum* Glenister 1952 by Crick and Quarles van Ufford (1995). These nautiloids are from black shale nodules in river float within and south of the Central Range of West Papua. The problem is that (1) the nodules look very similar to those from Lower Kembelangan Formation black shales, which yielded common Middle-Late Jurassic ammonites, and (2) the fossils appear to have been collected in areas with nearby outcrops of Jurassic rocks, but with no evidence of any Paleozoic sediments. These observations suggest a more likely Jurassic age for these nautiloids, but this type of straight nautiloids is not known from post-Triassic rocks anywhere in the world. It is hard to decide whether these 'Ordovician' nautiloids represent (1) material from as yet unidentified outcrops of Ordovician shales in the Central Range; (2) an as yet undescribed nautiloid species of Jurassic age, or (3) reworked Ordovician fauna into Middle-Late Jurassic sediments.
4. Another occurrence of molds of possible Ordovician *Orthoceras* is in phyllitic shale (presumably Kemum Formation), just N of the mouth of the Wesan River in the NW part of the Birds Head (Kruizinga 1957).



Figure X.5.1. The characteristic Silurian tabulate 'chain coral' *Halysites wallichi* from a tributary of the Noordoost/ Lorentz River, West Papua (Musper 1938).

Silurian-age fossils are known only from West Papua:

1. Graptolites *Monograptus turriculatus* and *M. marri* from the highly-deformed deep water sediments of the Kemum Formation in the north-central Birds Head (Llandoveryan; Visser and Hermes 1962);
2. Small trilobites and brachiopods from float samples in rivers draining the southern slopes of the Central Range (Martin, 1911), associated with Silurian conodonts (Ludlowian; Van den Boogaard 1990);
3. Conodonts from Modio Dolomite in Charles Louis Range, SW West Papua, with *Panderodus cf. simplex*, indicate a Silurian age (Nicoll and Bladon 1991);
3. Silurian cosmopolitan coral *Halysites wallichii* was also found in river float in a tributary of the Noordoost/Lorentz River (Musper, 1938; Figure X.5.1);
4. Late Silurian (M Ludlow) thelodont and acanthodian fish scales from Lorenz River in eastern W Papua and Kemum Fm of north part of Birds Head (Turner et al. 1995).

Devonian

Devonian fossils are relatively rare in Indonesia, and are known only from West Papua and from blocks in melange in NE Kalimantan.

Middle or Late Devonian corals, including *Heliolites* and *Favosites*, and stromatoporoids, have been reported from the dark grey 'Modio Dolomite Formation', which outcrops south of the Central Range of West Papua (Gerth 1927, Keijzer 1941, Oliver et al. 1995). These carbonates may be remnants of a widespread Middle Devonian reef system that continues for about 2000 km along the East Australia and New Guinea margin (Copper and Scotese 2003, Torsvik and Cocks 2013). Pebbles of M-U Devonian sandstones with the brachiopod genus *Spirifer* were reported from the same region by Teichert (1928).

In NE Kalimantan Devonian corals (*Heliolites*) and the stromatoporoid *Clathrodictyon cf. spatiosum* are present in limestone blocks in the 'Danau Formation' melange complex at the Telen River (Rutten 1940, 1947). *Heliolites* is a genus that is geographically widespread, also known from Indochina, NE Thailand, Laos, East Australia and Europe. Age of the melange complex has not been properly documented, but is likely of Early Cretaceous age (Tate 1992).

TABLE 10 - ORDOVICIAN- DEVONIAN

FAUNA/FLORA	AREA	REFERENCES
Devonian corals	West Papua	Gerth 1927, Keijzer 1941, Oliver et al. 1995
	NE Kalimantan	Rutten 1940, 1947, Sugiaman and Andria 1999
Devonian brachiopods	West Papua	Stehn 1927, Feuilleateau de Bruyn 1921
Late Silurian-Devonian fish	West Papua	Turner et al. 1995
	SE Asia	Wang et al. 2010
Silurian corals	W Papua- S of C Range	Gerth 1927, Teichert 1928, Musper 1938
Silurian conodonts	W Papua- S of C Range	Van den Boogaard 1990, Nicoll and Bladon 1991
Ordovician-Silurian graptolites	W Papua, Birds Head	Visser and Hermes 1962 (Silurian)
	W Papua, Heluk River	Fortey and Cocks 1986 (M Ordovician)
Ordovician(?) orthoconic nautiloids	W Papua Star Mountains	Kobayashi. and Burton 1971
	W Papua Central Range	Crick and Quarles van Ufford 1995
	Birds Head	Kruizinga 1957
E Ordovician conodonts	W Papua, S Central Range	Nicoll 2002, 2006

Carboniferous

Carboniferous sediments and fossils are comparatively rare in the Indonesian region, and are limited to North Sumatra, West-Central Sumatra, West Papua and possibly also NW Kalimantan. In the late 1800's many of the dark-colored Permian limestones from Sumatra were erroneously assigned to the Carboniferous, due to their superficial resemblance to the Visean 'Kohlenkalk' of NW Europe.

Sumatra

Early Carboniferous sediments are the oldest sediments identified in Sumatra and may be from two different tectonic terranes (Fontaine and Gafoer, 1989, Barber et al. 2005):

- temperate late Visean Alas Fm limestones in North Sumatra, age-dated with conodonts (Metcalf 1983). These are probably part of the Sibumasu Terrane, which at this time was still part of the Australian margin.
- shallower marine and warmer-climate Kuantan Fm limestone with corals (*Syringopora*, *Siphonodendron*), calcareous algae (*Koninckopora*) and cosmopolitan foraminiferal assemblages from West Sumatra (Agam River, NE of Padang; Fontaine and Gafoer, 1989, Kato et al. 1999). This is part of the West Sumatra Block, with likely affinities to the low-latitude Indochina Block.

The unfossiliferous pebbly mudstones of the Bohorok Formation of West and North Sumatra are probably glacial deposits from the widespread Late Carboniferous- earliest Permian glaciation of Gondwana, but no fossils have been reported (similar rocks from Langkawi, NW Malaysia, do have cold-water brachiopod, etc. faunas).

NW Kalimantan- West Sarawak

In NW Borneo, in the border area between West Sarawak and NW Kalimantan, the oldest fossil-bearing rocks are tightly folded, steeply dipping sediments with chert and grey limestones of the Terbat Formation. These contain diverse latest Carboniferous and earliest Permian fusulinid assemblages with *Pseudoschwagerina*, *Paraschwagerina*, etc. (Krekeler 1932, 1933, Cummings 1962, Sanderson 1966, Vachard 1990, etc.). Correlative deposits are present in NW Kalimantan (Zeijlmans van Emmichoven, 1939). The fusulinid assemblages suggest affinity with low-latitude Cathaysian regions, not with the Sibumasu terrane.

West Papua

Conodonts from the Aimau Fm in the SW Tamrau Mountains of the Birds Head contain conodonts typical of Late Carboniferous (*Hindeodus minutus*, *Neognathus*; Nicoll and Bladon 1991).

TABLE 11 - CARBONIFEROUS

FAUNA/FLORA	AREA	REFERENCES
Corals	W Sumatra	Fontaine 1983, 1989
	West Papua	Kato et al. 1999
	Thailand	Fontaine et al. 1991
Foraminifera	W Sumatra	Metcalf 1983, 1989, Vachard 1989
	NW Borneo	Cummings 1962, Sanderson 1966, Vachard 1990
Conodonts	Sumatra	Metcalf 1983, 1986
	West Papua	Nicoll and Bladon 1991

Permian

Relatively rich Permian faunas and floras are known from many localities in mainland SE Asia, Indonesia and West Papua. In Indonesia Permian faunas and floras are common on Timor, West-Central Sumatra and West Papua (not in Papua New Guinea) and, to a lesser degree, from Borneo. For reviews of the shallow marine and non-marine Permian faunas and floras of SE Asia see Fontaine (1986, 2002). Key references are listed in Table 12 and in the Bibliography. Most of this introduction is from Van Gorsel (2014).

For biostratigraphic correlations of marine sequences brachiopods and mollusks have been the main tool in the Gondwana realm, while fusulinid foraminifera are the principal group used for correlations along the lower latitude Tethyan margin.

The Late Paleozoic faunas from Sumatra are generally comparable with those described from Thailand and Peninsular Malaysia, while the Permian of West Papua is Gondwanan.

The classic, highly diverse marine Permian faunas from Timor are famous for being the richest marine Permian faunas in the world, with over 600 species described by 1926 (Wanner 1926). These have been the subject of numerous papers in the early 1900's. A comprehensive recent review of Permian marine faunas of Timor is by Charlton et al. (2002). Unfortunately, most of the Permian fossiliferous sediments on Timor are not in any stratigraphic order, but occur as blocks in melange, olistostrome or broken formations. It is generally accepted that material from the famous fossil localities of Somohole and Bitau area are older (E Permian, ~Sakmarian- Artinskian) than those from the Basleo and Amarassi areas (late Middle Permian, ~Capitanian)

Early Permian cold-climate bivalves and brachiopods

Early Permian sediments associated with glacial marine deposits across northern Gondwana (Australia, India, etc.) often contain thick-shelled bivalves of the genera *Atomodesma* (Figure X.5.2.) and *Eurydesma* and the cool-climate brachiopod *Globiella foordi* (now also called *Cimmeriella foordi*). Comparable bivalve assemblages may be present in the Early Permian of the Sibumasu- Cimmerian terranes now in Sumatra, NW Malaysia, W Thailand and SW China (Sun 1993).

In Indonesia assemblages with these genera were found in the Early Permian Maubisse Formation of Timor (Beyrich 1865, Rothpletz 1892, Wanner 1922, 1926, 1940, Belford 1960, Bird et al. 1989, Hasibuan 1994), but they are associated with relatively diverse marine faunas and glacio-marine deposits are not known from Timor. These faunas may suggest a proximity to glacial Gondwana of this part of Timor in earliest Permian time, but are not necessarily part of the glaciated terranes.

The presence in Timor Leste of a diverse fusulinid assemblage interpreted as of latest Carboniferous- earliest Permian age and reflecting a relatively warm climate (Davydov et al. 2013) is puzzling in the context of widespread glaciations on Gondwana at this time.

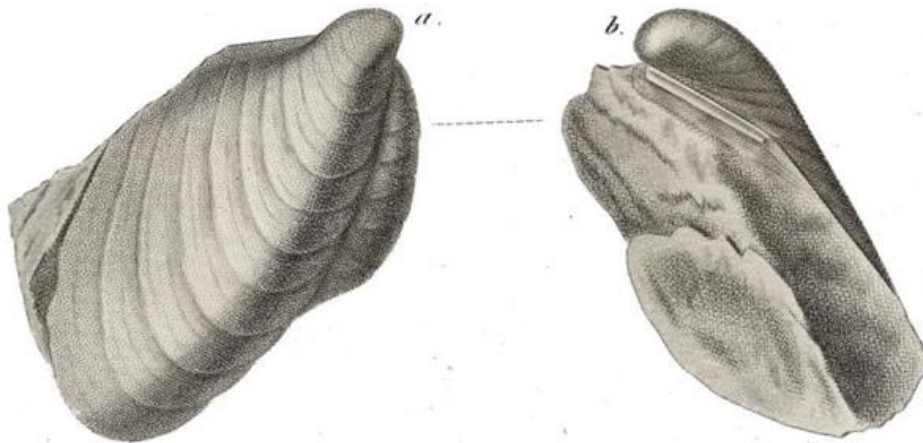


Figure X.5.2.. Permian bivalve *Atomodesma exarata* from the Kupang area, West Timor (Beyrich 1865).

Permian corals

Permian corals are relatively widespread in SE Asia. They generally occur in carbonate lithologies and may be associated with fusulinid larger foraminifera. Assemblage compositions differ with age, water depth and with paleogeographic position:

- Early Permian limestones from the Indochina terrane (East Thailand, etc.) contain typical 'Cathaysian', tropical, high-diversity coral and fusulinid assemblages, dominated by compound corals;
- Early Permian deposits of the Sibumasu Terrane have either no corals or small, solitary rugose corals, reflecting cooler and/or deeper waters (e.g. Peninsular Thailand; Fontaine et al. 1994, Yunnan, SW China; Wang and Sugiyama 2002). The low diversity assemblages of solitary rugose coral species, have been called '*Lytvolasma* faunas' or '*Cyathaxonia* faunas', and are generally viewed as 'anti-tropical', cooler climate coral assemblages (Kossovaya 2009).
- by late Middle and Late Permian time the Sibumasu terranes had moved towards lower latitudes and started to have similar high-diversity coral and fusulinid faunas as the Indochina terranes.

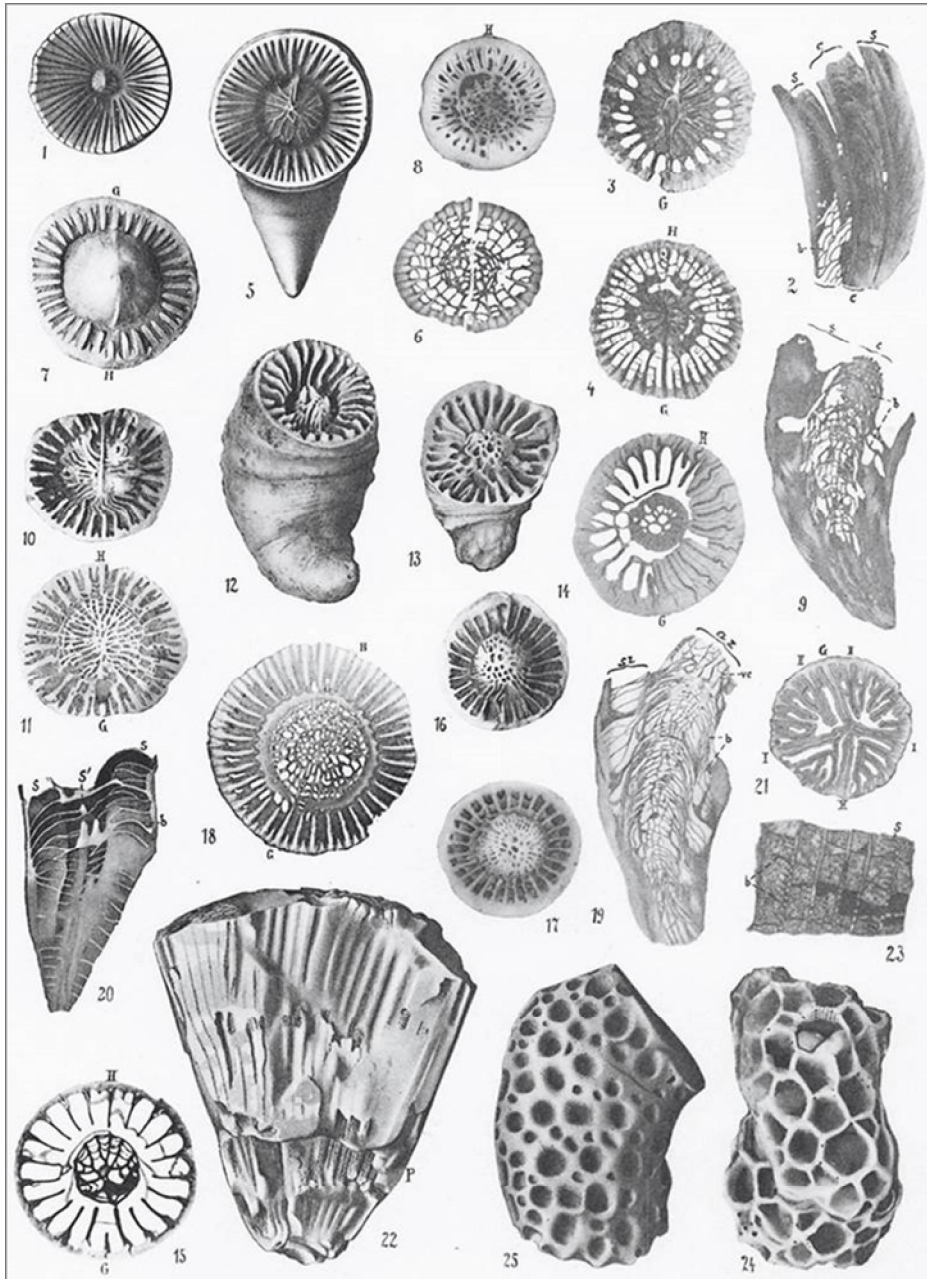


Figure X.5.3. Examples of Permian solitary and compound corals from Timor (Gerth 1921) (*Carcinophyllum*, *Dibunophyllum* (*Verbeekiella*), *Pterophyllum*, *Favosites* and *Michelinia*)

In Indonesia Permian coral faunas are known mainly from.

1. Timor Permian corals are locally abundant in the Maubisse Formation/ Basleo beds. They are mainly 'Cythaxonia-faunas' with solitary corals like *Lytvolasma*, *Timorphyllum*, *Lophophyllidium*, *Verbeekiella* (Figure X.5.3), *Zaphrentis*, *Amplexus* and *Wannerophyllum*. Colonial rugose corals like *Michelinia*, *Favosites*, *Lonsdaleia timorica* and *L. molengraaffi* are present as well, but are relatively rare (Gerth 1921, Koker 1924, Wang 1947, Von Schouppe and Stacul 1955). The Timor Permian coral assemblages are very similar to those reported from the Baoshan Block, SW China (Zhao and Zhou 1987);
2. Sumatra. Permian corals have been reported from several localities in West Sumatra. Some of the Middle Permian limestones from West Sumatra contain high diversity corals that look similar to 'Cathaysian' assemblages of Central Thailand (Guguk Bulat; Fontaine 1983,1989);
3. West Papua. Permian corals are widely distributed in the Aifam Fm (Visser and Hermes 1962, p. 54), including solitary *Amplexus* on the Birds Head (Broili 1924). However, typical low-latitude compound corals appear to be absent here (Fontaine et al. 1994, p. 39).

Gerth (1926) already noted that the Permian coral fauna of Timor indicated a relatively warm paleoclimate, while Permian deposits on adjacent Australia contained glacial deposits, suggesting that Timor and Australia must have been farther apart in Permian time. However, if the Permian corals on Timor are younger than the earliest Permian glacial deposits on Gondwana, which they probably are, the contrast may not be as significant.

Permian ammonoids

Permian ammonoids are generally rare in Indonesia/ SE Asia, but the ammonoid assemblages of Timor are among the richest in the world (Smith, 1927, Wanner 1932). Wanner (1926) counted 37 species of ammonoids and 21 nautiloids. Most numerous genera are *Agathiceras* and *Paralegoceras* (= *Metalegoceras*; Figure X.5.4). Another Permian ammonoid locality in Indonesia is a rare *Agathiceras* from the folded series of Belitung (Kruizinga, 1950).

Blendinger et al. (1992) noted the remarkable similarity between the Middle Permian ammonoids from the cephalopod limestone of Timor with those from the West Mediterranean (Sosio Limestone of Sicily) and Oman, suggesting unrestricted faunal exchange in a Middle Permian Paleotethyan seaway. Ehiro (1997, 1998) classified the Middle Permian ammonoid faunas from 'allochthous Timor' in his 'Equatorial Tethyan province', based on the presence of taxa like *Timorites* and *Waagenoceras*, which are not known from Australia.



Figure X.5.4. One of the most common Permian ammonoids from West Timor (Bitauni): *Metalegoceras sundaicum* (formerly *Paralegoceras*; Haniel 1915).

Permian Trilobites

Trilobites are rare in Indonesia, but have been reported from Permian sediments of three areas: Sumatra (Roemer 1880), Timor (Tesch 1923, Gheyselinck, 1937) and float in the Noord River in West Papua (Martin 1911).

They are mainly of the genus *Pseudophillipsia*: *P. timorensis* Roemer from Basleo, West Timor and *P. sumatrensis* from the Padang Highlands of West Sumatra (Figure X.5.5). Leman and Sone (2002) described similar *Pseudophillipsia* from the early Capitanian (Middle Permian) from Pahang, in the Central Belt of the Malay Peninsula (= west margin of East Malaya/ Indochina terrane).

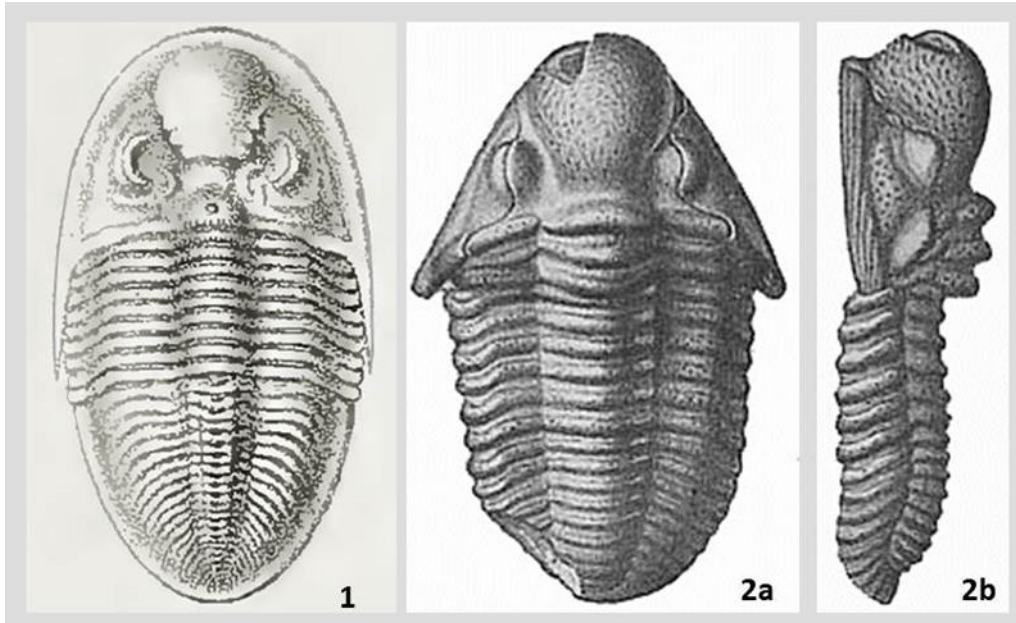


Figure X.5.5. Permian trilobites. 1. *Phillipsia sumatrensis* from Permian of West Sumatra (Roemer 1880); 2 and 3. *Neoproetus indicus* from Bitauai, West Timor (Tesch 1923).

Permian Fusulinid foraminifera

Fusulinid larger foraminifera are tropical-subtropical shallow marine carbonate taxa (estimated paleolatitude range between 0 and 40° N and S), with a reputation of being excellent guide fossils in Carboniferous-Permian time. Fusulinids are widespread in Permian shallow marine limestones across SE Asia and areas further west, generally on terranes that border the Paleotethys suture. Hundreds of papers have been written on this group in SE Asia. For more details see references in Table 12 and the Bibliography.

Interpretation of fusulinid foram faunas can be very difficult. The taxonomy is overwhelming, with over 100 genus names and 1000's of species names. Fusulinids reached a maximum in diversity and sizes in the Middle Permian, as did other reefal fauna (corals, large molluscs, etc.). A significant extinction event of large fusulinids took place at the end of the Middle Permian (end or late Capitanian; e.g. Hada et al. 2014). The Late Permian is characterized by fusulinid assemblages that are reduced in size and diversity. Fusulinids went completely extinct at the mass extinction event at the end of the Permian.

In Indonesia Permian fusulinid foraminifera have been reported from 6-7 main areas, mainly on Sumatra, NW Borneo, Timor and the Birds Head of West Papua:

1. NW Kalimantan- Sarawak border area. Late Carboniferous- earliest Permian 'Terbat Limestone' of the NW Kalimantan- Sarawak border area were first reported by Krekeler (1932, 1933), and by several generations of subsequent authors (Table 12). Fusulinid assemblages are quite diverse and similar to 'Tethyan' faunas from Eastern Thailand and South China (Cumings 1962, Vachard 1990, Fontaine 1990, Sakamoto and Ishibashi, 2002). Tan Sin Hok (in Krekeler 1933) examined the fusulinid beds from Sadong valley and believed them to be same species (and in same volcanoclastic facies) as the Early Permian assemblages of Jambi. The age and nature of the Terbat Limestone assemblages suggest affinities to the Indochina Block, not Gondwana or Sibumasu (as do associated Triassic-Jurassic faunas and floras).

2. Padang Highlands, West Sumatra (Figure X.5.6). Middle Permian fusulinids have long been known from West Sumatra, mainly from the famous Guguk Bulat locality. Several of the large Middle Permian fusulinid index species of the Tethyan province were first described from Sumatra, like *Verbeekina verbeeki* (Geinitz, 1876), *Sumatrina annae* (Volz, 1904) and *Schwagerina padangensis* (Lange, 1925). Tien (1988) also recorded *Colania douvillei*. Many of the fusulinid species described from this part of West Sumatra are also common on the 'Cathaysian' Indochina Block of NE Thailand, but some have also been reported from the Sibumasu terrane, which by the end of the Middle Permian had moved into lower latitudes (e.g. Ueno et al. 2003).
3. Jambi, SW Sumatra. Early Permian fusulinids from the thin '*Productus* Limestone' horizon in the Mengkareng Formation at Telok Gedang along the Merangin River, Jambi, underlying the beds with the famous 'Cathaysian' Jambi Flora (Ozawa 1929, Thompson 1936, Vachard 1990, Ueno et al. 2007). Most abundant is *Pseudofusulina rutschi* (= *Rugofusulina rutschi*; similar to a more widely known species *Rugofusulina alpina* Schellwien). Also present is *Pseudoschwagerina meranginensis* (assigned to *Sphaeroschwagerina* by Davydov et al. 2013). It is a low-diversity assemblage, believed to be of Early Permian age, but more precise age interpretations vary from Upper Asselian (Tien 1989, Vachard 1990) to 'most likely Sakmarian' (Ueno 2007). None of the species described can be tied directly to assemblages elsewhere, so conclusions on precise age and paleobiogeographic affinity lack a real firm basis. Additional fusulinid occurrences are the Artinskian- Kungurian assemblage from nearby Batu Impi (Tien (1989, Ueno et al. 2007). Two additional small occurrences on Sumatra worth noting are in West Sumatra (Batang Siputar; Hahn and Weber 1981) and in South Sumatra (Bukit Pendopo; Palembang; De Neve 1949).

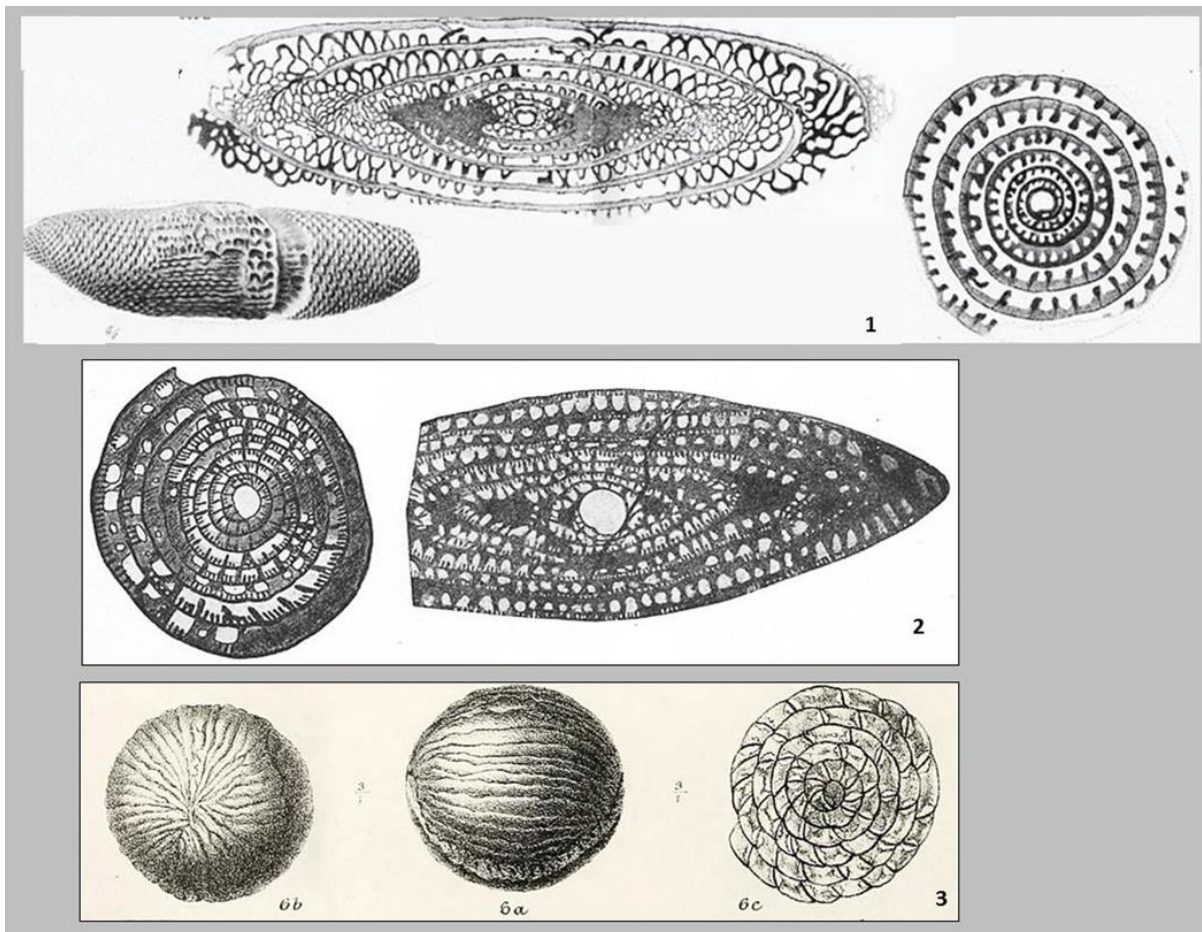


Figure X.5.6. Middle Permian fusulinid foraminifera from West Sumatra. 1. *Fusulina granum-avenae* (Verbeek 1896). 2. *Sumatrina annae* from NE of Lake Singkarak (Volz, 1904). 3. *Verbeekina verbeeki* from Guguk Bulat, Padang Highlands (originally described as *Fusulina princeps* by Brady, 1875).

4. Timor and adjacent islands Leti and Roti. Fusulinids are also known from various localities on Timor, and adjacent Roti and Leti islands (Schubert 1915a, Thompson 1949, Davydov et al. 2013). Many of the Timor assemblages are of low-diversity, but high abundance, and are dominated by a species initially described as

Fusulina wanneri by Schubert (1915), the type species of the 'anti-tropical' genus *Monodioxodina*. The small fauna of verbeekinids described from Leti Island by Schubert (1915b) with *Doliolina lepida* var. *lettensis* differs from assemblages known from Timor (Thompson 1949). Another different latest Carboniferous-earliest Permian assemblage from Timor Leste was described recently by Davydov et al. (2013).

5. Birds Head of West Papua. Rare fusulinids have been reported from West Papua. These the only fusulinid occurrences on undisputed Permian Gondwanaland, but are poorly documented. One occurrence in the Birds Head was figured by Visser and Hermes (1962, p. 54). Another possible fusulinid occurrence was reported, but not figured, from Permian limestone in a consultant biostratigraphy report of oil exploration well TBF 1X (3947m; NE of Misool in Bintuni Bay, south of Birds Head).
6. Bangka- Belitung. Less-known and rare fusulinids were reported from the intensely folded Permian beds of North Bangka (De Roever 1951) and Belitung (Strimble and Yancey 1974).

Permian brachiopods

In Indonesia Permian brachiopods are known from Sumatra, Timor and West Papua (Table 12). The principal monographs on Indonesian brachiopods are by Broili (1915, 1916), Hamlet (1928) and Wanner and Sieverts (1935), all from Timor. Permian brachiopods were described from Sumatra by Meyer (1922) and West Papua by Archbold (1981).

Productus and *Spirifer* groups dominate the Timor and West Papua assemblages (Figure X.5.7). The brachiopod faunas from Timor are relatively rich (49 species). However, unlike many other fossil groups from Timor like crinoids and blastoids, no new species were identified in the first monograph on this group by Broili (1916), attesting to the relatively cosmopolitan nature of these brachiopod taxa (mainly of Boreal and Palaeoequatorial genera; Crippa et al. 2014). Studies on paleobiogeographic patterns in Permian brachiopod assemblages therefore appear to have been somewhat non-diagnostic.

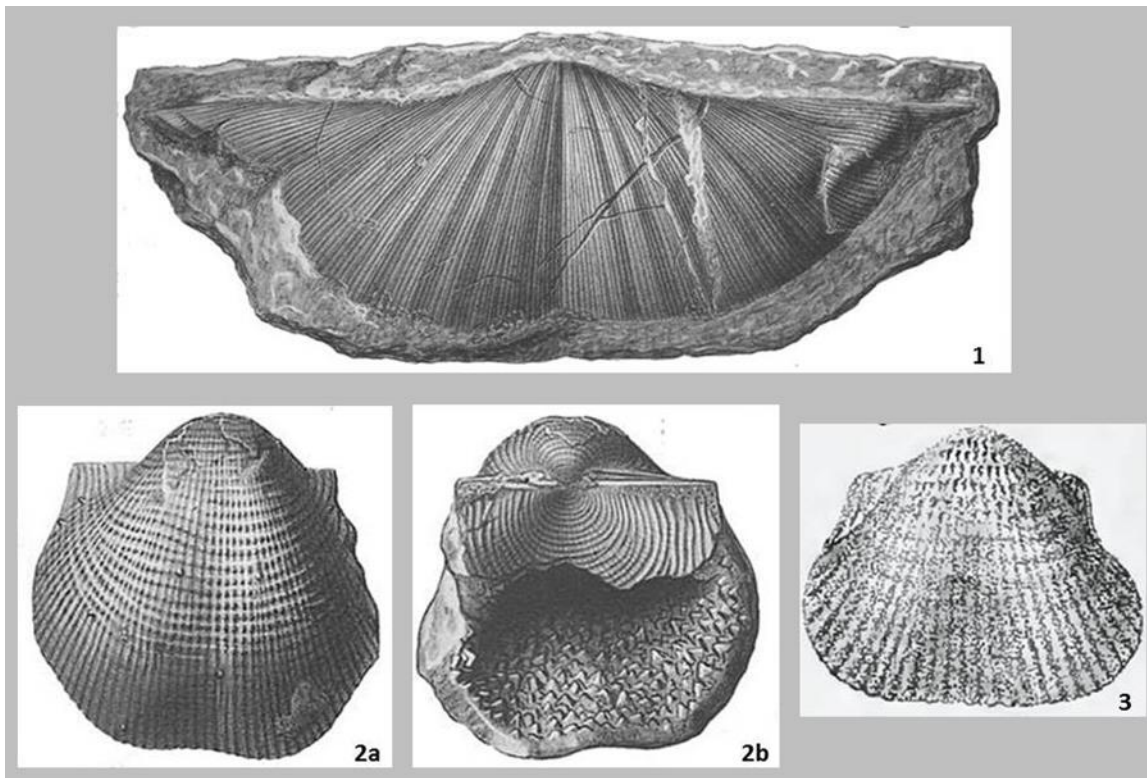


Figure X.5.7. Permian brachiopods. 1. *Spirifer* from Timor; 2. *Stereochia* (*Productus*) *semireticulatus* from Timor and 3. same species from Sibelabu, SE of Padang, West Sumatra.

The genus *Stereochia* (Figure X.5.7, 2,3) is of interest because it is commonly regarded as an anti-tropical genus (Shi et al. 1995, Crippa et al. 2014). In mainland SE Asia *Stereochia*-*Meekella* brachiopod fauna characterizes the Sibumasu terrane in Peninsular Thailand and the NW Malay Peninsula (Fang 1994). In Indonesia *Stereochia* was reported as '*Productus semireticulatus*' from Timor (Beyrich 1865, Broili 1916) and

from the Padang Highlands, West Sumatra (Woodward 1879). It is also the dominant brachiopod genus associated with the Early Permian Jambi flora of SW Sumatra (*S. semireticulatus* or *S. irianensis*; Hasibuan et al. 2000, Crippa et al. 2014).

Permian Crinoids and Blastoids

Timor Island has long been famous for its unique Permian deposits with abundant, diverse and well-preserved crinoid and blastoid faunas. Wanner (1923) identified 239 crinoid species in 75 genera. Two-thirds of these species are not known outside Timor (Wanner 1924, Webster 1998). Half of all crinoid species are poteriocrinids, with dominant genera *Timorocrinus*, *Cericrocinus*, *Parabursacrinus*, etc.

Most of the Timor crinoids and blastoids are from red-brown marls and tuffs with interbedded limestones, a formation named Maubisse Formation in Timor Leste or Sonnebait Series in older literature on West Timor (Figure X.5.8). They were believed to be relatively warm, shallow marine deposits, but they may actually be mostly hemi-pelagic organisms that ended up in clastics-free deep water carbonates that are often associated with basic volcanics (seamounts?).

The richest occurrences of crinoids are in the Basleo area near Niki-Niki, and are probably from exotic blocks in Neogene melange deposits, and are associated with cephalopods of Middle Permian age (Haniel 1915). Crinoid assemblages from the Amarassi region of SW Timor are less diverse and probably of Late Permian age (Wanner 1923).

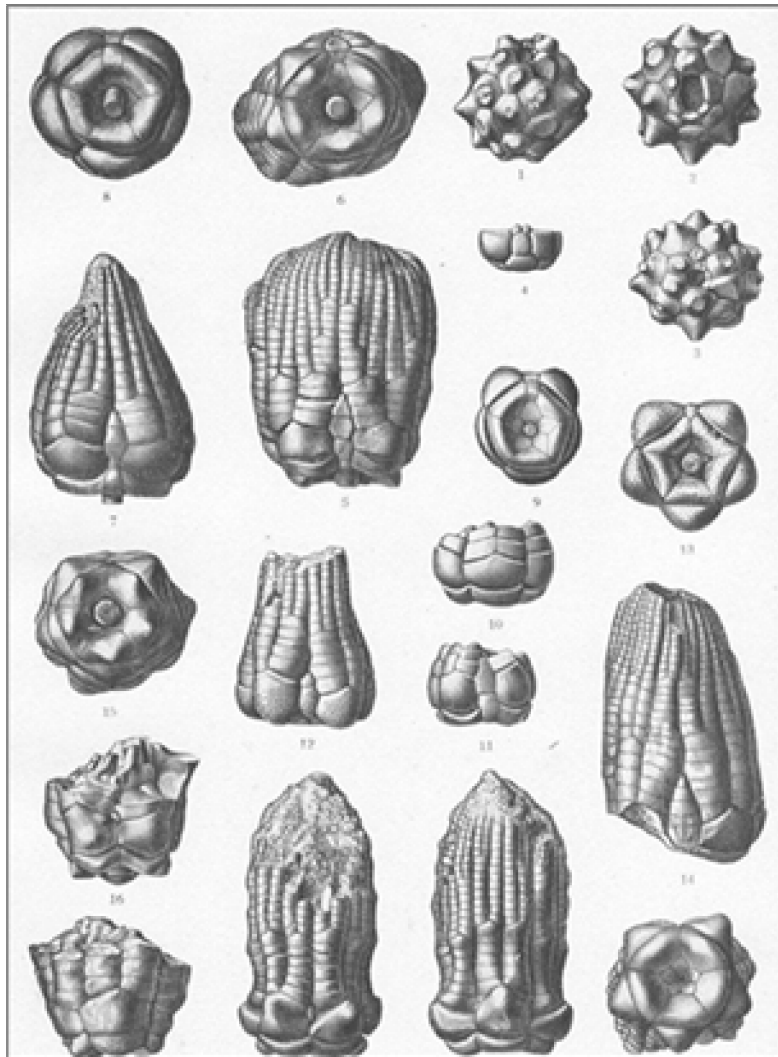


Figure X.5.8. Example of well-preserved crinoids from the Basleo area, Timor (Wanner 1923).

Permian blastoid assemblages from Timor have the highest abundances and diversity in the world. The main monographs on blastoids are Wanner (1924, 1940). Of the 13 genera known from Timor only three or four also occur outside Timor. (Figure X.5.9).

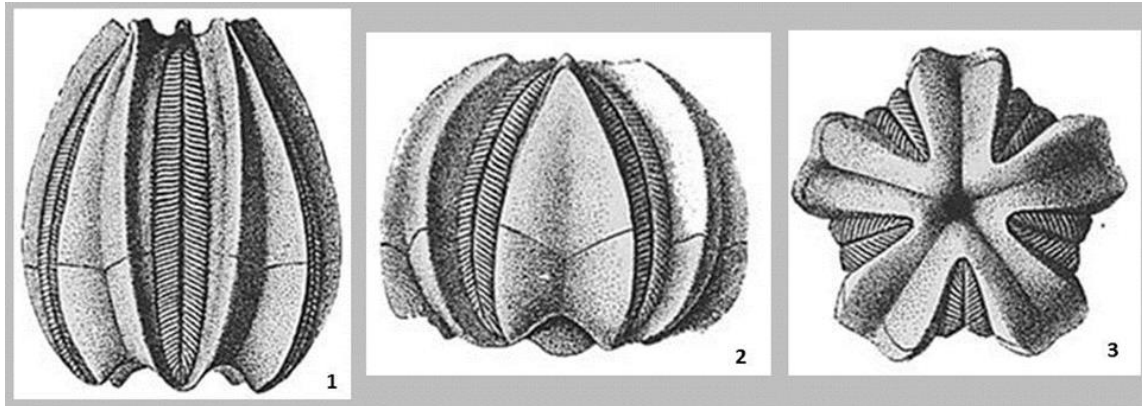


Figure X.5.9. Typical example of blastoid from Koeafeoe, West Timor, *Schizoblastus* (= *Deltoblastus*) *delta* (Wanner 1924).

The only other place in SE Asia where some of the Timor species of crinoids and blastoids were found is in the late Early- Middle Permian Ratburi Limestone of Peninsular Thailand (Racey et al. 1994; Sibumasu Terrane). Species of 'Basleo fauna' include the crinoids *Timorocrinus pumulus* Wanner 1924, *Parabursacrinus* and *Timorocidaris sphaeracantha* Wanner 1920, and the blastoid *Deltoblastus permicus* (Wanner 1910). Although they are present in much smaller numbers in Peninsular Thailand than at the Timor localities, their presence does suggest they were in the same faunal province around Artinskian time.

Outside SE Asia rare *Deltoblastus* have been reported from Oman and Sicily, both also on Cimmerian terranes.

Permian floras

Permian plant fossils, often associated with thin coal beds, are known from West Sumatra and West Papua, with less well-documented occurrences in NW Kalimantan and Belitung island.

The Early Permian floras from Sumatra, NW Kalimantan and Belitung are generally perceived to be warm-Cathaysian floras, while cooler-Gondwanan *Glossopteris* floras (but mixed with some Cathaysian elements) are present in West Papua. The Cathaysian nature of the Jambi flora plays an important role in the plate reconstruction history of Sumatra (Barber et al. 2005).

The famous Early Permian 'Jambi flora' from the Merangin River area in SW Sumatra was first discovered by Tobler, and described by Jongmans and Gothan (1925) (Figure X.5.10.). The flora was initially viewed as of Euramerican affinity, without Gondwanan or Cathaysian *Gigantopteris* flora elements. However, after the Jambi paleobotanical expedition of 1925-1927 collected additional material, Jongmans and Gothan (1935) also recognized some North Cathaysian species.

The Jambi flora was recently re-sampled and studied by a group from Naturalis Museum, Leiden, and the Geological Survey of Indonesia (Van Waveren et al., 2007, Booi et al., 2009). They also recognize affinities to Cathaysian flora, but argue that is not a fully Cathaysian flora, but its greatest similarity is with floras from North China, either the Artinskian Shansi Series (Asama et al. 1975) or the Kungurian Lower Shihhotse beds (Van Waveren et al. 2007). The Jambi Flora is probably best characterized as a late Early Permian temperate subgroup of the true low-latitude Cathaysian floral province.

The age of the Jambi flora is Early Permian, probably Late Asselian or Sakmarian, but exactly what stage within the Early Permian remains to definitively established (see discussion of fusulinids above).



Figure X.5.10. Permian flora from the Merangin River area, West Jambi, West Sumatra: 1. *Lepidodendron mesostigma*, Mengkarang River; 2. *Pecopteris arborescens*, Sungei Garing (Jongmans and Gothan 1925, 1935).

Permian plant assemblages are also known from West Papua, both the Birds Head and areas south of the Central Range. They were first described by Jongmans (1940, 1941), who documented only Cathaysian and Euramerican species (*Taeniopteris*, *Pecopteris*, *Sphenophyllum*). Hopping and Wagner (in Visser and Hermes 1962) also recognized Gondwanan *Glossopteris* and *Vertebraria*. The West Papua floras are generally viewed as mixed floras, dominated by Gondwanan elements, but with common Cathaysian elements (Asama et al. 1975, Li and Wu 1994, Rigby 1998, 2001).

A poorly known Permian plant assemblage was also reported from SE Belitung island by Van Overeem (1960). It was provisionally identified by Jongmans as a Permian Cathaysian (*Gigantopteris*) flora, but has never been described. No plant fossils are known from Timor, where Permian sediments are in marine facies.

The existence of mixed Gondwanan- Cathaysian floras in West Papua (and in parts of mainland SE Asia like Thailand and Laos is significant for Permian plate reconstructions. Because *Glossopteris* and many Cathaysian plants like *Gigantopteris* have relatively large seeds, which are unlikely to be dispersed across wide oceans. These mixed Permian floras therefore suggest some configuration of land connections (with only very narrow seaways) between the 'Cathaysian' and Gondwana provinces in Permian time, not a wide Paleotethys Ocean.

TABLE 12 - PERMIAN

FAUNA/FLORA	AREA	REFERENCES
Permian General	Timor	Wanner 1926, Charlton et al. 2002
	Sumatra	Fliegel 1901, Fontaine and Gafoer 1989
Mixed <i>Glossopteris</i>-Cathaysian flora	West Papua,	Jongmans 1940, 1941, Hopping and Wagner in Visser and Hermes 1962, Rigby 1997, 1998, 2001, Playford and Rigby(2008, Srivastava and Agnihotri 2010
'Cathaysian' flora	West Sumatra	Posthumus 1927, Jongmans and Gothan 1935, Asama 1976, Li and Wu

		1994, Van Waveren et al. 2005, 2007, Booi et al. 2008, 2009
	Belitung	Jongmans in Van Overeem 1960
	NW Kalimantan	Jongmans in Zeijlmans 1939
Palynoflora	West Papua	Playford and Rigby 2008
	Australia	Kemp et al. 1977
Permian- E Triassic Radiolaria	Malay Peninsula	Sashida et al. 1993, 1995, Spiller and Metcalfe 1994, 1995, Jasin 1997
	Thailand	Kamoto et al. 2008, 2013
Crinoids	Timor	Wanner 1916, 1923, 1929- 1951, De Maresz Oyens 1940
	Belitung	Strimple and Yancey 1976
Blastoids	Timor	Wanner 1924, 1940, Breimer and Macurda 1965, 1972, Webster 1998, Sprinkle and Waters 2013
Ammonoids	Timor, Leti	Wanner 1915, 1932, Haniel 1915a,b, Smith 1927, De Roever 1940, Gerth 1950, Furnish and Glenister 1971, Glenister et al. 1973
	Bangka/Belitung	Kruizinga 1950,
	West Papua	Glenister et al. 1983
Molluscs	Timor	C. Wanner 1922, 1940, 1942, J. Wanner 1940, Hasibuan 1994
	Sumatra	Fliegel 1901
	West Papua	Dickins and Skwarko 1981
Brachiopods	Sumatra	Fliegel 1901, Meyer 1922, Tan Sin Hok 1933, Hasibuan et al. 2000, Crippa et al. 2014
	Timor, Leti, Roti	Rothpletz 1892, Broili 1915, 1916, 1922, Krumbeck 1924, Hamlet 1928, Wanner and Sieverts 1935, Shimizu 1966, Archbold and Barkham 1989, Archbold and Bird 1989, Kato et al. 1999, Winkler Prins 2008
	West Papua	Visser and Hermes 1962, Archbold 1981, 1991, Archbold et al. 1982
Permian Fusulinid foraminifera	West Sumatra	Geinitz 1876, Volz 1904, Von Staff 1909, Lange 1925, Ozawa 1929, Tan Sin Hok 1933, Thompson 1936a,b, Hahn and Weber 1981, Fontaine 1983, Vachard 1989, Ueno 2003, 2006
	South Sumatra	De Neve 1949, 1961
	Bangka, Belitung	De Roever 1951, Van Overeem 1960
	NW Kalimantan/ W Sarawak	Krekeler 1932, 1933, Tan Sin Hok (in Krekeler 1933), Cummings 1962, Sanderson 1966, Fontaine 1990, Vachard 1990, Sakamoto and Ishibashi 2002
	NE Kalimantan (Upper Kutai)	Tan Sin Hok 1930, Sugiaman and Andria 1999
	Timor, Roti, Leti	Schubert 1915a,b, Thompson 1949, Nogami 1963, Charlton et al. 2002, Davydov et al. 2013
	West Papua	Visser and Hermes 1962
Tubiphytes	Sumatra	Tien 1986
	Timor	Riding and Barkham 1999 (= <i>Shamovella</i>)
Corals	Timor	Gerth 1921, Koker 1924, Wang 1947, Von Schouppe and Stacul 1955, 1959, Minato and Kato 1965, Niermann 1975, Sorauf 1984, 2004
	West Sumatra	Volz 1904, Minato and Kato 1965, Nguyen Duc Tien 1989a,b
	Thailand	Fontaine et al. 1994
Smaller foraminifera	Sumatra	Nguyen Duc Tien 1989a,b
	Sibumasu	Zhao and Zhou 1987, Wang et al. 2013
Conodonts	Timor	Van den Boogaard 1987
	SE Asia	Mei and Henderson 2001, 2002
Ostracodes	Timor	Grundel and Kozur 1975, Bless 1987

X.6. Quaternary Hominids, Mammals

This sub-chapter X.6 of Bibliography 7.0 contains 935 papers on Quaternary mammals, including hominids, from the Indonesian region, as well as related forms from mainland SE Asia. Additional titles on this topic may be in area chapters.

Indonesia has long been an area of great interest for the study of the Late Pliocene- Pleistocene vertebrate faunas, including hominids, and their evolution and dispersal from mainland Asia across the islands of Java, Sulawesi and farther East. There are many additional papers on this large field of research, but not all could be included in this bibliography. Early 1900's milestone work has been by Dubois and Von Koenigswald.

Relatively rich Eocene and Miocene land mammal assemblages are known from Thailand, Myanmar and other areas of mainland SE Asia. Remarkably, no equivalent deposits are known from Indonesia, although parts of Sumatra and Kalimantan must have been land areas at that time, with likely land bridges to mainland SE Asia. Only two presumably Eocene mammal occurrences are known from Indonesia: remnants of acanthrotheres from Kalimantan (Stromer 1931) and an enigmatic occurrence on Timor (Von Koenigswald 1967, Ducrocq 1996).

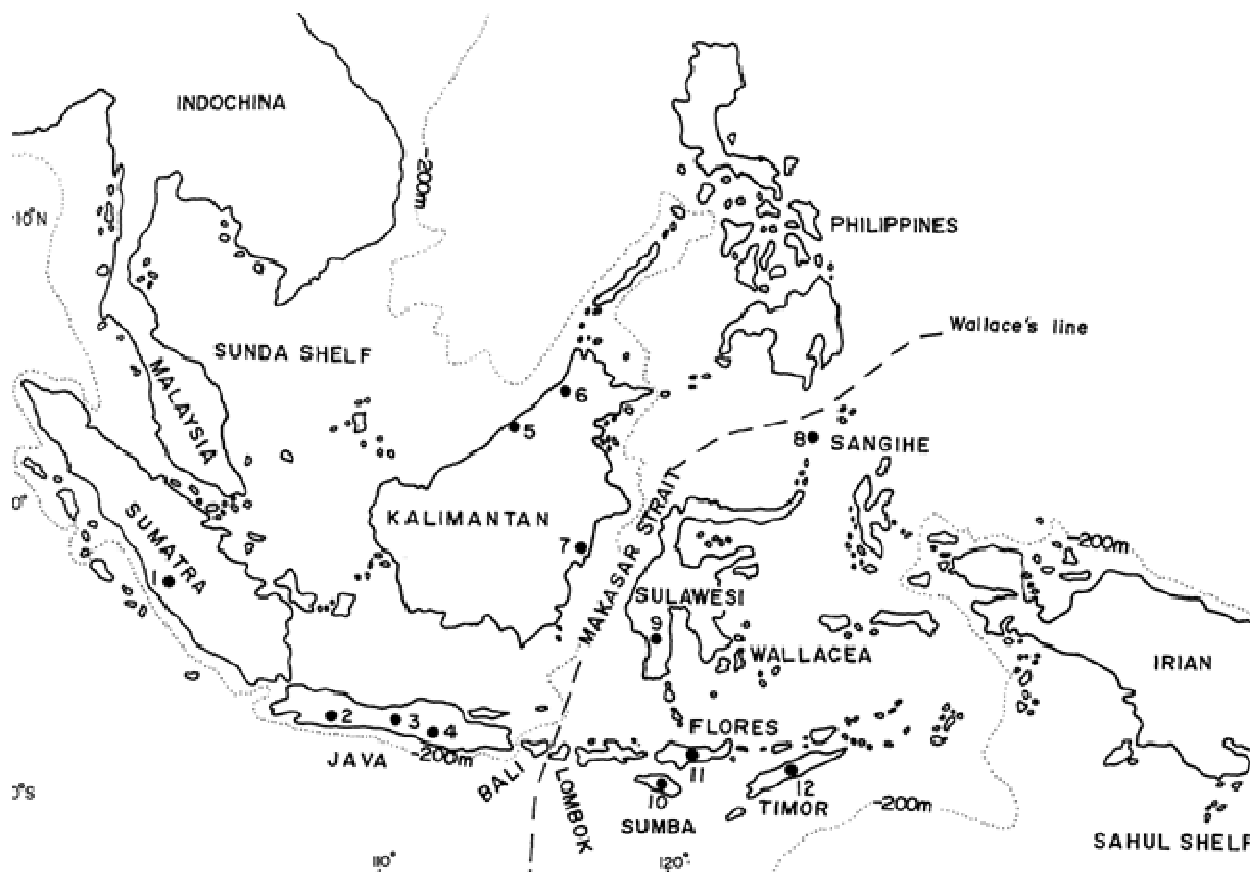


Figure X.6.1. Main Quaternary vertebrates localities in Indonesia (Aziz et al. 1995). 1. Padang Highlands (Lidah Ayer, Jambu and Sibrambang caves), 2. West Java (Cijulang, Cijurey, Citarum, etc), 3. Central Java (Bumiayu, Sangiran, and Patiayam), 4. East Java (Trinil, Kedungbrubus, Ngandong, Widodaren, Sampung, Wajak, Mojokerto), 5. North Borneo (Niah Cave), 6. Brunei, 7. East Kalimantan (Samarinda), 8. Sangihe Island : (Pintareng), 9. South Sulawesi (Walanae), 10. Sumba (Kawangu), 11. Flores (Ola Bula, Ola Kile, Mata Menge (Bajawa Area), 12. Timor (Atambua).

Land mammals started to appear on Java, Sulawesi and Flores relatively late in geologic history, i.e. at around 2.5 Ma (or later?), as these areas emerged to form more significant land areas during Late Pliocene-Pleistocene tectonic uplift processes and volcanism.

Migration of land mammals from the SE Asia mainland to Java was also facilitated during Pleistocene glacial periods of sealevel lowstands, when the Sunda shelf was largely exposed and became the most likely migration route (e.g Sartono 1987).

Pre-Pleistocene mammal fossils are extremely rare in Indonesia, although relatively diverse mammal assemblages are known from the Eocene- Pliocene of mainland SE Asia. This is probably mainly a reflection of the rarity of pre-Pleistocene terrestrial deposits in the archipelago. Eocene acanthocerids (*Hippopotamus* family), common in Asia at that time, were reported from West Kalimantan and from Timor. The latter find is another indication that parts of what is now Timor Island ('Banda Terrane') may have been attached to Sundaland in Eocene time.

Present-day distributions of faunas and floras still reflect plate tectonic past history. Well-known biogeographic boundaries like the Wallace Line (1869), separating balanced Asian/Sundaland faunas from unbalanced island faunas on Sulawesi, Flores and islands farther East, and Lydekkers Line, separating the Australian faunas of Australia and New Guinea in the SE from the impoverished island faunas to its West.

The history of latest Pliocene- Recent terrestrial vertebrate evolution and dispersal is best documented on Java, where there is a succession of faunas reflecting island conditions in the (latest Pliocene-) Early Pleistocene (Satir Fauna), followed by the arrivals of more diverse Asian mammal populations (including *Homo erectus*) in the Middle Pleistocene around 1 Ma (Figure X.6.2).

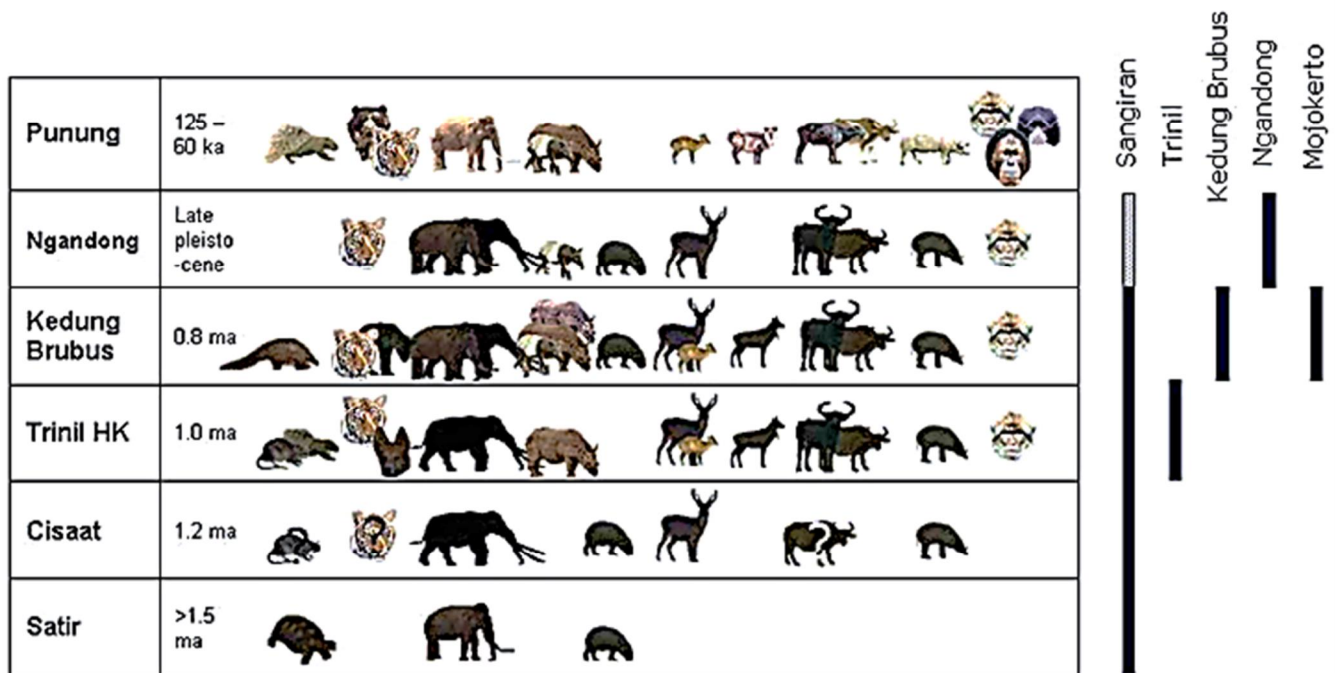


Figure X.6.2. Succession of Pleistocene mammal assemblages of Java (De Vos 1995).

Pleistocene vertebrate faunas from SW Sulawesi have also been interpreted as impoverished island faunas of Asian origin.

Island faunas

Early island populations are typically composed of a limited number of migrant species of Asian origin that are relatively good swimmers (elephants, hippos, deer; not humans or other predators). In the absence of carnivorous predators, mammal species commonly developed into either dwarfed species (pygmy *Stegodon* elephants) or giants (giant tortoises, rats, Komodo lizards, etc.) in the Pleistocene of, Timor, SW Sulawesi and Sumba. Similar forms from East Java and West Java suggest these parts of Java were also islands in the Early Pleistocene.

Pleistocene hominids

The first fossil evidence for human evolution and migration came with the discovery of Java Man (*Pithecanthropus erectus*; now called *Homo erectus*) at Trinil by Dubois in 1891. Finding this rare material was a remarkable story of perseverance and luck. Additional *Homo erectus* fragments were reported in the 1930s and later.

Younger, but still primitive Upper Pleistocene hominid fossils were found in a Solo River terrace at Ngandong in East Java, named *Homo soloensis* (Solo Man) and represent another much-debated group of hominids transitional between *H. erectus* and *H. sapiens*. Latest age dating of these skulls is in the 40-70 ka range.

The incomplete fossil record, the often poorly documented stratigraphic positions of much of the fossil hominid material (much of it collected by local farmers), and the notoriously inconsistent results of various radiometric direct dating methods of hominid fossils still leaves much room for debate on timing of arrivals, evolution and extinctions of hominids in the SE Asia region.

The most widely accepted interpretation of *Homo erectus* history has been an evolutionary transition from *Homo habilis* in East Africa around 1.8-1.6 Ma and a migration into SE Asia/ Java around 1.0 Ma. However, Swisher et al. (1994) reported a radiometric age of 1.81 Ma for a *Homo erectus* skull from Mojokerto, East Java, the oldest date for any *Homo erectus*, and suggested it therefore probably originated in Asia instead of Africa. However, their dating is on tuff samples that may not be from the same horizon as the *Homo erectus* skull (De Vos and Sondaar 1994). Some recent Ar/Ar dating of pumice layers at Sangiran dome yielded an age range of the *Homo erectus*-bearing interval between 1.51- 1.01 Ma.

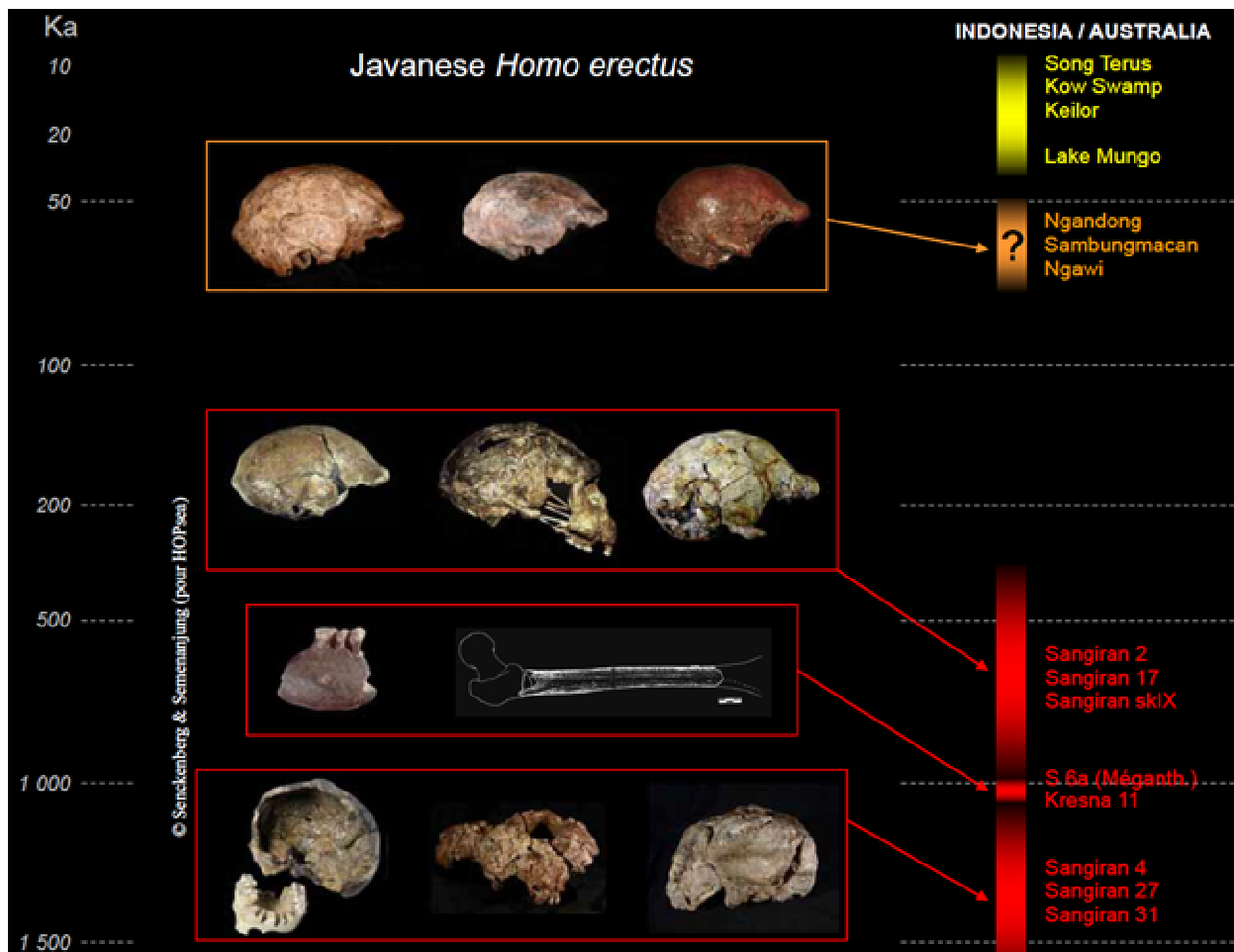


Figure X.6.3. Examples of *Homo erectus* fossils from Java (from T. Ingicco presentation). There is an apparent half-million year gap in the fossil record of Java between older *Homo erectus* of Sangiran- Trinil and younger populations from Ngandong- Sambungmacan (actual gap may actually be wider than indicated here)

Homo floresiensis

The Liang Bua cave on Flores island was the site of the latest significant discovery of a cave-dwelling, dwarf population of hominids of Late Pleistocene age (95-13 ka). It was named *Homo floresiensis*, adults are only one meter tall, and it may overlap in time with Solo Manqand with modern man (*Homo sapiens*). One of the more recent age estimates places *H. floresiensis* between ~100- 60 ka (Sutikna et al. 2016)

This discovery has been the subject of much debate. Most authors view it as a late descendants of the *Homo erectus* group, that underwent dramatic island dwarfism, although many of its characteristics are more like *Homo erectus* that is older than the Central Java *H. erectus* (e.g. Kaifu et al. 2011, 2015). Others viewed it as aberrant forms of early *Homo sapiens*, affected by diseases like Down syndrome or microcephalism (Henneberg et al. 2008, 2014 and others). Jacob et al. (2006) and others have argued that these Flores hominids should be regarded as a dwarf population of *Homo sapiens*. Brown & Maeda (2009) and Argue et al (2017) argued that *H. floresiensis* are not descendants of either *H. erectus* or *H. sapiens*.

Older *Homo erectus* may have reached the island of Flores by 0.8 Ma, as suggested by relatively well-dated stone tools from the Mata Menge site, associated with a *Stegodon* mammal assemblage and tektites of the Australasian tektite event of ~780 ka (Maringer & Verhoeven 1970, Sondaar et al. 1994, Morwood et al. 1997, Van den Bergh et al. 2009). The stone tools resemble those from Sangiran, C Java (Van Heteren and De Vos 2012), which are associated with classic *H. erectus*. Initially no hominid fossils were found at this site, but recent excavations yielded *H. erectus* or *H. floresiensis*-like mandible and teeth. (Van de Bergh et al. 2016).

As in Central Java, there is a significant gap in the fossil record of hominids and other mammals in Flores between the ~800ka and the younger than 100 ka hominid assemblages.

Arrival of modern humans (*Homo sapiens*)

Anatomically modern humans (*Homo sapiens*) are commonly believed to have migrated from Africa, and arrived into island SE Asia by 75- 80 ka and reached Australia ~50,000 years ago (Oppenheimer 2009). Recent dating of deposits and fossils associated with Late Pleistocene modern human teeth excavated in a cave in West Sumatra by Dubois (1891) appears to confirm an arrival date before ~70 ka (Westaway et al. 2017).

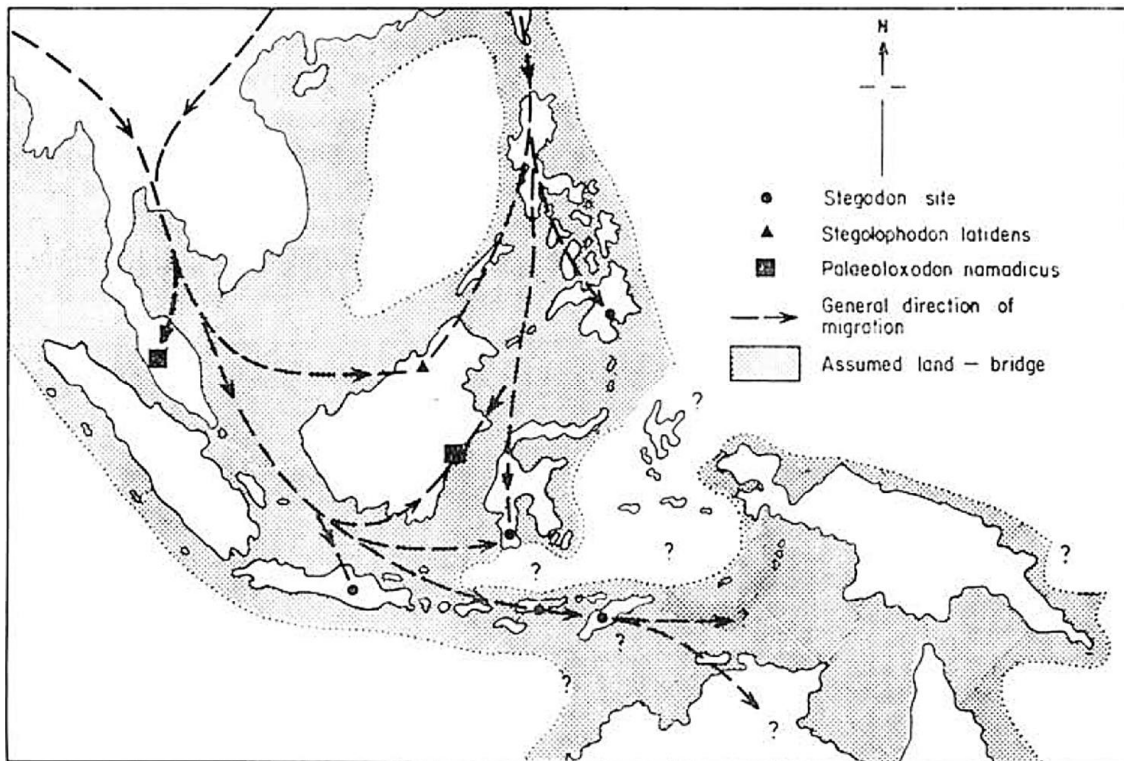


Figure X.6.4. Paleogeography of Southeast Asia during Pleistocene, showing land areas during sea level lowstands and likely general mammal migration routes (Sartono 1973)

Mammal migration routes

Several authors have speculated on the possible migration routes and times of migration of mammals (including hominids) from SE Asia (e.g. Sartono 1973, Fig. X.6.4).

Obvious times of migration would be during Pleistocene glacially-driven sealevel lowstands, like the -120m sealevel drop at the Last Glacial Maximum at ~18,000 years ago or the -160m drop at ~160,000 years ago (e.g. Molengraaff, Voris 2000). These lowered sea levels would have exposed all of the Sunda Shelf, making for easy migrations into Sumatra and Borneo and into S Sulawesi from the south, but also would have narrowed some of the seaways to islands further East.

Possible land bridges and likely migration routes into Eastern Indonesia and the Philippines were discussed by Heaney 1985, Sartono 1973, 1987, Tjia 2006, De Vos 1995, etc.

Some suggested reading (not a comprehensive list of all relevant papers)

- Pleistocene mammals:
(mainly Java) *Van der Maarel 1931, 1932, Van Es 1931, Von Koenigswald 1933-1949, Hooijer 1952-1957, Sartono 1969-1979, Audley Charles and Hooijer 1973, Bartstra 1974-1994, De Vos et al. 1982, 2007, De Vos 1983-1996, Sondaar 1984, Van den Bergh et al. 1996, 2001, Aziz 2000, Zaim 2002*
- Pleistocene mammals SW Sulawesi:
Van Heekeren 1958, Hooijer 1950, Bartstra 1977, 1997, Sartono 1979, Aziz 1990, Van den Bergh 1999
- Eocene mammals: *Stromer 1931, Von Koenigswald 1967, Ducroq 1996*
- Hominid dispersal(s) *Sartono 1973, Heaney 1985, Sondaar 1989, Aziz et al. 1995, Dennell 2004, Oppenheimer 2009, Dennell and Petraglia 2012*
- Hominids Java: *Dubois 1891, Zwierzycki 1926, Oppenoorth 1932, Von Koenigswald 1936, 1938, 1940, Sartono 1961-1991, Jacob 1973-1981, De Vos and Sondaar 1994, Suminto et al. 1996, Rightmire 1993, Huffman et al. 1999, 2006, Van den Bergh et al. 2001, Storm et al. (1992-2013), Larick et al. 2001, 2004, Bouteaux et al. 2007, 2008, Yokoyama et al. 2008, Morwood et al. 2008*
- Hominids Sumatra *Westaway et al. 2017*
- Hominids Flores: *Van den Bergh et al. 1996, Morwood et al. 1998, 2004, 2005, Brown et al. 2004, Roberts et al. 2009, Dennell et al. 2014, Sutikna et al. 2016.*

X.1. Quaternary-Recent faunas-microfloras and distribution

Adisaputra, Mimin K. (1985)- Paleontological analyses of the Savu and Lombok basins and Argo abyssal plain. Proc. 14th Ann. Conv. Indon. Assoc. Geol. (IAGI), p. 205-221.

Adisaputra, Mimin K. (1988)- Late Quaternary calcareous nannoplankton in the surface sediment of Makasar and Flores basin, Indonesia. Bull. Marine Geol. Inst. Indonesia 3, 1, p. 25-36.

Adisaputra, Mimin K. (1989)- Planktonic foraminifera in recent bottom sediments of the Flores, Lombok and Savu Basins, eastern Indonesia. In: J.E. van Hinte et al. (eds.) Proc. Snellius II Symposium, Jakarta 1987, Netherlands J. Sea Research 24, 4, p. 465-475.

*(Planktonic foraminiferal assemblages differ between Flores, Lombok and Savu Basins. In Flores Basin *Ng. dutertrei* dominant, followed by *Gr. menardii*, *Pulleniatina obliquiloculata*, *Hastigerina siphonifera* and *Globigerina bulloides*. Lombok and Savu Basins dominated by *Gr. menardii*, with *Pulleniatina obliquiloculata*, *Gs. ruber* and *Gr. tumida*)*

Adisaputra, Mimin K. (1991)- Mikrofauna dan potensi wisata perairan Benoa, Bali. J. Geologi Sumberdaya Mineral 1, 2, p. 2-6.

*(Microfauna and recreational potential of the water of Benoa, Bali'. Beach sand at Benoa, S of Denpasar, SE Bali, contains abundant foraminifera of genus *Schlumbergerella*, also *Amphistegina lessoni*, *Calcarina calcar*, *Tinoporus spengleri*, *Baculogypsisna sphaerulata*, *Operculina*, etc.)*

Adisaputra, Mimin K. (1992)- Mikrofauna perairan Muria. J. Geologi Sumberdaya Mineral 2, 5, p. 11-16.

*(Microfauna in the waters of Muria'. Shallow marine small benthic forams of Java Sea N of Muriah volcano. At less than 20m common *Ammonia beccarii*, *Eponides praecinctus* and *Asterorotalia trispinosa*. In deeper parts more *Ammonia annectens*, *Pseudorotalia schroeteriana* and *Quinqueloculina*. Not much detail)*

Adisaputra, Mimin K. (1992)- Late Neogene planktonic foraminifera of the Makasar Basin. Bull. Marine Geol. Inst. 7, 1, p. 15-21.

*(Abundant planktonic foraminifera in Makassar Straits bottom samples between 42-2300m, collected during Snellius II expedition. *Globigerinoides ruber* dominant in North, *Neogloboquadrina dutertrei* in S part)*

Adisaputra, Mimin K. (1996)- Planktonic foraminifera and oxygen isotope records in two cores from the Banda Sea and Indian Ocean. J. Geologi Sumberdaya Mineral 6, 57, p. 10-17.

*(Study of Quaternary planktonic foraminifera from two ~7-8m long French- Indonesian cores collected in 1990, one SW of Timor (2313m), one in Banda Sea depth (3163m). *Neogloboquadrina dutertrei* is indicator of rel. low salinity, *Globorotalia menardii* for rel. high salinity)*

Adisaputra, Mimin K. (1996)- Biostratigrafi kuartar sedimen dasar laut perairan Indonesia bagian Timur dan Samudera Hindia. J. Geologi Sumberdaya Mineral 6, 59, p. 2-6.

*(Stratigraphy of Quaternary seafloor sediments in waters of eastern Indonesia and the Indian Ocean'. Study of Quaternary planktonic foraminifera from 46 seven meter long seafloor cores in deep waters of E Indonesia and adjacent Indonesian Ocean. Four subzones in Quaternary *Globorotalia truncatulinoides* zone (N22-N23), from top: (1) *Globorotalia fimbriata-Bolliella adamsi*, (2) *Globigerina calida*, (3) *Globorotalia crassaformis hessi* and (4) *Globigerinoides cyclostomus*)*

Adisaputra, Mimin K. (1997)- Foraminifera sedimen permukaan perairan Selat Bangka-Belitung. J. Geologi Sumberdaya Mineral 7, 70, p. 2-10.

*(Foraminifera from seafloor sediments of Bangka-Belitung Straits'. 38 seafloor samples from straits S of Bangka and Belitung in water depths 10-50m. Dominant foraminifera *Operculina ammonoides* and other spp., followed by *Quinqueloculina*, *Amphistegina lessonii*, *Elphidium*, *Cellanthus*, *Pseudorotalia schroeteriana*, etc.)*

Adisaputra, Mimin K. (1998)- *Schlumbergerella floresiana* accumulation in coastal zone of Bali and Nusatenggara, Indonesia: implementation for tourism. Proc. 33rd Sess. Coord. Comm. Coastal and Offshore Programmes E and SE Asia (CCOP), Shanghai 1996, p. 310-316.

('White sands' along coasts of E Bali, W Lombok, N Sumbawa and S Flores composed mainly of rounded foraminifera Schlumbergerella floresiana (formerly also called Tinoporus, Baculogypsina, Baculogypsinoides; JTvG). Forams derived from adjacent coral reefs)

Adisaputra, Mimin K. (1998)- Foraminifera bentos pantai Senggigi, Lombok Barat dan asosiasinya; faktor penunjang pariwisata. Proc. 27th Ann. Conv. Indon. Assoc. Geol. (IAGI), 2 (Sed. Pal. Strat.), Yogyakarta, p. 53-65.

('Benthic foraminifera of Senggigi Beach, W Lombok, and its associations; factors supporting tourism'. Senggigi beach with abundant foraminifera derived from adjacent reef flat, dominated by Schlumbergerella floresiana. Also Baculogypsina, Baculogypsinoides spinosus, Amphistegina lessonii, Calcarina calcar)

Adisaputra, Mimin K. (2000)- Recent foraminifera on the coast and offshore of East Lombok, Eastern Indonesia. Proc. 36th Sess. Coord. Comm. Coastal and Offshore Progr. E and SE Asia (CCOP), Hanoi 1999, p. 181-200.

(Benthic foraminifera from East Lombok coast and Alas Strait shallow waters down to 90m. In N and central parts Amphistegina lessonii dominant and associated with Calcarina. In S Asterorotalia ('Rotalinoides') gaimardii dominant, still with Amphistegina. Beach samples in N with common Schlumbergerella and Baculogypsinoides, derived from coral reef. Planktonic foraminifera rare)

Adisaputra, Mimin K. (2000)- Late Neogene planktonic foraminiferal biostratigraphy of two cores in Timor waters, Indonesia. Majalah Geologi Indonesia 24, 1, p. 39-50.

Adisaputra, Mimin K. & M. Hendrizen (2011)- Foraminifera perairan Balikpapan, Kalimantan Timur: lingkungan pengendapan dan pengaruhnya. J. Geologi Kelautan 9, 2, p. 119-133.

(online at: <http://ejournal.mgi.esdm.go.id/index.php/jgk/article/view/205/195>)

('Foraminifera from waters off Balikpapan, East Kalimantan: depositional environment and its effects'. 195 benthic and 34 planktonic foraminifera species in Makassar Straits seafloor samples off Balikpapan, between 18-562m depth. Asterorotalia trispinosa dominant around 20m, Heterolepa praecincta most abundant from ~50-300m, Karreriella brady and Uvigerina spp. common only >300m, etc. Cycloclypeus only at 71 and 83m. Abundant planktonic foraminifera Neogloboquadrina dutertrei below 100m, indicating rel. low salinity.)

Adisaputra, Mimin K., M. Hendrizen & A. Kholiq (2010)- Katalog foraminifera perairan Indonesia. Pusat Puslitbang Geologi Kelautan, Bandung, p. 1-198.

('Catalog of Foraminifera collected from Indonesian seas')

Adisaputra, Mimin K. & D. Rostyati (2000)- Recorded Recent foraminifera in the surface sediment of Sunda Strait water. Proc. 29th Ann. Conv. Indon. Assoc. Geol. (IAGI), Bandung, 4, p. 117-132.

(Foraminifera from 12 seafloor samples in Sunda Straits and adjacent Indian Ocean between 52- 2180m. Rel. common planktonic foram Neogloboquadrina dutertrei, possibly related to rel. low salinity. Most common benthics Bulimina and Bolivina (mostly 490-1580m). Hyaline balthica between 489-1078m)

Adisaputra, Mimin K. & D. Rostyati (2003)- Foraminifera sedimen dasar Laut Delta Mahakam, Kalimantan Timur. J. Geol. Kelautan 1, 3, p. 1-10.

(online at: <http://ejournal.mgi.esdm.go.id/index.php/jgk/article/view/98/88>)

('Foraminifera in sediments offshore Mahakam Delta, E Kalimantan'. Forams distribution in samples mainly from 10-100m water depth. 39 species of planktonic, 149 benthic foraminifera. Common benthics Amphistegina lessonii, Heterolepa, Operculina and Pseudorotalia schroeteriana. Max. diversity at depth of 63,5 m)

Amijaya, H., Ngisomuddin & Akmaluddin (2010)- Characterization of July 17, 2006 tsunamiite at South coast of West Java. J. Southeast Asian Applied Geol. (UGM) 2, 1, p. 35-39.

(online at: <https://journal.ugm.ac.id/index.php/jag/article/viewFile/7232/5672>)

(Deposits of July 26 tsunami at Pangandaran Beach, W Java. Mainly f-m sand, ~10-12cm thick, separated from older beach sediment by erosional surface. Sedimentary structures parallel lamination and current ripples. No vertical fining trends. With transported shallow and deeper marine benthic foraminifera, incl. *Ammonia*, *Elphidium*, *Amphistegina*, *Cibicides* sp., *Biginerina*, *Bolivina*, *Bathysiphon*, *Nodosaria* and *Quinqueloculina*)

Anderson, J.A.R. (1963)- The flora of the peat swamp forests of Sarawak and Brunei, including a catalogue of all recorded species of flowering plants, ferns and fern allies. Singapore Gardens Bull. 20, p. 131-228.
(All modern coastal and deltaic peat swamps of N Borneo raised bog type. 243 plant/tree species, in 6 communities: 1) Mixed swamp forest, 2) Alan forest, 3) Alan bunga forest, 4) High pole forest, 5) Low pole forest, 6) Padang keruntum)

Aswan, Y. Zaim & Y. Rizal (2006)- Distribution of Quarternary freshwater molluscs fossils in Jawa. In: Y. Zaim et al. (eds.) S. Sartono: dari hominid ke delapsi dengan kontroversi, Penerbit ITB, Bandung, Chapter 9, p. 109-120.

Auliaherliaty, L., K.T. Dewi & Y.A. Priohandono (2004)- Foraminifera di Teluk Sepi- Blongas, Lombok selatan, Nusa Tenggara Barat dan kaitannya dengan faktor lingkungan. J. Geologi Kelautan 2, 3, p. 1-8.
(online at: <http://ejournal.mgi.esdm.go.id/index.php/jgk/article/view/115/105>)
(Seafloor sediment samples of 1-78m in Sepi-Blongas Bay, S Lombok, with 133 foraminiferal species, mainly *Ammonia beccarii*, *Elphidium crispum*, *Pattelina*, *Amphistegina lessonii*, *Calcarina*, *Pyrgo*, *Quinqueloculina*, etc.. Genus *Calcarina* with 15 species (?))

Baccaert, J. (1976)- Soritidae of the Lizard Island reef complex: a preliminary report. Annales Soc. Geologique Belgique 99, p. 237-262.
(Eight species of soritids, incl. *Marginopora vertebralis*)
(online at: <http://popups.ulg.ac.be/0037-9395/index.php?id=5368&file=1&pid=5366>)

Baccaert, J. (1986)- Foraminiferal bio- and thanatocoenoses of reef flats, Lizard Island, Great Barrier Reef, Australia: nature of substrate. Annales Soc. Royale Zoologique Belgique 116, 1, p. 3-14.

Baccaert, J. (1987)- Distribution patterns and taxonomy of benthic foraminifera in the Lizard Island reef complex, northern Great Barrier Reef, Australia. Ph.D. Thesis, Universite de Liege, 3 vols., 146p, 290p.

Barbin, V., J.C. Cailliez & D. Decrouez (1987)- Sable a *Schlumbergerella floresiana* (foraminifere) et *Conus mobilis skinneri* (gasteropode) de Kesuma Sari (SSE Bali, Indonesie). Revue Paleobiologie, Geneve, 6, 1, p. 159-164.
(Sands composed of large globular foram *Schlumbergerella floresiana* and *Conus* gastropods in SE Bali)

Barker, R.W. (1960)- Taxonomic notes on the species figured by H.B Brady in his report on the foraminifera dredged by the H.M.S. "Challenger" during the years 1873-1876. Spec. Publ. SEPM 9, p. 1-238.
(Useful taxonomic revision of beautifully illustrated modern deep water foraminifera book of Brady (1884) (see also Jones (1994))

Barmawidjaja, D.M. (1991)- Studies in living and fossil foraminifers from seasonally productive regions. Ph.D. Thesis University of Utrecht, Geologica Ultraiectiana 82, p. 1-221.
(online at: <http://dspace.library.uu.nl/handle/1874/238680>)
(Collection of papers on subrecent foraminifera in Adriatic Sea, semi-enclosed Kau Basin (Halmahera; sill depth 40m) and Molucca Sea. Three categories of species: epifaunal, predominantly infaunal and infaunal. Kau Basin, Halmahera was freshwater lake during Last Glacial Maximum, became reconnected with open ocean about 10 ka due to sea level rise at Pleistocene- Holocene transition. Dysoxic bottom conditions prevailed throughout Holocene. Piston core off Halmahera in N Molucca Sea suggest Pleistocene glacial climate was drier than today and surface water T 2.5° C lower than today)

- Barmawidjaja, D.M. (1993)- Holosen bentos foraminifera dan sebaran mikrohabitat di Teluk Kau. Proc. 22nd Ann. Conv. Indon. Assoc. Geol. (IAGI), Bandung, 2, p. 1114-1129.
(*Holocene benthic foraminifera and microhabitat distribution of Kau Bay*)
- Barmawidjaja, D.M. (1994)- Pengaruh lingkungan terhadap sebaran foraminifera plangton di Teluk Kau, Halmahera. Proc. 23rd Ann. Conv. Indon. Assoc. Geol. (IAGI), 1, p. 173-183.
(*Influence of environment on planktonic foraminifera distribution in Kau Bay, Halmahera*)
- Barmawidjaja, D.M., R. Kapid & B. Dwiyanto (1996)- Environmental factors controlling the distribution of benthonic foraminifera of Jakarta Bay. Proc. 25th Ann. Conv. Indon. Assoc. Geol. (IAGI), 2, p. 1-15.
- Barton, E. S. (1901)- The genus *Halimeda*. In: M. Weber (ed.) Siboga Expeditie, Uitkomsten op zoologisch, botanisch, oceanographisch en geologisch gebied verzameld in Nederlandsch Oost-Indie 1899-1900, Monographie LX, Brill, Leiden, p. 1-32.
(online at: <http://images.algaebase.org/pdf/5964B9370f1d92EC18jmK2CED443/16210.pdf>)
(*Recent calcareous algae Halimeda rel. widespread in coastal reefs around of E Indonesia: LesserSunda Islands, Sulawesi, Aru and Kai islands and in Banda-Archipelago. Seven species distinguished*)
- Belasky, P. (1996)- Biogeography of Indo-Pacific larger foraminifera and scleractinian corals: a probabilistic approach to estimating taxonomic diversity, faunal similarity, and sampling bias. Palaeogeogr. Palaeoclim. Palaeoecology 122, p. 119-141.
(*On modern corals and larger foraminifera distribution in Indo-Pacific. Eastward decline in diversity due primarily to shallowing of thermocline and significant cooling of Equatorial Undercurrent in E Pacific*)
- Biekart, J.W. (1989)- The distribution of calcareous nannoplankton in Late Quaternary sediments collected by the Snellius II Expedition in some southeast Indonesian basins. Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam, B92, 2, p. 77-141.
(*Descriptions of Late Quaternary calcareous nannofossils in three Snellius II Expedition (1984-1985) cores from Savu Sea, Timor Trough and Lombok Ridge. Dominant species Florisphaera profunda*)
- Biekart, J.W. (1989)- Coccolithophores in the Upper Quaternary of some Indonesian basins. In: J.E. van Hinte et al. (eds.) Proc. Snellius II Symposium, Jakarta 1987, Netherlands J. Sea Research 24, 4, p. 523-530.
(*Quaternary calcareous nannofossils from E Indonesia piston cores dominated by Florisphaera profunda*)
- Biswas, B. (1976)- Bathymetry of Holocene foraminifera and Quarternary sea-level changes on the Sunda shelf. J. Foraminiferal Research 6, 2, p. 107-133.
(*Benthic foraminifera distribution on Sunda Shelf. Only 3 species in littoral zone of S China Sea, 107 species at shelf edge. Planktonic species 4% of total fauna at 20-30m, increasing to 65-80% at shelf edge*)
- Boichard, R., P.F. Buroillet, B. Lambert & J.M. Villain (1985)- La plate-forme carbonate du Pater Noster, Est de Kalimantan (Indonesie), etude sedimentologique et ecologique. TOTAL Comp. Francaise Petrole, Notes et Mem. 20, p. 3-101.
(*The carbonate platform of Paternoster, East of Kalimantan'. Well-documented sedimentological- ecological study by TOTAL personnel of Recent sediments on marine platform bordering SW Makassar Straits deepwater and its coral reef islands. All bottom samples are m-c grained carbonate sands. On reef islands mainly fragments of corals, algae and foraminifera, between reef complexes mainly benthic foraminifera. In some sheltered lows abundant Halimeda algae. On E slope of platform common planktonic foraminifera, coccoliths and glauconite*)
- Brady, H.B. (1884)- Report on the foraminifera dredged by H.M.S. Challenger during the years 1873-1876. H.M.S. Challenger Reports 9, Zool. XXII, p. 1-814.
(*Historic description of foraminifera from deep waters of SE Asia. For revisions of taxonomy see also Barker 1960 and Jones 1994*)

- Brady, G.S. (1880)- Report on the Ostracoda dredged by H.M.S. Challenger during 1873-1876. H.M.S. Challenger Reports 1, Zoology III, p. 1-184.
(Early descriptions of modern ostracods from Challenger seafloor samples, mainly from deep water SE Asia)
- Broecker, W.S., E. Clark, J. Lynch-Stieglitz, W. Beck, L.D. Stott, I. Hajdas & G. Bonani (2000)- Late Glacial diatom accumulation at 9°S in the Indian Ocean. *Paleoceanography* 15, 3, p. 348-352.
(10m-long section in core from 3800m depth at 9°S on Ninety-East Ridge, Indian Ocean, consists of 2/3 of diatom *Ethmodiscus rex* and 1/3 planktonic foraminifera. Age ~30 ka- 11 ka. During glacial time, Pacific Ocean thermocline waters may have moved above site, providing silica and nutrients required by diatoms)
- Bronnimann, P. & A.J. Keij (1986)- Agglutinated foraminifera (Lituolacea and Trochamminacea) from brackish waters of the state of Brunei and of Sabah, Malaysia, Northwest Borneo. *Revue Paleobiologie*, Geneve, 5, 1, p. 11-31.
- Bronnimann, P., A.J. Keij & L. Zaninetti (1983)- *Bruneica clypea* n.gen. n.sp., a Recent remaneicid (Foraminiferida; Trochamminacea) from brackish waters of Brunei, Northwest Borneo. *Revue Paleobiologie*, Geneve, 2, 1, p. 35-41.
- Bronnimann, P., J.E. Whittaker & L. Zaninetti (1992)- Brackish water foraminifera from mangrove sediments of southwestern Viti Levu, Fiji Islands, Southwest Pacific. *Revue Paleobiologie*, Geneve, 11, p. 13-65.
- Bronnimann, P. & J.E. Whittaker (1993)- Taxonomic revision of some Recent agglutinated foraminifera from the Malay Archipelago, in the Millett Collection, the Natural Museum of History, London. *Bull. British Museum (Natural History)*, Zoology, London 59, 2, p. 107-124.
- Burke, S.C. (1981)- Recent benthonic foraminifera of the Ontong Java Plateau. *J. Foraminiferal Research* 11, p. 1-19.
- Burke, S.C., W.H. Berger, W.T. Coulbourn & E. Vincent (1993)- Benthic foraminifera in box core ERDC 112, Ontong Java Plateau. *J. Foraminiferal Research* 23, p. 19-39.
- Carbonel, P. & T. Hoibian (1988)- The impact of organic matter on ostracods from an equatorial deltaic area, the Mahakam Delta- Southeastern Kalimantan. In: T. Hanai (eds.) *Evolutionary biology of ostracoda, its fundamentals and applications*, *Developments in palaeontology and stratigraphy* 11, Elsevier, p. 353-366.
(On ostracod fauna in Mahakam delta area. In front of delta mouth number of species decreases, *Hemicytheridea reticulata* relatively common, and ornamentation of polymorphic species decreases. Between delta mouths ornamentation increases, probably due to less degradation of organic matter here)
- Carpenter, W.B. (1883)- Report on the specimens of the Genus *Orbitolites* collected by H.M.S. Challenger during the years 1873-1876. H.M.S. Challenger Repts. 7, Zool. XXI, p. 1-47.
(online at: www.19thcenturyscience.org/HMSC/HMSC-Reports/Zool-21/htm/doc.html)
(Descriptions of Recent larger foram *Orbitolites complanata* from coast of Australia and Fiji (= *Marginopora vertebralis* Quoy and Gaimard; JTvG))
- Chaproniere, G.C.H. (1991)- Pleistocene to Holocene planktonic foraminiferal biostratigraphy of the Coral Sea offshore Queensland, Australia. *BMR J. Australian Geol. Geophysics* 12, 3, p. 195-221.
(online at: www.ga.gov.au/corporate_data/49552/Jou1991_v12_n3.pdf)
(Well-illustrated latest Pliocene- Holocene planktonic foraminifera biostratigraphy (N19-N23) in cores from Queensland and Townsville Troughs)
- Chen, C. & H.L. Lin (2017)- Applying benthic foraminiferal assemblage to evaluate the coral reef condition in Dongsha Atoll lagoon. *Zoological Studies* 56, 20, p. 1-16.
(online at: <http://zoolstud.sinica.edu.tw/Journals/56/56-20.pdf>)

(Recent foraminifera distribution in Dongsha Atoll, northern S China Sea. Porcelaneous foraminifera dominant (76%, 48 species, miliolids). Fourteen hyaline species (incl. common Calcarina))

Chen, C.W., K.Y. Wei, H.S. Mii & T.N. Yang (2008)- A Late Quaternary planktonic foraminiferal oxygen isotope record of the Banda Sea: chronostratigraphy, orbital forcing, and paleoceanographic implications. *Terrestrial Atmospheric Oceanic Sci.* 19, 4, p. 331-339.

(online at: <http://ntur.lib.ntu.edu.tw/bitstream/246246/172607/1/27.pdf>)

(Oxygen isotope time-scale based on planktonic foram Globigerinoides sacculifer at piston core site MD012380 in water depth 3232m in Banda Sea was established for past 820 ky. Spectral analysis of 18 O time-series reveals distinct periodicities of 100, 41, and 23 ky, indicating strong orbital forcing)

Cleary, D.F.R., L.E. Becking, N.J. de Voogd, W. Renema, M. de Beer, R.W.M. van Soest & B.W. Hoeksema (2005)- Variation in the diversity and composition of benthic taxa as a function of distance offshore, depth and exposure in the Spermonde Archipelago, Indonesia. *Estuarine Coastal Shelf Science* 65, p. 557-570.

Cleary, D.F.R. & W. Renema (2007)- Relating species traits of foraminifera to environmental variables in the Spermonde Archipelago, Indonesia. *Marine Ecology Progress Series* 334, p. 73-82.

(Dinoflagellate symbionts and an orbitoidal chamber arrangement in foraminifera linked to exposed reefs and hard substrate, whereas rhodophyte symbionts linked to sheltered reefs and sandy substrate. Etc.)

Cole, A.R., P.T. Harris & J.B. Keene (1995)- Foraminifers as facies indicators in a tropical macrotidal environment; Torres Strait-Fly River delta, Papua New Guinea. In: B.W. Flemming & A. Bartholomae (eds.) *Tidal signatures in modern and ancient sediments*, Int. Assoc. Sediment (IAS), Spec. Publ. 24, p. 213-223.

Collen, J.D. & D.W. Garton (2004)- Larger foraminifera and sedimentation around Fongafale Island, Funafuti Atoll, Tuvalu. *Coral Reefs* 23, 3, p. 445-454.

(Larger foraminifera common around Fongafale Island, Tuvalu. In shallow lagoon mainly larger foraminifera (Amphistegina lessonii, A. lobifera, Baculogypsina sphaerulata, Calcarina spengleri, Marginopora vertebralis, Sorites marginalis). In deeper water Halimeda replaces foraminifera)

Collins, A.C. (1958)- Foraminifera. In: *Great Barrier Reef Expedition 1928-29*, Scient. Reports, British Museum (Natural History), London, 6, 6, p. 335-437.

Coustillas, F. (1983)- Les facies recents de la plate-forme orientale de Kalimantan (Indonesie) et leur contenu micropaleontologique (foraminiferes benthiques). *Doct. Thesis Universite de Bordeaux*, p. 1-188.

(Recent facies of the eastern platform of Kalimantan and the micropaleontological content (benthic foraminifera))

Culver, S. J., E. Leorri, D.R. Corbett, D.J. Mallinson, N.A.M. Shazili et al. (2013)- Infaunal mangrove swamp foraminifera in the Setiu wetland, Terengganu, Malaysia. *J. Foraminiferal Research* 43, 3, p. 262-279.

(Mangrove swamp samples from Setiu wetlands of NE Peninsular Malaysia with 13 infauna taxa. Six taxa live in all cores: Ammobaculites exiguus, Bruneica clypea, Caronia exilis, Haplophragmoides, Siphotrochammina and Trochammina inflata. Upper mangrove swamp populations with Arenoparella mexicana (=Trochammina inflata mexicana), Haplophragmoides wilberti, Miliammina fusca, Miliammina obliqua, Trochammina inflata and calcareous Helenina anderseni. Low-mangrove-swamp and adjacent mudflat populations dominated by calcareous species such as Ammonia aoteana, Rosalina sp., Elphidium oceanicum, and Triloculina oblonga)

Culver, S.J., D.J. Mallinson, D.R. Corbett, E. Leorri, A.A. Rouf, N.A.M. Shazili, R. Yaacob, J.E. Whittaker, M.A. Buzas & P.R. Parham (2012)- Distribution of foraminifera in the Setiu estuary and lagoon, Terengganu, Malaysia. *J. Foraminiferal Research* 42, p. 109-133.

(Four benthic foram thanatofacies in Setiu wetlands of NE Peninsular Malaysia, related to variations in salinity and hydrodynamics: (1) low salinity estuarine: low diversity assemblage dominated by Ammotium directum, Trochammina amnicola, Miliammina fusca and Ammobaculites exiguus; (2) medium salinity lagoon: dominated by Ammobaculites exiguus; (3) high salinity estuary and lagoon: high diversity, dominated by A. exiguus and

Ammonia aff. *A. aoteana*; (4) normal marine salinity inlet and adjacent lagoon: high diversity dominated by *Amphistegina lessonii*, *Ammonia* aff. *A. aoteana*)

Cushman, J.A. (1917)- New species and varieties of foraminifera from the Philippines and adjacent waters: (Scientific Results of the Philippine Cruise of the Fisheries Steamer "Albatross" 1907-1910, No. 35). Proc. U.S. Nat. Museum 51, p. 651-662.

(online at: <https://repository.si.edu/handle/10088/15002>)

(Brief descriptions of new species of deep water foraminifera from Albatross Expedition in Philippines. No figures)

Cushman, J.A. (1919)- The relationships of the genera *Calcarina*, *Tinoporus* and *Baculogypsina* as indicated by recent Philippine material. U.S. Nat. Museum Bull. 100, 1, 4, p. 363-368.

(online at: <https://repository.si.edu/handle/10088/21244>)

Cushman, J.A. (1921)- Foraminifera of the Philippine and adjacent seas. US Nat. Museum Bull. 100, 4, p. 1-589.

(online at: <https://repository.si.edu/handle/10088/21264>)

(Extensive descriptions of Recent benthic and planktonic foraminifera from 600 shallow and deep water dredge samples collected during 'Albatross Expedition' around Philippines)

Cushman, J.A. (1924)- Samoan foraminifera. Publ. Carnegie Inst. Washington 342, 21, p. 1-75.

Cushman, J.A. (1932)- The foraminifera of the Tropical Pacific collections of the Albatross, 1899-1900, Part 1- Astrorhizidae to Trochamminidae. U.S. Nat. Museum Bull. 161, p. 1-84.

(online at: <https://repository.si.edu/handle/10088/10059>)

(Part 1 of descriptions of Recent foraminifera in deep water samples from around Equatorial Pacific islands)

Cushman, J.A. (1933)- The foraminifera of the Tropical Pacific collections of the Albatross, 1899-1900, Part 2- Lagenidae to Alveolinellidae. U.S. Nat. Museum Bull. 161, p. 1-79.

(online at: <https://repository.si.edu/handle/10088/10058>)

Cushman, J.A. (1942)- The foraminifera of the Tropical Pacific collections of the Albatross, 1899-1900, Part 3- Heterolidae and Buliminidae. U.S. Nat. Museum Bull. 161, p. 1-67.

(online at: <https://repository.si.edu/handle/10088/10057>)

(Descriptions of smaller bulimimid benthic foraminifera from tropical Pacific Ocean. For Part 4 of series see Todd 1965)

Cushman, J.A., R. Todd & R.J. Post (1954)- Recent foraminifera of the Marshall Islands: Bikini and nearby atolls, part 2, oceanography (biologic). U.S. Geol. Survey (USGS) Prof Paper 260-H, p. 319-384.

(online at: <http://pubs.usgs.gov/pp/0260h/report.pdf>)

(331 species from 195 samples from lagoons and outer slopes of Marshall Islands: Rongerik, Rongelap, Bikini and Eniwetok, range in depth from beach to 835 fathoms. Reef flat fauna characterized by common *Calcarina spengleri*, *Marginopora vertebralis*, *Homotrema rubrum*, *Miniacina miniacea*, *Carpenteria proteiformis* and *Amphistegina madagascariensis*. Lagoon fauna dominated by *A. madagascariensis* and *Heterostegina suborbicularis*)

Dalby, A.P., A. Kumar, J.M. Moore & R.T. Patterson (2000)- Preliminary survey of arcellaceans (Thecamoebians) as limnological indicators in tropical Lake Sentani, Irian Jaya, Indonesia. J. Foraminiferal Research 30, p. 135-142.

(On low diversity fresh water Thecamoebian assemblage in Lake Sentani, NE Papua)

Dawson, J.L., S.G. Smithers & Q. Hua (2014)- The importance of large benthic foraminifera to reef island sediment budget and dynamics at Raine Island, northern Great Barrier Reef. Geomorphology 222, p. 68-81.

(Larger foraminifera *Baculogypsina sphaerulata*, *Marginopora* and *Amphistegina* contribute 55% of calcareous sediment produced on Raine Island reef)

Dawson, S. (2007)- Diatom biostratigraphy of tsunami deposits: examples from the 1998 Papua New Guinea tsunami. *Sedimentary Geol* 200, 3-4, p. 328-335.

(Variable and often chaotic diatom assemblages can be attributed to tsunami waves incorporating and depositing diatoms from intertidal and offshore habitats during runup and subsequent backwash. Tsunami sand deposits have high % of broken diatom valves and dominance of centric (circular) species)

De, S. & A.K. Gupta (2010)- Deep-sea faunal provinces and their inferred environments in the Indian Ocean based on distribution of Recent benthic foraminifera. *Palaeogeogr. Palaeoclim. Palaeoecology* 291, p. 429-442.

(Distributions of 46 species of deep-sea benthic foraminifera from 131 core-top samples (322-5013 m) from across Indian Ocean. Two faunal provinces: (1) NW (Arabian Sea): with high organic flux and pronounced oxygen minimum zone (dominated by *Uvigerina peregrina*, *Robulus nicobarensis*, *Bolivinita* spp., *Bulimina aculeata*, *Bulimina alazanensis*, *Ehrenbergina carinata* and *Cassidulina carinata*); (2) S, SE and E Indian Ocean (dominated by *Nuttallides umbonifera*, *Epistominella exigua*, *Globocassidulina subglobosa*, *Uvigerina proboscidea*, *Cibicides wuellerstorfi*, *Cassidulina laevigata*, *Pullenia bulloides*, *Oridorsalis umbonatus*, *Gyroidinoides soldanii*), suggesting well-oxygenated, cold deep water)

Debenay, J.P. (2013)- A guide to 1,000 foraminifera from the Southwestern Pacific New Caledonia. IRD Editions, Montpellier, Publications Scient. Mus. Nat.Histoire naturelle p. 1-383.

(online at: http://horizon.documentation.ird.fr/exl-doc/pleins_textes/divers14-01/010058351.pdf)

(Descriptions and environmental conditions of 1000 species of Recent foraminifera found around New Caledonia)

Debenay, J.P. & G. Cabioch (2007)- Recent and Quaternary foraminifera collected around New Caledonia. In: Compendium of marine species of New Caledonia, Doc. Sci. Techn II-7, Inst. Rech. Dev., Noumea, p. 69-94.

(Online: www.ird.nc/biodec/downloads/Compendium/Version%20v%E9rrouill%E9e/Debenay-Cabioch-v.pdf)

(Listing and some illustrations of modern forams around New Caledonia)

Debenay, J.P. & C.E. Payri (2007)- Epiphytic foraminiferal assemblages on macroalgae in reefal environments of New Caledonia. *J. Foraminiferal Research* 40, 1, p. 36-60.

(online at: <http://jfr.geoscienceworld.org/content/40/1/36.full.pdf>)

(152 species of epiphytic foraminifera identified from New Caledonia)

De Deckker, P. & F.X. Gingele (2002)- On the occurrence of the giant diatom *Ethmodiscus rex* in an 80-ka record from a deep-sea core, southeast of Sumatra, Indonesia: implications for tropical palaeoceanography. *Marine Geology* 183, p. 31-43.

(Deep-sea core from water depth 2542 m off SE Sumatra shows 'blooms' of giant diatom *Ethmodiscus rex* in Indian Ocean during last glacial period, particularly in Last Glacial Maximum. Blooms caused by increases in salinity and nitrate levels near surface. No major upwelling recorded during glacial times. During glacial period Indonesian Archipelago was much drier, preventing low-salinity 'cap' at surface of oceans)

De Neve, G.A. (1949)- Foraminifera from the shore zone of the Islands of Roeang and Siao. *Chronica Naturae* 105, 4, p. 113-115.

(online at: <http://colonial.library.leiden.edu/...>)

(Recent benthic foraminifera in shoreline sands of islands between Sulawesi and Philippines. Mainly miliolids, *Robulus*, *Elphidium*, *Heterostegina*, *Amphistegina*, *Calcarina* spp., *Baculogypsina sphaerulata*)

De Neve, G.A. (1949)- Opmerkingen over een foraminifenhoudende kalksteen van Baranti op het schiereiland Sanggar (Soembawa) en de strandzanden van Poeloe Ngali (Salehbaai) en Poeloe Madang. *Chronica Naturae* 105, 4, p. 116-118.

(online at: <http://colonial.library.leiden.edu/...>)

('Remarks on a foraminifera-bearing limestone of Baranti on the Sanggar Peninsula (Sumbawa) and the beach sands of Pulau Ngali (Saleh Bay) and Pulau Madang'. Late Neogene limestone similar to described by Tobler (1918), with Schlumbergerina, Alveolinella quoyi, Calcarina spp., Baculogypsina sphaerulata, etc. Baculogypsina tetraedra n.sp. described by Tobler (1918) from this area is probably synonym of Tinoporus baculatus and T. floresianus (Schlumberger))

De Neve, G.A. (1949)- Foraminifera from the shore zone of the islands of Morotai and Ternate. *Chronica Naturae* 105, 7, p. 196-198.

(online at: <http://colonial.library.leiden.edu/...>)

(Recent foraminifera from beach sand samples of SW Molotai and Ternate: Quinqueloculina, Robulus, Elphidium, Heterostegina, Orbitolites, Rotalia gaimardii, Amphistegina radiata, Calcarina spp., Baculogypsina sphaerulata. With summary of foraminifera from deep water samples off W Halmahera from 'Albatross-Expedition', as reported by Cushman (1921))

De Neve, G.A. (1949)- Foraminifera from the shore zone of Parigi and Poso (Gulf of Tomini). *Chronica Naturae* 105, 10, p. 252-254.

(online at: <http://colonial.library.leiden.edu/...>)

(Recent foraminifera from beach sand samples near Parigi and Poso, C Sulawesi. Up to 13 species, incl. miliolids, Elphidium, Operculina, Verbeekia, Orbitolites, Siderolites tetraeda and Calcarina. With summary of Gulf of Tomini deep water samples (1240-1966m) from 'Albatross-Expedition', as reported by Cushman (1921))

De Neve, G.A. (1949)- Een notitie over de foraminiferen van de oudste diepzee-lodingen in Indonesia. *Chronica Naturae* 105, 11, p. 291-292.

(online at: <http://colonial.library.leiden.edu/...>)

('Note on the foraminifera from the oldest deep sea soundings in Indonesia'. Brief note on earliest descriptions of deep sea foraminifera from Indonesia by Ehrenberg (1854) and Harting (1861, 1864))

De Silva, L.P. & P.J. Militante-Matias (1998)- Foraminiferal assemblages of Pagbilao Bay, Philippines. *J. Geol. Soc. Philippines* 53, 1-2, p.

(134 foram species identified, representing 7 foraminiferal assemblages: river mouth, intertidal zone- Patayan Island, intertidal zone- Bocboc point, beach, reef/carbonate platform, inner bay, and inner bay channel. Nature of substrate strongly influences distribution of shallow water benthic foraminifera)

Dewi, K.T. (1993)- Ostracoda from the Java Sea, West of Bawean Island, Indonesia. Masters Thesis, University of Wollongong, Australia, p. 1-165.

(online at: <http://ro.uow.edu.au/cgi/viewcontent.cgi?article=3832&context=theses>)

(Seafloor samples from Sunda Shelf W of Bawean island contain 113 species of ostracodes, including 7 new)

Dewi, K.T. (1997)- Ostracoda from the Java Sea, West of Bawean Island, Indonesia. *Marine Geol. Inst., Bandung, Spec. Publ.* 4, p. 1-86.

(same as Dewi (1993) Masters Thesis, University of Wollongong, Australia)

Dewi, K.T. (2000)- Distribution of ostracoda from South of Tanjung Selatan, South Kalimantan. *Bull. Marine Geol.* 15, 1, p. 1-14.

Dewi, K.T. (2014)- Ostracoda from subsurface sediments of Karimata Strait as indicator of environmental changes. *Bull. Marine Geol.* 29, 1, p. 1-10.

(online at: ejournal.mgi.esdm.go.id/index.php/bomg/article/download/60/61)

(43 species of ostracods from 3 short seafloor cores of Sunda Shelf, in water depth 11-27m. Highest abundance/diversity in upper 70 cm of cores. Main genera Actinocythereis, Hemicytheridea, Loxoconcha, Neocytheretta, Stigmatocythere, Neomonoceratina, Phlyctenophora, Argillillocia, etc. (see also Mostafawi 1992))

Dewi, K.T., I. Adhirana, Y.A. Priohandono & L. Gustiantini (2016)- Ostracoda sebagai indikator perubahan lingkungan perairan sekitar PLTU Tarahan, Teluk Lampung, Sumatera. *J. Geologi Kelautan* 14, 1, p. 1-12.

(online at: <http://ejournal.mgi.esdm.go.id/index.php/jgk/article/view/335/263>)

('Ostracoda as indicators of marine environmental changes off the Tarahan power plant, Lampung Bay, Sumatera'. Ostracods from surface sediments in Lampung Bay quite diverse and abundant, with 27 genera, dominated by Keijella, Hemicytheridea and Cytherella. Also locally abundant Bairdopillata)

Dewi, K.T., L. Arifin, A. Yuningsih & Y. Permanawati (2012)- Meiofauna (Foraminifera) dalam sedimen dan keterkaitannya dengan pantai pasir putih Senggigi serta kondisi perairan Lombok Barat. Jurnal Ilmu Tekn. Kelautan Tropis 4, 1, p. 47-54.

(online at: www.itk.fpik.ipb.ac.id/ej_itkt41/jurnal/...)

('Meiofauna (Foraminifera) in sediments and its association with the white sand beaches and water conditions of Senggigi, West Lombok'. Schlumbergerella floresiana abundant in white sands of Senggigi beach, but not common in offshore samples)

Dewi, K.T., N.C.D. Aryanto & Y. Noviadi (2007)- Land-sea interactions in coastal waters off NE Kalimantan: evidence from microfaunal communities. Bull. Marine Geol. 22, 1, p. 1-15.

(online at: ejournal.mgi.esdm.go.id/index.php/bomg/article/download/1/1)

(Microfauna in seafloor samples in 14-43m deep water off Nunukan and Sebatik islands in NE Kalimantan with typical microfauna of shallow marine ostracoda (Hemicytheridea spp., Keijella spp., Cytherella) and foraminifera (Asterorotalia trispinosa, Operculina))

Dewi, K.T., P. Frenzel & A. Muller (2008)- Mikrofauna (ostracoda) di sekitar paparan Sahul dan Laut Banda dalam kaitannya dengan batimetri. Proc. 37th Ann. Conv. Indon. Assoc. Geol. (IAGI), Bandung, 1, p. 127-138.

(Study of recent ostracods distribution in Snellius II samples along transects from Timor, Tanimbar, Seram into Banda Sea down to 3070m. Highest number of ostracods between 100-210m water depth, with Bairdopillata, Neonesidea, Paranesidea, Paracytheridea, Hemiparacytheridea, Foveoleberis, Polycope and Loxoconcha)

Dewi, K.T., P. Frenzel, A. Muller & D. van Harten (2004)- Recent ostracoda (microcrustacea) from a Banda-to-Timor Sea traverse: implications for paleobathymetric studies. Proc. 33rd Ann. Conv. Indon. Assoc. Geol. (IAGI), Bandung, 1, p. 42-51.

(146 species of ostracods in surface sediments between 100-3070m along Banda Sea- Leti Strait-Timor Sea transect, E of Timor island. Richest assemblages in <100m water; abundance and diversity decreases with depth. Bathyal zone characterized by Cytheropteron, Saida, Bradleya, Paleocythere, Henryhowella, Krithe and Parakrithe; lower bathyal by Acantocythereis, Agrenocythereis and Krithe- Parakrithe spp.; abyssal by Argilloecia, Xestoleberis, Cytheropteron)

Dewi, K.T. & M. Hanafi (2013)- Karakteristik komunitas foraminifera laut dalam di Teluk Tomini, Sulawesi. J. Ilmu dan Teknologi Kelautan Tropis (Bogor), 5, 1, p. 17-25.

(online at: <http://journal.ipb.ac.id/index.php/jurnalikt/article/view/7742>)

('The characteristics of the deep sea foraminiferal community in Tomini Bay, Sulawesi'. Foraminifera from 14 seafloor sediment samples from 600-1400m in Tomini Bay. Samples dominated by planktonic foraminifera (>90%). Benthic foraminifera represented by Cibicidoides wuellerstorfi, Ceratobulimina pacifica, Pyrgo sp., Bolivinita quadrilatera, Uvigerina peregrina, Planulina, etc., also very rare Laticarinina below 1000m)

Dewi, K.T. & D. Illahude (2005)- Ostracoda from off Derawan island, East Kalimantan (LP-1815) in relation to bathymetric zonation. Bull. Marine Geol. 20, 1, p. 1-14.

(Depth distribution of Recent ostracoda from 25 seafloor samples at depths 7-628m off Berau/ Tarakan Rivers, NE Kalimantan. 142 species identified. Common ostracods in area around reef complex, with Bairdopillata paracratericola, B. paraalcyonicola and Macrocypris decora. Also high diversity at water depths >200m, with displaced shallow water ostracods and deep water fauna. Bradleya common deepwater ostracod, found from <50m to >500m)

Dewi, K.T., A. Muller, P. Frenzel, L. Auliaherliaty & L. Gustiantini (2003)- Do Quaternary ostracods reflect sea level changes in the Timor Sea? Proc. 32nd Ann. Conv. Indon. Assoc. Geologists (IAGI) and 28th Ann. Conv. HAGI, Jakarta, 11p.

(Samples from E of Timor in water depth 1768m show several small ostracod diversity peaks. Peaks of deep-sea taxa like Krithe, Bradleya, Cytheropteron, Acantocythereis and Ambocythere related to changes in paleoproductivity. Other peak with mixed shallow-water (Paracytheridea, Quadracythere, Loxocorniculum, Neonesidea) and deep-sea taxa suggest downslope transport of sediments, possibly regressive events)

Dewi, K.T., N. Nurdin, Y.A. Priohandono & A. Sinaga (2015)- Benthic foraminifera in marine sediment related to environmental changes off Bangka Island, Indonesia. *Berita Sedimentologi* 33, p. 47-57.
(online at: www.iagi.or.id/fosi/files/2015/09/BS33-Marine-Geology-of-Indonesia-II-R1.pdf)
(60 species of foraminifera in samples from 6-24m water depth offshore E Bangka island. Dominated by Amphistegina, Elphidium, Quinqueloculina, Operculina)

Dewi, K.T., Y.A. Prihandono & H.H. Prabowo (2000)- Ostracoda perairan Utara P. Kangean: kaitannya dengan transpor sedimen. *Proc. 29th Ann. Conv. Indon. Assoc. Geol. (IAGI)*, 4, p. 109-116.
('Ostracodes from waters North of Kangean Island; relations to sediment transport'. 30 sediment samples with 30 species, dominated by Bairdopillata, Cytherella, Foveoleberis)

Dewi, K.T. & E. Saputro (2013)- Sebaran spasial foraminifera dalam kaitannya dengan kedalaman laut dan jenis sedimen di Teluk Bone, Sulawesi Selatan. *J. Geologi Kelautan* 11, 3, p. 165-173.
(online at: <http://ejournal.mgi.esdm.go.id/index.php/jgk/article/view/240/230>)
('Spatial distribution of foraminifera in relation to water depth and sediment types in Bone Bay, S Sulawesi'. Foraminifera from 23-85m water depth in N Bone Bay mainly Operculina spp., Heterolepa, Pseudorotalia. Absence of 'Sunda species' Asterorotalia trispinosa)

Dharma, B. (2005)- Recent & fossil Indonesian shells. *Hackenheim*, p. 1-424.

Dhillon, D.S. (1968)- Notes on the foraminiferal sediments from the Lupar and Labuk estuaries, East Malaysia. *Geol. Survey of Malaysia, Borneo Region, Bull.* 9, p. 56-73.

Ding, X., F. Bassinot, F. Guichard, Q.Y. Li, N.Q. Fang, L. Labeyrie, R.C. Xin, M.K. Adisaputra & K. Hardjawidjaksana (2006)- Distribution and ecology of planktonic foraminifera from the seas around the Indonesian Archipelago. *Marine Micropaleontology* 58, p. 114-134.
(Planktonic foraminiferal assemblages five provinces: (1) Banda/Java region; (2) Timor region; (3) Java upwelling region; (4) Indian monsoon Sumatra region, and (5) NW Australia margin region. Assemblages reflect sea-surface temperature, salinity, thermocline depth, and nutrient supply, related to circulation patterns. Strongest dissolution in Java upwelling region, with lysocline rising above 2800m. Increase in Globigerina bulloides at 10-8 ka BP in Java upwelling region corresponds to decrease in Banda/Java region, indicating intensification of upwelling in relation to strengthened SE monsoon)

Faiz, N.N., R. Omar & Basir Jasin (2007)- Taburan ostrakod di dalam sedimen luar pantai di sekitar Pulau Tinggi, Johor. *Sains Malaysiana* 36, 2, p. 139-148.
(online at: <http://journalarticle.ukm.my/112/1/1.pdf>)
(Distribution of ostracoda in offshore sediment around Pulau Tinggi, Johor. 11 shallow(?) marine samples off SE Malay Peninsula with 36 genera/ 51 species of ostracods. Dominant species is Loxoconcha malayensis. Sediment mainly m-grained sand)

Faiz, N.N., R. Omar, M.N. Abd Malek, C. Li & Y. Liu (2016)- Taburan dan kepelbagaian Foraminifera benthik di dalam sedimen permukaan sekitar delta Sungai Pahang, Pahang, Malaysia. *Sains Malaysiana* 45, 5, p. 669-676.
(online at: www.ukm.my/jsm/pdf_files/SM-PDF-45-5-2016/02%20Noraswana%20.pdf)
('The distribution and diversity of benthic Foraminifera in surface sediment of Pahang River Delta, Pahang, Malaysia'. 82 species of Recent benthic foraminifera offshore Pahang River delta. Amphistegina lessonii and A. gibbosa most abundant, followed by Elphidium advenum, Operculina ammonoides and Asterorotalia pulchella. No specifics on water depth of samples or detailed distribution)

Fajemila, O.T., M.R. Langer & J.H. Lipps (2015)- Spatial patterns in the distribution, diversity and abundance of benthic foraminifera around Moorea (Society Archipelago, French Polynesia). PLoS ONE 10, 12, e0145752, p. 1-25.

(online at: <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0145752>
(380 species of shallow benthic foraminifera from around Moorea)

Fauzielly, L. (2013)- Distribusi vertikal Ostracoda dan hubungannya dengan perubahan lingkungan di perairan Teluk Jakarta. Bull. Scientific Contr. (UNPAD) 11, 2, p. 108-117.

(online at: <http://jurnal.unpad.ac.id/bsc/article/view/8292/3839>)

(Vertical distribution of ostracods and relationship with environmental changes in Jakarta Bay waters'. Similar to Fauzielly et al. (2012), below)

Fauzielly, L., T. Irizuki & Y. Sampei (2012)- Vertical changes of Recent ostracode assemblages and environment in the inner part of Jakarta Bay, Indonesia. J. Coastal Development 16, p. 11-24.

(Ostracodes from sediment core from inner part of Jakarta Bay. 53 species, dominated by *Keijella carriei* and *Loxococoncha wrighti*, which are common in areas with high organic carbon and nitrogen contents)

Fauzielly, L., T. Irizuki & Y. Sampei (2013)- Spatial distribution of Recent ostracode assemblages and depositional environments in Jakarta Bay, Indonesia, with relation to environmental factors. Paleont. Research 16, 4, p. 267-281.

(Recent ostracodes of Jakarta Bay 94 species, dominated by *Keijella carriei*, *Hemicytheridea reticulata*, *Loxococoncha wrighti* and *Hemicytheridea ornata*. *Cytherella*, *Cytherelloidea*, *Neomonoceratina*, and *Pistocythereis* also abundant. Three biofacies: (I) muddy bottom inner-middle bay with *K. carriei*, *L. wrighti*, and *H. reticulata*. Biofacies; (II) muddy bottom outer bay with *H. reticulata*, *H. ornata*, and *Cytherella* spp. (III) sandy mud bottom outer bay high-diversity assemblages with *Atjehella kingmai*, *Foveoleberis cypraeoides*, *Neomonoceratina bataviana* and *Pistocythereis cribriformis*)

Fauzielly, L., L. Jurnaliah & A.H. Hamdani (2014)- Distribusi foraminifera bentonik sedimen paleo-tsunami letusan Gunung Krakatau berdasarkan data inti bor U-6 Di daerah Ujungkulon, Banten. Bull. Scientific Contr. (UNPAD) 12, 2, p. 84-91.

(online at: <http://repository.unpad.ac.id/21772/1/Distribusi-foraminifera-bentonik-sedimen...>)

(The distribution of benthic foraminifera in sedimentary paleo-tsunami eruption of Krakatoa based on data from core U-6 in the Ujungkulon area, Banten'. Marine microfossils in onland sediments may indicate paleo-tsunami deposits. Sand with coral debris at 90-120cm in core from Ujung Kulon recognized as tsunami deposit. With 55 species of benthic foraminifera, dominated by *Streblus beccarii*, *Planulina wuellerstorfi*, *Hyalinea balthica*, *Bulimina marginata*, *Bolivina spathulata*, *Elphidium*, *Uvigerina peregrina* Cushman. Origin of tsunami sediments is (outer) shelf-bathyal and inner shelf lagoon)

Fernando, A.G.S., A.M. Peleo-Alampay & M.G. Wiesner (2007)- Calcareous nannofossils in surface sediments of the eastern and western South China Sea. Marine Micropaleontology 66, p. 1-26.

(Calcareous nannofossils in surface sediments of S China Sea in water depths of 35–4345 m. In shallow/nearshore waters dominant taxa are *Emiliania huxleyi* and *Gephyrocapsa oceanica*. In deeper portion of SCS, *Florisphaera profunda* dominates. Three assemblages recognized: (a) upwelling, (b) oceanic and (c) deep basin assemblages. *F. profunda* is relatively resistant to dissolution)

Flenley, J.R. (1979)- The Equatorial rain forest: a geological history. Butterworths London, p. 1-162.

(Includes review of SE Asia Cretaceous- Neogene evolution of pollen assemblages and chapter on Quaternary palynology and vegetation changes of SE Asia. In PNG vegetation zones moved downward ~1600m during Pleistocene glacial episodes, suggesting 10°C decline in temperatures (later book with similar title by R.J. Morley (2000) Origin and evolution of tropical rain forests))

Flenley, J.R. (1998)- Tropical forests under the climates of the last 30,000 years. In: A. Markham (ed.) Potential impacts of climate change on tropical forest ecosystems, Climatic Change 39, Kluwer, p. 177-197.

(Incl. review of pollen diagrams from lowlands of SE Asia. Depression of altitudinal vegetation zones during Late Pleistocene Last Glacial Maximum suggests temperatures 5-10°C cooler than now)

Flenley, J.R. (1999)- Problems of the Quaternary on mountains of the Sunda-Sahul region. *Quaternary Science Reviews* 15, p. 549-555.

(In montane areas in Sunda-Sahul region Upper Montane rainforest appears to be absent in Late Pleistocene. Estimates of temperature lowering in Late Pleistocene strikingly greater in mountains than in lowlands)

Forderer, M. & M.R. Langer (2016)- Five new species and one new genus of recent miliolid foraminifera from Raja Ampat (West Papua, Indonesia). *PeerJ* 4:e2157; DOI 10.7717/peerj.2157, 20p.

(online at: www.ncbi.nlm.nih.gov/pmc/articles/PMC4924127/pdf/peerj-04-2157.pdf)

(Shallow waters W of Waigeo Island with highly diverse assemblages of 455 species of benthic foraminifera (249 miliolid species). With new genus (Dentoplanispirinella) and 5 new species of miliolids (D. occulta, Miliolinella moia, M. undina, Triloculina kawea, Siphonaperta hallocki). New species relatively rare)

Frantz, L.A.F., A. Rudzinski, A.M S. Nugraha, A. Evin, J. Burton et al. (2018)- Synchronous diversification of Sulawesi's iconic artiodactyls driven by recent geological events. *BioRxiv*, p. 1-22.

(preprint online at: <https://www.biorxiv.org/content/biorxiv/early/2018/01/04/241448.full.pdf>)

(Paleogeographical reconstructions with genetic and morphometric data from Sulawesi mammals Babirusa, Anoa and Sulawesi warty pig indicate almost synchronous expansion from central part of island after recent emergence of land on Sulawesi (~1-2 Ma))

Frerichs, W.E. (1967)- Distribution and ecology of benthonic foraminifera in the sediments of the Andaman Sea. Ph.D. Thesis University Southern California, Los Angeles, p. 1-269.

(Recent foraminifera from seafloor samples across Andaman Sea, between 13-3778m depth. Number of forams increases with depth to 1800m; below this affected by dissolution of calcareous foraminifera. Planktonic number increases with depth and distance from shore. Planktonic assemblages from shelf sediments have globose chambers (Globigerina, Globigerinoides, Globigerinita); in bathyal deposits also common Globorotalia and Sphaeroidinella. Radiolarian number increases with depth; not significant above middle bathyal depths. Benthic foraminifera five faunal provinces. Etc.)

Frerichs, W.E. (1970)- Distribution and ecology of benthonic foraminifera in the sediments of the Andaman Sea. *Contr. Cushman Found. Foraminiferal Research* 21, 4, p. 123-147.

(In Andaman Sea shelf faunas characterized by species of Ammonia, Asterorotalia and Pseudorotalia. Upper bathyal faunas characterized by first appearance of Bolivina robusta. Change in ornamentation of Uvigerina at upper-middle bathyal boundary: costate species in outer shelf-upper bathyal; hispid species (U. auberiana) below 600m. Lower bathyal microfaunas calcareous forams dissolved, characterized by arenaceous Glomospira charoides and Karreriella apicularis. Etc.)

Frerichs, W.E. (1971)- Planktonic foraminifera in the sediments of the Andaman Sea. *J. Foraminiferal Research* 1, p. 1-14.

(Distribution of Recent planktonic foraminifera in sediments of Andaman Sea controlled by surface salinity, water depth, diagenesis and topography. Large volumes of fresh water in N Andaman Sea result in lowering of surface salinity and exclusion of planktonic forams. Depth zonation: Sphaeroidinella and some Globorotalia species indicative of bathyal depths)

Fujita, K. (2006)- Identification of coral reef environments based on foraminiferal death assemblages from Ishigaki Island, Okinawa, Japan. In: *Proc. 10th Int. Coral Reef Symposium, Okinawa 2004*, p. 528-535.

(Reef-flat foraminiferal assemblages characterized by dominant Calcarinidae, whereas fore-reef foraminiferal assemblages are characterized by various dominant species)

Fujita, K. & S. Kato (2011)- Distribution of gravel-sized empty tests of large benthic foraminifers as practical depositional indicators in tropical reef and shelf carbonate environments. *Facies* 57, 4, p. 525-541.

(Depth and spatial distributions of Large Benthic Forams in 39 surface sediment samples from W coast of Miyako Island (Ryukyu Islands, NW Pacific))

Fujita, K., Y. Osawa, H. Kayanne, Y. Ide & H. Yamano (2009)- Distribution and sediment production of large benthic foraminifers on reef flats of the Majuro Atoll, Marshall Islands. *Coral Reefs* 28, p. 29-45.

(Estimates of sediment production by Large Benthic Forams, mainly Calcarina and Amphistegina, on reef flats of Pacific atolls. Both live attached to seagrass/algae and most abundant on ocean reef flat (ORF) and in inter-island channel near windward, sparsely populated islands. Calcarina density higher on windward sides)

Fujita, K., M. Otomaru, P. Lopati, T. Hosono & H. Kayanne (2016)- Shell productivity of the large benthic foraminifer *Baculogypsina sphaerulata*, based on the population dynamics in a tropical reef environment. *Coral Reefs* 35, p. 3176326

Fujita, K., H. Shimoji & K. Nagai (2006)- Paleoenvironmental interpretations of Quaternary reef deposits based on comparisons of 10 selected modern and fossil larger foraminifera from the Ryukyu Islands, Japan. *Island Arc* 15, p. 420-436.

Fukumoto, Y., X. Li, Y. Yasuda, M. Okamura, K. Yamada & K. Kashima (2015)- The Holocene environmental changes in southern Indonesia reconstructed from highland caldera lake sediment in Bali Island. *Quaternary Int.* 374, p. 15-33.

(Diatoms, pollen, geomagnetic and geochemical analyses on 3.6 m long core from Lake Buyan, Bali, representing ~8000 yrs sedimentation. Laminated sediments at 6.5-5.0 and 3.6-3.1 ka reflect drier climate)

Furio, E.F., R.V. Azanza, Y. Fukuyo & K. Matsuoka (2012)- Review of geographical distribution of dinoflagellate cysts in Southeast Asian coasts. *Coastal Marine Science* 35, 1, p. 20-33.

(online at: <http://repository.dl.itc.u-tokyo.ac.jp/dspace/bitstream/2261/51680/1/CMS350104.pdf>)

(Dinoflagellates play role in harmful algal blooms. Review of distribution in marine sediments shows generally 13-50 cyst types, Pyridinium bahamense var. compressum most common species in SE Asia waters)

Furio, E.F., K. Matsuoka, K. Mizushima, I. Baula, K.W. Chan, A. Puyong, D. Srivilai, B.R. Sidharta & Y. Fukuyo (2006)- Assemblages and geographical distribution of dinoflagellate cysts in surface sediments of coastal waters of Sabah, Malaysia. *Coastal Marine Science* 30, 1, p. 62-73.

(online at: <http://repository.dl.itc.u-tokyo.ac.jp/dspace/bitstream/2261/5609/1/KJ00004354582.pdf>)

(Dinoflagellate cysts relatively rare in sediments from Kota Kinabalu Bay and Tuaran Estuary. >25 species identified, mainly Spiniferites, Alexandrium, Lingulodinium, Polysphaeridium, etc.)

Gastaldo, R.A. (2012)- Taphonomic controls on the distribution of palynomorphs in tidally influenced coastal deltaic settings. *Palaios* 27, p. 798-810.

(Includes discussion of Recent palynomorph distribution in meso- to macrotidal Rajang River Delta, Sarawak. Mangrove pollen found throughout delta and alluvial plain sediments, as far as 75 km inland from mouth of rivers in frequencies of 5% of pollen spectra)

Gastaldo, R.A., W. Feng & J.R. Staub (1996)- Palynofacies patterns in channel deposits of the Rajang River and delta, Sarawak, East Malaysia. *Palaios* 11, 3, p. 266-279.

(Three organic matter facies assemblages in Rajang River delta sediments)

Gastaldo, R.A. & J.R. Staub (1997)- Water column and grab sample palynofacies assemblages from the Rajang River delta, Sarawak, East Malaysia. *Palynology* 21, p. 145-172.

Glenn, E.C. (1989)- Foraminifera and associated sedimentary constituents in Holocene and Miocene reefs of the Philippines and Indonesia. Ph.D. Thesis, University of Houston, p. 1-665. *(Unpublished)*

Glenn, E.C., J.W. McManus, P.M. Alino, L. Talaue, P. Alino & V. Banzon (1981)- Distributions of live foraminifers on a portion of Apo Reef, Mindoro, Philippines. Proc. 4th Coral Reef Symposium, Manila 1981, 2, p. 775-780.

(Apo reef W of Mindoro in S China Sea with 10 physiographic zones. Sediment pockets in reef wall with Amphistegina lessonii, Marginopora vertebralis. Deep lagoon with Elphidium, Sorites marginalis, Peneroplis. Reef flat with Calcarina spp., etc.)

Glenn-Sullivan, E.C. & I. Evans (2001)- The effects of time-averaging and taphonomy on the identification of reefal sub-environments using larger foraminifera: Apo Reef, Mindoro, Philippines. Palaios 16, 4, p. 399-408.

(Foraminifera ~40% of sediment at small, isolated Apo Reef. Comparisons of live and dead assemblages show time-averaged assemblages, the product of taphonomic processes, more effective in delineating reefal sub-environments than do live assemblages. Robust calcarinids are in shallow seaward zones; free-living miliolids and small rotaliines in leeward zones. Planktonics and large thin rotaliines in fore reef)

Gorog, A.J., M.H. Sinaga & M.D. Engstrom (2004)- Vicariance or dispersal? Historical biogeography of three Sunda shelf murine rodents (*Maxomys surifer*, *Leopoldamys sabanus* and *Maxomys whiteheadi*). Biological J. Linnean Society 81, p. 91-109.

(online at: <https://academic.oup.com/biolinnean/article/81/1/91/2639894>)

(DNA tests of three rain-forest-restricted murine rodents of Borneo, Sumatra, Java, Malay Peninsula and Indochina do not support hypothesis of migrations enabled by Late Pleistocene land bridges/ rainforest corridors, but suggest older history of divergent evolution since Pliocene fragmentation of Sunda block)

Graham, J.J. & P.J. Militante (1959)- Recent foraminifera from the Puerto Galera area, northern Mindoro, Philippines. Stanford University Publ., Geol. Sci. 6, 2, p. 1-171.

Grand Pre, C.A. (2011)- The application of macro- and microfossils to identify paleoearthquakes in Sumatra, Indonesia and to characterize geomorphic and ecological succession on a marsh platform after Hurricane Isabel in North Carolina, USA. Ph.D. Thesis University of Pennsylvania, p. 1-179.

(Study of Early Holocene coseismic subsidence in Aceh. Buried mangrove soil horizons overlain with sharp contact by 5-20 cm thick sand that tapered landward, with intertidal and shallow marine foraminifera (Ammonia, Asterorotalia, Pararotalia, Quinqueloculina, etc.) and probably tsunami deposit. Sands overlain by 1-3m of silty clay with at base common Cerithidea cingulata, an opportunistic intertidal gastropod)

Gremmen, W.H.E. (1987)- Palynological evidence from Quaternary sediments in Southeast Asia, a review. Palaeohistoria 29, p. 77-84.

(online at: <http://ugp.rug.nl/Palaeohistoria/article/view/24871/22319>)

Gremmen, W.H.E. (1989)- Palynological investigations in the Danau Tempe Depression, Southwest Sulawesi (Celebes), Indonesia. Modern Quaternary Research in Southeast Asia, Balkema, Rotterdam, 11, p. 123-134.

(online at: <http://www.oxis.org/articles-c-j/gremmen-1990.pdf>)

(Tempe Lake Depression in SW Sulawesi with three lakes and swamp areas probably remnant shallow marine seaway between Makassar Straits and Bone Bay until recently. In tidal mangrove zone between 7000- 2600 BP)

Guptha, M.V.S. (1981)- Nannoplankton from Recent sediments off the Andaman Islands. Indian J. Marine Sci. 10, p. 293-295.

(online at: [http://nopr.niscair.res.in/bitstream/123456789/39098/1/IJMS%2010\(3\)%20293-295.pdf](http://nopr.niscair.res.in/bitstream/123456789/39098/1/IJMS%2010(3)%20293-295.pdf))

(16 deep marine seafloor samples around Little Andaman, with 14 modern and 24 reworked Eocene-Pliocene nannofossil species. Modern species dominated by Gephyrocapsa oceanica)

Gustiantini, L., K.T. Dewi & D. Illahude (2005)- Perbandingan foraminifera bentik dan plangtonik (P/B ratio) di perairan sekitar Pulau Derawan, Kalimantan Timur. Proc. Joint Convention 30th HAGI- 34th IAGI and 14th PERHAPI, Surabaya, p. 341-348.

('Comparison of benthic and planktonic foraminifera (P/B ratio) in the waters around Derawan Island, East Kalimantan')

Gustiantini, L., K.T. Dewi, A. Muller & Praptisih (2003)- The benthic foraminifera *Ammonia beccarii* as indicator of estuarine environments in Indonesia (Segara Anakan lagoon and southern Gombang, Java). Proc. 32nd Ann. Conv. IAGI and 28th Ann. Conv. HAGI, Jakarta, 11p.

(Fossil estuarine deposits often with common Ammonia beccarii, abundance is low in modern Segara Anakan lagoon N of Nusakambangan, S Java)

Gustiantini, L., K.T. Dewi & E. Usman (2005)- Foraminifera di perairan sekitar Bakauheni, Lampung (Selat Sunda bagian utara). J. Geologi Kelautan 3, 1, p. 10-18.

(online at: <http://ejournal.mgi.esdm.go.id/index.php/jgk/article/view/120/110>)

(Foraminifera in the waters around Bakauheni, Lampung (northern Sunda Strait)' Abundant foraminifera along Lampung coast in N Sunda Strait, dominated by Asterorotalia trispinosa, Operculina, Pseudorotalia and Elphidium)

Gustiantini, L. & D. Ilahude (2015)- Foraminifera benthik dalam sedimen sebagai indikator kondisi lingkungan terumbu karang di perairan Pulau Cemara Besar dan Cemara Kecil, Kepulauan Karimunjawa, Jawa Tengah. J. Geologi Kelautan 10, 1, p. 35-38

(online at: <http://ejournal.mgi.esdm.go.id/index.php/jgk/article/view/213/203>)

(Benthic foraminifera in sediment as indicators of coral reef environments in the waters of Pulau Cemara Besar and Cemara Kecil, Karimunjawa Islands, Central Java'. Benthic forams dominated by Calcarina, Amphistegina, Streblus and Reusella)

Gustiantini, L., K.A. Maryunani, R. Zuraida, C. Kissel, F. Bassinot & Y. Zaim (2015)- Distribusi foraminifera di Laut Halmahera dari Glasial Akhir sampai Resen. J. Geologi Kelautan 13, 1, p. 25-36.

(online at: <http://ejournal.mgi.esdm.go.id/index.php/jgk/article/view/259/249>)

(The distribution of foraminifera in the Halmahera Sea from the last Glacial to Recent'. Deep marine Late Pleistocene- Holocene planktonic and benthic foraminifera from core MD10-3339, SE of Halmahera)

Gustiantini, L. & E. Usman (2008)- Distribusi foraminifera benthik sebagai indikator kondisi lingkungan di perairan sekitar Pulau Batam- Riau kepulauan. J. Geologi Kelautan 6, 1, p. 43-52.

(online at: <http://ejournal.mgi.esdm.go.id/index.php/jgk/article/view/149/139>)

(Distribution of benthic foraminifera as indicators of environmental conditions in the waters around Batam Island, Riau archipelago'. High abundance of benthic foraminifera in Batam- Bintan waters, dominated by dominated by Asterorotalia trispinosa, Pseudorotalia annectens, Amphistegina radiata, Quinqueloculina cf. philippinensis, and Operculina ammonoides)

Hada, Y. (1943)- The relation between the foraminifera and deposits of the Java Sea. J. Oceanogr. Soc. Japan 12, 4, p. 27-36. *(in Japanese with English Abstract)*

(Bottom samples from 31 stations in shallow areas of Java Sea rich in foraminifera. Some genera more abundant in sandy deposits (incl. Textularia, Operculina, Amphistegina, Siderolites (=Baculogypsina?; JTvG), Planorbulinella, Alveolinella), some more abundant in muddy deposits (Eponides praecinctus, Rotalia schroeteriana, Quinqueloculina))

Hadiwisastra, S. (1978)- Kumpulan Ostrakoda dari delta Cimanuk. J. Riset Geologi Pertambangan (LIPI) 1, 2, p. 9-20.

(online at: <http://pustaka.geotek.lipi.go.id/wp-content/uploads/2016/02/Riset-Vol.1-No.2-78.pdf>)

(Ostracodes from the Cimanuk Delta'. 35 Recent genera of ostracods in shallow waters around Cimanuk 'birdfoot delta', Java. Delta fauna dominated by Hemicytheridea, Loxoconcha, Hemikrithe, Cythereis, etc. Open marine genera Cytherella, Cytherelloidea, Bradleya, etc.)

Hadiwisastra, S. & S. Djoehanah (1979)- Penyebaran foraminifera bentos di delta Cimanuk. J. Riset Geologi Pertambangan (LIPI) 2, 1, p. 7-21.

(online at: <http://pustaka.geotek.lipi.go.id/wp-content/uploads/2016/02/Riset-Vol.2-No.1-2-2-.pdf>)

(The distribution of benthic foraminifera in the Cimanuk delta'. 137 species of benthic foraminifera in 33 bottom samples around Cimanuk Delta, N coast of Java. Four main assemblages)

Haig, D.W. (1979)- Foraminiferids from shoreline sediments, Motupore Islands, Papua New Guinea. *Science in New Guinea* 6, 3, p. 138-143.

Haig, D.W. (1988)- Distribution of miliolid foraminifera in marine sediments around Motupore Island, Papua New Guinea. *Science in New Guinea* 14, p. 54-94.

Haig, D.W. (1988)- Miliolid foraminifera from inner neritic sand and mud facies of the Papuan lagoon, New Guinea. *J. Foraminiferal Research* 18, 3, p. 203-236.

(online at: <http://jfr.geoscienceworld.org/content/18/3/203.full.pdf>)

(101 species of miliolids from five settings in Papuan Lagoon, SE coast of PNG. Miliolids generally 10-40% of total foram assemblage, which is dominated by rotaliids)

Haig, D.W. (1993)- Buliminid foraminifera from inner neritic sand and mud facies of the Papuan Lagoon, New Guinea. *J. Foraminiferal Research* 23, 3, p. 162-179.

(online at: <http://jfr.geoscienceworld.org/content/23/3/162.full.pdf>)

(60 small buliminid-boliviniid-uvigerinid species from in 0-50m water depth in lagoon behind Papuan barrier reef, SE coast of PNG)

Haig, D.W. (1997)- Foraminifera from Exmouth Gulf, Western Australia. *J. Royal Soc. Western Australia* 80, p. 263-280.

(Recent foraminifera from 5-30m water depth at Exmouth Gulf: 236 benthic and 6 planktonic species)

Haig, D.W. & S. Burgin (1982)- Brackish-water foraminiferids from the Purari River delta, Papua New Guinea. *Revista Espanola Micropal.* 14, p. 359-366.

Hallock, P. (1981)- Production of carbonate sediments by selected large benthic foraminifera on two Pacific coral reefs. *J. Sedimentary Res.* 51, p. 467-474.

(Carbonate production rates by foram families Asterigerinidae, Calcarinidae, and Nummulitidae in Palau, W Caroline Islands: seaward reef flats up to 2.8 kg CaCO₃/m²/yr, equivalent to deposition of almost 1 mm/yr. Productivity on lagoonal reef slopes about one-fifth. In Hawaii production rates much lower because of slower growth rates and absence of family Calcarinidae)

Hallock, P. (1984)- Distribution of selected species of living algal symbiont-bearing foraminifera on two Pacific coral reefs. *J. Foraminiferal Research* 14, p. 250-261.

(Distribution of 15 larger foram species on reefs of Palau (W Caroline Islands) and Oahu (Hawaii). Four clusters (1) Calcarinidae-dominated on seaward reef flats; (2) Marginopora vertebralis, Amphistegina lobifera and Peneroplis planatus in protected shoals in <5m water, (3) Amphistegina lessonii on reef slopes of 5-20m, (4) Amphistegina radiata and Operculina ammonoides deeper dwelling taxa)

Hallock, P. (1999)- Symbiont-bearing foraminifera. In: B.K. Sen Gupta (ed.) *Modern Foraminifera*, Kluwer, Amsterdam, p. 123-149.

Hallock, P. & E.C. Glenn (1985)- Numerical analysis of foraminiferal assemblages: a tool for recognizing depositional facies in Lower Miocene reef complexes. *J. Paleontology* 59, 6, p. 1382-1394.

(late Early Miocene larger foram facies assemblages in wells Matinloc 2 and Libro 1, off NW Palawan, Philippines. Assigned to zone Te5, but more likely Lower Tf?; associated with N8 planktonic forams)

Hanai, T., N. Ikeya & M. Yajima (1980)- Checklist of Ostracoda from Southeast Asia. University Museum, University of Tokyo, *Bull.* 17, p. 1-236.

(online at: www.um.u-tokyo.ac.jp/publish_db/Bulletin/no17/no17000.html)

(Review of studies on extensive listing of Recent and fossil ostracodes described from SE Asia)

Hanzawa, S. (1951)- Recent and fossil *Cycloclypeus* from the Ryukyu Islands and their adjacent seas. Short Papers Inst. Geol. Paleont. Tohoku University, Sendai, 3, p. 1-12.

(14 samples with Recent Cycloclypeus from off Ryukyu Islands from 87-133m water depth, one from 235m)

Hardy, M.J. (2000)- Origin, distribution, and degradation of sedimentary organic matter in a modern tropical deltaic system (Mahakam Delta, Borneo, Indonesia). Ph.D. Thesis Louisiana State University, Baton Rouge, p. 1-368. *(Unpublished)*

Hardy, M.J. & J.H. Wrenn (2009)- Palynomorph distribution in modern tropical deltaic and shelf sediments- Mahakam Delta, Borneo, Indonesia. *Palynology* 34, p. 19-42.

(Distribution of terrestrial palynomorphs in Mahakam Delta surface sediments from 12 depositional environments from head of delta to shelf edge can be explained by transport and depositional processes. Amounts of marine palynomorphs (foram linings, copepod eggs, dinocysts) increases gradually offshore)

Harting, P. (1863)- Bijdrage tot de kennis der mikroskopische fauna en flora van de Banda-Zee. Verhandelingen Kon. Akademie Wetenschappen, Amsterdam, 10, p. 1-34.

(‘Contribution to the knowledge of the microscopic fauna and flora from the Banda Sea’ Early report on foraminifera, radiolaria, etc. from Recent deep Banda Sea sediment samples between 1200-4000 fathoms)

Hasan, S.S., M. Mohamed, N. Muhsin & S. Jirin (2013)- The distribution of *Miliammina fusca* in three different environmental setting of Peninsular Malaysia, Malaysia. In: Petroleum Geoscience Conf. Exhib. (PGCE 2013), Kuala Lumpur, P14, 4p. *(Extended Abstract)*

(Study on distribution of small agglutinated benthic foram Miliammina fusca in three modern depositional settings, Klang Delta, Pahang Delta and Sedili Besar River. Invariably associated with brackish conditions. In Malay Basin M. fusca used as indicator of marine incursions into basin, particularly in Lower Oligocene (upper Group L and Group K))

Haseldonckx, P. (1974)- A palynological interpretation of palaeo-environments in S.E. Asia. *Sains Malaysiana* 3, 2, p. 119-127.

Haseldonckx, P. (1977)- The palynology of a Holocene marginal peat swamp environment in Johore, Malaysia. *Review Palaeobotany Palynology* 24, 5, p. 227-238.

(Shallow Holocene peat near Pekan Nanas, Johore, with 47 pollen and spore types. Pollen profile shows succession from open swamp vegetation with mangrove influence to marginal peat swamp facies with river bank vegetation. Radiocarbon dating on deepest peat yielded ~4.9 ka)

Haseldonckx, P. (1977)- Palynology and its application to Quaternary geology in the Sunda shelf region. Proc. Symposium on Quaternary Geology of the Malay-Indonesian coastal and offshore areas, Kuala Lumpur, 1976, United Nations ESCAP CCOP Techn. Publ. 5, p. 33-53.

(Brief, general overview of pollen and spores, processing and application in determination of paleoenvironments. ‘Palynology in SE Asia still at early stage of development’)

Haslett, S.K. (2001)- The palaeoenvironmental implications of the distribution of intertidal foraminifera in a tropical Australian estuary: a reconnaissance study. *Australian Geogr. Studies* 39, p. 67-74.

(Modern intertidal foraminifera in mangrove-lined microtidal distributary of Barron River Delta (Queensland): (1) saltmarsh: Trochammina inflata assemblage; (2) regularly inundated tidal flat: dominated by Ammonia beccarii; (3a) high tidal flat: >70% Ammonia beccarii and low diversity, and (3b) low tidal flat: 55-65% Ammonia beccarii and diverse small allochthonous species transported into estuary from shelf)

Hayward, B.W. & S. Kawagata (2005)- Extinct foraminifera figured in Bradyø Challenger Report. *J. Micropalaeontology* 24, 2, p. 171-175.

(online at: <https://www.j-micropalaeontol.net/24/171/2005/jm-24-171-2005.pdf>)

(Brady's (1884) monograph on living foraminifera from Challenger Expedition samples contains 18 species known to become extinct in M Pleistocene between 1.2- 0.6 Ma (mainly elongate, benthic foraminifera like Pleurostomella, Stilostomella, Orthomorphina, etc.). Majority (14 species) from two stations off Kei Islands, Banda Sea (191A, 192). Station 192 (~250m depth) is considerably shallower than established fossil bathymetric ranges of extinct species, suggesting tectonic uplift)

Hayward, B.W., S. Kawagata, H.R. Grenfell, A.T. Sabaa & T. O'Neill (2007)- Last global extinction in the deep sea during the mid-Pleistocene climate transition. *Paleoceanography* 22, PA3103, p. 1-14.
(20% of cosmopolitan deep-sea benthic foraminifera extinct during late Pliocene-M Pleistocene, with peak of extinctions during M Pleistocene Climate Transition (1.2-0.55 Ma). Family Stilostomellidae (30 species) wiped out, Pleurostomellidae (9 species) decimated. Pulsed declines in abundance, earlier in deepest water sites. Tied to demise of microbial food source due to increased cold and oxygenation of S-sourced deep water masses during major late Pliocene and E Pleistocene glacials)

Hendrizan, M., R.A. Troa, R. Zuraida & E. Triarso (2016)- Calcareous nannoplankton (marine algae) analysis in subsurface sediments of Andaman Sea. *Bull. Marine Geol.* 31, 2, p. 91-98.
(online at: <http://ejournal.mgi.esdm.go.id/index.php/bomg/article/view/313/277>)
(4m thick Quaternary clay sediment core BS36 in S Andaman Sea (Mergui-N Sumatra Basin). With 11 genera of calcareous nannofossils, dominated by Gephyrocapsa, Emiliana, and Helicosphaera)

Hessler, I., M. Young, U. Holzwarth, M. Mohtadi, A. Luckge & H. Behling (2013)- Imprint of eastern Indian Ocean surface oceanography on modern organic-walled dinoflagellate cyst assemblages. *Marine Micropaleontology* 101, p. 89-105.
(Recent distribution of dinoflagellate cysts in 116 marine surface samples of E Indian Ocean. Three distinct regions (1) W and E Indonesia, with high T and low nutrient content of surface water; dominated by Spiniferites spp. and S. ramosus; (2) Indonesian Throughflow(ITF) region, dominated by heterotrophic dinocyst species (Brigantedinium spp.), reflecting high productivity; (3) offshore NW Australia, characterized by water masses of saline and nutrient depleted Leeuwin Current, with rel. high O. centrocarpum)

Hillen, R. (1986)- Palynology as a tool in delineating tropical lowland depositional environments of Late Quaternary age. In: G.H. Teh & S. Paramanathan (eds.) *Proc. 5th Reg. Congress Geology, Mineral and Energy Resources of SE Asia (GEOSEA V)*, Kuala Lumpur 1984, 1, *Bull. Geol. Soc. Malaysia* 19, p. 495-504.
(online at: <https://gsmpubl.files.wordpress.com/2014/09/bgsm1986037.pdf>)
(Samples from Lower Perak and Kelantan lowlands (Malay Peninsula) allowed palynological characterization of environments: shallow offshore, deltaic/ estuarine, mangrove, fresh water swamp, peat swamp)

Hofker, J. (1927)- The foraminifera from the Siboga expedition, I. Families Tinoporidae, Rotaliidae, Nummulitidae, Amphisteginidae. *Siboga Expedition 1899-1900, Monogr.* 4a, 1, E.J. Brill, Leiden, p. 1-78.
(Modern foraminifera in seafloor samples collected by Siboga Expedition in Indonesia, part 1 of 3)

Hofker, J. (1930)- Foraminifera of the Siboga Expedition, Part II, Families Astrorhizidae, Rhizamminidae, Reophacidae, Anomaliniidae, Peneroplidae. *Siboga-Expeditie, Monogr.* 4a, 2, E.J. Brill, Leiden, p. 79-170.
(Modern foraminifera in seafloor samples collected by Siboga Expedition in Indonesia, part 2 of 3)

Hofker, J. (1951)- The Foraminifera of the Siboga Expedition. Part III. Ordo Dentata, Sub-Ordines Protoforaminata, Biforaminata, Deuteroforaminata. *Siboga Expeditie Monograph* 4a, 3, Brill, Leiden, p. 1-513.
(Modern foraminifera in seafloor samples collected by Siboga Expedition in Indonesia, part 3 of 3)

Hofker, J. (1968)- Foraminifera from the Bay of Jakarta, Java. *Bijdragen tot de Dierkunde* 37, p. 11-59.
(online at: www.repository.naturalis.nl/document/548150)
(Rel. low diversity recent foraminifera assemblages in shallow marine Jakarta Bay, dominated by Pseudorotalia schroeteriana, Asterorotalia pulchella, Elphidium batavum, Operculina complanata, Quinqueloculina. Highest diversity in NW part of bay. Pseudorotalia most common in muddy substrates in SE, Baculogypsinoidea and miliolids mainly in NW, away from delta muds)

Hofker, J. (1978)- Biological results of the Snellius Expedition XXX. The foraminifera collected in 1929 and 1930 in the eastern part of the Indonesian Archipelago. Zool. Verhandelingen, Rijksmuseum Natuurlijke Historie Leiden 161, p. 1-69.

(online at: www.repository.naturalis.nl/document/155300)

(462 species of oraminifera from 78 sea bottom samples at depths 85- 5138m, collected by 1929-1930 Snellius Expedition to East Indonesia, and a few other shallow marine samples)

Hohenegger, J. (1994)- Distribution of living larger foraminifera NW of Sesoko-Jima, Okinawa, Japan. Marine Ecology 15, p. 291-334.

(Living larger foraminifer restricted to photic zone. Peneroplids in shallow-water from intertidal (common Peneroplis) to 40m (Dendritina, sandy substrates). Soritids subtidal, from reef moat down to 60m. Amphisorus and Marginopora common down to 3 m, Parasorites in deeper parts of reef slope. Alveolinella in upper 40m of reef slope. Amphisteginids in entire photic zone, with test flattening with increasing depth. Calcarinids cling to firm substrates. Baculogypsina restricted to high energy reef flat regions. Calcarina similar facies, extending to fore reefs down to 8m. Baculogypsinoidea dominant calcarinid genus from 30-70m depth. Heterostegina prefers hard substrates on reef slope. Operculina frequent in deeper part, independent of substrates. Sandy bottoms from 30-60m inhabited by Nummulites (Operculina) venosus. Cycloclipeus restricted to fore reef areas below 50m down to base of photic zone)

Hohenegger, J. (1995)- Depth estimation by proportions of living larger foraminifera. Marine Micropaleontology 26, p. 31-47.

Hohenegger, J. (1996)- Remarks on the distribution of larger foraminifera (Protozoa) from Belau (Western Carolines). Kagoshima University Research Center Pacific Islands, Occasional Papers 30, p. 85-90.

(online at: <http://hdl.handle.net/10232/16891>)

Hohenegger, J. (1999)- Larger foraminifera-microscopical greenhouses indicating shallow-water tropical and subtropical environments in the present and past. Kagoshima University Research Center Pacific Islands, Occasional Papers 32, p. 19-45.

(online at: <http://hdl.handle.net/10232/16923>)

(Larger foraminifera (2mm-15cm) characteristic of shallow marine (sub-)tropical environments, in clear, nutrition-depleted water like for coral reefs. All larger foraminifera house symbiotic microalgae and are thus restricted to photic zone (<150m). In intertidal-shallow subtidal environments high irradiation blocked by thicker tests or porcelaneous structures; species living near base of photic zone facilitate light penetration by thin transparent test walls and by light-collecting mechanisms such as nodes and pillars)

Hohenegger, J. (2000)- Coenoclines of larger foraminifera. Micropaleontology 46, Suppl. 1, Advances in the biology of foraminifera, p. 127-151.

(Good review of depth distribution of modern larger foraminifera, mainly in W Pacific)

Hohenegger, J. (2004)- Depth coenoclines and environmental considerations of Western Pacific larger foraminifera. J. Foraminiferal Research 34, p. 9-33.

(Good overview of depth distribution modern larger foraminifera in W Pacific)

Hohenegger, J. (2005)- Estimation of environmental paleogradient values based on presence/absence data: a case study using benthic foraminifera for paleodepth estimation. Palaeogeogr. Palaeoclim. Palaeoecology 17, p. 115-130.

Hohenegger, J. (2006)- The importance of symbiont-bearing benthic foraminifera for West Pacific carbonate beach environments. Marine Micropaleontology 61, p. 4-39.

Hohenegger, J. & E. Yordanova (2001)- Depth-transport functions and erosion-deposition diagrams as indicators of slope inclination and time-averaged traction forces: applications in tropical reef environments. *Sedimentology* 48, p. 1025-1046.

(Comparisons of distributions of living versus dead tests of larger foraminifera indicate common downslope transport in two NW Pacific off-reef transects)

Hohenegger, J. & E. Yordanova (2001)- Displacement of larger foraminifera at the western slope of Motobu Peninsula (Okinawa, Japan). *Palaios* 16, p. 53-72.

Hohenegger, J., E. Yordanova & A. Hatta (2000)- Remarks on West Pacific Nummulitidae (Foraminifera). *J. Foraminiferal Research* 30, p. 3-28.

(Operculina, Planostegina, Cycloclypeus and Heterostegina from W Pacific. Heterostegina depressa broad range in light intensities and is protected against irradiation by thick tests and cryptic life mode near surface. Test construction enables life under strong hydrodynamic regimes. Lives firmly attached to hard substrates, thus counteracting transportation by water movement. Nummulites venosus lives exclusively on coarse sand and avoids high sediment movement, starting distribution beneath fair weather wave base. Cycloclypeus carpenteri easily transported due to thin, plate-like form. Upper distribution limit correlates with storm wave base, below 50m. Lower distribution limit depends on light intensity and is near base photic zone)

Hohenegger, J., E.K. Yordanova, Y. Nakano & F. Tatzreiter (1999)- Habitats of larger foraminifera on the upper reef slope of Sesoko Island, Okinawa, Japan. *Mar. Micropal.* 36, p. 109-168.

(Peneroplis common on reef flat, hardgrounds down to 30m. Dendritina on sandy bottoms avoids uppermost slope, found down to 50m. Alveolinella similar distribution, common on hard bottom. Parasorites restricted to sandy substrates, 20-80m. Sorites and Amphisorus firm substrates between reef edge and 50m. Amphistegina species prefer hardgrounds, A. radiata also common on sand. Calcarinids withstand high energy, abundant on firm substrates close to reef edge. Baculogypsinoidea deeper slope, sandy bottom, avoids shallowest parts. Hard substrates settled by Heterostegina down to 80m, occasionally on sandy bottoms. Nummulites on sands between 20- 70m. Operculina, starting at 20m, sandy substrates, rare individuals on rubble)

Hoibian, T. (1984)- La microfaune benthique traceur de l'évolution d'un système deltaïque sous climat équatorial: le delta de la Mahakam (Kalimantan). *Doct. Thesis Université Bordeaux*, p. 1-169. *(Unpublished)*

('Benthic microfauna tracing evolution of a delta system under equatorial climate: the Mahakam Delta (Kalimantan)')

Ho Kiam Fui (1971)- Distribution of recent benthonic foraminifera in the öinnerö Brunei Bay. *The Brunei Mus. J.* 2, 3, p. 124-137.

(Three foraminifera assemblage in nearly landlocked Brunei Bay: (1) Trochammina cf. lobata and other small arenaceous species (tidal inlets); (2) Ammobaculites (large part of inner bay); (3) Asterorotalia trispinosa with Ammonia, Elphidium, Florilus (seaward part of inner bay))

Holbourn, A., A.S. Henderson & N. Macleod (2013)- Atlas of benthic foraminifera. Wiley-Blackwell, p. 1-654. *(Atlas describing and illustrating 300 common Jurassic- Recent deep-sea benthic foraminifera species)*

Honjo, S. & N. Minoura (1968)- *Discoaster barbadiensis* Tan Sin Hok and the geologic age of the Setogawa Group. *Proc. Japan Academy* 44, 3, p. 165-169.

(online at: https://www.jstage.jst.go.jp/article/pjab1945/44/3/44_3_165/_pdf)

(Nannofossil assemblage with Discoaster barbadiensis (originally described by Tan Sin Hok from Roti) signifies E-M Eocene age)

Hope, G.S. (1973)- The vegetation history of Mt Wilhelm. *Ph.D. Thesis Australian National University, Canberra*, p. 1-461.

(online at: <https://digitalcollections.anu.edu.au/handle/1885/11103>)

(Palynology study of sites on Mt Wilhelm PNG. Before 10,000 BP cooler and drier conditions prevailed in mountains and most mountains over 3800m in New Guinea were glaciated. Glaciers started retreating after

14,000 BP. By 8300 BP subalpine forests colonised Mt Wilhelm up to 4000m. Forests extensively cleared after 800 BP when planting of gardens took place below 2500m)

Hope, G.S. (1976)- The vegetational history of Mt Wilhelm, Papua New Guinea. *J. of Ecology* 64, p. 627-663.
(Pollen diagrams and 14 C dating from sites between 4420- 2740m on Mt Wilhelm, PNG Highlands allow determination of position of vegetation zones. From >22 000 years ago until 10 200 yrs B.P. tree-line stood well below 2700m and glaciers were present on mountain)

Horton, B.P., S.J. Culver, M.I.J. Hardbattle, P. Larcombe, G.A. Milne et al. (2007)- Reconstructing Holocene sea-level change for the central Great Barrier reef (Australia) using subtidal foraminifera. *J. Foraminiferal Research* 37, 4, p. 47-63.

(Samples behind barrier reef in water depths from 4.2- 48m. Two foraminiferal zones: inner shelf with *Elphidium hispidulum*, *Pararotalia venusta*, *Planispirinella exigua*, *Quinqueloculina venusta* and *Triloculina oblonga*; and middle shelf dominated by *Amphistegina lessonii*, *Dendritina striata* and *Operculina complanata*)

Horton, B.P., P. Larcombe, S.A. Woodroffe, J.E. Whittaker, M.R. Wright & C. Wynn (2003)- Contemporary foraminiferal distributions of a mangrove environment, Great Barrier Reef coastline, Australia: implications for sea-level reconstructions. *Marine Geology* 198, p. 225-243.

(Modern foraminifera and associated environmental information from Cocoa Creek, a mesotidal fringing mangrove environment on Great Barrier Reef. Three elevational zones. Zones I (highest) and II dominated by agglutinated species *Trochammina inflata* and *Miliammina fusca*, respectively; and Zone III (lowest) dominated by calcareous species, notably *Ammonia tepida* and *Elphidium discoidale multiloculum*. These assemblage zones similar to those found in both tropical and temperate intertidal environments)

Horton, B.P., J.E. Whittaker, K.H. Thomson, M.I.J. Hardbattle, S.A. Woodroffe & M.R. Wright (2005)- The development of a modern foraminiferal data set for sea-level reconstructions, Wakatobi Marine National Park, Southeast Sulawesi, Indonesia. *J. Foraminiferal Research* 35, 1, p. 1-14.

(Intertidal foraminifera from Tukang-Besi islands off SE Sulawesi. Agglutinated species like *Arenoparella mexicana*, *Miliammina fusca* and *Trochammina inflata* most common at landward margin, and small calcareous species *Ammonia tepida*, *Elphidium advanum* and *Quinqueloculina* dominant at seaward margin of mangrove belt)

Horton, B.P., Y. Zong, C. Hillier & S. Engelhart (2007)- Diatoms from Indonesian mangroves and their suitability as sea-level indicators for tropical environments. *Marine Micropaleontology* 63, p. 155-168.

(Modern diatoms from mangrove swamps of Kaledupa (Tukang Besi island). 95 species, dominated by mesohalobous species (*Amphora coffeaeformis*, *Amphora turgida*, *Achnanthes delicatula*, *Nitzschia sigma*, *Tryblionella balatonis*) and oligohalobous (*Amphora veneta*, *Diploneis ovalis*, *Progonioia didiomatia*) taxa)

Howe, H.V. & K.G. McKenzie (1989)- Recent marine ostracoda (Crustacea) from Darwin and North Western Australia. Northern Territory Museum Arts Sciences, Monogr. Ser. 3, p. 1-50.

Hughes, G.W. (1977)- Recent foraminifera from the Honiara Bay area, Solomon Islands. *J. Foraminiferal Research* 7, 1, p. 45-57.

Hughes, G.W. (1984)- Recent foraminifera and selected biometrics of *Heterostegina* from Ontong Java Atoll, Solomon Islands, Southwest Pacific. *J. Foraminiferal Research* 15, p. 13-17.

(online at: <http://jfr.geoscienceworld.org/content/15/1/13.full.pdf>)
(56 species of foraminifera in *Halimeda* gravels from Ontong Java Atoll lagoon between 31-38 m water depth. *Amphistegina lessonii* and *Heterostegina depressa* two most common species in all samples)

Hughes, G.W. (1988)- Modern bathyal agglutinating foraminifera from the Vella Gulf and Blanche Channel, New Georgia, Solomon Islands, Southwest Pacific. *J. Foraminiferal Research* 18, p. 304-310.

(online at: <http://jfr.geoscienceworld.org/content/18/4/304.full.pdf>)

(Diverse agglutinated foraminiferal assemblages of 39 species between 510- 1225m water depth off Solomon Islands. Below ~600m Bathysiphon, Ammodiscus, Martinottiella, Karreriella appear. Increase in abundance and diversity between 865-1070m associated with regional oxygen-maximum zone between 450m and 750m and a salinity-minimum zone below 800m)

Hughes, G.W. (1995)- Recent foraminifera from inter-reef channels, nearshore North Rarotonga, Cook Islands, South Pacific. *J. Micropalaeontology* 14, 1, p. 29-36.

(online at: <https://www.j-micropalaeontol.net/14/29/1995/jm-14-29-1995.pdf>)

(Samples from 8-65 water depth in Avatiu and Avarua channels of Rarotonga Island, S Pacific. Foraminifera mainly Cymbaloporeta bradyi, Borelis schlumbergeri, Heterostegina depressa, Peneroplis pertusus, Planorbulinella larvata, Siphogenerina raphanus, Sorites marginalis, Reussella simplex, Spirillina vivipara, Rosalina globularis, Amphistegina radiata, Planispirinella exigua and small miliolids)

Hughes, G.W. (2008)- Recent brackish Foraminifera and Thecamoebae from Sedili River, West Malaysia. Malaysia. In: M.A. Kaminski & R. Coccioni (eds.) Proc. 7th Int. Workshop on agglutinated foraminifera, Grzybowski Foundation Spec. Publ. 13, p. 41-45.

(Sedili River of S Malay Peninsula enters S China Sea through wide estuary. Lower estuarine, mangrove-fringed regime with normal marine salinity (34 ppt) has mixed calcareous-agglutinated autochthonous foraminiferal assemblage with Trochammina, Tiphotrocha comprimata, Haplophragmoides and Ammobaculites and surge-transported inner neritic calcareous benthic forams (Asterorotalia, Cellanthus, Triloculina, Ammonia, Elphidium, etc.) and rare planktonics. Estuarine, mangrove-fringed regime upstream of lower estuarine contains diverse agglutinated foraminiferal assemblages dominated by Trochammina spp., Tiphotrocha, Cribrostomoides and Ammobaculites. Upper estuarine, freshwater-slightly brackish Pandanus-grass-fringed tidal regime with low diversity agglutinated foram assemblages dominated by Miliammina fusca and Spirolocammina sp. Upstream freshwater areas of Nipa palm and grass-fringed river banks barren of foraminifera. Thecamoebae include Diffugia oblonga, Cucurbitella tricuspis and Nebela colaris)

Hunt, C.O., D.D. Gilbertson & G. Rushworth (2012)- A 50,000-year record of Late Pleistocene tropical vegetation and human impact in lowland Borneo. *Quaternary Science Reviews* 37, p. 61-80.

(Palynology from sections in Great Cave of Niah, Sarawak, spanning period from ~52,000-5000 BP. Vegetation of interstadials marked by lowland forest, sometimes rather dry and at times by mangroves. Stadials are indicated by taxa characteristic of open environments, with taxa now restricted to 1000-1600m above sea level, suggesting temperature declines of ca 7–9 °C relative to present)

Hunt, C.O. & R. Premathilake (2012)- Early Holocene vegetation, human activity and climate from Sarawak, Malaysian Borneo. *Quaternary Int.* 249, p. 105-119.

(40 m core from Loagan Bunut yielded high-resolution E Holocene (11.3- 6.75 ka) sequence of marginal-marine deposits)

Hussain, S.M. (2017)- An overview of ostracoda studies from the freshwater, marginal marine and marine ecosystems of Andaman and Nicobar Islands and the coasts of India. In: P K Kathal et al. (eds.) *Micropaleontology and its applications*, Scientific Publishers, India, p.

Hussain, S.M., P. Ganesan, G. Ravi, S.P. Mohan & S.G.D. Sridhar (2007)- Distribution of ostracoda in marine and marginal marine habitats off Tamil Nadu and adjoining areas, SE coast of India and Andaman Islands: environmental implications. *Indian J. Marine Sciences* 36, 4, p. 369-377.

(online at: [http://nopr.niscair.res.in/bitstream/123456789/68/1/IJMS%2036\(4\)%20\(2007\)%20369-377.pdf](http://nopr.niscair.res.in/bitstream/123456789/68/1/IJMS%2036(4)%20(2007)%20369-377.pdf))

Hussain, S.M., R. Krishnamurthy, M.S. Gandhi, K. Ilayaraja, P. Ganesan & S.P. Mohan (2006)- Micropaleontological investigations of tsunamigenic sediments of Andaman Islands. *Current Science* 91, p. 1655-1667.

(online at: www.iisc.ernet.in/currsci/dec252006/1655.pdf)

(Diverse marine foraminifera and ostracods from likely tsunami deposits on Andaman Islands. Common Amphistegina., Operculina ammonoides, Calcarina, Textularia, Ammonia, etc. Also deeper marine elements)

Hussain, S.M., S.P. Mohan & M.P. Jonathan (2010)- Ostracoda as an aid in identifying 2004 tsunami sediments: a report from SE coast of India. *Natural Hazards* 55, p. 513-522.
(*Presence of marine ostracods in 2004 coastal tsunami deposits*)

Hustedt, F. (1938)- Systematische und ökologische Untersuchungen über die Diatomeen-Flora von Java, Bali und Sumatra nach dem Material der Deutschen Limnologischen Sunda-Expedition. 1: Systematischer Archiv. *Hydrobiologie, Suppl. Band 15*, p. 1-790. (Reprinted 1980 by Otto Koeltz Science Publishers, Königstein)
(*Systematic and ecological investigations of the diatom florae of Java, Bali and Sumatra...*)

Isnaniawardhani, V. (2006)- Biostratigrafi dan paleoekologi berdasarkan nannoplankton dan foraminifera daerah Perairan Madura sejak Pliosen hingga Resen. Ph.D. Thesis Inst. Teknologi Bandung (ITB), p. 1- .
(*Unpublished*)
(*Biostratigraphy and palaeoecology based on nannoplankton and foraminifera in the Madura waters from Pliocene to Recent'. 10 biozones in waters S of Madura. Climate trends: warm conditions characterized by nannoplankton Discoaster quinqueramus and foram Globorotalia tumida*)

Isnaniawardhani, V. (2009)- Environmental control of nannoplankton and foraminifera assemblages in Madura waters. *Bull. Marine Geol.* 24, 1, p. 1-12.
(online at: <http://isjd.pdii.lipi.go.id/admin/jurnal/24109112.pdf>)
(*Distribution of nannoplankton and foraminifera in 26 shallow marine surface sediment samples from Madura Strait and 24 samples from open marine water N of Madura*)

Isnaniawardhani, V. (2012)- Karakteristik sedimen dan mikroorganisma permukaan dasar laut perairan Madura bagian utara. *Bull. Scientific Contr. (UNPAD)* 10, 1, p. 18-30.
(online at: <http://jurnal.unpad.ac.id/bsc/article/view/8275/3822>)
(*Characteristics and microorganisms of seafloor sediments north of Madura'. Clay and silt seafloor samples in water depths 5-77m with 20 nannoplankton species (mainly Emiliana huxleyi, Gephyrocapsa oceanica), 30 planktonic forams species (mainly Globigerinoides ruber) and 16 benthic foraminifera species (common Ammonia, Quinqueloculina, Eponides, Triloculina, Asterorotalia, Cibicides, Cancris, Elphidium, Textularia). Pseudorotalia, Cibicides and Anomalina more abundant in N, away from coast. Abundance and diversity increase with depth. Gephyrocapsa mainly in samples closest to shoreline*)

Isnaniawardhani, V. & F. Muhammadiyah (2015)- Kelimpahan, keanekaragaman dan spesies khas dari kumpulan foraminifera benthik pada sedimen permukaan dasar laut di perairan Tambelan. *Bull. Scientific Contr. (UNPAD)* 13, 3, p. 259-269.
(online at: <http://jurnal.unpad.ac.id/bsc/article/view/8413/3920>)
(*Abundance, diversity and species of benthic foraminifera in sea floor sediments in waters of Tambelan'. Benthic foraminifera from shallow waters around Tambelan Islands, Natuna Sea*)

Isnaniawardhani, V., E. Suparka, R. Kapid & H. Latief (2002)- Calcareous nannoplankton and foraminifera in the surficial sediment of Madura Strait. *Proc. 31st Ann. Conv. Indon. Assoc. Geol. (IAGI)*, Surabaya, 1, p. 380-386.
(*Recent calcareous nannoplankton assemblages N of Madura island dominated by Gephyrocapsa oceanica, Emiliana huxleyi and Florisphaera. Not much detail*)

Isnaniawardhani, V., E. Suparka, R. Kapid & H. Latief (2003)- Nannoplankton and foraminifera assemblages and their relations to bathymetry in Madura waters. In: *Proc. 8th Int. Congress Pacific Neogene Stratigraphy*, Chiang Mai 2003, p.

Jell, J.S., W.H.G. Maxwell & R.G. McKellar (1965)- The significance of the larger foraminifera in the Heron Island reef sediments. *J. Paleontology* 39, 2, p. 273-279.

(Distribution of foraminiferal detritus in sediments of Heron Island Reef, Great Barrier Reef Province. Dominant genus *Calcarina* spp., *Baculogypsina sphaerulata* and *Marginopora vertebralis* mainly in outer parts of reef flats. *Amphistegina*, *Elphidium*, *Operculina*, *Peneroplis* and *Alveolinella quooi* relatively rare)

Jian, Z. & L. Wang (1997)- Late Quaternary benthic foraminifera and deepwater paleoceanography in the South China Sea. *Marine Micropaleontology* 32, p. 127-154.

(In deepwater S China Sea different foram assemblages associated with Intermediate Water Mass (*Globocassidulina subglobosa*), Deep Water Mass (*Astrononion novozealandicum* and *Bulimina aculeata*) and Deep water below CCD (*Eggerella bradyi*))

Jian, Z., L. Wang, M. Kienast, M. Sarnthein, W. Kuhnt, H. Lin & P. Wang (1999)- Benthic foraminiferal paleoceanography of the South China Sea over the last 40,000 years. *Marine Geology* 156, 1, p. 159-186.

(During periods of high organic carbon flux during last glacial maximum (~10 ka; possibly due to increased surface productivity, induced by increased input of nutrients from nearby river runoff) detritus feeders like *Bulimina aculeata* and *Uvigerina peregrina* dominated benthic foraminiferal assemblages. Suspension feeders like *Cibicidoides wuellerstorfi* and 'opportunistic' species like *Oridorsalis umbonatus*, *Melonis barleeanum* and *Chilostomella ovoidea* gradually became more abundant as soon as organic carbon flux decreased)

Jones, R.W. (1994)- The Challenger Foraminifera. Oxford University Press, p. 1-149.

(Updated taxonomy and reproductions of foraminifera from classic H.B. Brady (1884) Challenger report)

Jones, R.W. (2014)- Supplemental notes on Challenger Foraminifera. In: A.J. Bowden et al. (eds.) Landmarks in foraminiferal micropalaeontology: history and development, The Micropalaeontological Society, Spec. Publ. 6, Geol. Soc. London, p. 31-45.

(Updates to Jones (1994) updates to names of foraminifera in Brady Challenger Report)

Jouse, A., P. & G.H. Kazarina (1974)- Pleistocene diatoms from site 262 leg 27, DSDP. Initial Reports Deep Sea Drilling Project (DSDP) 27, U.S. Government Printing Office, Washington, p. 925-946.

(online at: www.deepseadrilling.org/27/volume/dsdp27_42.pdf)

(Site 262 near axis of the Timor Trough, 75 km S of W tip of Timor in 2315m water depth. Mainly nannofossil oozes with some terrigenous material. Diatoms only in upper 250m (M-U Pleistocene; 5 zones), not numerous, well preserved, 97 species, dominantly oceanic (38). All samples with of *Thalassionema* and *Thalassiotrix*)

Jumngthai, J. (1983)- Recent smaller foraminifera from the Gulf of Thailand. *J. Geol. Soc. Thailand* 6, 1 p. 39-53.

(online at: <http://library.dmr.go.th/Document/J-Index/1983/88.pdf>)

(Foram distribution in 18 samples from water depth 29-74m in N Gulf of Thailand >99% benthics (83% calcareous). Common *Asterorotalia pulchella*, *Cellanthus craticulatus*, *Elphidium*, *Pseudorotalia* spp., *Quinqueloculina*, *Textularia*, etc.))

Jumngthai, J. (2001)- Brackish foraminifera from southern provinces along the Gulf of Thailand. Dept. Mineral Resources, Bangkok, Techn. Report No. GSD 254/2001, p.

(online at: http://library.dmr.go.th/Document/DMR_Technical_Reports/2001/1746.pdf)

(Brackish water foraminifera from five provinces along Gulf of Thailand 53 benthic species. Low salinity facies with *Ammobaculites*, *Ammotium cassis*, *Arenoparella*, *Miliammina fusca* and *Trochammina*. Higher salinity assemblages with more calcareous forms *Elphidium*, *Pararotalia nipponica*))

Jumngthai, J. (2002)- Recent brackish foraminifera from southern peninsular Thailand. *J. Geol. Soc. Thailand* 1, p. 35-46.

(online at: <http://library.dmr.go.th/Document/J-Index/2002/136.pdf>)

(92 species of brackish foraminifera in estuaries and coastal zones along Andaman Sea. Arenaceous taxa *Arenoparella mexicana*, *Haplophragmoids*, *Miliammina fusca* and *Trochammina* dominant in mangrove forests; calcareous taxa *Ammonia beccarii*, *Elphidium* and *Pararotalia nipponica* dominant in coastal areas)

- Jurnaliah L. & Winantris (2015)- Distribusi submikrofosil (polen dan foraminifera) pada delta front di delta Mahakam, Kalimantan Timur. *Bull. Scientific Contr. (UNPAD)* 13, 3, p. 169-181.
(online at: <http://jurnal.unpad.ac.id/bsc/article/view/8404/3911>)
(*'Distribution of microfossils (pollen and foraminifera) in the Mahakam delta, East Kalimantan'. 29 samples from delta front. Pollen 24 species of palmae, 21 mangrove and 117 species of non-mangrove and 7 biofacies. Foraminifera 82 species of small benthics, also 7 biofacies, from inner shelf to mangrove swamp*)
- Kamaludin b. Hassan (1989)- Significance of palynology in Late Quaternary sediments in Peninsular Malaysia. *Bull. Geol. Soc. Malaysia* 24, p. 57-66.
(online at: <https://gsmpublic.files.wordpress.com/2014/09/bgsm1989b05.pdf>)
- Karmini AS, Mimin (1996)- Foraminifera sedimen permukaan perairan Teluk Semangko & Lepas pantai sebelah Barat Sumatra Selatan. *Proc. 25th Ann. Conv. Indon. Assoc. Geol. (IAGI)*, p. 71-87.
(*'Foraminifera in seafloor sediments of Semangko Bay and Lepas beach, S Sumatra'*)
- Kathal, P.K. (2002)- Taxonomy, distribution patterns and ecology of Recent littoral foraminifera of the East coast of India. *Neues Jahrbuch Geol. Palaont. Abhandl.* 224, 1, p. 115-160.
(*Foram distributions in 96 samples of coastal sediments down to 3m depth along E coast India. Faunas dominated by Miliolidae, followed by Rotaliidae, Elphididae, Nonionidae, Cassidulinidae, etc.*)
- Kawagata, S., B.W. Hayward & A.K. Gupta (2006)- Benthic foraminiferal extinctions linked to late Pliocene-Pleistocene deep-sea circulation changes in the northern Indian Ocean (ODP sites 722 and 758). *Marine Micropaleontology* 58, p. 219-242.
(*Late Pliocene- M Pleistocene decline and extinction of 63 species of elongate, bathyal-upper abyssal benthic foraminifera (Stilostomellidae, Pleurostomellidae, some Nodosariidae. Two Indian Ocean ODP sites show pulsed declines in Extinction Group abundance and richness, especially in glacial periods, with partial recoveries in interglacials. Glacial declines result of increased production of colder, well-ventilated Antarctic Bottom Water and Glacial North Atlantic Intermediate Water)*)
- Kawamura, H. (2002)- Marine palynological records in the southern South China Sea over the last 44 kyr. Doctor Dissertation Christian-Albrechts-University, Kiel, p. 1-145.
(online at: [at http://deposit.ddb.de/cgi-bin/...](http://deposit.ddb.de/cgi-bin/...))
(*Mainly on Recent and Quaternary dinoflagellates in Molengraaf paleo-river area of N Sunda Shelf*)
- Kawamura, H. (2004)- Dinoflagellate distribution along a shelf to slope transect of an oligotrophic tropical sea (Sunda Shelf, South China sea). *Phycological Research* 52, 4, p. 355-375.
(*51 surface samples along Sunda shelf to S China Sea slope with 36 taxa of dinoflagellate cysts. Oligotrophic tropical shelf assemblages dominated by gonyaulacoids (Spiniferites, Operculodinium spp.). Slope assemblages dominated by protoperidinioids, possibly reflecting higher nutrient availability*)
- Keij, A.J. (1953)- Preliminary note on the Recent Ostracoda of the Snellius Expedition. *Proc. Kon. Nederl. Akademie Wetenschappen*, B 56, 2, p. 155-168.
(*13 species of podocopid and one platycopid ostracode species from 28 stations of 1929-1930 Snellius Expedition in E Indonesian Seas. Ostracoda still found in samples from 4000-5000m*)
- Keij, A.J. (1964)- The relative abundance of recent planktonic foraminifera in seabed samples collected offshore Brunei and Sabah. *Annual Report Geological Survey Borneo Region Malaysia* 1963, p. 146-153.
(*Percentages of planktonic foraminifera increase with depth in 561 seafloor samples from narrow Brunei and Sabah shelf between 4-113m: rare between 0-20m, <5% between 20-40m, 5-40% between 40-100m, up to 80% between 100-200m. Distinct increases in relative abundance of Orbulina, Pulleniatina, Globorotalia menardii below 40-50m. Globorotalia truncatulinoides, Gr. crassaformis and Sphaeroidinella dehiscens only below 100m*)

- Keij, A.J. (1966)- Southeast Asian Neogene and Recent species of *Paijenborchella*. *Micropaleontology* 12, 3, p. 324-354.
(Discussion of distribution of 4 species of Miocene- Recent ostracode genus *Paijenborchella* in Brunei, Cebu-Philippines, etc. to Victoria, Australia. *P. malaiensis* is deep-water species living in depths of >100m)
- Keij, A.J. (1975)- Some recent Ostracoda of Manila (Philippines). *Proc. Kon. Nederl. Akademie Wetenschappen B* 78, p. 351-363.
- Keij, A.J. (1979)- Review of the Indo-West Pacific Neogene to Holocene ostracode genus *Atjehella*. *Proc. Kon. Nederl. Akademie Wetenschappen B* 82, p. 449-464.
- Keijzer, C.J. (1935)- On variability in East Indian foraminifera. *Doct. Thesis University of Leiden, Brill*, p. 1-79. (*Unpublished*)
(*Biometric study of selected modern foraminifera species from coasts of Java, Bali, Madura. Not very useful*)
- Khare, N., S.K. Chaturvedi & A. Mazumder (2007)- An overview of foraminiferal studies in nearshore regions off eastern coast of India, and Andaman and Nicobar Islands. *Indian J. Marine Sci.* 36, 4, p. 288-300.
(online at: [http://nopr.niscair.res.in/bitstream/123456789/52/1/IJMS%2036\(4\)%20\(2007\)%20288-300.pdf](http://nopr.niscair.res.in/bitstream/123456789/52/1/IJMS%2036(4)%20(2007)%20288-300.pdf))
(Review and bibliography of over 100 papers dealing with shallow marine and coastal Recent foraminifera)
- Kleijne, A. (1990)- Distribution and malformation of extant calcareous nannoplankton in the Indonesian Seas. *Marine Micropaleontology* 16, p. 293-316.
(*Calcareous nannoplankton distribution in 202 samples from Snellius-II Expedition in Banda Sea and adjacent seas. 36 living species recorded; most common Gephyrocapsa oceanica, Umbellosphaera irregularis, Emiliana huxleyi and U. sibogae. Coccolithophorids present, but devoid of coccoliths during NW monsoon, suggesting low salinity and nutrient depletion of surface waters restrict coccolith formation, since normal coccoliths do develop during SE monsoon when upwelling causes nutrient enrichment and normal salinity*)
- Kob, M.R.C. (1993)- Late Quaternary nannofossils from offshore Sabah, northwest Borneo. In: T. Thanasuthipitak (ed.) *Proc. Int. Symposium Biostratigraphy of mainland Southeast Asia: facies & paleontology (BIOSEA), Chiang Mai 1993, Chiang Mai University*, 2, p. 261-281.
(online at: [http://library.dmr.go.th/Document/Proceedings-Yearbooks/M_1/1993/2298_2 ...](http://library.dmr.go.th/Document/Proceedings-Yearbooks/M_1/1993/2298_2...))
(*late Pleistocene- Recent calcareous nannofossils from 13m thick core KL139 in ~2700m water depth of Sabah Trough. Emiliana huxleyi, Gephyrocapsa oceanica and 'small Gephyrocapsa' >50% of total assemblages. Four zones: deeper zone C (Late Pleistocene Last Glacial Maximum?) with peak 'small Gephyrocapsa' represents rel. cool period, youngest zone A with peak G. oceanica rel. warm*)
- Koba, M. (1978)- Distribution and environment of Recent *Cycloclypeus*. *Science Repts. Tohoku University*, ser. 7, 28, p. 283-311.
(online at: <http://ir.library.tohoku.ac.jp/re/bitstream/10097/45065/1/AA0045945078466.pdf>)
(*Tropical larger foram Cycloclypeus widely distributed in Recent of Indo-Pacific oceanic region. Common on outer reef slopes, and confined by 200m isobath. Not present in pelagic environments, reef banks, lagoons or bays. In Recent samples found between 32-1419m depth, but clear abundance peak around 90m*)
- Langer, M.R. (1992)- New Recent foraminiferal genera and species from the lagoon at Madang, Papua New Guinea. *J. Micropalaeontology* 11, 1, p. 85-93.
(online at: <https://www.j-micropalaeontol.net/11/85/1992/jm-11-85-1992.pdf>)
(*Samples from shallow water (0-55m) fore- and back-reef environments at Madang lagoon with larger foraminifera (Assilina spp., Heterostegina depressa, Alveolinella quoyi, Sorites spp., Amphisorus hemprichii, Marginopora vertebralis). Two new genera (Pseudolachlanella) and eight new species of benthic foraminifera*)
- Langer, M.R. (1995)- Oxygen and carbon isotopic composition of Recent larger and smaller foraminifera from the Madang Lagoon (Papua New Guinea). *Marine Micropaleontology* 26, p. 215-221.

(General trend in Recent large benthic foraminifera (*Operculina*, *Heterostegina*, *Sorites*, *Marginopora*, *Alveolinella*) from Madang Lagoon of depletion in heavier C and O isotopes, with depth appears to be depth- and light-dependant)

Langer, M.R. & L. Hottinger (2000)- Biogeography of selected 'larger' foraminifera. *Micropaleontology* 46, Suppl. 1, Advances in the biology of foraminifera, p. 105-126.

(Global distributions of Recent larger foraminifera species. Main provinces: (1) Central Pacific with *Baculogypsinoidea spinosus*, *Schlumbergerella floresiana*, *Operculina heterosteginoides*, *Pseudorotalia indopacifica*; (2) Indo-Pacific with *Marginopora vertebralis*, *Alveolinella quoyii*, *Amphistegina radiata*, *Calcarina* spp., *Nummulites venosus* and *Cycloclypeus carpenteri*; (3) W Indian Ocean and (4) Caribbean)

Langer, M.R. & J.H. Lipps (2003)- Foraminiferal distribution and diversity, Madang reef and lagoon, Papua New Guinea. *Coral Reefs* 22, p. 143-154.

(Benthic foram distribution shows four clusters in in Madang lagoon at NE coast of PNG)

Lei, Y. & T. Li (2016)- Atlas of benthic foraminifera from China Seas, the Bohai Sea and the Yellow Sea. IUP Science Press, Beijing, Springer, p. 1-399.

(Descriptions of 183 species of mainly shallow marine foraminifera from northern South China Sea)

Lelono, E.B. (2007)- Pleistocene palynology of East Java. *Lemigas Scientific Contr.* 29, 3, p. 3-14.

LeRoy, L.W. (1938)- A preliminary study of the microfaunal facies along a traverse across Peper Bay, West coast of Java. *De Ingenieur in Nederlandsch-Indie* (IV) 5, 8, p. 130-133.

(Recent foraminifera off W Java SW of Labuan three assemblages (1) *Haplophragmoides*- *Haplophragmium*, (2) *Operculina ozawaia* and (3) *Dendritina*-*Aveolinella*)

Lessard, R.H. (1964)- Intertidal and shallow water foraminifera of the tropical Pacific Ocean. M.Sc. Thesis, University of Southern California, p. 1-112.

(online at: <http://digitallibrary.usc.edu/cdm/ref/collection/p15799coll30/id/107855>)

(Mainly on distribution of *Baculogypsina* and *Tinoporus* in western tropical Pacific)

Lessard, R.H. (1980)- Distribution patterns of intertidal and shallow water foraminifera of the tropical Pacific Ocean. *Cushman Found. Foraminiferal Research, Spec. Publ.* 19, p. 40-58.

Li, Z., Y. Saito, L. Mao, T. Tamura, Z. Li, B. Song, Y. Zhang, A. Lu, S. Sieng & J. Li (2012)- Mid-Holocene mangrove succession and its response to sea-level change in the upper Mekong River delta, Cambodia. *Quaternary Research* 78, 2, p. 386-399.

(Cores from upper Mekong River delta in Cambodia record transgressive sequence from floodplain freshwater marsh to tidal flat (~9.4- 6.3 ka), overlain by mangrove. At decelerated sea-level rise at ~8.3 ka pioneer (high-salinity tolerant) mangrove species *Sonneratia alba* and *Sonneratia caseolaris* appeared, then was replaced by regressive mangrove succession of increasing *Rhizophora apiculata* and *Bruguiera* spp.)

Ling, H.Y. & W.A. Anikouchine (1967)- Some spumellarian radiolaria from the Java, Philippines and Mariana trenches. *J. Paleontology* 41, 6, p. 1481-1491.

(Eight species of five genera of patagium-bearing and morphologically closely related spumellarian *Radiolaria* in three sediment cores from Java, Philippine, and Mariana Trenches. Java Trench samples from pelagic ooze in core from 3380m water depth off S Sumatra, with *Euchitonia* spp., *Hymeniastrum*, *Dictyocorine* and *Rhopalodictyum*. Also locally common diatom *Ethmodiscus rex*)

Lipps, J.A. & K.P. Severin (1985)- *Alveolinella quoyi*, a living fusiform foraminifera, at Motupore Island, Papua New Guinea. *Science in New Guinea* 11, p. 126-137.

(Living species of *Alveolinella quoyi* in water depths of 3-12m, mainly on algae-covered coral rubble and around bases of living coral heads in rel. sheltered areas. Dead tests scattered over wider bathymetric range. Virtually absent on back-reef flats)

Lobegeier, M.K. (2002)- Benthic foraminifera of the family Calcarinidae from Green Island Reef, Great Barrier Reef Province. *J. Foraminiferal Research* 32, 3, p. 201-216.

(Three epiphytic calcarinid species on Great Barrier Reef and limited to W Indo-Pacific (absent from Indian Ocean and E of 170°W). Calcarina spengleri (=hispidia) dominant and common in shallow water on reef flat. Calcarina mayori smaller and dominates in deeper water off reef flat. Baculogypsina sphaerulata is shallow water high-energy species. Best preserved Calcarina at Green Island Reef in windward shoals)

Li, B.H., X.Y. Wang, Z.M. Jian, P.X. Wang (2009)- Sea surface environment inferred from planktonic foraminifera in the southern South China Sea since the last glacial period. *Palaeoworld* 18, p. 23-33.

(Planktonic foraminifera from Site 17964 in southern S China Sea (SCS) show higher % warm-water species in Holocene, while temperate-water species increase during last glacial period. Pulleniatina obliquiloculata more common during glacial period. Orbulina universa test size larger than those in Indian and Atlantic Oceans, indicating warmer and less saline surface water in Equatorial- tropical W Pacific. Diameter and shell porosity of O. universa increased from last glacial to Holocene)

Lirdwitayaprasit, T. (1997)- Distribution of dinoflagellate cysts in the surface sediment of the South China Sea, Area I: Gulf of Thailand and East Coast of Peninsular Malaysia. In: Proc. 1st Techn. Seminar Marine fishery resource survey in the South China Sea, SE Asia Fisheries Dev. Centre (SEAFDEC), Training Dept., Thailand, S4/SB7, p. 294-309.

*(online at: http://map.seafdec.org/downloads/pdf/collaborative%20research/AreaI_GOT/SCS_FRS1_18.pdf)
(Dinoflagellate cysts in Gulf of Thailand and off E coast of Peninsular Malaysia 20 goniolacoid, tuberculodinioid and peridinioid species. Spiniferites spp. (=Gonyaulax spp.) dominant cyst species)*

Lirdwitayaprasit, T. (1997)- Distribution of dinoflagellate cysts in the surface sediment of the South China Sea, Area II: Sabah, Sarawak and Brunei Darussalam waters. In: Proc. 1st Techn. Seminar Marine fishery resource survey in the South China Sea, SE Asia Fisheries Dev. Centre (SEAFDEC), Training Dept., Thailand, S2/FB4, p. 310-322. *(online at:*

*http://map.seafdec.org/downloads/pdf/collaborative%20research/AreaII_West%20Borneo/SCS_FRS2_16.pdf)
(Dinoflagellate cysts off N Borneo with Spiniferites bulloideus as dominant species)*

Lloyd, A.R. (1973)- Foraminifera of the Great Barrier Reef bores. In: O.A. Jones & R. Endean (eds.) *Biology and geology of coral reefs*, 1, Academic Press, New York, p. 347-366.

Loeblich, A.R. & H. Tappan (1994)- Foraminifera of the Sahul Shelf and Timor Sea. *Cushman Found. Foraminiferal Research, Spec. Publ.* 31, p. 1-661.

*(online at: www.cushmanfoundation.org/specpubs/sp31.pdf)
(Comprehensive study of Recent foraminifera from Timor Trough and Sahul Shelf, collected in 1961. Mainly descriptions of species: (946 species of 428 genera; 101 new species)*

Luan, B.T. & J.P. Debenay (2005)- Foraminifera, environmental indicators in the highly impacted environments of the Mekong Delta: *Hydrobiologia* 548, p. 75-83.

Lucero, E.S. & L.P. de Silva (2006)- The occurrence and distribution of Recent benthic foraminifera in Subic Bay, Zambales, Philippines. *J. Geol. Soc. Philippines* 61, p.

Lunt, P. (2014)- Stacked digital imaging of foraminifera. *Berita Sedimentologi* 29, p. 123-132.

*(online at: www.iagi.or.id/fosi)
(Description of technique of imaging foraminifera by combining series of digital photographs in automated software to produce single optical image with high resolution and superior depth of focus. With examples of Indonesian Tertiary- Recent foram material)*

Maloney, B.K. (1992)- Late Holocene climatic change in Southeast Asia: the palynological evidence and its implications for archaeology. *World Archaeology* 24, 1, p. 25-34.

(Palynological information on SE Asia Holocene from deep sea cores, archeological sites and land cores)

Maloney, B.K. (1998)- That elm again! *Ulmus* at Pea Bullok, North Sumatra, and regional comparisons. *Blumea* 43, p. 121-127.

(online at: <http://repository.naturalis.nl/document/565696>)

(Quaternary Ulmus pollen present in Pua Bulok swamp in N Sumatra. Ulmus not necessarily indicator for seasonal dryness)

Maloney, B.K. & F.G. McCormac (1996)- Thirty thousand years of radiocarbon dated vegetation and climatic change in highland Sumatra. *Radiocarbon* 37, p. 181-190.

(Pollen analysis and 14C sequences from two Sumatra highland sites, Pea Bullok (Toba Plateau) and Danau di-Atas, spanning last glacial period. Strong indications of extensive forest clearance after ~2 ka)

Mamo, B.L. (2016)- Benthic foraminifera from the Capricorn Group, Great Barrier Reef, Australia. *Zootaxa* 4215, 1, p. 1-123.

(Taxonomy of 133 benthic foram species from Heron Island, One Tree Island, Wistari and Sykes Reefs)

Mantle, D.J., A.P. Kelman, R.S. Nicoll & J.R. Laurie (2010)- Australian biozonation chart 2010, Part 1: Australian and selected international biozonation schemes tied to the GTS2004 geological timescale. Geoscience Australia, Canberra.

(online at: https://d28rz98at9flks.cloudfront.net/70371/Australian_Biozonation_Chart_2010_Part1.pdf)

(Large chart with Ediacaran- Recent time scale and biozonations of Australia)

Marquez, E.J. (1999)- Deep sea foraminiferal distribution of eastern South China Sea. *J. Geol. Soc. Philippines* 54, 1-2, p.

Marquez, E.J. (2000)- The 1991 Mount Pinatubo eruption and Eastern South China Sea foraminifera: occurrence, composition and recovery. *Island Arc* 9, 4, p. 527-541.

*(Pyroclastic materials from 1991 eruption of Mt Pinatubo resulted in decimation of most benthic foraminifera in E South China Sea. Samples above eruption layers in deep water cores much lower abundances, lower diversity and relative common of *Quinqueloculina* spp., probably form part of recolonization fauna)*

Marquez, E.J., P.J. Militante-Matias, G.P. Yumul, M.M. De Leon, D.V. Faustino et al. (1999)- Deep-sea foraminiferal distribution of the central and eastern portions of the South China Sea. In: G.H. Teh (ed.) *Proc. 9th Reg. Congress Geology, Mineral and Energy Resources of SE Asia (GEOSEA 08)*, Kuala Lumpur 1998, *Bull. Geol. Soc. Malaysia* 43, p. 529-536.

(online at: www.gsm.org.my/products/702001-100787-PDF.pdf)

(1991 eruption of Mount Pinatubo covered S China Sea with W-trending ash fan. Eruption affected foraminifera only in cores taken near Luzon. Not much detail (not one species name!))

Martin, S.Q. (2016)- Distribution and taxonomy of modern benthic foraminifera of the western Sunda Shelf (South China Sea) off Peninsular Malaysia. Masters Thesis, East Carolina University, p. 1-

*(Distribution and taxonomy of 125 modern benthic foraminifera species from 54 seafloor samples in southern S China Sea, between 8-60m. Main assemblages across Sunda Shelf : (1) nearshore areas (<40m) dominated by symbiont-bearing *Amphistegina lessonii*, *A. radiata*; (2) inner shelf (40-100m), sandy mud substrates and abundant *Heterolepa. dutemplei*; (3) outer shelf (100-200m), muddy substrates and *Uvigerina schwageri*)*

Maryunani, Khoiri Anwar (2003)- Calibration of tropical Pacific marine sediment indices (d18O) to sea surface temperature. *Buletin Geologi (ITB)* 35, 1, p.

Matsumaru, K. & Y. Matsuo (1976)- Short note on the Recent benthic foraminiferids from the beach sediments of the subtropical and tropical islands in the Western Pacific region. *J. Saitama University Fac. Education (Math. Nat. Science)* 25, p. 15-26.

Matsuoka, K., Y. Fukuyo, D.P. Praseno, Q. Adnan & M. Kodama (1999)- Dinoflagellate cysts in surface sediments of Jakarta Bay, off Ujung Pandang and Larantuka of Flores island, Indonesia with special reference of *Pyrodinium bahamense*. Bull. Fac. Fisheries, Nagasaki University, 80, p. 49-54.
(online at: <http://naosite.lb.nagasaki-u.ac.jp/dspace/bitstream/10069/9236/1/80-049.PDF>)

McCloskey, B.J. (2009)- Foraminiferal responses to arsenic in shallow-water hydrothermal system in Papua New Guinea and in the laboratory. Ph.D. Thesis University of South Florida, p. 1-425. (Unpublished)
(On shallow marine, reef flat foram assemblages around hydrothermal vents in ~8m of water at Ambitle Island, Tutum Bay, E of New Ireland, PNG)

McKenzie, K.G. & A.J. Keij (1977)- *Pterobairdia* (Ostracoda, Bairdiidae), a new genus from the Indo-West Pacific. Proc. Kon. Nederl. Akademie Wetenschappen, B, 80, 5, p. 367-374.
(Recent ostracodes from East Indonesia Snellius Expedition, incl. *Pterobairdia maddocksaе* n. sp.)

Melis, R. & D. Violanti (2006)- Foraminiferal biodiversity and Holocene evolution of the Phetchaburi coastal area (Thailand Gulf). Marine Micropaleontology 61, p. 94-115.
(Study of foraminifera from surface sediments from Phetchaburi coastal area, Thailand Gulf, from margin of vegetated zone, to depth of ~20m, and core in Mae Khlong delta plain. Area characterized by inflow of Mae Khlong river. Four assemblages of low diversity brackish-water faunas, with salinity controlling factor)

Mertens, K.N., Y. Takano, M.J. Head and K. Matsuoka (2014)- Living fossils in the Indo-Pacific warm pool: a refuge for thermophilic dinoflagellates during glaciations. Geology 42, 6, p. 531-534.
(Dinoflagellate 'refugium species' *Dapsilidinium pastielsii* thought to range from Eocene- E Pleistocene, but still living in SE Asia (Okinawa; Koror, Palau, Ambon, E Vietnam Sea and Philippines)

Miao, Q. & R.C. Thunell (1993)- Recent deep-sea benthic foraminiferal distributions in the South China and Sulu Seas. Marine Micropaleontology 22, p. 1-32.
(Benthic foraminifera in surface sediment samples from S China and Sulu Seas. Low abundances but high diversity. Four faunal assemblages: (1) *Globocassidulina subglobosa*/ *Uvigerina* <1500m; within oxygen minimum zone); (2) *Bulimina aculeata* between 1700-2000m in SE S China Sea, also associated with high organic carbon content; (3) *Astrononion pusillum* in S China Sea between 1500-3200 m; (4) below lysocline (~3200m) in S China Sea agglutinated *Rhabdammina abyssorum* assemblage, in water mass that is highly undersaturated with respect to calcite. In Sulu Sea *Pyrgo murrhina* assemblage 1400-2200m; below 2200m assemblages dominated by *Oridorsalis umbonatus*)

Miao, Q. & R.C. Thunell (1996)- Late Pleistocene-Holocene distribution of deep-sea benthic foraminifera in the South China Sea and Sulu Sea- palaeoceanographic implications. J. Foraminiferal Research 26, p. 9-23.

Millett, F.W. (1898-1904)- Report on the Recent foraminifera of the Malay Archipelago collected by Mr. A. Durrand, parts I-XVII. J. Royal Microscopical Society, 1898-1904, p. 1-248.
(Reprinted by Antiquariaat Junk, Lochem, 1970. 17 papers on foraminifera from samples collected by A. Durrand at 30 stations along transect from N Australia to Malay Peninsula)

Minhat, F.I., P.R. Parham, M.L. Husain & B. Satyanarayana (2014)- Review of foraminiferal studies in nearshore Areas, Peninsular Malaysia. Geol. Soc. Malaysia, Nat. Geoscience Conf. (NGC) 2014, Trengganu, P063, p. 122-124. (Extended Abstract)
(Brief review of current status of intertidal- shallow marine foraminiferal distribution work in Malaysia)

Minhat, F.I., B. Satyanarayana, M.L. Husain & V.V.V. Rajan (2016)- Modern benthic foraminifera in subtidal waters of Johor: implications for Holocene sea-level change on the East coast of Peninsular Malaysia. J. Foraminiferal Research 46, 4, p. 347-357.
(Modern subtidal benthic foraminifera on E coast of Johor 279 species, dominated by *Asterorotalia pulchella* (= *A. tripinosa*), *Discorbinella bertheloti*, *Pseudorotalia indopacifica*, *Ammonia* and *Cavarotalia annectens*.)

Agglutinated species Textularia pseudosolita, T. agglutinans, Bigenerina nodosaria and T. foliacea in middle-shelf (>20m), calcareous genera Elphidium, Pararotalia and Ammonia in inner-shelf (<20m)

Minhat, F.I., K. Yahya, A. Talib & O. Ahmad (2013)- A survey of benthic foraminiferal assemblages in tropical coastal waters of Pulau Pinang, Malaysia. *Tropical Life Sciences Research* 24, 1, p. 35-43.
(Samples from subtidal zone to 1200m offshore Pinang Island, Malacca Straits, in water depths 1.5-10m with 9 nine genera of foraminifera, dominated Ammonia, Bigenerina, Ammobaculites and Elphidium)

Minhat, F.I., K. Yahya, A. Talib & O. Ahmad (2014)- Benthic foraminiferal distributions as bioindicators in coastal waters of Penang National Park, Malaysia. *J. Foraminiferal Res.* 44, 2, p. 143-150.
(Distribution of benthic foraminifera off NW corner of Penang Island. Water depths 1.5-10 m, with predominantly muddy substrate. All assemblages dominated by Ammonia; also Elphidium, Ammobaculites, etc.)

Mohamed, Mahani, S. Jirin, S.S. Hasan & N. Mohsin (2010)- Biofacies characterisation in the marginal marine environments of the Malay Basin using agglutinated foraminifera. *Petrol. Geosc. Conf. Exhib. (PGCE)*, Kuala Lumpur 2010, p. *(Extended Abstract)*
(Malay Basin dominated by paralic facies, where agglutinated foraminifera are useful in characterising biofacies. Three modern localities studied for biofacies analogs: Sedili Besar Estuary, Klang-Langat Delta and Pahang River Delta. Occurrences of species such as Ammobaculites exiguus, Textularia sp and Arenoparrella mexicana used to differentiate nearshore, shallow marine and brackish intertidal depositional settings)

Mohamed, Mahani, S.S. Hasan & S. Jirin (2014)- Recent agglutinated foraminiferal trends and assemblages of the Sedili Besar River and its adjacent offshore area, southeastern Peninsular Malaysia. *Berita Sedimentologi* 29, p. 73-79.

(online at: www.iagi.or.id/fosi)

(Distribution of Recent foraminifera from Sedili river estuary to shallow marine offshore S China Sea along SE coast of Malay Peninsula. Calcareous forms increase with water depth, agglutinated foraminifera show reverse trend. Five biofacies zones differentiated, coinciding with the upper brackish intertidal, lower brackish intertidal, estuary mouth, beach/nearshore and inner shelf depositional settings)

Mohamed, Mahani, S.S. Hasan, A.M. Yakzan & S. Jirin (2011)- Agglutinated foraminiferal trends and assemblages of the Sedili Besar River and its offshore area, southeastern Peninsular Malaysia. In: M.A. Kaminski & S. Filipescu (eds.) *Proc. 8th Int. Workshop on agglutinated foraminifera*, Romania, Grzybowski Found. Spec. Publ. 16, p. 131-136.

(Similar to paper above)

Mohamed, Mahani, S. Jirin & S.S. Hasan & N. Mohsin (2011)- Salinity stratification and its effects on the Malay Basin biofacies assemblages. In: *Petroleum Geology Conference and Exhibition 2011*, Kuala Lumpur, Poster 7, p. 141-143. *(Extended Abstract)*

(Foraminifera in Sedili Besar River Estuary dominated by Ammonia cf. takanabensis (also identified as Ammonia beccarii) in stratified water column of marine base and freshwater top. In Klang-Langat and Pahang Deltas, where minimal salinity stratification, Ammonia assemblages are quite scattered. Agglutinated forms (mainly Arenoparrella group) dominate less stratified water column)

Mohan, P.M., P. Dhivya & K. Narayanamurthy (2013)- Distribution of live planktonic and benthic foraminifera in the shelf off Port Blair and Hut Bay, Andaman Group of Islands, India. In: K. Venkataraman et al. (eds.) *Ecology and conservation of tropical marine faunal communities*, Springer-Verlag, Berlin, p. 19-42.

(189 shelfal marine foram species off Andaman Islands (no water depths of sample locations given))

Montaggioni, L.F. & M.T. Venec-Peyre (1993)- Shallow-water foraminiferal taphocoenoses at Site 821: implications for the Pleistocene evolution of the central Great Barrier Reef shelf, Northeastern Australia. In: J.A. McKenzie et al. (eds.) *Proc. Ocean Drilling Program (ODP)*, Scient. Results, 133, p. 365-378.

(online at: www-odp.tamu.edu/publications/133_SR/VOLUME/CHAPTERS/sr133_26.pdf)

(Useful overview of foram distribution on and around Great Barrier reef)

Morley, R.J., H.P. Morley, A.A.H. Wonders, Sukarno & S. van der Kaars (2004)- Biostratigraphy of modern (Holocene and Late Pleistocene) sediment cores from Makassar Straits. In: R.A. Noble et al. (eds.) Proc. Deepwater and frontier exploration in Asia and Australasia, Indon. Petroleum Assoc., Jakarta 2004, p. 361-371. (*Palynology and foraminifera from two shallow Late Pleistocene- Holocene cores from Makassar Straits and offshore SW Sulawesi*)

Mostafawi, N. (1992)- Rezenten Ostracoden aus dem mittleren Sunda-Schelf, zwischen der Malaiischen Halbinsel und Borneo. *Senckenbergiana Lethaea* 72, p. 129-168.
(*'Recent ostracods from the central part of the Sunda Shelf, between the Malay Peninsula and Borneo'. 116 species of Recent ostracodes in 44 seafloor samples along W-E transect, all <100m depth. Four new genera. Major control on abundance / diversity appears to be substrate. Many species range across all water depths, some more diagnostic for water depth: (1) < ~50m with *Atjehella kingmai*, *Keijia* spp., *Hemicytheridea* cf. *oculosa*, etc.; (2) >50m with *Abracythereis malaysiana*, *Bythocytheridea carinatum*, etc.)*)

Mostafawi, N., J.P. Colin & J.F. Babinot (2005)- An account on the taxonomy of ostracodes from recent reefal flat deposits in Bali, Indonesia. *Revue Micropaleontologie* 48, p. 123-140.
(*Ostracods from recent reefal flat sample off Sanur, SE Bali, at depth of ~1.5m. Assemblage of 34 species, dominated by *Loxoconcha peterseni*, *Auradilus convolutus*, *A. australiensis*, *Paranesidea conulifera*, etc. Fauna belongs to East Indian biogeographical province of Titterton and Whatley (1988) in tropical littoral zone of Indo-W Pacific. Associated with foraminifera *Schlumbergella floresiana*, *Calcarina hispida*, etc.)*)

Muller, G.W. (1906)- Die Ostracoden der Siboga-Expedition. In: M. Weber (ed.) Siboga Expeditie, Uitkomsten op zoologisch, botanisch, oceanographisch en geologisch gebied, Monograph 30, Brill, Leiden, 40, p. 1-40 + Plates.

(online at: <http://ia800807.us.archive.org/26/items/dieostracodender00mille/dieostracodender00mille.pdf>)
(*'The ostracodes of the Siboga Expedition'. 56 Recent species from shallow to deep water seafloor samples of 1899-1900 Siboga Expedition. Material unusually rich in Cypridinids (25 species, 15 new). *Halocypriden* mainly at depths >750m. Cypridiniden generally <70m*)

Muller, J. (1965)- Palynological study of Holocene peat in Sarawak. In: Symposium on ecological research in humid tropics vegetations, Kuching, Sarawak. UNESCO, p. 147-156.

Murphy, S. (1996)- Distribution and ecology of Holocene foraminifera within the Lassa distributary of the Rajang River delta, Sarawak, East Malaysia. M.S. Thesis, Southern Illinois University, Carbondale, p. 1-121. (*Unpublished*)

Murray, J.W. (1994)- Larger foraminifera from the Chagos Archipelago: their significance for Indian Ocean biogeography. *Marine Micropaleontology* 24, p. 43-55.

(*Chagos Archipelago is thin limestone cap on Eocene volcanic basement in central Indian Ocean. Principal larger foraminifera in surface samples from 0-43m. *Amphisorus hemprichii* and *Sorites orbiculus* widespread in shallow lagoon. *Heterostegina depressa* patchy distribution, most common between 18-25m. *Operculina ammonoides* generally in deeper lagoon, below 12m*)

Murray, J.W. (2006)- Ecology and applications of benthic foraminifera. Cambridge University Press, New York, p. 1-426.

Murray, J.W. & C.W. Smart (1994)- Distribution of smaller benthic foraminifera in the Chagos Archipelago, Indian Ocean. *J. Micropalaeontology* 13, 1, p. 47-53.

(online at: <https://www.j-micropalaeontol.net/13/47/1994/jm-13-47-1994.pdf>)
(*Chagos Archipelago in C Indian Ocean close to the equator. Relatively high energy conditions in shallow waters around reefs. On oceanic side of atoll reefs *Amphistegina lessonii* dominant, with minor miliolids and up to 20% planktonics. Lagoon assemblages dominated by *Calcarina calcar*, with minor miliolids*)

- Muruganantham, M. & P.M. Mohan (2015)- First report of three benthic foraminifera from the waters of Andaman Islands, India. *Biodiversity Journal* 6, 4, p. 789-794.
(online at: [www.biodiversityjournal.com/pdf/6\(4\)_789-794.pdf](http://www.biodiversityjournal.com/pdf/6(4)_789-794.pdf))
(*Living benthic foraminifera Nevillina coronata, Sigmoidhauerina involuta and Loxostomina limbata reported from inner shelf regions of Andaman Islands. Nevillina coronata very common in NE, flourishing in low T of rainy season, while two other species abundant in non rainy months*)
- Muruganantham, M. & P.M. Mohan (2015)- The assemblages of benthic foraminifera In the muddy and sandy sediments of Andaman Islands. *J. Andaman Science Association* 20, 2, p. 199-208.
(online at: <http://asapb.org/15%20-%20The%20Assemblages%20of%20Benthic.pdf>)
(*28 species of tropical marginal- shallow marine benthic foraminifera around South Andaman Island*)
- Muruganantham, M., P. Ragaven & P.M. Mohan (2017)- Diversity and distribution of living larger foraminifera from coral reef environments, South Andaman Islands, India. *J. Foraminiferal Research* 47, 3, p. 252-257.
(*Larger foraminifera at six reef sites (4-30 m) around South Andaman Islands 16 species, incl. Amphistegina lessonii, A. radiata and Calcarina spengleri*)
- Myers, E.H. (1945)- Recent studies of sediments in the Java Sea and their significance in relation to stratigraphic and petroleum geology. In: P. Honig & F. Verdoorn (eds.) *Science and scientists in the Netherlands Indies*, New York, p. 265-269.
- Newsome, J. & J.R. Flenley (1988)- Late Quaternary vegetational history of the Central Highlands of Sumatra. II. Palaeopalynology and vegetational history. *J. Biogeography* 15, p. 555-578.
(*Late Quaternary pollen from two swamps at ~1500 m asl in Sumatran Highlands (Danau di Atas, Telago). In Late Pleistocene vegetation zones depressed by ~800m and mean T 1.6- 5.2 °C cooler than now*)
- Ngisomuddin, Akmaluddin & H. Amijaya (2007)- Benthic foraminifera as indicator of Recent tsunami deposit sources at Pangandaran coast, Ciamis and Parangendog coast, Yogyakarta. *Proc. Joint Conv. 36th IAGI, 32nd HAGI, and 29th IATMI, Bali 2007*, p. 1110a-d.
(*Recent tsunami deposit from Pangandaran with Ammonia, Elphidium, Amphistegina, Cibicide., Biginerina. Bolivina, Bathysiphon, Nodosaria and Quinqueloculina, suggesting source from shallow to deep marine environments. Recent tsunami sediments at Parangendog Beach with Ammonia beccarii and Elphidium advenum, suggesting sediments came from lagoonal to shallow marine environment*)
- Nor Faiz, N. & R. Omar (2009)- Ostrakod baharu di dalam sedimen luar pantai di Sekitar Pulau Tioman, Pahang. *Sains Malaysiana* 38, 1, p. 9-20.
(*'Recent Ostracoda in offshore sediment around Pulau Tioman, Pahang'. 34 species of ostracodes in shallow waters around Tioman Island. Most common species Loxoconcha paiki, Pistocythereis bradyi, Venericythere papuensis*)
- Nugroho, S.H. (2018)- State of knowledge on marine palynology in Indonesia. *Proc. Global Colloquium on GeoSciences and Engineering, Bandung 2017, IOP Conf. Series, Earth Environm. Science* 118, 012012, p. 1-7.
(online at: <http://iopscience.iop.org/article/10.1088/1755-1315/118/1/012012/pdf>)
(*Brief review of Quaternary (displaced) spores-pollen studies in marine environments in Indonesia*)
- Nurani, N., L. Jurnaliah & Winantris (2014)- Penentuan spesies foraminifera bentonik kecil dominan pada perairan Semarang, Provinsi Jawa Tengah. *Bull. Scientific Contr. (UNPAD)* 12, 1, p. 1-7.
(online at: <http://jurnal.unpad.ac.id/bsc/article/view/8364/3885>)
(*'Determination of small benthic foraminifera species dominant in the waters of Semarang, C Java Province'. Foraminifera in 20 samples from 38-54m in Java Sea N of Semarang dominated by Heterolepa (36%), Anomalina, Ammonia spp. (12%), Pseudorotalia, Quinqueloculina spp. (9%) and Asterorotalia trispinosa(6%)*)

Nuridin, N., L. Gustiantini, S. Marina & M. Yosi (2014)- Analyses of foraminifers microfauna as environmental bioindicators in Kotok Besar, Kotok Kecil and Karang Bongkok Islands, Kepulauan Seribu, DKI Jakarta Province. *Bull. Marine Geol.* 29, 1, p. 21-28.

(online at: <http://ejournal.mgi.esdm.go.id/index.php/bomg/article/view/62/63>)

(Kepulauan Seribu (Thousand Islands) samples from coral reefs with ~20 genera of benthic foraminifera, dominated by Amphistegina and Calcarina, also Operculina, Quinqueloculina, Peneroplis, and Discorbis)

Nuridin, N. & I.R. Silalahi (2014)- Distribusi foraminifera bentik di perairan Aceh. *J. Geologi Kelautan* 12, 1, p. 25-31.

(online at: <http://ejournal.mgi.esdm.go.id/index.php/jgk/article/view/243/233>)

('Distribution of benthic foraminifera in Acaeh waters'. Shallow marine foraminifera distribution off NW tip of Sumatra, in water depths of 7-170m. 45 species of benthic foraminifera, dominated by Amphistegina papillosa. Ammonia tepida dominant in N part of Weh island)

Okada, H. (1983)- Modern nannofossil assemblages in sediments of coastal and marginal sea along the Western Pacific Ocean. *Utrecht Micropal. Bull.* 30, p. 171-187.

(On distribution of modern calcareous nannofossils off Japan, Taiwan, Gulf of Thailand (mainly Emiliana huxleyi, Gephyrocapsa oceanica, Florisphaera profunda; G. oceanica most abundant in coastal stations) and Arafura Sea- Gulf of Carpenteria (mainly G. oceanica and E. huxleyi; F. profunda rel. rare). F. profunda dominates associations in deep basins)

O'Neill, M. (1986)- Distribution and ecology of Recent foraminifera from Pulau Pari (Pulau Seribu), West Java Sea. p.

Ongkosongo, O.S.R., S. Soeka & Susmiati (1979)- Foraminifera Resen dari daerah kehidupan hutan bakau di Teluk Ambon. *Proc. Seminar Ekosistem Hutan Mangrove, Jakarta 1978*, p. 129-138.

('Recent foraminifera from mangrove forests in Ambon Bay' (see also Suhartati Natsir 2010))

Oostingh, C.H. (1923)- Recent shells from Java, Part I. Gastropoda. *Meded. Landbouwhoogeschool Wageningen* 26, 3, Verhandelingen, p. 1-174.

Oostingh, C.H. (1931)- Beitrage zur Kenntnis der Molluscenfauna von Sud Sumatra. *Archiv fur Molluscenkunde* 63, 4-6, p. 166-255.

('Contributions to the knowledge of the mollusc fauna of S Sumatra'. Listings of recent molluscs from southernmost Sumatra, along Sunda straits)

Oppenoorth, W.F.F. (1920)- het gebruik der microfauna voor de kennis der stratigrafie van het jong-tertiair ten behoeve van olie-opsporingen. *Meded. Algemeen Ingenieurs Congres, Batavia 1920*, 5, Mijnbouw en Geologie, Prae-advies 5, p. 3-4.

('The use of microfauna for the knowledge of stratigraphy of the Late Tertiary, as needed for oil exploration'. Brief pamphlet promoting use of foraminifera for oilfield stratigraphic subdivision))

Orpin, A.R., D.W. Haig & K.J. Woolfe (1999)- Sedimentary and foraminiferal facies in Exmouth Gulf, in arid tropical northwestern Australia. *Australian J. Earth Sci.* 46, 4, p. 607-621.

(Recent foraminifera distribution in shallow water grab samples, Exmouth Gulf (generally <20m). Benthic foraminifera dominant; planktonics only 1-2%. Six cluster groups, mainly controlled by bottom sediment type)

Palmieri, V. (1976)- Modern and relict foraminifera from the central Queensland continental shelf. *Queensland Government Mining J.* 77, p. 406-423.

Panchang, R. & R. Nigam (2012)- High resolution climatic records of the past ~489 years from Central Asia as derived from benthic foraminiferal species, *Asterorotalia trispinosa*. *Marine Geology* 307-310, p. 88-104.

(Recent benthic foraminiferal distribution on Ayeyarwaddy Delta Shelf, off Myanmar shows Asterorotalia trispinosa has preference for low salinity. Variations in abundance used as proxy for delineation of past wet and dry periods: dry climate prior to 1650 AD and warm and wet climate since 1650 to present)

Parker, J.H. (2009)- Taxonomy of foraminifera from Ningaloo Reef, Western Australia. Mem. Assoc. Australasian Palaeont. 36, p. 1-810.

(Comprehensive inventory of modern foraminifera from 334 samples in 0-34m water depth of subtropical Ningaloo Reef in E Indian Ocean, off NW Australia. Descriptions and illustrations of 404 species)

Parker, J.H. & E. Gischler (2011)- Modern foraminiferal distribution and diversity in two atolls from the Maldives, Indian Ocean. Marine Micropaleontology 78, p. 30-49.

(Two coral-reef lagoons comprise eight foraminifera assemblages with 270 species. Three assemblages reefal and dominated by Amphistegina and Calcarina. One lagoon assemblage with abundant Ammonia and smaller miliolids. Species diversity in Maldives higher than W Indian Ocean, but not as high as central Indo-Pacific)

Pflaumann, U. & Z. Jian (1999)- Modern distribution patterns of planktic foraminifera in the South China Sea and Western Pacific: a new transfer technique to estimate regional sea-surface temperatures. Marine Geology 156, 1, p. 41-83.

Pickett, E.J., S.P. Harrison, G. Hope, K. Harle, J.R. Dodson, A.P. Kershaw, I.C. Prentice, J. Backhouse et al. (2004)- Pollen based reconstructions of biome distributions for Australia, Southeast Asia and the Pacific (SEAPAC region) at 0, 6000 and 18,000 14C yr BP. J. Biogeography 31, p. 1381-1444.

(Reconstruction of vegetation patterns in Australia and SE Asia in mid-Holocene and Last Glacial Maximum from pollen data. At 18ka SEAPAC region drier than today and, in tropics, colder)

Pirrung, M., G. Buechel, U. Schulte-Vieting, B.W. Scharf & H.C. Treutler (2005)- Dating of lacustrine sediments from the tropical maar Ranu Klindungan, East Java (Indonesia). Zeitschrift Deutschen Gesellschaft Geowissensch. 156, 4, p. 557-571.

(On Late Quaternary lake sediments from 126m deep volcanic maar lake near Pasuruan, E Java. Bottom sediments down to 1.06m sediment depth consist of calcareous diatom gyttja with frequent turbidites. Seasonal variations of terrigenous layers deposited during rainy season (November-April) and diatom gyttja layers with thin distal turbidites, deposited during dry season)

Polhaupessy, A.A. (2009)- Pollen dispersal into the Liang Bua cave, Ruteng, Manggarai region, West Flores. J. Sumber Daya Geologi 14, 3 (147), p. 113-117.

(Quaternary pollen grains in Liang Bua cave derived mainly from local upland vegetation around cave)

Polhaupessy, A.A. (2009)- Palynology of Togi Ndrawa cave, coastal area of Nias Island, North Sumatera. Bull. Marine Geol. 24, 2, p. 99-115.

(online at: <http://ejournal.mgi.esdm.go.id/index.php/bomg/article/view/19/19>)

(Spores-pollen in 10 samples from Pleistocene- Holocene cave deposits on Nias)

Poliakova, A. (2015)- The Late Holocene history of vegetation, climate, fire dynamics and human impacts in Java and Southern Kalimantan. Doct. Thesis Georg-August Universitat, Gottingen, p. 1-186.

(online at: <https://d-nb.info/1113875569/34>)

(Collection of papers/ manuscripts of palynological studies in four shallow cores in Holocene deposits in Java Sea off NE Java (Solo River) and S Kalimantan (off Jelai and Pembuang rivers))

Poliakova, A. & H. Behling (2015)- Pollen and fern spores recorded in recent and late Holocene marine sediments from the Indian Ocean and Java Sea in Indonesia. Quaternary Int. 392, p. 251-314.

(Documentation of Quaternary and Recent pollen (138) and spores (41) in cores from coastal regions of Java Sea off SW Kalimantan and NE Java and in marine sediment trap off W Java)

Poliakova, A., K.A.F. Zonneveld, L.S. Herbeck, T.C. Jennerjahn, H. Permana, C. Kwiatkowski & H. Behling (2016)- High resolution multi-proxy reconstruction of environmental changes in coastal waters of the Java Sea, Indonesia, during the late Holocene. *Palynology* 41, 3, p. 297-310.

(A 134-cm-long sediment core from ~50 km off Pemuang River mouth, S Kalimantan. Mixed terrestrial and marine organic matter, with low pollen-spore concentrations. Dinoflagellate cysts mainly Operculodinium and Spiniferites with minor Impagidinium (mainly I. striatum). After ca. 2480 cal yr BP, bottom waters became increasingly ventilated. After 1530 cal yr BP, more pronounced influence of Pemuang River indicated by nutrient-sensitive Lingulodinium machaerophorum and Nematospaeropsis labyrinthus)

Post, A.L., L. Sbaffi, V. Passlow & D.C. Collins (2009)- Benthic foraminifera as environmental indicators in Torres Strait- Gulf of Papua. In: B.J. Todd & H.G. Greene (eds.) Mapping the seafloor for habitat characterization, Geol. Assoc. Canada, Spec. Publ. 47, p. 329-348.

(Study of benthic forams along transect from Fly River Delta to shelf edge (~140m depth), near N end of Great Barrier Reef. Three areas different benthic foram assemblages. High relict content in surface samples)

Pudjoarinto, A. (1999)- Palynological evidence for environmental change in Dieng Highland. *Indonesian J. Geography* 31, 77-78, p. 11-24.

(Palynology of 18m core from small lake in Dieng Plateau, C Java. Montane forest assemblages record climate changes)

Rai, A.K. & V.B. Singh (2001)- Late Neogene deep-sea benthic foraminifera at ODP Site 762B, eastern Indian Ocean: diversity trends and palaeoceanography. *Palaeogeogr. Palaeoclim. Palaeoecology* 173, p. 1-8.

(Pliocene-Pleistocene deep sea benthic foraminifera from ODP Site 762B off Exmouth Plateau. Species diversity inverse relationship with abundance of Uvigerina proboscidea and percentage infaunal taxa)

Rai, A.K. & V.B. Singh (2012)- Response of eastern Indian Ocean (ODP Site 762B) benthic foraminiferal assemblages to the closure of the Indonesian seaway. *Oceanologia* 54, 3, p. 449-472.

(Pliocene-Pleistocene deep sea benthic foraminifera from ODP Site 762B off Exmouth Plateau in E Indian Ocean. Diverse fauna in E Pliocene (>3.5 Ma) relatively oligotrophic and warm bottom water conditions. At beginning of Late Pliocene (i.e. ~ 3 ± 0.5 Ma) increase in Uvigerina proboscidea, infaunal taxa and high productivity taxa and decline in faunal diversity suggest development of pronounced upwelling. Reduced inflow of warm and oligotrophic water masses from SW Pacific to E Indian Ocean due to effective closure of Indonesian seaway increased surface water productivity. Closing of Indonesian seaway in Late Pliocene also responsible for cessation of warm, S-flowing Leeuwin Current)

Rajshekhar, C. (2013)- The Late Holocene foraminifera from Andaman Islands, Andaman Sea, Bay of Bengal. In: K. Venkataraman et al. (eds.) Ecology and conservation of tropical marine faunal communities, Springer Verlag, p. 3-18.

(S Andaman Island three distinct environments: rocky shore with Elpidium, Amphistegina; (2) sandy shore with common Calcarina and (3) intertidal muddy region with Trochammina inflata is common in intertidal clays)

Rao, N.R., M. Jayaprakash & P.M. Velmurugan (2013)- The ecology of *Asterorotalia trispinosa* (Thalman, 1933)- new insights from Muthupet Lagoon, Southeast Coast of India. *J. Foraminiferal Research* 43, p. 14-20.

(Asterorotalia trispinosa dominates sparse foraminiferal assemblage of shallow, mud-dominated Muthupet Lagoon on SE coast of India, where salinities are slightly lower than normal marine)

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Rathburn, A.E. & B.H. Corliss (1994)- The ecology of living (stained) deep-sea benthic foraminifera from the Sulu Sea. *Paleoceanography* 9, p. 87-150.

(Deep-sea benthic foraminifera distribution in 8 box cores from 510-4515 m in thermospheric (>10°C) Sulu Sea. Site 510m dominated by Cibicidoides, Uvigerina, and Bolivina. 1005m core: mainly Siphonina Cibicidoides, Uvigerina. 2000-m cores: Cibicidoides, Gyroidinoides, and Oridorsalis. 3000 and 4000m cores: Cibicidoides bradyi and Oridorsalis umbonatus dominant. Infaunal Valvulineria mexicana in sediments of 4515m core. Low bottom water oxygen values do not necessarily yield 'low-oxygen taxa' like Bolivina, Uvigerina, Chilostomella, Bulimina and Globobulimina)

Rathburn, A.E., B.H. Corliss, K.D. Tappa & K.C. Lohmann (1996)- Comparisons of the ecology and stable isotopic compositions of living (stained) benthic foraminifera from the Sulu and South China Seas. *Deep Sea Research* 1, 43, 10, p. 1617-1646.

(Significant differences between living deep-sea benthic foraminifera in thermospheric (>10°C) environments of Sulu Sea and psychrospheric (<10°C) conditions in S China Sea. Gavelinopsis, Bolivinopsis, Astrononion, Osangularia and Ceratobulimina common taxa in S China Sea, but rare in Sulu Sea. Siphonina and Valvulineria dominant genera at certain depths in Sulu Sea, but rare in S China Sea. Differences result from large differences of bottom-water temperatures)

Rathburn, A.E. & Q. Miao (1995)- The taphonomy of deep-sea benthic foraminifera: comparisons of living and dead assemblages from box and gravity cores taken in the Sulu Sea. *Marine Micropaleontology* 25, p. 127-149.

(Benthic foraminifera from 500- 4000m water in Sulu Sea. Bolivina, Bulimina, Globobulimina, Chilostomella and Uvigerina most abundant <1500m, but rel. rare in deeper water. Dominant taxa below 2000m Cibicidoides bradyi and Oridorsalis umbonatus)

Reeves, J.M. (2004)- The use of ostracoda in the palaeoenvironmental reconstruction of the Gulf of Carpentaria, Australia, from the last interglacial to present. Ph.D. Thesis University of Wollongong, p. 1-447.

(<http://ro.uow.edu.au/cgi/viewcontent.cgi?filename=0&article=1211&context=theses&type=additional>)

Reeves, J.M., A.R. Chivas, A. Garcia & P. De Deckker (2007)- Palaeoenvironmental change in the Gulf of Carpentaria (Australia) since the last interglacial based on Ostracoda. *Palaeogeogr. Palaeoclim. Palaeoecology* 246, p. 163-187.

(Throughout last glacial cycle, region between Australia and New Guinea (now Gulf of Carpentaria) oscillated from open shallow marine conditions to freshwater lake behind Arafura sill. Six ostracod biofacies in last 130 ka: (1) open shallow marine with bairdiids, pectocytherinids, cytherettids; (2) shallow marine dominated by Cytherella and Hemikrithe; (3) marginal marine with Xestoleberis and Praemunita; (4) tidal channel dominated by Loxoconcha; (5) estuarine with Venericythere and Leptocythere; (6) non-marine facies: brackish lagoon/lake dominated by Cyprideis and Leptocythere and freshwater with Ilyocypris, Cyprinotus and Cypretta. Also morphological variations within species tied to paleoenvironments)

Renault-Miskovsky, J. & A.M. Semah (1998)- Palynology of the Quaternary in temperate and tropical areas: chronostratigraphy, palaeoclimatology and vegetal environment of fossil man. In: N.M. Dutta et al. (eds.)

Current concepts in pollen-spore and biopollution research (S. Chandra volume), Research Period. Publ. House, Houston, p. 297-317.

(online at: http://horizon.documentation.ird.fr/exl-doc/pleins_textes/pleins_textes_7/b_fdi_53-54/010021194.pdf)

(General review of spores-pollen studies and applications in chronostratigraphy, paleoclimate and paleoenvironments. With examples from SE Asia, including work on Java Pleistocene hominid sites and Pleistocene climate changes on New Guinea, Sumatra, etc.)

Renema, W. (2003)- Larger foraminifera on reefs around Bali. Zool. Verhandelingen, Leiden, 345, p. 337-366.

(online at: www.repository.naturalis.nl/document/46850)

(Recent larger foraminifera from Bali total 19 species. Species richness similar to SW Sulawesi and Cebu, but different composition. Schlumbergerella locally abundant and geographically restricted to Lesser Sunda Islands and Java. Very low abundance of imperforate species probably due to climatic or oceanographic parameters, most likely periodic upwelling, which causes seasonal seawater temperature drops)

Renema, W. (2005)- Depth estimation using diameter-thickness ratios in larger benthic foraminifera. Lethaia 38, p. 137-141.

(Diameter-thickness ratio (D/T) of Amphistegina and Operculina varies with depth. Increased turbulence thickens test, whilst decreased light intensity causes flatter tests)

Renema, W. (2006)- Large benthic foraminifera from the deep photic zone of a mixed siliciclastic-carbonate shelf off East Kalimantan, Indonesia. Marine Micropaleontology 58, p. 73-82.

(Modern large benthic forams on Berau shelf 2 to 3 depth-controlled assemblages: shallow (20-50m; dominated by Operculina ammonoides) and deeper (50-85m; dominated by Operculina complanata and Planostegina operculinoides). Deepest living LBF at 115m. Cycloclypeus carpenteri between 55-95m)

Renema, W. (2006)- Habitat variables determining the occurrence of large benthic foraminifera in the Berau area (East Kalimantan, Indonesia). Coral Reefs 25, 3, p. 351-359.

(Composition of larger foram assemblages (35 species) on Berau carbonate shelf with barrier reef system and some reefs outside barrier. Four clusters corresponding to substrate type)

Renema, W. (2008)- Habitat selective factors influencing the distribution of larger benthic foraminiferal assemblages over the Kepulauan Seribu. Marine Micropaleontology 68, p. 286-298.

(On distribution of symbiont-bearing larger foraminifera on 'Thousand Islands' off Jakarta. Diversity and habitat fractionation increases as terrestrial and nutrient influence decline. Assemblages in nearshore reefs dominated by generalist species, while, additionally, more specialistic species occur at more offshore reefs)

Renema, W. (2010)- Is increased calcarinid (foraminifera) abundance indicating a larger role for macro-algae in Indonesian Plio-Pleistocene coral reefs? Coral Reefs 29, p. 165-173.

(Reefal habitats dominated by algae are inhabited by Calcarinidae larger foraminifera)

Renema, W. (2018)- Terrestrial influence as a key driver of spatial variability in large benthic foraminiferal assemblage composition in the Central Indo-Pacific. Earth-Science Reviews, p. (in press)

Renema, W., R.J. Beaman & J.M. Webster (2013)- Mixing of relict and modern tests of larger benthic foraminifera on the Great Barrier Reef shelf margin. Marine Micropaleontology 101, p. 68-75.

Renema, W., D.R. Bellwood, J.C. Braga, K. Bromfield, R. Hall, K.G. Johnson, P. Lunt et al. (2008)- Hopping hotspots: global shifts in marine biodiversity. Science 321, p. 654-657.

(Fossil and molecular evidence reveals at least three hotspots of high marine biodiversity in past 50 million years. They moved across globe, with timing and locations coinciding with major tectonic events. Birth and death of successive hotspots highlights link between environmental change and biodiversity patterns. Antiquity of taxa in modern Indo-Australian Archipelago hotspot emphasizes role of pre-Pleistocene events)

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(online at: www.repository.naturalis.nl/document/46294)
(Distribution patterns of 20 species of larger benthic foraminifera in Spermonde Archipelago, off SW Sulawesi. 13 transects sampled, down to 33m water depth. Substrate type, hydrodynamic energy, light intensity, nutrient availability and environmental stability determine distribution)
- Renema, W. & J. Hohenegger (2005)- On the identity of *Calcarina spengleri* (Gmelin 1791). *J. Foraminiferal Research* 35, p. 15-21.
(online at: <http://jfr.geoscienceworld.org/content/35/1/15.full.pdf>)
(On identity of Recent reef dwelling larger foram *Calcarina spengleri* (Gmelin 1791). Commonly confused with *Calcarina mayori* Cushman 1924, *C. gaudichaudii* d'Orbigny 1840 and *C. hispida* Brady 1876)
- Renema, W. & S.R. Troelstra (2001)- Larger foraminifera distribution on a mesotrophic carbonate shelf in SW Sulawesi (Indonesia). *Palaeogeogr. Palaeoclim. Palaeoecology* 175, p. 125-146.
(Modern larger foram distribution on Spermonde Shelf)
- Robles, E. (2007)- Palynological investigation of a laminated sediment core from Lake Guyang Warak, Java, Indonesia. Masters Thesis Museum Nat. Histoire Naturelle Paris, p. 1-53. (Unpublished)
(online at: http://hopsea.mnhn.fr/pc/thesis/Emil_Robes_2007.pdf)
(Palynology of Quaternary lake deposits on karst surface of Gunung Sewu (Southern Mountains), C Java)
- Romero, O.E., M. Mohtadi, P. Helmke & D. Hebbeln (2012)- High interglacial diatom paleoproductivity in the westernmost Indo-Pacific Warm Pool during the past 130,000 years. *Paleoceanography* 27, PA3209, p. 1-14.
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(Late Pleistocene diatoms in core GeoB10038-4 off S Sumatra show highest paleoproductivity during interglacials, due to nutrient input after rise in sea level. In Marine Isotope Stage 5 response of diatom productivity and upwelling intensity to boreal summer insolation. Resting spores of *Chaetoceros*, typical of nutrient-rich waters, dominant during periods of highest diatom paleoproductivity)
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(Study of larger foram *Calcarina gaudichaudii*, abundant in high-energy shallow reefal facies of W Pacific. Based on material from Adorius island, Micronesia and Komodo island, Indonesia)
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(Foraminifera as bioindicators for contaminated deposits'. *Foraminifera from Jakarta Bay and Sunda Straits*)
- Rositasari, R. (2010)- Recent foraminifera communities in Makassar Strait. *J. Coastal Development* 14, p. 26-34.
(*Globigerina ooze forms major fraction of bottom sediment in Makassar Strait. Diversity and richness of benthic foraminifera decrease with water depth. High abundance of *Uvigerina asperula* may be proxy of oxygen minimum zone*)
- Rositasari, R. (2010)- Karakteristik komunitas foraminifera di perairan Teluk Jakarta. *J. Ilmu dan Teknologi Kelautan Tropis* 3, 2, p. 100-111.
(online: <http://repository.ipb.ac.id/bitstream/handle/123456789/53434/08%20Karakteristik%20Komunitas.pdf>)

(The characteristics of the foraminiferal community in Jakarta Bay'. Benthic foraminifera in Jakarta Bay: (1) coastal water and estuary dominated by Ammonia beccarii; (2) Calcarina and other larger foraminifera common in coral reef area; (3) Elphidium and Nonion depressulum common in open waters area. Higher diversity than coastal water of Semarang and Cirebon. Reef area has highest diversity)

Rositasari, R. & L. Effendi (1994)- Foraminifera aglutinin dan kemungkinan pengaplikasiannya sebagai indikator lingkungan yang mengalami tekanan. Proc. 23rd Ann. Conv. Indon. Assoc. Geol. (IAGI), Jakarta, 1, p. 155-161.

(Agglutinated foraminifera and possible application as indicators of environments under stress'. Discussion of agglutinated foraminifera and presence in shallow, brackish waters of coastal creeks around Jakarta Bay. Main taxa Eggerella, Ammobaculites agglutinans, Trochammina, Haplophragmoides, Textularia conica, Cyclammina pusilla, etc.)

Rositasari, R., Suhartati M.N., T. Susana & Helfinalis (1994)- Tipe estuari sebagai faktor pembatas pada komunitas foraminifera; hasil penelitian di Muara Sungai Ciawi dan Muara Sungai Bekasi. Proc. 23rd Ann. Conv. Indon. Assoc. Geol. (IAGI), Jakarta, 1, p. 162-172.

(Type of estuary as factor on foraminifera communities; results of study at mouths of Ciawi and Bekasi Rivers'. Ciawi river mouth (Ujung Kolon) with abundant Operculina ammonoides, Amphistegina lessonii, Calcarina calcar, Elphidium, Quinqueloculina, etc.. Bekasi river mouth dominated by Ammonia beccarii, Trochammina hadai and Ammobaculites agglutinans)

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Rottman, M.L. (1980)- Net tow and surface sediment distributions of pteropods in the South China Sea region: comparison and oceanographic implications. Marine Micropaleontology 5, p. 71-110.

(Distributions of Recent aragonitic pelagic pteropod species on Sunda Shelf and in Java Sea very similar, but some exceptions)

Rowe, C., I.J. McNiven, B. David, T. Richards & M. Leavesley (2013)- Holocene pollen records from Caution Bay, southern mainland Papua New Guinea. The Holocene 23, 8, p. 1130-1142.

(Palynological data from tide-dominated shoreline of Caution Bay, W of Port Moresby, PNG, suggest late-Holocene mangrove to mudflat transition)

Rugmai, W., P.J. Grote, C. Chonglakmani, R. Zetter & D.K. Ferguson (2008)- A Late Pleistocene palynoflora from the coastal area of Songkhla Lake, southern Thailand. Science Asia 34, p. 137-145.

(online at: http://scienceasia.org/2008.34.n2/scias34_137.pdf)

Rymer-Jones, F.W.O. (1874)- On some Recent forms of Lagenae from deep-sea soundings in the Java Seas. Trans. Linnean Soc. London, 30, 1, p. 45-69.

(On many 'varieties' of Lagenella vulgaris (incl. Oolina) from seafloor samples at 1080 fathoms, 10 miles S of 'Sandalwood Island' (= probably Sumba, but lat-longs closer to South Bali; unlikely from Java Sea). Many now viewed as species. Associated with common Rotalia, Uvigerina, Bulimina, Globigerina, diatoms, ostracods, sponge needles, etc.)

Sakai, K. & M. Nishimura (1980)- Population study of the benthic foraminifer Baculogypsina sphaerulata on the Okinawan Reef Flat and preliminary estimation of its annual production. Proc. Fourth Int. Coral Reef Symposium, Manila, 2, p. 736-766.

Sarasin, P. & F. Sarasin (1897)- Ueber die Molluscenfauna der grossen Susswasser Seen von Central-Celebes. Zoologischer Anzeiger 20, 536, p. 241-245.

(On the mollusc fauna of the large freshwater lakes of Central Sulawesi')

Sathyanarayana, B., M.L. Husain, R. Ibrahim, S. Ibrahim & F.D. Guebas (2014)- Foraminiferal distribution and association patterns in the mangrove sediments of Kapar and Matang, West Peninsular Malaysia. *J. Sustainability Science Management* 9, p. 32-48.

(online at: www.ulb.ac.be/sciences/biocomplexity/pub/Satyanarayanaetal_2014_JSustainSciManage.pdf)

(28 foram species in mangrove surface sediment on W coast of Malay Peninsula. Calcareous forms mainly *Ammonia beccarii* and *Buccella frigida*. Agglutinated species mainly *Arenoparrella* and *Haplophragmoides*)

Sawai, Y., K. Jankaew, M.E. Martin, A. Prendergast, M. Choowong & T. Charoentitirat (2009)- Diatom assemblages in tsunami deposits associated with the 2004 Indian Ocean tsunami at Phra Thong Island, Thailand. *Marine Micropaleontology* 73, 1, p. 70-79.

(Diatom assemblages in fining-upward m-f sandy deposits of 2004 tsunami at Phra Thong Island, Thailand: (1) lowermost sand mainly unbroken beach and subtidal species that live attached to sand grains; (2) shift to marine planktonic species in middle of the bed and (3) mix of freshwater, brackish, and marine species near top. Trends are consistent with expected changes in current velocities of tsunami through time)

Schepman, M.M. (1908)- The Prosobranchia of the Siboga Expedition, Part I. Rhipidoglossa and Docoglossa. In: M. Weber (ed.) Siboga Expeditie, Uitkomsten op zoologisch, botanisch, oceanographisch en geologisch gebied verzameld in Nederlandsch Oost-Indie 1899-1900, Monographie 49a, Brill, Leiden, p. 1-107.

(online at: <https://ia600405.us.archive.org/32/items/prosobranchiaofs13sche/prosobranchiaofs13sche.pdf>)

(*The Prosobranchs of the Siboga Expedition*'. First of series of six monographs published in 1908-1913 on Recent marine gastropods from Indonesia, collected during Siboga Expediton 1899-1900)

Schepman, M.M. (1909)- The Prosobranchia of the Siboga Expedition, Part II. Taenioglossa and Ptenoglossa. In: M. Weber (ed.) Siboga Expeditie, Uitkomsten op zoologisch, botanisch, oceanographisch en geologisch gebied verzameld in Nederlandsch Oost-Indie 1899-1900, Monographie 49b, Brill, Leiden, p. 108-231.

(*The Prosobranchs of the Siboga Expedition, Part II, Taenioglossa and Ptenoglossa*'. Part 2 of series of six monographs on Recent marine gastropods from Indonesia, collected during Siboga Expediton 1899-1900)

Schepman, M.M. (1909)- The Prosobranchia of the Siboga Expedition, Part III. Gymnoglossa. In: M. Weber (ed.) Siboga Expeditie, Uitkomsten op zoologisch, botanisch, oceanographisch en geologisch gebied verzameld in Nederlandsch Oost-Indie 1899-1900, Monographie 49c, Brill, Leiden, p. 233-246.

(*The Prosobranchs of the Siboga Expedition, Part III, Gymnoglossa*'. 32 species. Part 3 of series of six monographs on Recent marine gastropods from Indonesia, collected during Siboga Expediton 1899-1900)

Schepman, M.M. (1911)- The Prosobranchia of the Siboga Expedition, Part IV. Rachiglossa. In: M. Weber (ed.) Siboga Expeditie, Uitkomsten op zoologisch, botanisch, oceanographisch en geologisch gebied verzameld in Nederlandsch Oost-Indie 1899-1900, Monographie 49d, Brill, Leiden, p. 247-364.

(online at: <http://ia600409.us.archive.org/26/items/sibogaexpeditie58sibo/sibogaexpeditie58sibo.pdf>)

(*The Prosobranchs of the Siboga Expedition, Part IV, Rachiglossa*'. Part 4 of series of six monographs on Recent marine gastropods from Indonesia, collected during Siboga Expediton 1899-1900)

Schepman, M.M. (1911)- The Prosobranchia of the Siboga Expedition, Part V. Toxoglossa. In: M. Weber (ed.) Siboga Expeditie, Uitkomsten op zoologisch, botanisch, oceanographisch en geologisch gebied verzameld in Nederlandsch Oost-Indie 1899-1900, Monographie 49e, Brill, Leiden, p. 365-452.

(*The Prosobranchs of the Siboga Expedition, Part V, Toxoglossa*'. Part 5 of series of six monographs on Recent marine gastropods from Indonesia, collected during Siboga Expediton 1899-1900)

Schepman, M.M. (1913)- The Prosobranchia of the Siboga Expedition, Part VI. Pulmonata and Opisthobranchia Tectibranchiata, tribe Bullomorpha. In: M. Weber (ed.) Siboga Expeditie, Uitkomsten op zoologisch, botanisch, oceanographisch en geologisch gebied verzameld in Nederlandsch Oost-Indie 1899-1900, Monographie 49f, Brill, Leiden, p. 453-494.

(*The Prosobranchs of the Siboga Expedition, Part VI, Pulmonata and Opisthobranchia, Tectibranchiata, tribe Bullomorpha*'. Part 6 of series of six monographs on Recent gastropods from Indonesia, collected during

Siboga Expedition. 19 species of land- and freshwater molluscs (2 new), 41 species of Opisthobranchia Tectibranchiata Bullomorpha with 15 new sp.)

Schmidt, C., P. Heinz, M. Kucera & S. Uthicke (2011)- Temperature-induced stress leads to bleaching in larger benthic foraminifera hosting endosymbiotic diatoms. *Limnol. Oceanogr.* 56, 5, p. 1587-1602.

(online at: www.aslo.org/lo/toc/vol_56/issue_5/1587.pdf)

(Aquarium experiments on living larger forams *Amphistegina radiata* and *Heterostegina depressa*, collected from Great Barrier Reef. Normally at temperatures of 23-28°C, show bleaching and lack of growth at temperatures of 31°C and higher)

Schonfield, J. (1994)-Biostratigraphy and assemblage composition of benthic foraminifera from the Manihiki Plateau, southwestern tropical Pacific. *J. Micropalaeontology* 14, 1, p. 165-175.

(online at: <https://www.j-micropalaeontol.net/14/165/1995/jm-14-165-1995.pdf>)

(Deep water late Pliocene- Pleistocene benthic foraminifera from Sonne cruise SO67 core on Manihiki Plateau in SW Tropical Pacific (2612m water depth). Dominated by *Nodogenerina*, *Cibicidoides wuellerstorfi*, *Oridorsalis umbonatus*, *Pleurostomella*, *Dentalina*, etc. Remarkable absence of 'high-productivity taxa' *Bolivina*, *Bulimina*, *Chilostomella* and *Uvigerina*, suggesting low flux of organic matter to sea floor)

Schubert, R.J. (1900)- Uber die recente Foraminiferenfauna von Singapore. *Zool. Anzeiger* 23, p. 500-502.

(*On the Recent foraminifera fauna of Singapore'. Foraminifera in shallow marine calcareous sand off Singapore dominated by miliolids*)

Schudack, M.E. & J. Reitner (1996)- Holocene Ostracoda from the Satonda crater lake (Indonesia). *Gottinger Arbeiten Geologie Palaeontologie, Sonderband SB2*, p. 119-123.

(Holocene Ostracoda from 80cm deep digs on beach of Satonda Crater Lake off Sumbawa: (1) lowermost samples monospecific associations of fresh-brackish *Aglaiocypris*; (2) middle part higher diversity including marine *Tenedocythere*, etc.; (3) in upper parts of digs and in alkaline waters of today's crater lake, same cypridid species as in lowermost horizons, reflecting re-establishment of more stressful environment)

Severin, K.P. (1983)- The size-frequency distribution of the foraminifer *Marginopora vertebralis* on seagrass through time. *Science in New Guinea* 10, p. 187-195.

Shafik, S. (1978)- The near-surface sediments of the Scott Plateau and Java Trench: nannofossil assessment and implications. *BMR J. Australian Geol. Geophysics* 3, p. 341-345.

(online at: www.ga.gov.au/corporate_data/80975/Jou1978_v3_n4_p341.pdf)

(Quaternary sediments in N Scott Plateau and Java Trench. Quaternary calcareous nannofossils associated with reworked U Cretaceous and Tertiary forms, possibly caused by bottom currents eroding parts of C Scott Plateau. Late Pleistocene-Holocene calcareous nannofossils in upper ~1 m thick of N Scott Plateau, but absent from Java Trench suggesting that present Nanno Solution Depth is between 3290-4950m water depth)

Shen, L., M. Chen, B. Lan, H. Qi, A. Zhang, D. Lan & Qi Fang (2017)- Diatom distribution as an environmental indicator in surface sediments of the West Philippine Basin. *Chinese J. Oceanology Limnology* 35, 2, p. 431-443.

(Distribution of oceanic diatoms in W Philippine Basin. *Ethmodiscus rex* dominant species. 68 species in 4 assemblages, related with North Equatorial Current and Kuroshio Current patterns)

Shuto, T. (1970)- Taxonomical notes on the Turrids of the Siboga-Collection originally described by M.M. Schepman, 1913 (Part 1). *Venus (Japanese J. Malacology)* 28, 4, p. 161-178.

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- Sidiq, A., S. Hadisusanto & K.T. Dewi (2016)- Foraminifera bentonik kaitannya dengan kualitas perairan de wilayah barat daya Pulau Morotai, Maluku Utara.. J. Geologi Kelautan 14, 1, p. 13-22.
(online at: <http://ejournal.mgi.esdm.go.id/index.php/jgk/article/view/336/264>)
(*'Benthic foraminifera and relation to water quality off southwest part of Morotai Island, North Moluccas'. Seafloor samples from 16-36m off Morotai, N Moluccas, with 28 species of benthic foraminifera, dominated by abundant Amphistegina spp. and Operculina spp. Also Alveolinella, Calcarina, Heterolepa, Baculogypsinoidea, Elphidium, Peneroplis, Schlumbergerella and Sorites*)
- Sijinkumar, A.V., B.N. Nath, G. Possnert & A. Aldahan (2011)- *Pulleniatina* minimum events in the Andaman Sea (NE Indian Ocean): implications for winter monsoon and thermocline changes. Marine Micropaleontology 81, p. 88-94.
(*Late Quaternary record of Pulleniatina obliquiloculata in cores from Andaman Sea. As in Pacific Ocean, Pulleniatina obliquiloculata Minimum Event exists in Indian Ocean between 4.5- 3.0 ka. Two additional minimum events in Younger Dryas and late Last Glacial Maximum (20-18 ka). PMEs of Andaman Sea characterized by fewer thermocline species, indicating increased depth of thermocline during minimum events*)
- Silalahi, I.R., M.K. Adisaputra, R. Kapid & M. Hendrizan (2012)- Album mikrofossil foraminifera dan nanoplankton perairan Indonesia. Puslitbang Geologi Kelautan RI (Research Center Marine Geology), Bandung, p. 1-143.
(*'Album of foraminifera and nannoplankton microfossils from Indonesian waters'*)
- Siregar, M.S. (1978)- Pengaruh musim terhadap penyebaran foraminifera di Teluk Jakarta. J. Riset Geologi Pertambangan (LIPI) 1, 3, p. 33-78.
(*'The influence of the seasons on the distribution of foraminifera in Jakarta Bay'. Seasonal influence shown by modern foraminifera Rotalia and Quinqueloculina*)
- Soemodihardjo, S. & A. Matsukuma (1989)- Ecology of sandy beach bivalves of Pari Island off the coast of Jakarta Bay. Indonesia. Bull. Nat. Science Museum, Tokyo, Ser. A, 15, p. 197-212.
(online at: <http://ci.nii.ac.jp/ognavi?name=nels&lang=en&type=pdf&id=ART0006479304>)
- Somboon, J.R.P. (1990)- Palynological study of mangrove and marine sediments of the Gulf of Thailand. J. Southeast Asian Earth Sci. 4, 2, p. 85-97.
- Southward, E.C., A. Schulze & V. Tunnicliffe (2002)- Vestimentiferans (Pogonophora) in the Pacific and Indian Oceans: a new genus from Lihir Island (Papua New Guinea) and the Java Trench, with the first report of *Arcovestia ivanovi* from the North Fiji Basin. J. Natural History 36, p. 1179-1197.
(*Example of occurrences of tube worms at cold gas seeps and hot hydrothermal vent sites in SW Pacific and Java deepwater seafloor settings (also known from Sumatra forearc, etc.)*)
- Staub, W. (1915)- Über die Verbreitung einiger lebender und versteinter Lamellibranchier und Gastropodenarten am Ausgange der Sangkulirangbai (Ost Borneo), einem Aestuarium der tropischen Zone. Vierteljahrsschrift Naturforschenden Gesellschaft Zurich 61, p. 120-135.
(*'On the distribution of some living and fossilized bivalve and gastropod species at the mouth of Sangkulirang Bay (East Borneo), an estuary of the tropical sea'. Early paper on distribution of land, brackish and marine molluscs in estuary of NE Kalimantan*)
- Stelbrink, B. (2014)- A biogeographic view on Southeast Asia's history. Doct. Thesis Humboldt-Universität, Berlin, p. 1-270.
(online at: <http://edoc.hu-berlin.de/dissertationen/stelbrink-bjoern-2014-12-19/PDF/stelbrink.pdf>)
(*On significance of modern fauna and floral distribution for evolution of SE Asia*)
- Sterrenburg, F.A.S, P.L.A. Erftemeijer & P.H. Nienhuis (1995)- Diatoms as epiphytes on seagrasses in South Sulawesi (Indonesia); comparison with growth on inert substrata. Botanica Marina 38, p. 1-8.

Stidolph, S.R., F.A.S. Sterrenburg, K.E.L. Smith & A. Kraberg (2012)- Stuart R. Stidolph diatom atlas. U.S. Geol. Survey (USGS) Open File Report 2012-1163.

(online at: <http://pubs.usgs.gov/of/2012/1163/>)

(Spectacular photographs of modern coastal marine diatoms, including Indonesian material on Plates 30-33 (Semarang, Sumatra))

Stuijts, I. (1984)- Palynological study of Situ Bayongbong, West Java. *Modern Quaternary Research in Southeast Asia* 8, Balkema, Rotterdam, p. 2-17.

(Palynology of 8m sediment core from Bayombong swamp at ~1200m above s.l. in SW Java, showing Late Pleistocene- Holocene (~17 ky- today) vegetational shift from upper montane forest to lower montane forest around ~10,000 yrs B.P.)

Stuijts, I. (1993)- Late Pleistocene and Holocene vegetation of West Java, Indonesia. *Modern Quaternary Research in Southeast Asia* 12, Balkema, Rotterdam, p. 1-173. (also Thesis Rijksuniversiteit Groningen)

(Late Pleistocene- Holocene palynology of shallow core holes from montane localities above 1000m in West Java (Gede-Panggrango, Gunung Patuha, Danau Ciharus))

Stuijts, J.C., J.C. Newsome & J.R. Flendley (1988)- Evidence for Late Quaternary vegetational change in the Sumatran and Javan highlands. *Review Palaeobotany Palynology* 55, p. 207-216.

(Late Pleistocene pollen records from above 2000m on tropical mountains indicate cooler climates and more arid climates below 1200m. Sumatran and Javan sites at intermediate altitudes show higher altitude vegetation from ~18,200 yr B.P. to ca. 12,400 yr B.P., suggesting much lower forest altitudinal boundaries than today's)

Sugawara, D., K. Minoura, N. Nemoto, S. Tsukawaki, K. Goto & F. Imamura (2009)- Foraminiferal evidence of submarine sediment transport and deposition by backwash during the 2004 Indian Ocean tsunami. *Island Arc* 18, 3, p. 513-525.

(online at: <http://onlinelibrary.wiley.com/doi/10.1111/j.1440-1738.2009.00677.x/epdf>)

(Nearshore to offshore sediments from SW coast of Thailand clarify submarine sediment transport during 2004 Indian Ocean tsunami. Benthic foraminifera showed seaward migration after tsunami event (brackish agglutinated foraminifera in post-tsunami foreshore to offshore, transported offshore with tsunami backwash). Offshore planktonic and benthic species slight evidence of landward migration by tsunami)

Suhartati, M.N. (1992)- Preliminary study on the benthic foraminifera and its association with ostracoda in Porong Delta, East Java. Toyama University, 10p.

(15 sediment samples from 0.6- 21.5m along Porong delta front, Madura Straits. Most abundant species *Ammonia beccarii*, *Calcarina calcar* and *Elphidium advenum*. Also common *Elphidium crispum*, *Asterorotalia trispinosa*, *Pseudorotalia schroeteriana* and *Quinqueloculina*)

Suhartati, M.N. (1994)- Foraminifera bentonik dan kaitannya dengan kandungan zat hara di perairan Padang Lamun, Goba Besar, Pulau Pari, Kepulauan Seribu. *Proc. 23rd Ann. Conv. Indon. Assoc. Geol. (IAGI)*, Jakarta, 1, p. 582-590.

(Foraminifera bentonik and their relation to nutrient content in the waters of Padang Lamun, Goba Besar, Pulau Pari, Thousand Islands'. Diverse benthic foram assemblage on seagrass beds of Pari Island, dominated by *Quinqueloculina* spp., *Spiroloculina* spp., *Ammonia*, *Peneroplis*, *Rosalina*, *Elphidium*, *Calcarina*, etc.)

Suhartati, M.N. (1994)- Benthic foraminifera in the seagrass beds of Pari island- Seribu islands, Jakarta. In: S. Sudara et al. (eds.) *Proc. Third ASEAN-Australia Symp. Living Coastal Resources*, Bangkok, 2, p. 323-329.

(Dominant species in reef-flat seagrass areas are miliolids *Quinqueloculina* spp., and *Spiroloculina* spp. Also common *Ammonia beccarii*, *Calcarina calcar*, *Elphidium* spp.)

Suhartati, M. Natsir (1998)- First record of brackish water agglutinated foraminifera from Java. *Reopical Biodiversity* 5, 1, p. 57-63.

(Ammobaculites agglutinans and Textularia pseudogramen common in Recent sediments near Solo and Poreng River mouths, E Java)

Suhartati, M. Natsir (2005)- Distribusi foraminifera benthik (*Textularia*) di Delta Porong, Jawa Timur. Agritek 4, 2, p. 1-7.

('Distribution of benthic foraminifera (Textularia) in the Porong Delta, East Java')

Suhartati, M. Natsir (2009)- Distribusi dan kelimpahan foraminifera benthik Resen di Pulau Opak Besar, Kepulauan Seribu. Lingkungan Tropis 3, 2, p. 95-103.

(Online at: www.lingkungan-tropis.org/distribusi-dan-kelimpahan-foraminifera-suhartati-m-natsir)

('Distribution and abundance of Recent benthic foraminifera in Opak Besar, Seribu islands'. Off NW Java. Samples from water depths 27-36m around Opak Island dominated by Calcarina calcar, followed by miliolids)

Suhartati, M.N. (2010)- First record of agglutinated foraminifera from Lombok. J. Coastal Development 13, 1, p. 48-55.

(online at: www.omicsonline.com/open-access/first-record-of-agglutinated-foraminifera-from-lombok-1410-5217-13-276.pdf)

(Benthic foram assemblages around Gili islands, NW Lombok, have more agglutinated individuals in stations close to bay, mainly Ammobaculites agglutinans and Haplophragmoides canariensis)

Suhartati M. Natsir (2010)- The distribution of benthic foraminifera in Damar and Jukung Island, Seribu Islands. Marine Research in Indonesia (LIPI) 35, 2, p. 9-14.

(Benthic foraminifers on Jakarta Bay islands. Jukung Island higher diversity than Damar Besar Island. Larger foraminifera of both islands Amphistegina, Calcarina, Heterostegina, Marginophora, and Operculina)

Suhartati M. Natsir (2010)- Foraminifera benthik sebagai indikator kondisi lingkungan terumbu karang perairan Pulau Kotok Besar dan Pulau Nirwana, Kepulauan Seribu. Oseanol. Limnol. Indonesia 36, 2, p. 181-192.

('Benthic foraminifera as indicator of environmental conditions of coral reefs in Kotok Besar and Nirwana islands of Seribu islands'. Kotok Besar Island healthy reef growth due to FORAM Index of ~7.6. Dominant symbiont bearing foraminifera are Amphistegina, Calcarina and Tinoporus. Nirwana Island was dominated by opportunistic foraminifera Ammonia, Elphidium, Quinqueloculina and Spiroloculina, showing stressed conditions unsuitable for reef growth as shown by FORAM Index of 1.6-1.9)

Suhartati M. Natsir (2010)- Kelimpahan foraminifera Resen pada sedimen permukaan di Teluk Ambon. E-Jurnal Ilmu Tekn. Kelautan Tropis 2, 1, p. 9-18.

(online at: http://repository.ipb.ac.id/jspui/bitstream/123456789/53406/1/2_foraminifera.pdf)

('The abundance of recent foraminifera in surface sediment of Ambon Bay'. Bottom samples from Ambon Bay with 61 species of benthic and 25 species of planktonic foraminifera. Dominant benthics Amphistegina lessonii, Ammonia beccarii, Elphidium craticulatum, Operculina ammonoides and Quinqueloculina. Forams generally abundant on sand substrate sand, but no foraminifera on mud substrate)

Suhartati M. Natsir (2012)- The benthic foraminiferal assemblages on Handeuleum Islands, Ujung Kulon National Park of Banten, Indonesia. J. Shipping and Ocean Engineering 2, p. 86-91.

(online at: [www.davidpublishing.com/...](http://www.davidpublishing.com/))

(Nine sediment samples from around Handeuleum Islands off Ujung Kulon Peninsula contain 14 genera of benthic foraminifera and some Ostracoda and Bryozoa. Most specimens from sand sediments of coral reefs community. Most common foraminifera are opportunistic taxa such as Ammonia beccarii and Elphidium craticulatum and E. crispum. Also present are symbiont bearing foraminifera Amphistegina, Calcarina, Sorites also Cymbaloporetta, Oolina, Quinqueloculina and Spiroloculina)

Suhartati M. Natsir (2014)- The distribution of benthic foraminifera in Indonesian shallow waters. Berita Sedimentologi 29, p. 66-72.

(online at: www.iagi.or.id/fosi/berita-sedimentologi-no-29-biostratigraphy-of-southeast-asia-part-1.html)

(Summary of studies on Recent benthic foraminifera in Indonesia shallow waters by Research Center for Oceanography- LIPI)

Suhartati M. Natsir & K.T. Dewi (2015)- Foraminifera bentik terkait dengan kondisi lingkungan perairan sekitar Pulau Damar, Kepulauan Seribu. *J. Geologi Kelautan* 13, 3, p. 165-171.

(online at: <http://ejournal.mgi.esdm.go.id/index.php/jgk/article/view/271/261>)

*('Benthic foraminifera related to marine environments around Damar Island, Pulau Seribu'. 64 species of benthic foraminifera from 11-37m depth around Damar Island reef, S part of Thousand Islands. Common forms associated with coral reef incl. *Amphistegina lessonii*, *A. radiata*, *Sorites marginalis*, *Heterostegina* and *Calcarina calcar*)*

Suhartati M. Natsir, K.T. Dewi & S. Ardhyastuti (2017)- Keterkaitan foraminifera dan kedalaman perairan sebelah tenggara Pulau Seram, Maluku. *J. Geologi Kelautan* 15, 2, p. 73-80.

(online at: <http://ejournal.mgi.esdm.go.id/index.php/jgk/article/view/389/424>)

*('The relation between foraminifera and water depth of waters SE of Seram Island, Moluccas'. Nine samples between 512-1177m water depth, with 95-100% planktonic foraminifera. Rare benthic foraminifera incl. *Bulimina*, *Buliminella*, *Bolivinella*)*

Suhartati M. Natsir, A. Firman, I. Riyantini & I. Nurruhwati (2015)- Struktur komunitas foraminifera pada sedimen permukaan dan korelasinya terhadap kondisi lingkungan lepas pantai Balikpapan, Selat Makassar. *J. Ilmu dan Teknologi Kelautan Tropis* 7, 2, p. 671-680.

(online at: <http://journal.ipb.ac.id/index.php/jurnalikt/article/view/11059/8774>)

('Community structure of foraminifera in surface sediments and correlation with environmental conditions in offshore waters of Balikpapan, Makassar Strait'. Foraminifera from 6 seafloor samples off Balikpapan. (no water depths for samples (54-73m?), no species identifications))

Suhartati M. Natsir & Z.A. Muchlisin (2012)- Benthic foraminiferal assemblages in Tambelan Archipelago, Indonesia. *AAFL Bioflux* 5, 4, p. 259-264.

(online at: www.bioflux.com.ro/docs/2012.259-264.pdf)

*(Recent foraminifera in shallow waters around Tambelan islands, S China Sea. Dominated by *Amphistegina* and *Assilina ammonoides*; also common *Quinqueloculina*, *Pseudorotalia*, *Amphistegina*, *Elphidium*)*

Suhartati, M.N., Ricky R. & Helfinalis (1994)- Foraminifera bentonik dan spesifikasinya pada beberapa lingkungan perairan Dangkal di Indonesia. *Proc. 23rd Ann. Conv. Indon. Assoc. Geol. (IAGI)*, 1, p. 603-604.

Suhartati M.Natsir & Rubiman (2010)- Distribusi foraminifera Resen di Laut Arafura. *J. Ilmu Tekn. Kelautan Tropis* 2, 2, p. 74-82.

(online at: [www.itk.fpik.ipb.ac.id/ej_itkt22/jurnal/ML_185_final%20\(74-82\).pdf](http://www.itk.fpik.ipb.ac.id/ej_itkt22/jurnal/ML_185_final%20(74-82).pdf))

*('The distribution of Recent benthic foraminifera in the Arafura Sea'. Arafura Sea shallow waters S of Papua. Shallow-water ecosystems such as mangrove, seagrass beds and coral reefs. Samples mainly between 30-90m, deepest station 13 at 341m. 37 species, most common *Ammonia beccarii* and *Pseudorotalia schroeteriana*, except station 13 which has abundant *Bolivina* spp. and *Anomalina rostrata*)*

Suhartati & Subadri (1993)- Foraminifera bentonik di perairan menpawah dan Sungai Duri- Pontianak Kalimantan Barat. *Proc. 22nd Ann. Conv. Indon. Assoc. Geol. (IAGI)*, Bandung, 2, p. 1181-1188.

*('Benthic foraminifera in the waters offshore Sungai Duri, Pontianak, W Kalimantan'. Shallow marine (0.5-5m) seafloor samples off Mempawah and Sunai Duri with 24 species of benthic foraminifera. Dominated by *Quinqueloculina* spp., *Asterorotalia trispinosa*, *Ammonia beccarii*, *Pseudorotalia schroeteriana*, etc.)*

Suhartati M. Natsir & M. Subkhan (2012)- The distribution of agglutinated foraminifera in Porong and Solo deltas, East Java. *J. Environmental Sci. Engineering A* 1, p. 918-923.

*(Recent foraminiferal assemblages around Porong and Solo River Deltas dominated by small agglutinated forams, mainly *Textularia pseudogramen*, *Ammobaculites agglutinans*, *Haplophragmoides*, *Ammotium*, etc.)*

- Suhartati M. Natsir & M. Subkhan (2012)- The distribution of benthic foraminifera in coral reefs community and seagrass bed of Belitung Islands based on foram index. *J. Coastal Development* 15, 1, p. 51-58.
(online at: <http://ejournal.undip.ac.id/index.php/coastdev/article/view/1997/1775>)
(*Benthic foraminiferal from six sampling sites around Belitung Islands 29 species of 18 genera. Most abundant benthic foraminifera in Nasik Strait on coarse sand substrate with coral reef (Peneroplis, Calcarina, Operculina, etc.). Seagrass beds of Nasik Strait dominated by opportunistic foraminifera Heterostegina, Calcarina, Elphidium, Ammonia, Acervulina, Spirolina, Quinqueloculina and Lenticulina. Most abundant species of all sites is Peneroplis pertusus*)
- Suhartati M. Natsir & M. Subkhan (2012)- Foraminifera bentik sebagai indikator kualitas perairan ekosistem terumbu karang di Pulau Bidadari dan Ringit, Kepulauan Seribu.
(*Benthic foraminifera as indicators for water quality of coral reefs ecosystem in Bidadari and Ringit Islands, Thousand Islands', off NW Java.*)
- Suhartati M. Natsir, M. Subkhan, Rubiman &, S.P.A. Wibowo (2011)- Komunitas foraminifera bentik di perairan kepulauan Natuna. *J. Ilmu dan Kelautan Tropis* 3, 2, p. 21-31.
(*Benthic foraminifera community in the Natuna islands group'. Over 50 species, dominated by Amphstegina lessonii, Ammonia beccarii, Operculina ammonoides, Quinqueloculina, etc. Water depths??*)
- Suhartati M. Natsir, M. Subkhan, M.S. Tarigan, S.P.A. Wibowo & K.T. Dewi (2012)- Benthic foraminifera in South Waigeo waters, Raja Ampat, West Papua. *Bull. Marine Geol.* 27, 1, p. 1-6.
(online at: <http://ejournal.mgi.esdm.go.id/index.php/bomg/article/view/40/41>)
(*Foraminifera from 12 sites in S part off Waigeo Island, Raja Ampat group, W Papua. Faunas dominated by symbiotic bearing benthic foraminifera, mainly Amphistegina lessonii, also Baculogypsina, Calcarina, Tinoporus, Heterostegina, etc.*)
- Suhartati M. Natsir, M. Subkhan & V.I. Wardhani (2012)- The distribution of benthic foraminiferal assemblages in Tambelan Islands of Riau Islands. In: *Proc. Soc. Indon. Biodiversity Int. Conf.*, 1, p. 107-112.
(online at: <http://biosains.mipa.uns.ac.id/P/P0101/P010119.pdf>)
(*Foraminifera from 5 shallow shelf stations around Tambelan Archipelago in South China Sea, off NW Kalimantan (34-50m water depth). Sediments mainly clay and mud. Assemblages 64 species, dominated by Operculina ammonoides ('Assilina depressa'), Amphistegina lessonii and miliolids*)
- Sukandarrumidi (1990)- The new species of "*Quinqueloculina*" and "*Triloculina*" from the bottom sea sediment of the Java Sea, Bali Strait and Karimata Strait, Indonesia. *Media Teknik (UGM)* 13, 2, p. 132-143.
(*Sea floor samples from Java Sea, Bali Strait and Karimata Strait with 3 new species of miliolid benthonic foraminifera, Quinqueloculina aberensis, Triloculina malayensis and Triloculina siuriensis*)
- Suleiman, A, C.C.S. Wahyu & A. Bachtiar (2011)- Quaternary benthic foraminifera from bathyal zone seabed of Mamuju offshore, North Makassar Basin, West Sulawesi. *Proc. Joint 36th HAGI and 40th IAGI Ann. Conv.*, Makassar, JCM2011-424, 5p.
(*Summary of benthic foraminifera from 1700-1800m depth, sampled during geohazard survey, offshore, Lariang Basin. Mainly calcareous benthics usually found in outer shelf- upper bathyal instead of arenaceous tests that are common in bathyal zone. This suggests deposition is allochthonous sediment debris from upslope*)
- Sumawinata, B. (1998)- Sediments of the lower Barito basin in South Kalimantan: fossil pollen composition. *Southeast Asian Studies, Kyoto* 36, 3, p. 293-316.
(*Palynology/ environments of Holocene sediments from Lower Barito and Martapura Rivers shallow cores*)
- Sun, H.J., T.G. Li, R.T. Sun, X.K. Yu, & F.M Chang & Z. Tang (2011)- Calcareous nannofossil bioevents and microtektite stratigraphy in the Western Philippine Sea during the Quaternary. *Chinese Sci. Bull.* 56, 25, p. 2732-2738.
(*Seven calcareous nannofossil bioevents identified over past 2.36 Ma in two sediment cores from Benham Rise, W Philippine Sea, E of Luzon. Bioevents and Australasian microtektite impact event calibrated to oxygen*)

isotope stratigraphy. Age of highest concentration of microtektites 792 ± 2 ka, near boundary of isotope stages MIS20/19)

Sun, X., Y. Luo, F. Huang, J. Tian & P. Wang (2003)- Deep-sea pollen from the South China Sea: Pleistocene indicators of East Asian monsoon. *Marine Geology* 201, p. 97-118.

(High-resolution pollen record for last 820 ka of ODP Site 1144, northern S China Sea. 29 pollen zones, mainly defined by alternations of Pinus-dominant (interglacial) vs. herb-dominant (glacial) zones correspond to Marine Oxygen Isotope Stages 1-29. Clear 100 ka Milankovich cyclicity)

Saraswat, R., M. Manasa, T. Suokhrie, M.S. Saalim & R. Nigam (2017)- Abundance and ecology of endemic *Asterorotalia trispinosa* from the western Bay of Bengal: implications for its application as a paleomonsoon proxy. *Acta Geologica Sinica (English Ed.)* 91, 6, p. 2268-2282.

(In samples from continental shelf and slope of W Bay of Bengal Asterorotalia trispinosa abundance ranges from 0-31%, with highest abundance near outfall region of Ganges-Brahmaputra Rivers and decreases away from the river mouths. Abundance of A. trispinosa indicates warmer and marginally hyposaline environment)

Szarek, R. (2001)- Biodiversity and biogeography of Recent benthic foraminiferal assemblages in the south-western South China Sea (Sunda Shelf). Ph.D. Thesis, Christian Albrechts Universitat, Kiel, p. 1-273. *(Unpublished)*

(Benthic foraminifera distribution patterns on Vietnam Shelf and Sunda Shelf of SW S China Sea, based on 75 sites along two transects in 50-2000m water depth. Shallow water (<200m) assemblages from Vietnam and Sunda Shelves significantly different species composition and distinct distribution patterns. Bathyal faunas exhibit more uniform species composition)

Szarek, R., W. Kuhnt, H. Kawamura & H. Kitazato (2006)- Distribution of Recent benthic foraminifera on the Sunda Shelf (South China Sea). *Marine Micropaleontology* 61, p. 171-195.

(Recent benthic foraminifera distribution on Sunda Shelf around Natuna Island between 60-226m depth. Four biofacies: (A) inner shelf (Ammomassilina alveoliniformis- Asterorotalia pulchella), in fine grained sediments; (B) high-energy inner shelf (Heterolepa dutemplei- Textularia lythostrota, Asterorotalia gaimardii) in sand and silt dominated sediments NE of Natuna; (C) high-energy outer shelf biofacies (Cibicidoides pachyderma-Textularia bocki, Operculina ammonoides) in neritic relict sand; (4) outer shelf (Facetocochlea pulchra-Bulimina marginata, Bolivina) in area covered with modern silt and mud)

Szarek, R., W. Kuhnt, H. Kawamura & H. Nishi (2009)- Distribution of Recent benthic foraminifera along continental slope of the Sunda Shelf (South China Sea). *Marine Micropaleontology* 71, p. 41-59.

(Benthic foraminiferal distribution from the winter upwelling region off Borneo on continental slope of Sunda Shelf and from continental slope of S Vietnam Shelf. Faunas highly diverse. Four biofacies: (1) Upper bathyal (Siphotextularia foliosa- Cibicidoides robertsonianus); (2) Middle bathyal (Uvigerina auberiana- Nuttallides rugosus; within oxygen minimum zone); (3) uppermost Lower bathyal (Lagenammina difflugiformis- Uvigerina peregrina) and (4) Lower bathyal (Paratrochammina challengerii- Parrelloides bradyi))

Tanaka, G., T. Komatsu & N.D. Phong (2009)- Recent ostracod assemblages from the northeastern coast of Vietnam and biogeographical significance of euryhaline species. *Micropaleontology* 55, p. 365-382.

(75 species, 3 biofacies controlled by salinity)

Taylor, A.M. (1988)- The taxonomy, ecology and zoogeographical significance of Recent reef Ostracoda from Singapore. Magister Dissertation, University of Wales, Aberystwyth, p. 1-203. *(Unpublished)*

Thanikaimoni, G. (1983)- Palynological investigation on the Borobudur monument. *Bull. Ecole française d'Extreme-Orient* 72, p. 237-250.

(online at: www.persee.fr/doc/AsPDF/befeo_0336-1519_1983_num_72_1_1458.pdf)

(Palynomorphs from soil material used for construction of base of Borobudur monument. Collected from alluvial deposits in open area, not covered by dense vegetation. Absence of marsh and aquatic elements like Typha and Nymphaea in samples suggests not derived from lake or marsh)

Thomas, M.L. (2015)- Holocene palynology of the Gulf of Papua, Papua New Guinea: using modern palynomorph distribution to better constrain paleoenvironmental changes. Ph.D. Thesis, Louisiana State University, p.1-207.

(online at: http://digitalcommons.lsu.edu/cgi/viewcontent.cgi?article=1786&context=gradschool_dissertations)

Thomas, M.L., D.T. Pocknall, S. Warny, S.J. Bentley, A.W. Droxler & C.A. Nittrouer (2015)- Assessing palaeobathymetry and sedimentation rates using palynomaceral analysis: a study of modern sediments from the Gulf of Papua, offshore Papua New Guinea. *Palynology* 39, 3, p. 410-433.

(Palynofacies analyses of organic matter of 64 seafloor samples in Gulf of Papua, PNG, from river mouth to shelf to slope. Five categories of palynomacerals distinguished: (1, 2) brown wood, (3) leaf cuticle, (4) black debris, (5) structureless organic matter. Palynomacerals 1-3 more common in nearshore facies, 4 more common in deeper offshore sites)

Thomas, M.L., S. Warny, D.M. Jarzen, S.J. Bentley, A.W. Droxler, B.B. Harper, C.A. Nittrouer & X. Xu (2018)- Palynomorph evidence for tropical climate stability in the Gulf of Papua, Papua New Guinea, over the latest marine transgression and highstand (14,500 years BP to today). *Quaternary Int.* 467, B22, p. 277-291.

(online at: <https://sites01.lsu.edu/faculty/swarny/wp-content/uploads/sites/30/2018/02/Thomas-et-al.-2018-QI.pdf>)

(Palynological data indicate climatic conditions at sea level around Gulf of Papua remained warm, wet and stable for past 14.5 kyr, with sea surface T > 14 °C)

Titterton, R. & R.C. Whatley (1988)- The provincial distribution of shallow water Indo-Pacific and marine ostracoda: origins, antiquity, dispersal routes and mechanisms. In: T. Hanai et al. (eds.) *Evolutionary biology of ostracoda: its fundamentals and applications*, Proc. 9th Int. Symposium on Ostracoda, Shizuoka, Elsevier, Amsterdam, p. 759-786.

(Tertiary to Recent ostracods from Indo-Pacific and Southern Ocean fall into 13 zoogeographical provinces. East Indian and SW Pacific regions were locus from which ostracods migrated out since Miocene)

Titterton, R. & R.C. Whatley (1988)- Recent Bairdiinae (Crustacea, Ostracoda) from the Solomon Islands. *J. Micropalaeontology* 7, 2, p. 111-142.

(online at: <https://www.j-micropalaeontol.net/7/111/1988/jm-7-111-1988.pdf>)

(21 species of Bairdiinae ostracods (13 new) from littoral and inner shelf of Solomon Islands)

Titterton, R. & R.C. Whatley (2005)- Recent marine Ostracoda from the Solomon Islands. Part 2. Cytheracea (Xestoleberidae). *Revista Espanola Micropal.* 37, 2, 291-313.

(online at: http://revistas.igme.es/index.php/revista_micro/article/viewFile/314/312)

Titterton, R. & R.C. Whatley (2006)- Recent marine Ostracoda from the Solomon Islands. Part 1: Cypridoidea, Platycopina and Cladocopina. *J. Micropalaeontology* 25, p. 73-94.

(online at: <https://www.j-micropalaeontol.net/25/73/2006/jm-25-73-2006.pdf>)

(16 species of Cypridoidea described, comprising 15% of the ostracode fauna of 160 species from Solomon Islands. Platycopids/ Cladocopids 13% of total fauna)

Titterton, R. & R.C. Whatley (2006)- Recent marine Ostracoda from the Solomon Islands. Part 3: Cytheroidea, Bythcytheroidea, Cytherideidae, Krithidae, Neoytherideidae, Cytheruridae. *Revista Espanola Micropal.* 38, p. 169-189.

(online at: http://revistas.igme.es/index.php/revista_micro/article/view/325/322)

Titterton, R. & R.C. Whatley (2008)- Recent marine Ostracoda from the Solomon Islands. Part 4: Cytheroidea; Hemicytheridae, Thaerocytheridae. *J. Micropalaeontology* 27, p. 13-33.

(online at: <https://www.j-micropalaeontol.net/27/13/2008/jm-27-13-2008.pdf>)

(11 species of family Hemicytheridae and 7 of family Thaerocytheridae described, together comprising 14% of Recent ostracod fauna from Solomon Islands. Hemicytherids more endemic than thaerocytherids)

Titterton, R., R.C. Whatley & J.E. Whittaker (2001)- A review of some key species of mainly Indo-Pacific ostracoda from the collections of G.S. Brady. *J. Micropalaeontology* 20, 1, p. 31-44.
(online at: <https://www.j-micropalaeontol.net/20/31/2001/jm-20-31-2001.pdf>)
(Review of 15 modern (mainly deep water?) ostracode species from Brady's Challenger collection)

Todd, R. (1960)- Some observations on the distribution of *Calcarina* and *Baculogypsina* in the Pacific. *Sci. Repts. Tohoku University, Sendai, ser. 2 (Geol.), Spec. Vol. 4*, p. 100-107.
(*Calcarina spengleri* and *Baculogypsina sphaerulata* common reef-dwelling foram species of tropical W Pacific between ~170°W and 120°E. Both first appeared late in Tertiary. Common from Australia Great Barrier Reef to Philippines and Ryukyus in W and from Marianas to Marshalls, Gilberts, Phoenix Islands, Samoa, and Niue in E (not known from C-E Pacific))

Todd, R. (1965)- The foraminifera of the tropical Pacific Collections of the öAlbatrossö, 1894-1900, Part IV, Rotaliform families and planktonic families. *Bull. U.S. National Museum*, 161, p. 1-139.
(online at: <https://repository.si.edu/handle/10088/10220>)
(Descriptions of smaller rotaliform benthic and planktonic foraminifera from tropical Pacific Ocean (Part 4 of of Cushman 1932-1942 monographs))

Toruan, L.N.L., D. Soedharma & K.T. Dewi (2013)- Komposisi dan distribusi foraminifera bentik di ekosistem terumbu karang pada Kepulauan Seribu. *J. Ilmu dan Teknologi Kelautan Tropis* 5, 1, p. 1-16.
(online at: <http://journal.ipb.ac.id/index.php/jurnalikt/article/view/7741>)
(*The composition and distribution of benthic foraminifera at coral reef ecosystem in the Thousand Islands'. Benthic foraminifera from 11 stations at Karang Bongkok, Pramuka, and Onrust Island. Highest composition of symbiont-bearing foraminiferal assemblages associated with reef ecosystem was in East Pramuka (78%) and lowest was in South Onrust (22%). Opportunistic types highest in S Onrust, indicating high nutrients*)

Troelstra, S.R. (1989)- Actuomicropalaeontology and sediment distribution of three transects across the Banda Arc, Indonesia (Snellius-II expedition, cruise G5). In: *Proc. Snellius II Symposium, Jakarta 1987, Netherlands J. Sea Research* 24, 4, p. 477-489.

Troelstra, S.R. & D. Kroon (1989)- Note on extant planktonic foraminifera from the Banda Sea, Indonesia (Snellius-II Expedition, Cruise G-5). In: J.E. van Hinte et al. (eds.) *Proc. Snellius II Symposium, Jakarta 1987, Netherlands J. Sea Research* 24, p. 459-463.

Troelstra, S.R., H.M. Jonkers & S. de Rijk (1996)- Larger Foraminifera from the Spermonde Archipelago (Sulawesi, Indonesia). *Scripta Geologica* 113, p. 93-120.
(Online at: www.repository.naturalis.nl/document/148804)
(*Modern larger foram distribution in Spermonde reefal province off SW tip of Sulawesi. Near-reef facies dominated by few species (Calcarina, Elphidium). Mid-shelf reefs mainly with Heterostegina depressa and Amphistegina radiata. Outer platform reefs more open ocean influence with Amphisorus hemprichii and Amphistegina lessonii*)

Van Benthem Jutting, W.S.S. (1953)- Systematic studies on the non-marine mollusca of the Indo-Australian Archipelago. IV. Critical revision of the freshwater bivalves of Java. *Treubia* 22, 1, p. 19-73.
(online at: <http://e-journal.biologi.lipi.go.id/index.php/treubia/article/view/1562/1453>)
(Review of 16 species of modern freshwater bivalves from lakes/ rivers of Java. Three families: Unionidae, Corbiculidae, Sphaeriidae (Pisidium spp.))

Van Benthem Jutting, W.S.S. (1956)- Systematic studies on the non-marine mollusca of the Indo-Australian Archipelago. V. Critical revision of the Javanese gastropods. *Treubia* 23, 2, p. 259-477.
(online at: <http://e-journal.biologi.lipi.go.id/index.php/treubia/article/view/2713/2325>)
(Review of modern freshwater gastropods (89 species) and land gastropods(171 species) of Java)

- Van Benthem Jutting, W.S.S. (1959)- Catalogue of the non-marine mollusca of Sumatra and of its satellite islands. Beaufortia, Zoological Museum Amsterdam, 7, 83, p. 41-191.
(online at: www.repository.naturalis.nl/document/548339)
- Van Benthem Jutting, W.S.S. (1959)- Non-marine mollusca of the North Moluccan islands Halmahera, Ternate, Batjan and Obi. Treubia 25, p. 25-87.
(online at: <http://e-journal.biologi.lipi.go.id/index.php/treubia/article/view/2731/2341>)
- Van Benthem Jutting, W.S.S. (1973)- Systematic studies on the non-marine mollusca of the Indo-Australian Archipelago. Linnaeus Press, Amsterdam, p. 1-477.
(Reprint of 5 papers on Recent fresh and brackish water molluscs from Indonesia, originally published in 'Treubia' (vol.19 (1948) p. 539-604; 20 (1950) p. 381-505; 21 (1952) p. 291-435; 22 (1953) p. 19-73 and 23 (1956) p. 259-477)
- Van den Bold, W.A. (1950)- *Hemikrithe*, a new genus of ostracoda from the Indopacific. Ann. Mag. Natural History 12, 3, p. 900-904.
(Short note listing 44 species of ostracods from two samples, one off Sarawak, one from Batu Island, W coast of Sumatra. Incl. new genus *Hemikrithe orientalis*)
- Van de Paverd, P.J. & K.R. Bjorklund (1989)- Frequency distribution of polycystine radiolarians in surface sediments of the Banda Sea, Eastern Indonesia. In: J.E. van Hinte et al. (eds.) Proc. Snellius II Symposium, Jakarta 1987, Netherlands J. Sea Research 24, 2, p. 511-521.
(Numbers of radiolarians in sea-floor sediments of Banda Sea vary widely: low from 0-950m, high between 950-4800m, and low again below 4800m water depth. Distribution reflect sediment influx and occurrence of highly productive areas in surface water)
- Van de Paverd, P.J. & K.R. Bjorklund (1996)- Preservation and density of Late Quaternary radiolaria in piston cores from the Banda Sea, eastern Indonesia. Revista Espanola Micropal. 28, 3, p. 139-152.
- Van der Kaars, W.A. (1991)- Palynology of eastern Indonesian marine piston-cores: a Late Quaternary vegetational and climatic record for Australasia. Palaeogeogr. Palaeoclim. Palaeoecology 85, p. 239-302.
(Pollen analyses on Late Quaternary sediments from E Indonesia marine piston cores show vegetation and environmental record for E Indonesia and N Australia. On Halmahera and N Australia montane oak forest largely replaced tropical lowland vegetation during last glacial period, while climate was cooler and drier than today, with maximum grassland cover at ~18 ka. One piston-core (G6-4) extends to 300 ka. and also shows glacial periods characterised by expanding grassland vegetation (Graminae pollen peaks), and during interglacials increases in woodland and fern cover. Mangrove vegetation expansions suggest rises in sea-level at ~244, 220 and 130 ka)
- Van der Kaars, S. (1998)- Marine and terrestrial pollen records of the last glacial cycle from the Indonesian region: Bandung Basin and Banda Sea. Palaeoclimates 3, p. 209-219.
- Van der Kaars, S.F. Bassinot, P. de Deckker & F. Guichard (2010)- Changes in monsoon and ocean circulation and the vegetation cover of southwest Sumatra throughout the last 83,000 years: the record from marine core BAR94-42. Palaeogeogr. Palaeoclim. Palaeoecology 296, p. 52-78.
(Palynological record from deep-sea core off SW Sumatra used to reconstruct monsoon circulation and vegetation of SW Sumatra over the last 83 ky. During marine isotope stage (MIS) 5a, SW Sumatra was covered by rainforest. During MIS 4 conditions became drier, cooler and weaker monsoon. Vegetation most open during MIS 3, between ~52- 43 ky, driest of last glacial, also increase in montane pollen. After ~43 ky everwet climate gradually developed as monsoonal circulation intensified)
- Van der Kaars, S. & R. Dam (1997)- Vegetation and climate change in West-Java, Indonesia during the last 135,000 years. Quaternary Int. 37, p. 67-71.

(Sediment cores from intramontane Bandung basin (W Java) provide paleoclimatic record for last 135,000 years. Anomalously dry conditions for penultimate glacial last glacial periods, very warm and humid conditions during last interglacial. For Last Glacial Maximum temperatures 4-7°C lower than present)

Van der Kaars, S., D. Penny, J. Tibby, J. Fluin, R.A.C. Dam & P. Suparan (2001)- Late Quaternary palaeoecology, palynology and palaeolimnology of a tropical lowland swamp: Rawa Danau, West-Java, Indonesia. *Palaeogeogr. Palaeoclim. Palaeoecology* 171, 3-4, p. 185-212.

(Open vegetation and drier climate suggested for Late Glacial, but no evidence for cooler conditions. Onset of Holocene coincides with change to more humid conditions. Changes in diatom composition reflect shallowing of lake)

Van Iperen, J.M., A.J van Bennekom & T.C.E. van Weering (1993)- Diatoms in surface sediments of the Indonesian Archipelago and their relation to hydrography. In: H. ten Dam (ed.) Twelfth Int. Diatom Symposium, *Hydrobiologia* 269-270, 1, p. 113-128.

*(Recent marine diatoms from 53 seafloor samples between 350-7200m water depth in Indonesian Archipelago, collected during Snellius II Expedition. Three assemblages, related to overlying water mass: (1) warm saline surface waters of Pacific and Indian Ocean origin (*Thalassiosira oestrupii*, *Rhizosolenia bergonii*); (2) low-salinity lobe in Makassar Strait (*Thalassionema frauenfeldii*, *Cyclotella striata*); (3) seasonal upwelling areas in Arafura Sea and S of Java (*Thalassionema nitzschioides*, *Chaetoceros* resting spores). Also three groups of allochthonous species, indicators of productivity in littoral environment, bottom currents and river outflow)*

Van Marle, L.J. (1988)- Bathymetric distribution of benthic foraminifera on the Australian- Irian Jaya continental margin, Eastern Indonesia. *Marine Micropaleontology* 13, 2, p. 97-152.

(Study of distribution of 164 species of benthic foraminifera in 35 seafloor samples from Australia- Irian Jaya continental margin between 60-2119 m water depth, along three transects across Banda Arc. Four faunal depth-zones and four subzones distinguished)

Van Marle, L.J. (1989)- Benthic foraminifera from the Banda Arc region, Indonesia, and their paleobathymetric significance for geologic interpretations of the Late Cenozoic sedimentary record. Ph.D. Thesis Vrije Universiteit, Free University Press, Amsterdam, p. 1-271.

(Collection of 11 papers, also published elsewhere, on modern foraminifera distribution and Neogene stratigraphy of E Indonesian islands)

Van Marle, L.J. (1991)- Eastern Indonesian, Late Cenozoic smaller benthic foraminifera. *Verhandelingen Kon. Nederl. Akademie Wetenschappen, Amsterdam, Afd. Natuurkunde* 1, 34, p. 1-328.

(online at: www.dwc.knaw.nl/DL/publications/PU00011017.pdf)

(Taxonomy and distribution of Miocene- Recent deep water benthic foraminifera in E Indonesia)

Van Marle, L.J., J.E.van Hinte & A.J. Nederbragt (1987)- Plankton percentage of the foraminiferal fauna in seafloor samples from the Australian-Irian Jaya continental margin, Eastern Indonesia. *Marine Geol.* 77, p. 151-156.

(Plankton percentage of foram fauna in 36 seafloor samples between 40-2119m depth from Australian-Irian Jaya continental margin increases with water depth. Percentage- Depth Transform derived from data set. Examples: around 100m water depth plankton% ~50%, below 500m >90%)

Van Steenis, C.G.G.J. (1934)- On the origin of the Malaysian mountain flora, part 1, Facts and statements of the problem. *Bull. Jardin Botanique Buitenzorg*, ser. 3, 13, p. 135-262.

(On distribution and origin of recent SE Asian mountain plants)

Van Steenis, C.G.G.J. (1935)- On the origin of the Malaysian mountain flora, part 2, Altitudinal zones, general consideration and renewed statement of the problem. *Bull. Jardin Botanique Buitenzorg*, ser. 3, 13, p. 289-290.

Van Steenis, C.G.G.J. (1936)- On the origin of the Malaysian mountain flora, part 3, Analysis of floristical relationships. *Bull. Jardin Botanique Buitenzorg*, ser. 3, 14, p. 56-72.

(Malesian (= Indonesian) mountain flora reached Indonesian archipelago along three migration routes, called Sumatra, Luzon and Papuan tracks)

Van Steenis, C.G.G.J. (1979)- Plant-geography of East Malesia. *Botanical J. Linnean Soc.* 79, p. 97-178.
(Modern plant distribution in E Indonesian archipelago (Lesser Sunda Islands; not Malaysia). Two main contacts between Malesian (Indonesian) and Australian floras must have occurred, (1) in Upper Cretaceous-Paleocene or earlier, and (2) before end Miocene (abundant influx of Asian elements into Australian flora))

Van Waveren, I. (1989)- Pattern analysis of organic component abundances from deltaic and open marine deposits: palynofacies distribution (East Java, Indonesia). In: J.E. van Hinte et al. (eds.) *Proc. Snellius II Symposium, Jakarta 1987, Netherlands J. Sea Research* 23, 4, p. 441-447.
(Eleven types of organic debris types in sea floor samples from Java Sea, off Solo River Delta, Porong Delta, etc.. Mix of open marine (foraminifera, dinoflagellates) and land-derived material (spores-pollen, etc.))

Van Waveren, I. (1989)- Palynofacies analysis of surface sediments from the Northeastern Banda Sea (Indonesia). In: *Proc. Snellius II Symposium, Jakarta 1987, Netherlands J. Sea Research* 24, 4, p. 501-509.
(Analysis of organic matter types in 31 deep water sea floor samples E of Seram)

Van Waveren, I. (1993)- Planktonic organic matter in surficial sediments of the Banda Sea (Indonesia); a palynological approach. Ph.D. Thesis University of Utrecht, *Geologica Ultraiectina* 104, p. 1-237.
(online at: dspace.library.uu.nl/bitstream/..)
(Collection of seven publications, six of which deal with Recent Banda Sea palynomorphs, organic matter, tintinnomorphs and dinoflagellate cysts)

Van Waveren, I. (1994)- Tintinnomorphs from deep-sea sediments of the Banda Sea (Indonesia). *Scripta Geologica* 105, p. 27-51.
(online at: www.repository.naturalis.nl/document/148769)
(64 types of chitinous remains of tintinnomorph protozoans in (sub-)Recent sediments of Banda Sea. Presence and preservation may be related to effects of high productivity and high sedimentation rates in Banda Sea)

Van Waveren, I. & H. Visscher (1994)- Analysis of the composition and selective preservation of organic matter in surficial deep-sea sediments from a high-productivity area (Banda Sea, Indonesia). *Palaeogeogr. Palaeoclim. Palaeoecology* 112, 1-2, p. 85-111.
(Palynological analysis of box-core samples from deep-sea sediments along three transects in Banda Sea)

Van Zeist, W. (1984)- The prospect of palynology for the study of prehistoric man in Southeast Asia. *Modern Quaternary Research in Southeast Asia* 8, Balkema, Rotterdam, p. 1-15.
(Early review of use of palynology to identify paleo-vegetational changes in Quaternary sediments of Indonesia, with examples from Java, Sumatra, PNG)

Van Zeist, W., N.A. Polhaupessy & I.M. Stuijts (1979)- Two pollen diagrams from West Java, a preliminary report. *Modern Quaternary Research in Southeast Asia* 5, Balkema, Rotterdam, p. 43-56.
(Palynology of two shallow core holes in Holocene lake deposits at Situ Gunung and Telaga Patengan, SW Java)

Varol, O. (1985)- Distribution of calcareous nannoplankton in surface sediments from intertidal and shallow marine regimes of a marginal sea: Jason Bay, South China Sea. *Marine Micropaleontology* 9, p. 369-374.
(Sediments collected from intertidal and shallow marine (0-20m) parts of Jason Bay, S China Sea contain calcareous nannoplankton assemblages with 99% Gephyrocapsa oceanica and rare Helicosphaera carteri, Umbilicosphaera sibogae, Scapholithus fossilis, Cyclococcolithus leptoporus, Syracosphaera pulchrae. Nannoplankton species abundance increases with depth, becoming abundant below ~20m)

Vavra, V. (1906)- Ostracoden von Sumatra, Java, Siam, den Sandwich-Inseln und Japan (Reise von Dr. Walter Voltz). *Zool. Jahrbuch, Syst. Okol. Geogr. Tiere* 23, p. 413-436.

(On Recent fresh-water ostracodes from swamps, lakes, etc. of Sumatra, Java, Thailand, etc.)

Verheij, E. & P.L.A. Erftemeijer (1993)- Distribution of seagrasses and associated macroalgae in South Sulawesi, Indonesia. *Blumea* 38, p. 45-64.

Veron, J.E.N. & R. Kelley (1988)- Species stability in reef corals of Papua New Guinea and the Indo Pacific. *Mem. Assoc. Australasian Palaeont.* 6, p. 1-69.

(Pliocene coral fauna from PNG with 85 species, of which 87% still extant)

Victor, R. & C.H. Fernando (1979)- On some freshwater ostracod type specimens from Indonesia. *Canadian J. Zoology* 57, 1, p. 6-12.

(Re-description of some modern freshwater ostracod species from Sulawesi and Sumatra, originally described by Moniez (1892) (Strandesia, Hemicyprus, Cypretta))

Victor, R. & C.H. Fernando (1981)- Freshwater ostracods (Crustacea: Ostracoda) of the subfamily Cyprinotinae Bronstein, 1947 from Malaysia, Indonesia and the Philippines. *Hydrobiologia* 83, 1, p. 11-27.

(Recent Cyprinotus, Hemicypris and Heterocypris from ponds in W Indonesia, etc.)

Villain, J.M. (1995)- Modeles micropaleontologiques recents et stratigraphie sequentielle en Indonesie. In: M. Gayet et al. (eds.) *First European Palaeontological Congress, Geobios, Mem. Spec.* 18, p. 409-423.

('Recent micropaleontological models and sequence stratigraphy in Indonesia'. Foraminifera distribution on E Kalimantan shelf between Mahakam delta and Makassar Strait. Deltaic assemblages arranged according to salinity. Inner shelf with larger Rotaliidae towards euryhaline conditions. Operculina typical of shallow marine low-oxygen organic-rich clays; coarser seafloor rich in oxygen with Amphisteginids. Nodosariidae and planktonics bathymetric markers on slope. In bathyal areas mostly agglutinants. Model above valid only for highstand situations, comparable to present day. Sediments deposited during last lowstand period cored and correlated. Shelf microfaunas thin-walled, due to low oxygen and low carbonate concentrations; Rotaliidae indicate low salinities at shelf edge, where they coexist with Operculina and Amphistegina, close to deeper facies with planktonics, Buliminidae and Nodosariidae)

Vozenin-Serra, C. & C. Prive-Gill (1991)- Les terrasses alluviales pleistocenes du Mekong (Cambodge). I. Bois silicifies homoxyles recoltes entre Stung-Treng et Snoul. *Review Palaeobotany Palynology* 67, 1/2, p.

('The Pleistocene alluvial terraces of the Mekong (Cambodia), I. Homoxyxl silified woods collected between Stung-Treng et Snoul')

Vozenin-Serra, C. & C. Prive-Gill (1991)- Les terrasses alluviales pleistocenes du Mekong (Cambodge). II. Bois silicifies heteroxyles recoltes entre Stung-Treng et Snoul. *Review Palaeobotany Palynology* 68, 1/2, p.

('The Pleistocene alluvial terraces of the Mekong (Cambodia), II. Heteroxyxl silified woods collected between Stung-Treng et Snoul')

Vyverman, W. (1991)- Diatoms from Papua New Guinea. *Bibliotheca Diatomologica* 22, p. 1-224.

(Recent diatoms from lakes, etc., in PNG)

Vyverman W. & K. Sabbe (1995)- Diatom-temperature transfer functions based on the altitudinal zonation of diatom assemblages in Papua New Guinea: a possible tool in the reconstruction of regional palaeoclimatic changes. *J. Paleolimnology* 13, p. 65-77.

Wagey, G.A. (2002)- Ecology and physiology of phytoplankton in Ambon Bay, Indonesia. Ph.D. Thesis University of British Columbia, p. 1-185.

(105 phytoplankton species identified from Ambon Bay, including several dinoflagellates new to Indonesia)

Waller, H.O. (1960)- Foraminiferal biofacies off the South China Coast. *J. Paleontology* 34, 6, p. 1164-1182.

(Benthic foraminifera from shelf S of Taiwan and in Gulf of Tonkin. Four depth-related faunas: (1) Inner Shelf (65-150') Elphidium advenum, E. sagrum, Nonion japonius, Quinqueloculina; (2) C Shelf (151-275')

Amphistegina lessonii, *Hanzawaia nipponica*, *Streblus tepidus*, *Operculina bartschi*; (3) Outer Shelf (276-400') *Biloculina labiata*, *Cassidulina neocarinata*, *Spiroloculina communis*; (4) U Bathyal (401-656') *Bolivina spathylata*, *Uvigerina auberiana*, *U. schwageri*)

Wang, P. & J. Chappell (2001)- Foraminifera as Holocene environmental indicators in the South Alligator River, Northern Australia. *Quaternary Int.* 83-85, p. 47-62.

(Trends in foraminifera assemblages along 80 km length of macrotidal river E of Darwin, N coast of Australia. Due to tidal transport and resuspension, most foraminiferal thanatocoenoses in river contain many small marine forms, while % of large and heavy marine forams, like Quinqueloculina, decreases upstream)

Wang, P. & C. Samtleben (1983)- Calcareous nannoplankton in surface sediments of the East China Sea. *Marine Micropaleontology* 8, p. 249-259.

(28 species of coccoliths in surface sediments of East China Sea. Emiliana huxleyi and Gephyrocapsa oceanica together >90% of assemblages. Coccoliths very rare in water depths <50m). Coccolith species composition different between continental shelf and Okinawa Trough, reflecting different water masses)

Wang, R., A. Abelmann, B. Li & Q. Zhao (2000)- Abrupt variations of the radiolarian fauna at Mid-Pleistocene climate transition in the South China Sea. *Chinese Science Bull.* 45, 10, p. 952-955.

(Core 17957-2 from S China Sea shows distinct changes in radiolarian/foraminifera ratio and radiolarian assemblages that can be related to global climate cooling observed at M Pleistocene revolution at ~900 ka)

Wang, X., S. van der Kaars, P.P. Kershaw, M.I. Bird & F.A. Jansen (1999)- A record of fire, vegetation and climate through the last three glacial cycles from Lombok Ridge Core G6-4, Eastern Indian Ocean, Indonesia. *Palaeogeogr. Palaeoclim. Palaeoecology* 147, 3-4, p. 241-256.

(Deepsea core SW of Sumba with ~300,000 yr sediment record)

Watson, K.A. (1988)- The taxonomy and distribution of Recent reef Ostracoda from the Pulau Seribu, Java Sea. *Doct. Diss., University of Wales, Aberystwyth*, p. 1-434. *(Unpublished)*

Weber- van Bosse, A. & M. Foslie (1904)- The Corallinaceae of the Siboga Expedition. In: M. Weber (ed.) *Siboga Expeditie, Uitkomsten op zoologisch, botanisch, oceanographisch en geologisch gebied verzameld in Nederlandsch Oost-Indie 1899-1900, Monographie 61, Brill, Leiden*, p. 1-110.

(Monograph on Recent marine coralline red algae collected by Siboga Expedition in 1899-1900. Lithothamnium group present at 55 stations, invariably in areas of strong tidal or other currents, thriving best from 10-30m, but also present on reef flats and deeper water down to ~120m)

Wells, P., G. Wells, J. Calli & A. Chivas (1994)- Response of deep sea benthonic foraminifera to Late Quaternary climate changes, SE Indian Ocean, offshore Western Australia. *Marine Micropaleontology* 23, p. 185-229.

(Late Quaternary benthic foraminifera of four ODP 122 deep-sea cores off W Australia with two main assemblages (1) dominated by Uvigerina peregrina, (2) dominated by U. proboscidea. Episodes of high influx of particulate organic matter during glacial episodes, tied to upwelling episodes and to unusually low sea-surface paleotemperature indicated by planktic foraminifera)

Whatley, R.C. & R. Titterton (1981)- Some new Recent podocopid Ostracoda from the Solomon Islands, South-West Pacific. *Revista Espanola Micropal.* 13, p. 157-170.

Whatley, R.C. & K. Watson (1988)- A preliminary account of the distribution of ostracoda in Recent reef and reef associated environments in the Pulau Seribu or Thousand Island Group, Java Sea. In: T. Hanai et al. (eds.) *Evolutionary biology of ostracoda: its fundamentals and applications, Proc. 9th Int. Symposium on Ostracoda, Shizuoka, Elsevier, Developments in Palaeontology and Stratigraphy* 11, p. 399-411.

(Samples on and around reef complex of Pulau Pari, Pulau Seribu, Java Sea, yielded 141 species of podocopid and platycopid Ostracoda. Bairdiidae maximum diversity on reef, Renaudocypris and Hansacypris mainly in intertidal zone. Loxoconcha, Xestoleberis and Ornatoleberis wider environmental tolerance)

Whatley, R.C. & Q. Zhao (1987)- Recent ostracoda of Malacca Straits (Part I). *Revista Espanola Micropal.* 19, 3, p. 327-366.

(18 bottom samples of modern sediments from Malacca Straits over depth range of 10-100m contain 129 species of ostracodes (22 new). Faunas close affinity to South China Sea and Indonesia)

Whatley, R.C. & Q. Zhao (1988)- Recent ostracoda of Malacca Straits (Part II). *Revista Espanola Micropal.* 20, 1, p. 5-37.

Whittaker, J.E. & R.L. Hodgkinson (1995)- The foraminifera of the Pitcairn Islands. In: T.G. Benton & T. Spencer (eds.) *Pitcairn Islands: biogeography, ecology and prehistory*, *Biol. J. Linnean Soc.* 56, p. 365-371.

(Recent foraminifera from Pitcairn Islands, Pacific Ocean. Living forams almost exclusively from phytal (attached or clinging) habitats. Foraminifera in sediment samples mainly thanatocoenoses. Fauna all calcareous, low diversity, dominated by large soritids (Marginopora, Amphisorus, Sorites) and Amphistegina, with small miliolids and small attached genera (discorbids, etc.). Apparent absence of Calcarina, small rotaliids, elphidiids and agglutinating species, common in W Pacific islands)

Wicaksono, S.A., J.M. Russell & S. Bijaksana (2015)- Compound-specific carbon isotope records of vegetation and hydrologic change in central Sulawesi, Indonesia, since 53,000 yr BP. *Palaeogeogr. Palaeoclim. Palaeoecology* 430, p. 47-56.

(Carbon isotopic composition ($\delta^{13}C$) of terrestrial leaf waxes in sediment cores from LakeMatano spanning 53 kyr. During Marine Isotope Stages 1 and 3, more negative $\delta^{13}C_{wax}$ values indicate closed-canopy rainforests dominated in Sulawesi, in wetter, less seasonal climate. More abundant open canopy vegetation and possible expansion of C4 grasses between 29-14 ka BP, indicating more arid climate in Marine Isotope Stage 2 (incl. Last Glacial Maximum). Higher elevations maintain rainforest refugia during regionally arid time intervals when C4 savannas and grasslands expanded at lower elevations)

Wijono, S. (1991)- Distribusi foraminifera bentonik di daerah perairan P. Papateo, Kepulauan Seribu, Laut Jawa. *Media Teknik (UGM)* 13, 2, p. 119-131.

'Distribution of benthic foraminifera off Papateo Island, Pulau Seribu, Java Sea'. Forams from 18 samples from 21-30m depth)

Winantris (2011)- Fungal spore sedimen Resen delta front delta Mahakam Kalimantan Timur. *Bull. Scientific Contr. (UNPAD)* 9, 2, p. 107-120.

(online at: <http://jurnal.unpad.ac.id/bsc/article/view/8267/3814>)

('Fungal spores in Recent sediments of the Mahakam delta from, East Kalimantan'. Terrestrial and marine fungal spores present in delta front sediments, incl. Monoporisporites, Inapertisporites, Biporipsilonites)

Winantris (2012)- Kelimpahan polen dan spora endapan channel Delta Mahakam. *Bull. Scientific Contr. (UNPAD)* 10, 2, p. 89-95.

(online at: <http://jurnal.unpad.ac.id/bsc/article/view/8280/3827>)

*('Abundance of pollen and spores in channels deposits of the Mahakam Delta'. Abundance of pollen higher in tidal channel deposits than in distributary channels. *Oncosperma tigillarum* and *Nypa fruticans palmae* pollen dominate in distributary channels, *Rhizophora* and *Avicennia mangrove* pollen dominant in tidal channels)*

Winantris & L. Jurnaliah (2018)- Pollen and foraminifera approaches to identify sediment sources in the river mouth Mahakam, East Kalimantan. *J. Geoscience Engineering Environm. Technol. (JGEET)* 2, 4, p. 242-248.

(online at: <http://journal.uir.ac.id/index.php/JGEET/article/view/689/627>)

*(Shallow core from Mahakam River before delta plain. Common pollen, rel. rare, simple foraminifera (*Oolina*, *Ramulina*, *Stictogonylus vandiemenensis*, etc.))*

Winantris, A. Sudradjat, I. Syafri & A.T.Rahardjo (2014)- Diversitas polen Palmae pada endapan delta Mahakam Resen. *Proc. 43rd Ann. Conv. Indon. Assoc. Geol. (IAGI), Jakarta, PIT IAGI 2014-195*, 5p.

*('Diversity of Palmae pollen in Recent deposits of the Mahakam Delta'. Sediments of Mahakam Delta contain 28 palm pollen species in delta plain, 23 in delta front. Palm pollen can help differentiate between delta plain and delta front facies: (1) delta plain dominated by *Oncosperma tiggilarium*, *Nypa fruticans*, *Euglossona insignis*, *Pinanga parvula* and *Cocos nucifera*; (2) delta front dominated by *Oncosperma tiggilarium*, *Nypa fruticans*, *Euglossona insignis*, *Phoenix paludosa* and *Licuala sp.* Palm pollen abundance nearly 4x greater in delta plain than in delta front, also higher diversity)*

Winantris, I. Syafri & A.T. Rahardjo (2012)- *Oncosperma tiggilarium* merupakan bagian palino karakter delta plain di Delta Mahakam, Kalimantan. *Bionatura-Jurnal Ilmu-ilmu Hayati dan Fisik* 14, 3, p. 228-236.
(online at: <http://jurnal.unpad.ac.id/bionatura/article/viewFile/7465/3426>)
*('Oncosperma tiggilarium is part of the palino character of delta plain in Mahakam Delta, Kalimantan'. *O. tiggilarium* pollen of coastal palm tree widespread in Recent delta plain samples, but absent in delta front, therefore good indicator of (upper) delta plain environment)*

Woodroffe, S.A., B.P. Horton, P. Larcombe & J.E. Whittaker (2005)- Intertidal mangrove foraminifera from the central Great Barrier Reef shelf, Australia: implications for sea-level reconstruction. *J. Foraminiferal Research* 35, 3, p. 259-270.
*(Foraminifera distribution in intertidal zone tied to elevation. Agglutinated foram assemblage of *Miliammina fusca*, *Trochammina inflata*, *Ammotium* and *Haplophragmoides* between just above Mean Low Water of Neap Tides to Highest Astronomical Tide level (vertical range 1.8 m). *Ammonia aoteana*- dominated assemblage between just below Mean Low Water of Neap Tides and Mean High Water of Neap Tides (vertical range 0.8 m)*

Wu, R., Y. Gao, Q. Fang, C. Chen, B. Lan, L. Sun & D. Lan (2013)- Diatom assemblages in surface sediments from the South China Sea as environmental indicators. *Chinese J. Oceanology Limnology* 31, 1, p. 31-45.
(online at: http://dspace.xmu.edu.cn/bitstream/handle/2288/53977/Diatom_assemblages_in_surface_sediments_from_the_South_China_Sea_as_environmental_indicators.pdf?sequence=1&isAllowed=y)
*(Diatoms in 62 surface sediment samples from depths from 101-4185m. 256 species, dominated by *Coscinodiscus africanus*, *Coscinodiscus nodulifer*, *Cyclotella stylorum*, *Hemidiscus cuneiformis*, *Melosira sulcata*, *Nitzschia marina*, *Roperia tessellata*, *Thalassionema nitzschioides*, etc.. Seven zones)*

Yahya, K., S. Shuib, F.I. Minhat, O. Ahmad & A. Talib (2014)- The distribution of benthic foraminiferal assemblages in the north-west coastal region of Malacca Straits, Malaysia. *J. Coastal Life Medicine* 2, 10, p. 784-790.
(online at: www.jclmm.com/qk/201410/5.pdf)
*(Benthic foram assemblages from shallow marine environments around NW Penang Island dominated by *Ammonia* (~80% of fauna), followed by *Elphidium* (~3%). Rare agglutinated taxa and *Bolivina*)*

Yakzan, A.M., S. Jirin, S.S.M. Shah & R.J. Morley (2010)- The major trends of palynomorphs distribution in three fluvial systems, Peninsular Malaysia. *Petrol. Geosc. Conf. Exhib. (PGCE)*, Kuala Lumpur 2010, p. (Extended Abstract)
*(Palynomorph distribution patterns in three fluvial systems on W (Klang-Langat River) and E (Pahang and Sedili Besar Rivers) coasts of Peninsular Malaysia. Ecological groups. mangrove (*Rhizophora*), back mangrove (*Acrostichum*, *Nypa*) and hinterland pollen. Pollen and spores redistributed by currents and less by wind. Sediments in offshore area contain pollen signals which approximately mirror vegetation character onshore)*

Yakzan, A.M. & H. Kamaludin (2010)- Palynology of late Quaternary coastal sediments. *Catena* 30, 4, p. 391-406.
*(Palynology of Late Pleistocene sediments from Pantai tin mine, W coast of Malay Peninsula, with freshwater *Pandanus* peat overlain by mangrove peat)*

Yanagisawa, Y. (1987)- Age assignments of dredge and piston core samples based on diatom biostratigraphy. *Comm. Co-Ord. Joint Prospecting Mineral Resources in Asian Offshore Areas (CCOP)*, Techn. Bull. 19, p. 73-87.

(Latest Pliocene- Recent ages for sediments in piston cores in forearc offshore E Java)

Yassini, I., B.G. Jones & M.R. Jones (1993)- Ostracods from the Gulf of Carpentaria, northeastern Australia. *Senckenbergiana Lethaea* 73, p. 375-406.

Yin, J., C. Liu, J. Zhang, X. Yang, J. Wu, W. Oschmann, F.T. Fursich, B. Zhu & H. Zhang (2018)- Distribution and constraining factors of planktonic and benthic foraminifers in bottom sediments of the southern South China Sea. *Palaeogeogr. Palaeoclim. Palaeoecology*, p. *(in press)*

*(Water depth dominant factor controlling foram assemblage composition and $\delta^{18}O$. Differences in proportion of agglutinated and porcelaneous tests in shallow-water zone controlled by terrestrial runoff from nearby river systems (Mekong and N Borneo rivers) and seasonal currents. Dominance of *Melonis barleeanus* at sites of active cold methane seepage in southern SCS)*

Yordanova, E.K. & J. Hohenegger (2004)- Morphocoenoclines of living operculinid foraminifera. *Micropaleontology* 50, p. 149-177.

*(Relations between water depth and shape in *Operculina*, *Planoperculina* and *Planostegina* in Ryuku islands. Thick *Operculina* with intensively coiled spirals predominate in shallow water (20 -40m); in deep euphotic zone (-120m) thin forms with weakly coiled spiral. Thin *Planoperculina heterosteginoides* restricted to deep euphotic zone (>80m) can extend distribution to just below euphotic zone, where it develops very thin tests)*

Yulianto, E., A.T. Rahardjo, Dardji Noeradi, D.A. Siregar & K. Hirakawa (2005)- A Holocene pollen record of vegetation and coastal environmental changes in the coastal swamp forest at Batulicin, South Kalimantan, Indonesia. *J. Asian Earth Sci.* 25, 1, p. 1-8.

*(Pollen analysis of coastal peat swamp core at Batulicin, SE Kalimantan, representing 9100 BP, showing *Rhizophora* mangrove forest since early Holocene. From ~6000 BP gradual change from mangrove forest to peat swamp forest due to higher precipitation and progradation. Human influence recognized from ~1600 BP)*

Yulianto, E., W.S. Sukapti (1998)-Perubahan iklim selama rentang Plistosen atas hingga Holosen di Indonesia berdasarkan rekaman data palinologi. *Proc. 27th Ann. Conv. Indon. Assoc. Geol. (IAGI)*, 2 (Sed. Pal. Strat.), Yogyakarta, p. 66-71.

(Late Pleistocene-Holocene climate change in Indonesia based on palynological data records')

Yulianto, E., W.S. Sukapti, A.T. Rahardjo, Dardji Noeradi, D.A. Siregar, P. Suparan & K. Hirakawa (2004)- Mangrove shoreline responses to Holocene environmental change, Makassar Strait, Indonesia. *Review Palaeobotany Palynology* 131, p. 251-268.

(Pollen analyses of two near-coastal sites at Batulicin, S Kalimantan and Pare-Pare, S Sulawesi. Mangroves developed at Batulicin in mid-Holocene, persisting to present at Batulicin. Mangrove development commenced at Pare-Pare in early Holocene, but since mid Holocene fluvial/floodplain deposition)

Zallesa, S., K.T. Dewi, N.C.D. Aryanto & R. Rahardiawan (2014)- The correlation between benthic foraminifera and sediment types of South Makassar Strait. *Bull. Marine Geol.* 29, 2, p. 53-59.

(online at: <http://ejournal.mgi.esdm.go.id/index.php/bomg/article/view/65/66>)

*(Core top samples from water depths 200-1500m in S Makassar Straits with 38 species of benthic foraminifera. Most common species *Anomalinoidea colligerus*, *Lenticulina suborbicularis*, *Planulina wuellerstorfi*, *Pseudonodosaria discreta*, *Bolivina spathulata*. Highest abundance of benthic foraminifera in silty sand and sandy silt)*

Zamoras, L.R. & P.J. Militante-Matias (1997)- Recent Foraminifera of Matabungkay and Talim Bays, Batangas. *J. Geol. Soc. Philippines* 52, 2, p.

Zhang, P., R. Zuraida, Y. Rosenthal, A. Holbourn, W. Kuhnt & J. Xu (2018)- Geochemical characteristics from tests of four modern planktonic foraminiferal species in the Indonesian Throughflow region and their implications. *Geoscience Frontiers*, 12p. *(in press)*

(online at: <https://www.sciencedirect.com/science/article/pii/S1674987118300471?via%3Dihub>)

(d18O and Mg/Ca of *Globigerinoides ruber*, *Gs sacculifer*, *Pulleniatina obliquiloculata* and *Neogloboquadrina dutertrei* from 60 coretop sediment samples from Indonesian Throughflow region suggest calcification within mixed layer for *G. ruber* (0-50m) and *G. sacculifer* (20-75 m), and within thermocline (~75-125m) for *P. obliquiloculata* and *N. dutertrei*)

Zhao, Q. & P. Wang (1988)- Distribution of modern ostracoda in the shelf seas off China. In: T. Hanai et al. (eds.) Evolutionary biology of ostracoda: its fundamentals and applications, Proc. 9th Int. Symposium on Ostracoda, Shizuoka, Elsevier, Developments in Palaeontology and Stratigraphy 11, p. 805-821.

Zhao, Q. & R.C. Whatley (1989)- Recent podocopid Ostracoda of the Sedili River and Jason Bay, southeastern Malay Peninsula. *Micropaleontology* 35, p. 168-187.

(Distribution of ostracodes in Jason Bay, off SE coast of Malay Peninsula. 101 species recorded. Dead assemblages higher diversity than live assemblages, due to postmortem transportation. One new genus and 13 new species. Freshwater Sedili River only two species (*Darwinula stephensoni*, ?*Cytherissa*.), in brackish estuary 4 species (*Sinocythere superba*, *Hemicytheridea reticulata*, *Keijella multisulcus*, *Neocytherideis* sp.) Forty-eight species live in open sea, most common: *Atjehella semiplicata*, *Cushmanidea subjaponica*, *Hemicytheridea* spp., *Javanella kendengensis*, *Neomonoceratina delicata*, *Parakrithella pseudadonta*, etc.)

Zhao, Q. & R.C. Whatley (1997)- Distribution of the ostracod genera *Krithella* and *Parakrithella* in bottom sediments of the East China and Yellow Seas. *Marine Micropaleontology* 32, 1, p. 195-207.

(Distribution closely linked to water masses)

Zheng, S.Y. (1979)- The Recent foraminifera of the Xisha Islands, Guangdong Province, China, Part II. *Studia Marina Sinica* 15, p. 101-232. (In Chinese with English summary)

Zheng, S.Y. (1980)- The Recent foraminifera of the Zhongsha Islands, Guangdong Province, China, Part I. *Studia Marina Sinica* 16, p. 143-182. (In Chinese with English summary)

Zhou, B. (1995)- Recent ostracode fauna in the Pacific off Southwest Japan. *Mem. Faculty Science, Kyoto University, Ser. Geology Mineralogy*, 57, 2, p. 21-98.

(online at: http://repository.kulib.kyoto-u.ac.jp/dspace/bitstream/2433/186675/1/mfskugm%20057002_021.pdf)

Zhou, B. & Q. Zhao (1999)- Allochthonous ostracods in the South China Sea and their significance in indicating downslope sediment contamination. *Marine Geol.* 156, p. 187-195.

(Modern distribution pattern of allochthonous ostracods in South China Sea: limited to continental shelf and slope, and around reef islands, suggesting ostracods have not travelled far from source areas. *Turbidites* probably principal agent responsible for downslope transport of ostracods)

Zobel, B. (1978)- Deep-water Quaternary Foraminifera from short cores taken between Australia and southeast Indonesia. *BMR J. Australian Geol. Geophysics* 3, p. 345-349.

(online at: www.ga.gov.au/corporate_data/80976/Jou1978_v3_n4_p345.pdf)

(Twenty short cores from N Scott Plateau (water depths ~3200 m) and S slope of the Java Trench (4950-5790m) taken by R.V. *Valdivia*. 55 species of benthic foraminifera identified on plateau, less in trench (incl. *Eggerella bradyi*, *Kareriella bradyi*, *Bulimina* spp, *Sphaeroidina bulloides*, *Cibicides wuellerstorfi*, *Globocassidulina*, *Gyroidinoides*, *Melonis pompilioides*, *Oridorsalis tener*, etc.. Only deep-water forms. Planktonic foraminifera belong to tropical associations. Holocene-Pleistocene boundary at ~60 cm in cores, and carbonate solution more marked above than below boundary)

Zong, Y. & B.H. Kamaludin (2004)- Diatom assemblages from two mangrove tidal flats in Peninsular Malaysia. *Diatom Research* 19, p. 329-344.

X.2. Tertiary

Adams, C.G. (1967)- Tertiary Foraminifera in the Tethyan, American and Indo Pacific Provinces. In: C.G. Adams & D.V. Ager (eds.) Aspects of Tethyan biogeography, Systematics Association, London, Spec. Publ. 7, p. 195-217.

(Tertiary larger foraminifera three major bioprovinces: Americas, Tethys, Indo-Pacific)

Adams, C.G. (1968)- A revision of the foraminiferal genus *Austrorillina* Parr. Bull. British Museum (Natural History), Geology, 16, p. 71-97.

(Evolutionary changes in Late Oligocene- E Miocene Austrorillina are of value in stratigraphy)

Adams, C.G. (1970)- A reconsideration of the East Indian Letter classification of the Tertiary. Bull. British Museum (Natural History), Geology, 19, 3, p. 87-137.

(Classic review of Late Paleocene- Recent larger foram zonation, known as East Indian Letter Classification)

Adams, C.G. (1973)- Some Tertiary foraminifera. In: A. Hallam (ed.) Atlas of Palaeobiogeography. Elsevier, Amsterdam, p. 453-468.

(Notes on biogeography of Eocene- M Miocene larger foram genera)

Adams, C.G. (1976)- Larger foraminifera and the Late Cenozoic history of the Mediterranean region. Palaeogeogr. Palaeoclim. Palaeoecology 20, p. 47-66.

(Larger foram faunas similar between Mediterranean and Indo-West Pacific, but different from Americas. From M Miocene onward diverged rapidly)

Adams, C.G. (1981)- Larger foraminifera and the Paleogene/ Neogene boundary. In: Proc. 7th Int.Congress Mediterranean Neogene, Athens 1979, Ann. Geol. Pays Hellen., hors serie, IV, p. 145-151.

(No major changes in larger foram faunas distribution at Oligo-Miocene boundary. In Indonesia- W Pacific first appearance of Miogypsina best marker event)

Adams, C.G. (1983)- Speciation, phylogenesis, tectonism, climate and eustasy: factors in the evolution of Cenozoic larger foraminiferal bioprovinces. In: R.W. Sims et al. (eds.) The emergence of the biosphere, Syst. Assoc. Spec. Vol. 23, Academic Press, London, p. 255-287.

(Review of evolutionary patterns of Cenozoic larger foraminifera (Miogypsina, Cycloclypeus, Lepidocyclina, etc.), related to climate changes and tectonism (Early Miocene disconnection of Mediterranean and Indian Ocean, etc.))

Adams, C.G. (1984)- Neogene larger foraminifera, evolutionary and geological events in the context of datum planes. In: N. Ikebe & R. Tsuchi (eds.) Pacific Neogene datum planes, Contributions to biostratigraphy and chronology, University of Tokyo Press, p. 47-67.

(Discussion of Oligocene- Recent larger foraminifera 'datum planes' and updated range chart)

Adams, C.G. (1987)- On the classification of the Lepidocyclinidae (Foraminiferida) with redescriptions of the unrelated Palaeocene genera *Actinosiphon* and *Orbitosiphon*. Micropaleontology 33, p. 289-317.

(Three subgenera, Lepidocyclina (Lepidocyclina), L. (Eulepidina), and L. (Nephrolepidina), discriminated on nature and arrangement of peri-embryonic chambers. Two groups of species recognized within L. (Lepidocyclina) on basis of equatorial chamber shape)

Adams, C.G. (1989)- Foraminifera as indicators of geological events. Proc. Geologists Assoc. 100, 3, p. 297-311.

Adams C.G. (1992)- Larger foraminifera and the dating of Neogene events. In: R. Tsuchi & J.C. Ingle (eds.) Pacific Neogene, University of Tokyo Press, p. 221-235.

- Adams, C.G. & D.J. Belford (1974)- Foraminiferal biostratigraphy of the Oligo-Miocene limestones of Christmas Island (Indian Ocean). *Palaeontology* 17, p. 475-506.
(Late Oligocene- M Miocene (lower Te- Lower Tf zones) LBF assemblages in ~190m thick limestones capping a truncated basaltic volcanic cone in the Indian Ocean off SW Java. Mention of Eocene limestone, but no details)
- Adams, C.G., J. Butterlin & B.K. Samanta (1986)- Larger foraminifera and events at the Eocene-Oligocene boundary in the Indo West Pacific region. In: C. Pomerol & I. Premoli Silva (eds.) Terminal Eocene events, Elsevier, Amsterdam, p. 237-252.
(In most Indo-Pacific localities Eocene terminated by disconformities, with extinction of *Discocyclina*, *Pellatispira*, *Spiroclypeus vermicularis*, etc., as in localities worldwide. Possibly triggered by global sea level fall with climatic deterioration.
- Adams, C.G. & P. Frame (1979)- Observations on *Cycloclypeus* (*Cycloclypeus*) Carpenter and *Cycloclypeus* (*Katacycloclypeus*) Tan (Foraminifera). *Bull. British Museum (Natural History), Geology*, 32, 1, p. 3-17.
(Online at: www.archive.org/details/bulletinofbritis32geollond)
(*Katacycloclypeus* limited to Middle Miocene Lower Tf letter stage. Microspheric forms from Fiji up to 90 mm)
- Adams, C.G., A.W. Gentry & P.J. Whybrow (1979)- Dating the terminal Tethyan event. *Utrecht Micropal. Bull.* 30, p. 273-298.
(Geographic distribution of larger foraminifera shows continuous connection between Mediterranean and Indian Ocean closed by mid-Burdigalian)
- Adams, C.G., D.E. Lee & B.R. Rosen (1990)- Conflicting isotopic and biotic evidence for tropical sea-surface temperatures during the Tertiary. *Palaeogeogr. Palaeoclim. Palaeoecology* 77, p. 289-313.
(Paleotemperatures derived from some isotope studies are too low to account for distribution and diversity of many Tertiary tropical- subtropical taxa)
- Adams, C.G., P. Rodda & R.J. Kiteley (1979)- The extinction of the foraminiferal genus *Lepidocyclina* and the Miocene-Pliocene boundary problem in Fiji. *Marine Micropaleontology* 4, 4, p. 319-339.
(Last surviving species of *Lepidocyclina*, *L. radiata*, becomes extinct at N18/N19 boundary, near top Miocene)
- Adisaputra, Mimin K. (1987)- Notes on *Cycloclypeus* (*Katacycloclypeus*) Tan and *Cycloclypeus* (*Radiocycloclypeus*) Tan. *J. Riset Geologi Pertambangan (LIPI)* 8, 1, p. 25-33.
(Discussion of larger foram *Cycloclypeus* subgenera and species. Age of *Katacycloclypeus* is M Miocene (planktonic foram zone N8-N12). Stellate *Radiocycloclypeus* may be N12 and younger)
- Adisaputra, Mimin K. & Hartono (2007)- Phillipsite mineral in deep sea sediment from single core in Roo Rise, Indian Ocean. *Indonesian Mining J.* 10, 3, p. 39-43.
(online at: <http://jurnal.tekmira.esdm.go.id/index.php/imj/article/view/612/474>)
(Core MD982156 in Roo Rise, Indian Ocean/ Java Trench, S of East Jawa, 30m long in water depth 3884m. Upper part of core abundant planktonic foraminifera, lower part mainly phillipsite-rich sediment (\pm 40%). Late Miocene or older (Paleocene according to Adisaputra & Kusnida (2010))
- Adisaputra, Mimin K., N. Hasjim & A. Djojsumarto (1995)- Sundaland Neogene biostratigraphic events. In: S. Nishimura & R. Tsuchi (eds.) Proc. Oji Seminar on Neogene evolution of Pacific Ocean Gateways, Kyoto, IGCP-355, p. 62-71.
- Adisaputra, Mimin K. & M. Hendrizan (2008)- Hiatus pada kala Eosen-Miosen Tengah di Tinggian Roo, Samudra Hindia, berdasarkan biostratigrafi nannoplankton. *J. Geologi Kelautan* 6, 3, p. 154-166.
(online at: <http://ejournal.mgi.esdm.go.id/index.php/jgk/article/view/159/149>)
(*'Eocene- Middle Miocene hiatus at the Roo Rise, Indian Ocean S of East Java, based on nannoplankton biostratigraphy'*. Late Miocene and Paleocene calcareous nannoplankton from Roo Rise piston core MD982156 from MD III-IMAGES IV Expedition)

- Adisaputra, Mimin K. & D. Kusnida (2010)- Paleocene postgenetic accumulation of nannoplankton on the phillipsite minerals in Roo Rise, Indian Ocean. *J. Geologi Indonesia* 5, 1, p. 49-56.
(online at: www.bgl.esdm.go.id/publication/index.php/dir/article_detail/264)
(Paleocene nannoplankton on phillipsite crystals in core from Roo Rise, 3880- 3914m below sea level)
- Adisaputra, Mimin K. & L. Sarmili (1995)- Neogene events through biostratigraphic constrain in the Banda Sea. In: S. Nishimura & R. Tsuchi (eds.) *Proc. Oji Seminar on Neogene evolution of Pacific Ocean Gateways*, Kyoto, IGCP-355, p. 72-79.
- Ayala, E.O. (1980)- Chronostratigraphic studies of Philippine *Cycloclypeus*. *The Philippine Geologist (J. Geol. Soc. Philippines)* 34, 1, p.
(*Cycloclypeus larger foram assemblages common in Miocene carbonates of Philippines. Mainly Cycloclypeus carpenteri*)
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(Larger foraminifera from Late Oligocene-M Miocene outcrops in Carnarvon Basin and W Australia; also Ashmore Reef 1 well in Bonaparte Gulf, Gage Roads 2 well in Perth Basin; Batesford and Bochara Lst in

Victoria; Wreck Island 1 well in Queensland; and various localities in New Zealand. Two new subspecies of *Lepidocyclina* (N): *Lepidocyclina* (N) *howchini praehowchini* and *Lepidocyclina* (N) *orakeiensis waikukuensis*)

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Chaproniere, G.C.H. (1992)- The distribution and development of Late Oligocene and Early Miocene reticulate globigerines in Australia. *Marine Micropaleontology* 18, p. 279-305.

(*Globigerinoides represented by both hispid (*Gs. primordius*) and reticulate (*Gs. quadrilobatus*) forms at levels below first appearance of *Globoquadrina dehiscens* (within Zone N4A in N Australia). *Globigerinoides quadrilobatus* warm, shallow water dweller. *Globigerina bulloides* group temperate biogeographic range, but typical of upwelling zones in subtropical and tropical areas*)

Clarke, W.J. & W.H. Blow (1969)- The inter-relationship of some Late Eocene, Oligocene and Miocene larger foraminifera and plankton biostratigraphic indices. In: P. Bronnimann & H.H. Renz (eds.) *Proc. First Int. Conf. Planktonic Microfossils*, Geneva 1967, Brill, Leiden, 2, p. 82-97.

(*One of first papers calibrating the Eocene- Recent larger and planktonic foraminifera zonations, which are rarely found together due to different facies. Includes section on records of *Miogypsinidae* in Indonesia (W Java, Sumatra)*)

Cole, W.S. (1939)- Large foraminifera from Guam. *J. Paleontology* 13, 2, p. 183-189.

(*Limestones from Guam with larger foraminifera, *Spiroclypeus higginsi* n. sp., primitive *Miogypsinoides dehaartii* var. *formosensis* and *Lepidocyclina* (N.) *parv*, *Borelis pygmaeus*. Age basal Miocene, zone Te (more likely latest Oligocene?; JTvG)*)

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(*Description of larger foraminifera from Palau islands, Micronesia, SW Pacific: Late Eocene (Tab) with *Pellatispira* and M Miocene (Tf) with *Katacycloclypeus*, *Lepidocyclina ruttenti*, *Lepidocyclina palauensis* n.sp. (latter re-assigned to *Lepidocyclina radiata* by Cole (1963))*)

Cole, W.S. (1954)- Larger Foraminifera and smaller diagnostic Foraminifera from Bikini drill holes. U.S. Geol. Survey (USGS) Prof. Paper, 260-O, p. 569-608.

(*online at: <http://pubs.usgs.gov/pp/0260m/report.pdf>*)

(*Description of 37 Oligocene- Recent foram species from two wells (2556') of Bikini Atoll*)

Cole, W.S. (1957)- Larger foraminifera from Eniwetok Atoll drill holes. U.S. Geol. Survey (USGS) Prof. Paper, 260-V, p. 743-784.

(*online at: <http://pubs.usgs.gov/pp/0260v/report.pdf>*)

(*62 species of Late Eocene (*Asterocyclina*, *Nummulites*, *Biplanispira*, *Pellatispira*), Late Oligocene (*Eulepidina*, *Heterostegina borneensis*, *Borelis*, *Miogypsinoides*, *Spiroclypeus*), Miocene (*Miogypsina*, *Flosculinella*) and Pliocene- Recent (*Calcarina*, *Marginopora*, *Sorites*) larger foraminifera from three Eniwetok Atoll drill holes. Deeper water genus *Cycloclypeus* rare, suggesting continuous shallow marine facies*)

Cole, W.S. (1957)- Geology of Saipan, Mariana Islands, Part 3 Paleontology, Larger Foraminifera. U.S. Geol. Survey (USGS) Prof. Paper 280-I, p. 321-360.

(*online at: <http://pubs.usgs.gov/pp/0280e-j/report.pdf>*)

(Larger foram assemblages for Saipan island: Late Eocene Tb (20 species; *Pellatispira*, *Nummulites*, *Asterocyclina*, etc.), Late Oligocene- E Miocene Te (35 species; incl. *Miogypsinoides*, *Heterostegina borneensis*) and Pleistocene (7 species))

Cole, W.S. (1960)- Upper Eocene and Oligocene larger foraminifera from Viti Levu, Fiji. U.S. Geol. Survey (USGS) Prof. Paper 374-A, p. 1-7.

(online at: <http://pubs.usgs.gov/pp/0374a/report.pdf>)

(Descriptions of Late Eocene (*Nummulites*, *Pellatispira*, *Spiroclypeus*, *Discocyclina*, *Asterocyclina*) and Early Oligocene (*Nummulites fichteli*, *Gypsina discus*) larger foraminifera from main island of Fiji)

Cole, W.S. (1960)- Problems of the geographic and stratigraphic distribution of certain Tertiary larger foraminifera. In: Hanzawa Memorial Volume, Sci. Repts. Tohoku University, ser. 2 (Geol.), Spec. Vol. 4, p. 9-18.

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Cole, W.S. (1963)- Tertiary larger foraminifera from Guam. U.S. Geol. Survey (USGS) Prof. Paper, 403-E, p. 1-28.

(online at: <http://pubs.usgs.gov/pp/0403e/report.pdf>)

(Late Eocene (*Asterocyclina*, *Nummulites*, *Pellatispira*, *Biplanispira*, *Halkyardia*), Oligocene (*Nummulites fichteli*), E-M Miocene (*Miogypsinoides dehaartii*, *Katacyclochypeus annulatus*) and Pleistocene (*Calcarina*, *Baculogypsina*, *Cyclochypeus carpenteri*) larger forams from outcrops on Guam)

Cole, W.S. (1969)- Larger foraminifera from deep sea drill holes on Midway Atoll. U.S. Geol. Survey (USGS) Prof. Paper, 680-C, p. 1-15.

(online at: <http://pubs.usgs.gov/pp/0680c/report.pdf>)

(Early Miocene Te larger forams (*Miogypsinoides dehaartii*, *Spiroclypeus*, *Austrotrillina striata*) in deeper part of 1261' deep well)

Cole, W.S. (1970)- Larger foraminifera of Late Eocene age from Eua, Tonga. U.S. Geol. Survey (USGS) Prof. Paper, 640-B, p. 1-17.

(online at: <http://pubs.usgs.gov/pp/0640b/report.pdf>)

(Eocene sample with 8 species of larger foraminifera characteristic of Upper Eocene (Tb) from E side of Eua Island, Tonga. Incl. *Pellatispira madaraszii*, *Discocyclina omphala*, *Nummulites pengaronensis*, *Asterocyclina matanzensis*, *Spiroclypeus vermicularis*, *Heterostegina saipanensis*, '*Biplanispira*' *fulgeria*)

Cole, W.S. (1975)- Concordant age determinations by larger and planktonic foraminifera in the Tertiary of the Indo-Pacific region. J. Foraminiferal Research 5, p. 21-39.

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(Good agreement in age determinations based on larger and planktonic foraminifera from 5 widely separated localities: (1) Sentolo Fm, C Java late E Miocene Lower Tf LBF and *Globigerinoides sicanus*-*Globigerinatella insueta* (N8) planktonic foram zone; (2,3) Larat (Moluccas) and Solomon Islands: early E Miocene Te LBF zone and *Globigerinita dissimilis* zone planktonics, etc.)

Cole, W.S. & J. Bridge (1953)- Geology and larger Foraminifera of Saipan Island. U.S. Geol. Survey (USGS) Prof. Paper 253, p. 1-45.

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Cook, P.L. & R. Lagaaij (1976)- Some Tertiary and Recent conescharelliniform bryozoa. Bull. British Museum (Natural History), Zoology, 29, p. 317-376.

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Cosijn, J. (1938)- Statistical studies on the phylogeny of some foraminifera: *Cycloclypeus* and *Lepidocyclina* from Spain, *Globorotalia* from the East Indies. Doct. Thesis Technical University Delft, p. 1-66. (Unpublished)

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(Not-overly-useful sets of measurements on Mio-Pliocene *Globorotalia menardii* and *Gr. tumida* from BPM Bojonegoro I well, E Java)

Crespin, I. (1956)- Papers on Tertiary micropalaeontology. Bureau Mineral Res. Geol. Geoph., Canberra, Report 25, p. 1-77.

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De Beaufort, L.F. (1931)- Pisces, Reptilia and Aves. In: B.G. Escher et al. (eds.) De palaeontologie en stratigraphie van Nederlandsch Oost-Indie, Leidsche Geol. Mededelingen 5 (K. Martin memorial volume), p. 461-470.

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(Summary of fossil fish, reptiles and birds known from Indonesia as of 1931. No figures)

De Bock, J.F. (1976)- Studies on some *Miogypsinoidea-Miogypsina* s.s. associations with special reference to morphological features. Scripta Geologica 36, p. 1-137.

(online at: www.repository.naturalis.nl/document/148747)

(Detailed morphological studies of Miocene *Miogypsina* and *Miogypsinoidea*, partly based on material from Madura and Larat (Kai islands))

Dollfus, G.F. (1908)- Sur quelques polypiers fossiles des Indes neerlandaises. Jaarboek Mijnwezen Nederlandsch Oost-Indie 37 (Verbeek Moluccas Report), p. 676-686.

(*'On some fossil corals from the Netherlands Indies'. Brief description of five Late Tertiary corals collected by Verbeek from C Timor, E Seram and Daweloo island near Babar*)

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(*On fragments of diadematiid echinoids from Miocene-Pliocene of Java, Kalimantan and Sulawesi. First report of such fossils from Neogene of the region*)

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(*'On some foraminifera from the eastern Moluccas and from New Guinea'. Brief description of Eocene larger forams in samples collected by Brouwer in Halmahera (Nummulites, Discocyclina, Alveolina), Roti (large Nummulites, Discocyclina), Seram (E Miocene *Lepidocyclina* in breccia with reworked angular clasts of Upper Cretaceous pelagic limestone), New Guinea, Kai Besar (rounded fragments of Eocene *Lacazina* in quartz sandstone, etc. No location info)*)

Douville, H. (1924)- Revision des *Lepidocyclines*. Mem. Soc. Geologique France, N.S., 2, p. 5-49 and (1925) part 2, p. 51-123.

(Revision of lepidocyclinid Tertiary larger foraminifera, including material from various parts of Indonesia)

Doweld, A.B. (2014)- Proposals to conserve the name *Discoaster* against *Eu-discoaster*, *Helio-discoaster* and *Hemi-discoaster*, and the names *Heliodiscoaster* and *Hemidiscoaster* with those spellings (fossil Prymnesiophyta (Algae) vel Haptomonada (Protista)). *Taxon* 63, 1, p. 195-197.

(Commonly used calcareous nannofossil genus name Discoaster, as first described by Tan Sin Hok (1927), was an informal genus name that lacked a generic description and designation of type species. It combines 3 groups of species of formally described genera Eu-discoaster Tan (star-shaped discoasterids; type species Discoaster brouweri Tan), Helio-discoaster Tan (rosette-shaped discoasterids; type species Discoaster barbadiensis Tan and Hemi-discoaster Tan (star-shaped discoasterids with arms welded together; type species Discoaster molengraaffii Tan). This is a proposal to legitimize the common use of Discoaster)

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(Revision of eight miogypsinid species described from Indonesia by Rutten and Van der Vlerk, before papers of Tan Sin Hok. Four considered valid. Miogypsinella Hanzawa is junior synonym of Miogypsinoides Yabe and Hanzawa. No reason to maintain genus Conomiogypsinoides Tan Sin Hok)

Drooger, C.W. (1955)- Remarks on *Cycloclypeus*. *Proc. Kon. Nederl. Akademie Wetenschappen* B58, p. 415-433.

(Measurements on Cycloclypeus eidae from Tfl/ Burdigalian of E Borneo, 40 km N of Balikpapan. No predominance of Tan Sin Hok's 1932 'elementary species' found; samples represent single populations)

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(Dipterocarpaceae angiosperm trees common in rain forests of SE Asia (>470 species). Earliest dipterocarps in SE Asia from Oligocene of Borneo (Muller 1981). In W India dipterocarp resin and palynomorphs in ~53 Ma old Eocene sediments, suggesting Asian dipterocarps originated in Gondwana and dispersed from India into Asia once land connection between Indian-Asian plates established in M Eocene (49-41 Ma). Many angiosperms did not originate in SE Asian region, but dispersed into area from W Gondwanaland)

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(Coelenterata chapter in 'Our paleontological knowledge of the Netherlands East Indies'. Overview of coral species and occurrences in Indonesia: Devonian (New Guinea), Carboniferous (Sumatra), Permian (Timor mostly endemic solitary species), Triassic (Timor, Ceram, Misool, Sumatra), Jurassic- Cretaceous (very rare; Sumatra only), Tertiary (rel. widespread). No figures)

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Timor (Batu Putih Fm near Soe): CN12a-CN14b, Late Pliocene- Pleistocene, (3) Yamdena (Tanimbar Islands): Pliocene Batimafudi and Batilembuti Fms; NN5- NN15M Miocene- Pliocene, and Tungustuban Fm sand-shale in Oktofan area, Wermatang; Late Eocene?)

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Ishijima, W. (1978)- Calcareous algae from the Philippines, Malaysia and Indonesia. In: T. Kobayashi & R. Toriyama (eds.) *Geology and Palaeontology of Southeast Asia*, University of Tokyo Press, 19, p. 167-190. *(Incl. Sporolithon borneoensis (= Archaeolithothamnium borneoense) and presumably Cretaceous coralline algae from W Kalimantan)*

Jacques, F.M.B., G. Shi, T. Su & Z. Zhou (2015)-A tropical forest of the middle Miocene of Fujian (SE China) reveals Sino-Indian biogeographic affinities. *Review Palaeobotany Palynology* 216, p. 76-91. *(M Miocene Fotan flora of S Fujian, just above basalt with 14.8 ± 0.6 Ma radiometric age, considered to represent tropical rainforest based on occurrence of Dipterocarpaceae and other tropical-subtropical elements, Closer affinities to Indian Neogene than other Chinese paleofloras. During M Miocene Climatic Optimum tropical and subtropical vegetation moved N to S Fujian)*

Jeannot, A. & R. Martin (1937)- Ueber Neozoische Echinoidea aus dem Niederlandisch-Indischen Archipel. *Leidsche Geol. Mededelingen* 8, 2, p. 215-308. *(online at: www.repository.naturalis.nl/document/549527)* *(‘On Neozoic echinoids from the Netherlands Indies Archipelago’. Mainly paleontological descriptions of Neogene echinoid fossils from Java, Madura, Kalimantan, Timor, Ceram, N Sumatra, etc., from various European University collections)*

Johnson, J.H. & B.J. Ferris (1949)- Tertiary coralline algae from the Dutch East Indies. *J. Paleontology* 23, 2, p. 193-198. *(Tertiary coralline algae, including five new species (Lithothamnium borneoense. L. nanosporum, Mesophyllum javaense, Lithophyllum parricellum, Corallina delicatula) from Eocene and Miocene of E Kalimantan and W Java, collected by LeRoy. Most common species is Lithoporella melobesioides)*

Johnson, K., B.W. Hayward & A. Holbourn (2011)- Impact of the Middle Miocene climate transition on elongate, cylindrical foraminifera in the subtropical Pacific. *Marine Micropaleontology* 78, p. 50-64. *(58 species of elongate, cylindrical benthic foraminifera of ‘Extinction Group’ (Nodosariidae, Stilostomellidae, Pleurostomella; extinct during M Pleistocene Climate Transition) in ODP Sites 1146, (S China Sea) and 1237 (SE Pacific) show no major changes during major cooling in M Miocene (14.0-13.7 Ma))*

Jones, R.W. (1996)- *Micropalaeontology in petroleum exploration*. Oxford University Press, Oxford, p. 1-432. *(Thorough review of applied biostratigraphy)*

Jones, R.W., M.D. Simmons & J.E. Whittaker (2006)- On the stratigraphical and palaeobiogeographical significance of *Borelis melo melo* (Fichtel & Moll, 1798) and *B. melo curdica* (Reichel, 1937) (Foraminifera, Miliolida, Alveolinidae). *J. Micropalaeontology* 25, p. 175-185. *(online at: <https://www.j-micropalaeontol.net/25/175/2006/jm-25-175-2006.pdf>)* *(Borelis melo melo ranges throughout Miocene, B. melo curdica restricted to late E- M Miocene. Both sub-species occur only in Indo-Pacific Province in late E Miocene (Burdigalian), but also present in Mediterranean province in latest Early- early M Miocene (M Burdigalian- Langhian))*

Jones, T.R. & F. Chapman (1900)- On the Foraminifera of the orbitoidal limestones and reef rocks of Christmas Island. In: C.A. Andrews (ed.) A monograph of Christmas Island (Indian Ocean), Bull. British Museum (Natural History), Geology, 13, p. 226-264.

(Descriptions of foram content of Tertiary limestones, mainly from Flying Fish Cove. Larger foraminifera include Lepidocyclina spp. and Discocyclina)

Kadar, D. & S. Soeka (1984)- Biostratigraphy of selected Neogene sequences in Indonesia. In: N. Ikebe & R. Tsuchi (eds.) Pacific Neogene datum planes; contributions to biostratigraphy and chronology, University of Tokyo Press, p. 193-202.

Kase, T., Y. Kurihara, Y.M. Aguilar, H. Pandita, A.G.S. Fernando & H. Hayashi (2015)- A new cerithioidean genus *Megistocerithium* (Gastropoda; Mollusca) from the Miocene of Southeast Asia: a possible relict of Mesozoic *oEustomatidae*. Paleontological Research 19, 4, p. 299-311.

(New, large cerithiform gastropod genus/ species Megistocerithium magoi described, based on specimens from M Miocene Nyalindung Fm of W Java and Philippines. Intertidal sandy mudflat dweller (mangrove grazer?). M. magoi possibly relict of Mesozoic Eustomatidae)

Kase, T., Y. Kurihara, H. Hayashi, H. Pandita & Y.M. Aguilar (2008)- Age refinement of the Sonde molluscan fauna, East Java, Indonesia. Mem. National Museum Natural Sci., Tokyo 45, p. 127-138.

(Klitik Mb of U Kalibeng Fm along Solo River in Sonde area, E Java, Indonesia contains diverse shallow marine molluscs that have been standard of Neogene mollusc sequences in Indonesia, and were vaguely dated as Late Pliocene. Planktonic foraminifera in Klitik Mb along Solo River at Bangun, 2 km W of Sonde, suggest age between 3.95 Ma- 3.58 Ma, ~mid Pliocene (NB: unusual mix of shallow marine molluscs and siltstones with abundant deeper planktonic forams, which may be reworked from older Kalibeng Fm. Klitik Beds younger than concluded here?; JTvG))

Kase, T., F. Kitao, Y.M. Aguilar, Y. Kurihara & H. Pandita (2008)- Reconstruction of color markings in *Vicarya*, a Miocene potamidid gastropod (Mollusca) from SE Asia and Japan. Paleont. Research 12, 4, p. 345-353.

(Includes material of Vicarya verneuili, from M Miocene Nyalindung Fm, Ciangsana, SW Java)

Kay, E.A. (1990)- Cypraeidae of the Indo-Pacific: Cenozoic fossil history and biogeography. Bull. Marine Sci., University of Miami, 47, 1, p. 23-34.

(Includes summary and discussion of Indonesian Miocene to Recent cowries)

Keij, A.J. (1974)- Review of the Indo-Pacific species of *Triebelina* (Ostracoda). Proc. Kon. Nederl. Akademie Wetenschappen, B77, 4, p. 345-358.

Keij, A.J. (1975)- Note on three Holocene Indo-Malayan ostracod species. Proc. Kon. Nederl. Akademie Wetenschappen, B78, 3, p. 231-241.

Keij, A.J. (1978)- Remarks on the Indo-Pacific ostracode genus *Loxoconchella*. Proc. Kon. Nederl. Akademie Wetenschappen, B81, 2, p. 215-229.

Keij, A.J. (1979)- Review of the Indo-West Pacific Neogene to Holocene ostracode genus *Atjehella*. Proc. Kon. Nederl. Akademie Wetenschappen, B 82, 4, p. 449-464.

Keij, A.J. (1979)- Brief review of the type species of genera from the Kingma collection. VIIth Int. Symposium on Ostracodes, Belgrade, 1, p. 59-63.

Kennett, J.P., G. Keller & M. Srinivasan (1985)- Miocene planktonic foraminiferal biogeography and paleoceanographic development of the Indo-Pacific region. In: J.P. Kennett (ed.) The Miocene Ocean: paleoceanography and biogeography, Geol. Soc. America (GSA) Mem. 163, p. 197-236.

(Suggest closure of Indonesian Seaway around 13-12 Ma)

Kennett, J.P. & M.S. Srinivasan (1983)- Neogene planktonic foraminifera, a phylogenetic atlas. Hutchinson Ross Publ. Co., Stroudsburg, p. 1-265.

Kiel, S. (2013)- Lucinid bivalves from ancient methane seeps. *J. Molluscan Studies* 79, 4, p. 346-363.
(online at: <https://academic.oup.com/mollus/article/79/4/346/1014058/Lucinid-bivalves-from-ancient-methane-seeps>)

(*Lucina-type bivalves reported from late Jurassic- late Miocene methane-seep deposits worldwide. Elliptiolucina hetzeli associated with asphalt seeps in Late Miocene sediments of Buton, Indonesia (Martin, 1933, Beets 1942) and E Pliocene seep deposits of Leyte, Philippines (Kase et al. 2007, Majima et al. 2007)*)

Kingma, J.T. (1948)- Contributions to the knowledge of the Young-Cenozoic Ostracoda from the Malayan region. *Doct. Thesis University Utrecht, Kemink*, p. 1-119.

(online at: <http://dspace.library.uu.nl/handle/1874/236218>)

(*Late Neogene ostracods from (1) outcrop samples in Aceh (N Sumatra), (2) S Kendeng zone (E Java; 31 species), (3) Miocene-Pliocene of Bojonegoro 1 well (E Java; 41 species), and (4) Recent forms from Snellius Expedition samples in E Java Sea (19 species). Six new genera (Hemicytheridea, Atjehella, Paijenborchella, Tanella, Javanella), 94 species of which 40 new. Includes description of Caudites javana Kingma, a widespread species in Indo Pacific. Limited stratigraphy/ stratigraphic results*)

Koch, R.E. (1935)- Namens-Aenderung einiger Tertiär-Foraminiferen aus Niederländisch Ost-Indien. *Eclogae Geol. Helvetiae* 28, p. 557-558.

(online at: <http://retro.seals.ch/>)

(*'Name changes of some Tertiary foraminifera from Netherlands East Indies'. Brief note about name changes for species described by Koch (1926): Globigerina aspera = G. binaiensis, Globigerina bulloides var. tripartita = G. tripartita, etc.*)

Kramer, K. (1974)- Die tertiären Holzer Südost-Asiens (unter Ausschluss der Dipterocarpaceae), 1 Teil. *Palaeontographica. Abt. B, Palaeophytologie*, 144, 3-6, p. 45-181.

(*'The Tertiary woods of SE Asia (with exclusion of Dipterocarpaceae', Part 1. Includes material from Sumatra collected by Posthumus a.o., with Dammaroxylon kaurioides n.sp., which may be of E Permian age (Booi et al. 2014)*)

Kramer, K. (1974)- Die tertiären Holzer Südost-Asiens (unter Ausschluss der Dipterocarpaceae), 2 Teil. *Palaeontographica. Abt. B, Palaeophytologie*, 145, p. 1-150.

(*'The Tertiary woods of Southeast Asia (with exclusion of Dipterocarpaceae', Part 2)*)

Krausel, R. (1925)- Der Stand unserer Kenntnisse von der Tertiärflora Niederländisch-Indiens. *Verhandelingen Geologisch-Mijnbouwkundig Genootschap Nederland Kol., Geol. Serie 8 (Verbeek volume)*, p. 329-342.

(*'The state of knowledge of the Tertiary flora of the Netherlands Indies'. Review of known fossil plant occurrences on Java, Borneo, Sumatra*)

Krijnen, W.F. (1931)- Het genus *Spiroclypeus* in het Indo-Pacifische gebied. *Verhandelingen Geologisch-Mijnbouwkundig Genootschap Nederland Kol., Geol. Serie 9, 2*, p. 77-112.

(*'The genus Spiroclypeus in the Indo-Pacific region'*)

Krijnen, W.F. (1931)- Annotations to the map of the more important fossil localities in the Netherlands East Indies. *Leidsche Geol. Mededelingen 5 (K. Martin Memorial Volume)*, p. 509-551.

(online at: www.repository.naturalis.nl/document/549269)

(*Map and chronological listing of 330 significant Paleozoic- Recent fossil localities in Indonesia*)

Kumar, P. & K.S. Soodan (1976)- Early Palaeocene planktonic foraminifera from Baratang Formation, Middle Andaman Island. *Proc. 6th Indian Colloq. Micropal. Stratigraphy, Hyderabad*, p. 145-150.

(*Early Paleocene planktonic foraminifera in Baratang Fm (= Mithakhari Gp) of Middle Andaman Island*)

Kupper, H. (1942)- Note on a new *Cycloclypeus* from Australia. De Ingenieur in Nederlandsch-Indie (IV), 9, p. 1-4.

Ladd, H. (1966)- Chitons and gastropods (Haliotidae through Adeorbidae) from the Western Pacific islands. U.S. Geol. Survey (USGS) Prof. Paper 531, p. 1-98.
(online at: <http://pubs.usgs.gov/pp/0531/report.pdf>)

Ladd, H. (1970)- Eocene molluscs from Eua, Tonga. U.S. Geol. Survey (USGS) Prof. Paper 640-C, p. 1-12.
(online at: <http://pubs.usgs.gov/pp/0640c/report.pdf>)
(Many of the W Pacific islands have Late Eocene shallow marine limestones. On Eua in Tonga Group Late Eocene limestone overlies plutonic- volcanic rocks. Mainly small gastropods, probably slightly deeper marine fauna (see also Storrs Cole (1970) for larger and Todd (1970) for smaller associated foraminifera))

Ladd, H. (1972)- Cenozoic fossil molluscs from Western Pacific islands; gastropods (Turritellidae through Strombidae). U.S. Geol. Survey (USGS) Prof. Paper 532, p. 1-79 + 20 plates.
(online at: <http://pubs.usgs.gov/pp/0532/report.pdf>)
(170 species of Eocene- Pliocene gastropods from W Pacific islands. Most molluscs appear reef-associated; many are from lagoonal beds. Molluscs are of Indo-Pacific aspect, with closer ties to Indonesia and N Australia than to Ryukyus and Japan)

Ladd, H. (1977)- Cenozoic fossil molluscs from Western Pacific islands; gastropods (Eratoidae through Harpidae). U.S. Geol. Survey (USGS) Prof. Paper 533, p. 1-75 + 23 plates.
(online at: <http://pubs.usgs.gov/pp/0533/report.pdf>)
(Indo-Pacific gastropods, mainly from Late Miocene-Pliocene of Fiji, Eniwetok, Guam, Palau, etc.)

Ladd, H. (1982)- Cenozoic fossil molluscs from Western Pacific islands; gastropods (Eulimidae and Volutidae through Terebridae). U.S. Geol. Survey (USGS) Prof. Paper 1171, p. 1-100 + 41 plates.
(online at: <http://pubs.usgs.gov/pp/1171/report.pdf>)

Lambert, J. & A. Jeannot (1935)- Contribution a la connaissance des Echinides tertiaires des iles de la Sonde. I. Echinides reguliers. Mem. Soc. Paleontologique Suisse 56, 1, p. 1-62.
(*Contribution to the knowledge of the Tertiary echinoids of the Sonde Islands (=Indonesia)*). On regular echinoderms from Java, Borneo, Sumbawa and Timor)

Lei, Z.Q. (1997)-Tertiary palynological sequence and the related problems in Pearl River mouth basin. In: P. Dheeradilok et al. (eds.) Proc. Int. Conf. Stratigraphy and tectonic evolution of Southeast Asia and the South Pacific (GEOTHAI'97), Dept. Mineral Resources, Bangkok, 1, p. 218-222.
(online at: http://library.dmr.go.th/library/Proceedings-Yearbooks/M_1/1997/7641.pdf)
(Tertiary palynology zonation of Pearl River Mouth basin, northern South China Sea. Warmest paleoclimate in M Miocene (common tropical mangroves of *Florschuetzia cf. levipoli- Dacrydiumites florinii* assemblage), coldest in Late Oligocene (*Alnipollenites- Pinuspoleenites* assemblage). Tertiary biozonation similarities with SE Asia, but calibration of Oligo-Miocene *Florschuetzia* zones younger than Morley 1977)

Lelono, E.B. (2001)- Revisi zonasi polen Eosen. Lembaran Publikasi Lemigas 35, 1, p. 16-26.
(*Revision of Eocene pollen zonation*). Palynology study of Nanggulan Fm in C Java shows seven Eocene biozones within former *Proxapertites operculatus* zone)

Lelono, E.B. (2001)- Climatic effect to the distribution of the Late Paleogene indicator of pollen *Meyeripollis naharkotensis* in Western Indonesia. Lemigas Scientific Contr. 24, 2, p. 12-16.

Lelono, E.B. (2005)- Penelitian palinologi pada sedimen Paleogen di kawasan Indonesia bagian Barat. Lembaran Publikasi Minyak Gas Bumi, Lemigas 39, 2, p. 15-23.
(*Palynological investigations in the western part of Indonesia*)

Lelono, E.B. (2006)- Eocene- Oligocene climate based on palynological records. Lemigas Scientific Contr. 29, 2, p. 10-23.

Lelono, E.B. (2007)- Zonasi polen Tersier Indonesia Timur. Lembaran Publikasi Lemigas 41, 1, p. 1-8.
(*'Tertiary pollen zonation of East Indonesia'. Differences of pollen assemblages between Papua (Australian plate) and Sulawesi- Java (Sundaland/Asian plate) necessitate separate palynozonation for E Indonesia: (1) 1. Spinizonocolpites baculatus (Paleo-Eocene). (2) Metroxylon salomonense (M Miocene), (3) Foveosporites spp; (4) Nothofagidites emarcida (Late Miocene; 3 sub-zones), (5) (6) Malvacipollis diversus (Pliocene), (7) 'Garcinia cuspidata type' (Late Pliocene) (8) Proteacidites spp. (Pleistocene)*)

Lelono, E.B. (2009)- The dispersal route of the Australian elements of *Dacrydium* and *Casuarina* from its origin to SE Asia. Lemigas Scientific Contr. 32, 3, p. 157-161.
(*Australian pollen *Dacrydium* may have dispersed into SE Asia prior to E Oligocene via Ninety East Ridge and Indian plate, and subsequent distribution across Sunda region and Indochina was limited by paleoclimate, explaining why it is present in some areas of Sunda region, but not others. Dispersal of *Casuarina* remains unresolved; migration via India unlikely as it is not known from Indian subcontinent*)

Lelono, E.B. (2012)- The migration pathway of some selected Australian palynomorphs from their origin to SE Asia. Lemigas Scientific Contr. Oil Gas 35, 2, p. 49-56.
(*online at: www.lemigas.esdm.go.id/)*
(*Proposes alternative dispersal route of Australian taxa *Dacrydium* and *Casuarina* to SE Asia. Previously thought to have migrated to Sunda region after collision of Australian and Asian plates, or arrival with Gondwanan fragment in Early Oligocene. Records of *Dacrydium* in Eocene of Ninety East Ridge and Indian subcontinent may support alternative dispersal route into SE Asia via Indian plate*)

Leloux, J. & W. Renema (2007)- Types and originals of fossil Porifera and Cnidaria of Indonesia in Naturalis. Nat. Natuurhist. Museum Techn. Bull., Leiden, 10, p. 1-305.
(*online at: www.naturalis.nl/sites/naturalis.en/contents/i000884/the%20gerth%20catalogue.pdf*)
(*Listings and illustrations of type material of 229 taxa of Tertiary and Permian corals in Leiden Natural History Museum, mainly from Martin, Gerth and Umbgrove collections*)

Leloux, J. & F.P. Wesseligh (2009)- Types of Cenozoic Mollusca from Java in the Martin collection of Naturalis. Nat. Natuurhist. Museum Techn. Bull. 11, p. 1-765.
(*online at: www.repository.naturalis.nl/document/143887*)
(*Updated, expanded and illustrated version of Van den Hoek Ostende et al. (2002) of type specimens of Tertiary bivalves, gastropods and scaphopods from Java in K. Martin collection at Naturalis Museum, Leiden. With listing of fossil localities and 289 color plates*)

LeRoy, L.W. (1940)- The ostracode genus *Cytherelloidea* from the Late Tertiary of the Netherlands East Indies. Natuurkundig Tijdschrift Nederl.- Indie 100, p. 179-196.
(*Fourteen new species of ostracode *Cytherelloidea* from Indonesia, incl. 3 from Late Miocene of NE Kalimantan, 4 from Mio-Pliocene from Bantam, W Java and 7 species from Miocene of C Sumatra*)

LeRoy, L.W. (1941)- The ostracode genus *Cytherelloidea* from the Tertiary of the Netherlands East Indies. J. Paleontology 15, 6, p. 612-621.
(*Same paper as above: 14 new species of ostracode *Cytherelloidea* from Indonesia, incl. 3 from Late Miocene of NE Kalimantan, 4 from Mio-Pliocene from Bantam, W Java and 7 species from Miocene of C Sumatra*)

LeRoy, L.W. (1945)- A contribution to ostracodal ontogeny. J. Paleontology 19, p. 81-86.
(*Includes discussion and illustrations of growth stages of *Cythereis holmani* from Telisa Fm of C Sumatra*)

LeRoy, L.W. (1948)- The foraminifer *Orbulina universa* d'Orbigny, a suggested middle Tertiary time indicator. J. Paleontology 22, 4, p. 500-508.

(Lowest stratigraphic occurrence of pelagic foraminifer Orbulina universa proposed to be a good mid-Miocene marker horizon. With discussion of stratigraphy and faunas of Kassikan section near Aliantan, Sultanate of Siak, C Sumatra, where this event occurs near top of Telisa Fm)

LeRoy, L.W. (1964)- Smaller foraminifera from the Late Tertiary of Southern Okinawa. U.S. Geol. Survey (USGS) Prof. Paper 454-F, p. 1-58.

(online at: <http://pubs.usgs.gov/pp/0454f/report.pdf>)

(Good descriptions of typical Indo-Pacific shallow and shelfal marine smaller benthic foraminifera))

Less, G. & E. Ozcan (2008)- The Late Eocene evolution of nummulitid foraminifer *Spiroclypeus* in the Western Tethys. Acta Palaeontologica Polonica 53, p. 303-316.

Leupold, W. & I.M. van der Vlerk (1931)- The Tertiary. In: B.G. Escher et al. (eds.) Stratigraphie van Nederlandsch Oost-Indie, Feestbundel Martin, Leidsche Geol. Mededelingen 5, p. 611-648.

(Overview of Tertiary stratigraphy across 'Netherlands East Indies' in K. Martin memorial volume. With distribution chart of larger foraminifera and 'Letter Classification' zonation)

Lignac-Grutterink, L.H. (1943)- Some Tertiary Corallinaceae of the Malaysian Archipelago. Verhandelingen Geologisch-Mijnbouwkundig Genootschap Nederland Kol., Geol. Serie 13, p. 283-297.

(Brief descriptions of Tertiary calcareous algae from Borneo, Java, etc., in Leiden collection. No location/stratigraphy info)

Lindley, I.D. (2004)- Some living and fossil echinoderms from the Bismarck Archipelago, Papua New Guinea, and two new echinoid species. Proc. Linnean Soc. New South Wales 125, p. 115-139.

Lloyd, A.R. (1974)- Time measurement of geological time and precision in correlation. Proc. SE Asia Petroleum Expl. Soc. (SEAPEX) 1, Singapore, p. 31-43.

(On stratigraphic correlations, with examples from SE Asia)

Lloyd, A.R. (1975)- Paleontology and its role on oil exploration. Proc. SE Asia Petroleum Expl. Soc. (SEAPEX) 2, Singapore, p. 152-159.

(Brief summary of importance of paleontology in oil exploration)

Ludbrook, N.H. (1965)- Tertiary fossils from Christmas Island (Indian Ocean). J. Geol. Soc. Australia, 12, p. 285-294.

(Christmas Island in Indian Ocean S of W Java is Tertiary atoll formed on volcanic cone rising more >13,000' from ocean floor. Algal limestones in outcrop of Late Eocene (Tb) and Early Miocene (Te-Tf) age. Upper Eocene limestone with Discocyclina, Nummulites, Heterostegina. Lower Miocene limestone lower part with Lepidocyclina (Eulepidina), followed by Miogypsinoidea dehaarti, then Flosculinella bontangensis. No rocks younger than Burdigalian identified other than young fringing reef)

Lunt, P. (2003)- Biogeography of some Eocene larger foraminifera, and their application in distinguishing geological plates. Palaeontologia Electronica 6, 1, p. 1-22.

(online at: http://palaeoelectronica.org/paleo/2003_2/geo/issue2_03.htm)

(Eocene larger foram assemblages can distinguish between carbonates from Asian-Pacific-Mediterranean (Pellatispira-Assilina) or Australian- New Guinea (Lacazinella) realms)

Lunt, P. (2013)- Foraminiferal micropalaeontology in SE Asia In: A.J. Bowden et al. (eds.) Landmarks in foraminiferal micropalaeontology: history and development, The Micropalaeontological Society, Spec. Publ. 6, Geol. Soc. London, p. 193-206.

(History of foraminiferal micropaleontology in SE Asia (mainly Indonesia) since late 1800's)

Lunt, P. & T. Allan (2004)- A history and application of larger foraminifera in Indonesian biostratigraphy, calibrated to isotopic dating. Geol. Res. Dev. Centre Museum, Bandung, 2004 Workshop on Micropaleontology, p. 1-109.

(*Modern overview of Indonesian Tertiary larger foraminifera and zonations*)

Lunt, P. & W. Renema (2014)- On the *Heterostegina- Tansinhokella- Spiroclypeus* lineage(s) in SE Asia. Berita Sedimentologi 30, p. 6-31.

(*online at: www.iagi.or.id/fosi*)

(*Detailed discussion of larger foraminifera evolutionary series from Heterostegina (Vlerkina) through Tansinhokella to Spiroclypeus, which can be observed twice in fossil record: (1) in Late Eocene and in mid-Oligocene- E Miocene. Morphologically no reliable way to distinguish Late Eocene and later Oligocene tests. Second evolutionary development of Tansinhokella and Spiroclypeus was at same time in three geographically separate areas. Tansinhokella important for biostratigraphic subdivision of Letter Stage Te*)

Ma, Z.L., Q.Y. Li, X.Y. Liu, W. Luo, D.J. Zhang & Y.H. Zhu (2017)- Palaeoenvironmental significance of Miocene larger benthic foraminifera from the Xisha Islands, South China Sea. Palaeoworld 27, 1, p. 145-157.

(*online at: <https://www.sciencedirect.com/science/article/pii/S1871174X1730029X>*)

(*Well XK-1 in Xisha (= Paracel) Islands, NW part of S China Sea, penetrated Miocene reef carbonate section with 66 species of larger foraminifera. Three assemblages: (1) 1256-1180m Spiroclypeus higginsi- Borelis pygmaeus (Te5, E Miocene); (2) 1031-577m Nephrolepidina- Miogypsina Assemblage (Tf, M Miocene), and 468-380m Cycloclypeus- Heterostegina Assemblage (Tg, Late Miocene). Facies backreef lagoon-shelf in E Miocene, normal-frontal reef in early M Miocene, backreef lagoon-shelf in later M Miocene, normal- frontal reef in early Late Miocene, and proximal foreereef shelf in later Late Miocene*)

MacGillavry, H.J. (1962)- Lineages in the genus *Cycloclypeus* Carpenter. Proc. Kon. Nederl. Akademie Wetenschappen B65, 5, p. 429-458.

(*Eight Eocene- Recent Cycloclypeus lineages distinguished*)

MacGillavry, H.J. (1978)- Foraminifera and parallel evolution- how or why? Geologie en Mijnbouw 57, 3, p. 385-394.

(*online at: <https://drive.google.com/file/d/0B7j8bPm9Cse0UE1PRmVLSE1GdHM/view>*)

(*On evolutionary trends in larger foraminifera, by former Stanvac micropaleontologist. With appendix B and C summarizing larger foraminifera (Cycloclypeus, miogypsinids) from Indonesia and stratigraphy near Baturaja, S Sumatra*)

Madon, M.B., R.B.A. Karim & R.W.H. Fatt (1999)- Tertiary stratigraphy and correlation schemes. In: Petronas (ed.) The Petroleum Geology and Resources of Malaysia. Petronas, Kuala Lumpur, p. 113-137.

(*Review of biozonations and stratigraphic nomenclature of Malay Basin, Penyu Basin, NW Borneo, Sabah*)

Malz, H. (1981)- *Atjehella jacobi* n.sp., eine pliozane Ostracoden-Art von Java. Senckenbergiana Lethaea 62, p. 167-171.

(*Atjehella jacobi n.sp., a Pliocene ostracod species from Java'*)

Mao, Limi & Swee Yeok Foong (2013)- Tracing ancestral biogeography of *Sonneratia* based on fossil pollen and their probable modern analogues. Palaeoworld 22, p. 133-143.

(*Review of biogeography of tropical mangrove pollen Florschuetzia, which is ancestral to modern Sonneratia. Florschuetzia documented from Late Eocene- M Miocene in paleotropics around Tethyan region. Migrated from center of origin in SE Asia probably during E Eocene, and radiated and expanded to China, Japan, Australia and E Africa. Until warm early M Miocene (Langhian) Sonneratia had largest geographical range*)

Martin, K. (1924)- Eenige opmerkingen over ouderdomsbepalingen van het Indische Tertiair. De Mijningenieur 5, 2, p. 15-19.

(*'Some remarks on the age determinations of the Indies Tertiary'. In past ages of rocks often assumed from lithologic similarities to other known formations, but paleontologic studies often proved them to be different*)

(quotes examples from Timor, Nanggulan, etc.). Current problem with interpretation of Tertiary faunas of Indonesia is lack of similarities with European faunas and no clear index fossils identified yet)

Martini, E. (1971)- Standard Tertiary and Quaternary calcareous nannoplankton zonation. In: A. Farinacci (ed.) Proc. Second Planktonic Conference, Rome, 1970, p. 737-785.

Martino, E., P.D. Taylor, A. Kudryavtsev & J.W. Schopf (2016)- Calcitization of aragonitic bryozoans in Cenozoic tropical carbonates from East Kalimantan, Indonesia. *Facies* 62, 11, p. 1-15.
(Calcification of originally aragonitic skeletons of cheilostome bryozoans Reussirella and Reptadeonella in muddy reefs from Miocene of E Kalimantan)

Matsumaru, K. (1974)- The transition of the larger foraminiferal assemblages in the Western Pacific Ocean- especially from the Tertiary period. *J. of Geography (Chigaku Zasshi)*, Tokyo, 83, 5, p. 281-301.
(In Japanese. Review of stratigraphic distribution of larger foraminifera in localities across SE Asia- W Pacific, the Letter zonation and its calibration to planktonic foram zones)

Matsumaru, K. (1980)- Cenozoic larger foraminiferal assemblages of Japan, Part 1. A comparison with Southeast Asia. In: T. Kobayashi et al. (eds.) *Geology and Palaeontology of Southeast Asia*, University of Tokyo Press, 21, p. 211-224.

(Review of Eocene- Recent larger foram occurrences and zonation in Japan and correlation with Indonesian letter zonation. Three abundance peaks: (1) M-L Eocene, (2) Late Oligocene; (3) latest E Miocene-M Miocene)

Matsumaru, K. (2011)- A new definition of the Letter Stages in the Philippine Archipelago. *Stratigraphy* 8, 4, p. 237-252.

(M Paleocene- Recent Letter Stages for Philippines re-defined in terms of 17 larger foram assemblage zones)

Matsumaru, K. (2012)- Miogypsinid foraminiferal biostratigraphy from the Oligocene to Miocene sedimentary rocks in the Tethys Region. In: I.A. Dar (ed.) *Earth Sciences, InTech Open Science*, 25, p. 619-648.

(online at: [http://cdn.intechopen.com/pdfs/27609/..](http://cdn.intechopen.com/pdfs/27609/))

(Good review of late Oligocene- M Miocene miogypsinid larger foram evolution and biostratigraphy)

Matsumaru, K. & K. Kimura (2012)- Larger foraminifera from the Eocene Shimizu and Miocene Misaki Formations in Tosa Shimizu City, Kochi Prefecture, Japan. *Trans. Proc. Palaeontological Soc. Japan* 156, p. 255-269.

(online at: www.palaeo-soc-japan.jp/download/TPPSJ/TPPSJ_NS156.pdf)

(Larger foraminifers from Eocene Shimizu Fm (Asterocyclina, Orbitoclypeus, Discocyclina) and Miocene Misaki Fm (Nephrolepidina) in Tosa Shimizu City, Kochi Prefecture, Shikoku, Japan)

McGowran, B. (1986)- Cainozoic oceanic and climatic events: the Indo-Pacific foraminiferal biostratigraphic record. *Palaeogeogr. Palaeoclim. Palaeoecology* 55, p. 247-265.

(Overall Cenozoic climatic deterioration reversed in Eocene and in Miocene by short-lived, far-reaching, extratropical excursions by tropical-type foraminifera. Widespread oceanic hiatuses appear to correlate with episodes of global warming and transgression)

McGowran, B. (2005)- *Biostratigraphy: microfossils and geological time*. Cambridge University Press, 459p.

McGowran, B. (2013)- Martin Glaessner's foraminiferal micropaleontology. In: A.J. Bowden et al. (eds.) *Landmarks in foraminiferal micropaleontology: history and development*, The Micropaleontological Society, Geol. Soc., London, Spec. Publ., p. 227-250.

(Review of M. Glaessner contributions to foraminiferal micropaleontology, including Cenozoic larger foraminifera of Papua New Guinea and biostratigraphic correlations in the Indo-Pacific region)

McGowran, B. & Q. Li (2000)- Evolutionary palaeoecology of Cainozoic Foraminifera: Tethys, Indo-Pacific, Southern Australia. *Historical Biol.* 15, p. 3-27.

(Tertiary larger foram extinctions and migrations into higher latitudes tied to major cooling/warming events)

Mohler, W.A. (1946)- Handleiding voor het determineren van de groot foraminiferen-genera van Nederlandsch Oost Indie. Unknown publisher, p. 1-46.

(‘Manual for the identification of larger foram genera of Indonesia’. Small atlas of Eocene- Recent key larger foraminifera genera of Indonesia)

Morgenroth, P., A.T. Rahardjo & K.A. Maryunani (2000)- Dinoflagellate cysts- an alternative stratigraphic tool in marine Tertiary strata in Indonesia. Proc. 29th Ann. Conv. Indon. Assoc. Geol. (IAGI), Bandung, 4, p. 99-108.

(Initial studies of dinoflagellates from Eocene- Miocene outcrops across Java)

Morley, R.J. (1977)- Palynology of Tertiary and Quaternary sediments in Southeast Asia. Proc. 6th Ann. Conv. Indon. Petroleum Assoc. 1, p. 255-276.

(Up to eight palynozones in Oligocene- Quaternary, mainly based on evolution of Florschuetzia species of mangrove pollen, building on Germeraad et al. 1968 work)

Morley, R.J. (1982)- Fossil pollen attributable to *Alangium* Lamarck (Alangiaceae) from the Tertiary of Malesia. Review Palaeobotany Palynology 36, p. 65-94.

(On four pollen-morphological evolutionary trends and Eocene-Pliocene fossil record of genus Alangium a flowering plant, in SE Asia)

Morley, R.J. (1991)- Tertiary stratigraphic palynology in Southeast Asia: current status and new directions. Bull. Geol. Soc. Malaysia 28, p. 1-36.

(online at: <https://gsmpubl.files.wordpress.com/2014/09/bgsm1991001.pdf>)

(Palynology is only biostratigraphic tool for correlation of non-marine sediments and correlation across facies. Age-restricted palynomorphs are relatively few, so in Tertiary palynology mainly useful in correlation rather than dating. Higher resolution requires quantitative palynological zonation schemes)

Morley, R.J. (1996)- Biostratigraphic characterization of systems tracts in Tertiary sedimentary basins. In: C.A. Caughey et al. (eds.) Proc. Int. Symposium on sequence stratigraphy in SE Asia, Jakarta 1995, Indon. Petroleum Assoc., p. 49-70.

(On palynomorph distribution patterns in sequences/ systems tracts)

Morley, R.J. (1998)- Palynological evidence for Tertiary plant dispersals in the SE Asian region in relation to plate tectonics and climate. In: R. Hall & J.D. Holloway (eds.) Biogeography and geological evolution of SE Asia, Backhuys Publ., Leiden, p. 211-234.

(online at; http://searg.rhul.ac.uk/publications/books/biogeography/biogeog_pdfs/Morley.pdf)

*(Tertiary plant dispersals reflect tectonic and climatic evolution of SE Asia. Sunda Eocene flora stretched as far East as S arm of Sulawesi, and after Makassar Straits opening, part of this flora became stranded E of Wallace Line. Small number of plant taxa dispersed W across Wallace line since Miocene, at 17 Ma, 14, 9.5, 3.5 and ~1 Ma. Much of Sunda region moisture deficient in Oligocene- earliest Miocene, ever-wet rainforest becoming widespread at ~20 Ma, after which they repeatedly expanded and contracted. Greatest extent of rainforest at beginning of M Miocene. Quaternary 'glacial' periods with low sea levels and more seasonal climates, leading to more pine forests and savannah. New Guinea mountains formed in M Miocene allowing dispersal of Gondwana taxa from S. Some, like *Podocarpus imbricatus*, *Phyllocladus* subsequently dispersed into SE Asia)*

Morley, R.J. (2000)- Tertiary history of the Malesian flora: a palynological perspective. In: L.G. Saw et al. (eds.) Taxonomy: the cornerstone of biodiversity, Forest Research Inst. Malaysia, Kepong, p. 197-210.

Morley, R.J. (2000)- Origin and evolution of tropical rain forests. Wiley, London, p. 1-362.

(Incl. SE Asia chapter describing Cenozoic vegetation response to plate tectonic evolution, as reflected in Indonesia palynology records. In M Eocene SW Sulawesi has Laurasian flora, and was attached to E

Kalimantan. Makassar Straits became floral-faunal migration barrier in Late Eocene. First Australian- New Guinea floral elements (Casuarina, etc.) start appearing in W Java Sea around 22-21 Ma)

Morley, R.J. (2002)- Tertiary vegetation history of SE Asia, with emphasis on biogeographical relationships with Australia. In: P. Kershaw et al. (eds.) *Bridging Wallace's Line: the environmental and cultural history of the SE Asian- Australian region*. *Advances in Geocology* 34, p. 2-28.

Morley, R.J. (2003)- Interplate dispersal paths for megathermal angiosperms. In: *Perspectives in plant ecology, evolution and systematics* 6, Urban & Fischer Verlag, p. 5-20.
(Review of dispersal of megathermal angiosperms between tectonic plates in Cretaceous and Tertiary. Early Cretaceous radiation of angiosperms unrelated to formation of Tethys. Nine dispersal routes, some tied to Late Cretaceous- E Tertiary Gondwana break-up and routes formed since M Eocene phases of plate collision)

Morley, R.J. (2007)- Cretaceous and Tertiary climate change and the past distribution of megathermal rainforests. In: M.B. Bush & J. R. Flenley (eds.) *Tropical rainforest responses to climatic change*, Chapter 1, Springer-Praxis, p. 1-31.
(also 2011 2nd Edition)

Morley, R.J. (2011)- Dispersal and paleoecology of tropical Podocarps. *Smithsonian Contr. Botany* 95, p. 21-41.
(online at: <http://smithsonianrex.si.edu/index.php/scb/article/download/175/131>)
(Tropical Podocarpaceae family appeared in Triassic of Gondwana and essentially remained southern family. Podocarpus s.l. dispersed into SE Asia in Late Eocene, explained by dispersal from India and possibly multiple dispersal events from Australia. Dacrydium reached SE Asia in E Oligocene and expanded range to Japan during M Miocene climatic optimum. Dacrycarpus and Phyllocladus dispersed into New Guinea as island emerged in Late Miocene, then island hopped to Borneo in M Pliocene. Dacrycarpus reached Sumatra and Malay Peninsula in Pleistocene)

Morley, R.J. (2012)- A review of the Cenozoic palaeoclimate history of Southeast Asia. In: D. J. Gower et al. (eds.) *Biotic evolution and environmental change in Southeast Asia*, The Systematics Association, Cambridge University Press, p. 79-114.
(Summary of Cenozoic climatic and environmental history of Sunda region, from Sulawesi to S Vietnam, based on palynological record, occurrence of coals (formed during periods of everwet climate) and paleosols)

Morley, R.J. & J.R. Flenley (1987)- Late Cainozoic vegetational and environmental changes in the Malay Archipelago. In: T.C. Whitmore (ed.) *Biogeographic evolution of the Malay Archipelago*, Oxford Monographs Biogeography 4, Clarendon Press, Oxford, p. 50-59.

Morley, R.J., E.B. Lelono, L. Nugrahaningsih & Nur Hasjim (2000)- LEMIGAS Tertiary palynology project: aims, progress and preliminary results from the Middle Eocene to Pliocene of Sumatra and Java. *Geol. Res. Dev. Centre (GRDC), Paleontol. Ser. 10*, Bandung, p. 27-47.
(Summary of palynology work in Java (Eocene of Nanggulan and Bayah), Sumatra (E Oligocene Pematang Fm, Late Oligocene Talang Akar Fm, E Miocene Gumai Fm, M Miocene Air Benakat Fm)

Morley, R.J. & H.P. Morley (2013)- Mid Cenozoic freshwater wetlands of the Sunda region. *J. Limnology* 72, 2s, p. 18-35.
(online at: www.jlimnol.it/index.php/jlimnol/article/view/704)
(On development widespread rift lake systems in Oligocene of SE Asia and eventual demise of these lakes following marine transgression. Pollen and spores content illustrate variety of fresh and brackish water swamp communities around their margins)

Muller, J. (1972)- Palynological evidence for change in geomorphology, climate and vegetation in the Mio-Pliocene of Malesia. In: P.S. & M. Ashton (eds.) *The Quaternary era in Malesia*, University of Hull, Geogr. Dept. Misc. Ser, 13, p. 6-16.

Muller, J. (1978)- New observations on pollen morphology and fossil distribution of the genus *Sonneratia* (Sonneratiaceae). Review Palaeobotany Palynology 26, p. 277-300.
(Study of mangrove pollen *Sonneratia*, and fossil representatives *Florschuetzia*. May have originated in Eocene in Tethys area, but earliest reliable occurrence (*Florschuetzia trilobata*) from E Miocene in Sunda area)

Murgese, D.S. & P. De Deckker (2005)- The distribution of deep-sea benthic foraminifera in core tops from the eastern Indian Ocean. Marine Micropaleontology 56, p. 25-49.
(57 core tops between 700- 4335m from E Indian Ocean between Australia and Indonesia. Seven key-species useful for environments. Two species groups: (1) *Oridorsalis tener umbonatus*, *Epistominella exigua* and *Pyrgo murrhina* (cold, well-oxygenated, low carbon flux to sea floor) and (2) *Nummoloculina irregularis* and *Cibicidoides pseudoungerianus* (upper-bathyal). *Uvigerina proboscidea* mainly at low latitudes, with high carbon flux due to higher primary productivity at sea surface, and low oxygen levels due to organic matter oxidation and presence of oxygen-depleted Indonesian Intermediate Water and N Indian Intermediate Water)

Nishida, S. (1987)- Calcareous nannoplankton biostratigraphy in the Sunda Arc. Comm. Co-Ord. Joint Prospecting Mineral Resources in Asian Offshore Areas (CCOP), Techn. Bull. 19, p. 69-72.

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(online at: <https://www.sciencedirect.com/science/article/pii/S1367912017306235>)
(Paleoenvironmental models for distribution of Miocene larger foraminifera, based on cluster analysis of assemblages from E-M Miocene mixed carbonate-clastic series in Kutai Basin, E Klaimantan, and Serravallian Bulu Fm of C Java)

Nuttall, W.L.F. (1926)- A revision of the *Orbitoides* of Christmas Island (Indian Ocean). Quart. J. Geol. Soc. London, 82, p. 22-43.
(Eocene limestones with *Discocyclina*, Miocene limestones with *Lepidocyclina*, *Miogypsina*, *Spiroclypeus*)

O'Herne, L. (1972)- Secondary chamberlets in *Cycloclypeus*. Scripta Geologica 7, p. 1-35.
(Biometrical study of Miocene *Cycloclypeus* from Van der Vlerk collection from NE Java, Madura and Larat)

O'Herne, L. (1974)- A reconsideration of *Amphistegina lessonii* d'Orbigny, 1826, sensu Brady, 1884 (Foraminifera). Scripta Geologica, 26, p. 1-53.
(online at: www.repository.naturalis.nl/document/148755)
(Discussion of Oligocene-Recent *Amphistegina* species, mainly from Java)

O'Herne, L. (1976)- A comparison of *Lepidocyclina ferreroi* (Provale, 1909) and *Lepidocyclina multilobata* (Gerth, 1939). Scripta Geologica 35, p. 1-48.
(online at: www.repository.naturalis.nl/document/148824)
(Comparison of two stellate *Lepidocyclina* species from E-M Miocene of Java, Madura and Borneo)

O'Herne, L. & I.M. van der Vlerk (1971)- Geological age determinations on a biometrical basis (comparison of eight parameters). Boll. Soc. Palaeont. Italiana 10, 1, p. 3-18.

Ong Goan Eng (1960)- The development of Shell micropaleontological studies in South Sumatra. Contrib. Dept. Geology Inst. Technology Bandung (ITB) 47, p. 3-9.
(Very general paper on use of micropaleontology since 1930 by BPM/ Shell in S Sumatra. Discussion of biofacies versus lithostratigraphy and time. No details on faunas, stratigraphy, etc.)

Oostingh, C.H. (1938)- Molluscan als gidsfossielen voor het Neogeen in Nederlandsch Indie. Handelingen 8e Nederl.-Indisch Natuurw. Congres, Soerabaja 1938, p. 508-516.

(Discussion of molluscs as index fossils for Neogene. Gastropod Vicarya callosa is M Miocene (Tf2-3) index species. No illustrations, range charts, etc. Very few of Neogene Java species known from elsewhere (unlike Eocene species; JTvG))

Osberger, R. (1956)- Korallen als Hilfsmittel der Tertiär und Quartär-Stratigraphie Indonesiens. Geol. Survey Indonesia, Publ. Keilmuan 32, p. 1-79.

(‘The use of corals in Tertiary and Quaternary stratigraphy of Indonesia’. Elegant review with listings of all Eocene- Pliocene fossil coral faunas described from Indonesia. Percentage of living coral species increases from 0% in Eocene-Oligocene, 6-9% in Early Miocene, 15-30% in M Miocene, 30-60% in Late Miocene-Pliocene and ~80% in Pleistocene. With range charts)

Panuju (2010)- The high resolution Neogene and Quaternary nannoplankton zonation for Indonesian basins. Proc. 39th Ann. Conv. Indon. Assoc. Geol. (IAGI), Lombok, PIT-IAGI-2010-265, 14p.

(New high resolution Neogene-Quaternary nannoplankton zonation for Indonesia, mostly based on material from NE Java, NW Java, Sumatra, Kutei, S Sulawesi, Salawati, Bintuni and Waipoga-Waropen Basins. The 21 standard zones of Martini (1971) can be subdivided into 58 subzones)

Parker, F.L. (1967)- Late Tertiary biostratigraphy (planktonic foraminifera) of tropical Indo-Pacific deep-sea cores. Bull. American Paleontology. 52, 235, p. 115-208.

(Late Miocene- Pliocene planktonic foram zonation on samples from deep sea cores and Fiji outcrop samples)

Piccoli, G. (1984)- Cenozoic molluscan associations of Mediterranean and Southeast Asia: a comparison. Memorie Scienze Geol., Padova, 36, p. 499-521.

Piccoli, G. (2002)- Tethyan exchange of benthic molluscs between SE Asia and Mediterranean in the Paleogene Memorie Scienze Geol., Padova, 54, p. 1-8.

Posthumus, O. (1929)- On paleobotanical investigations in the Dutch East Indies and adjacent regions. Bull. Jardin Botanique Buitenzorg, ser. 3, 10, 3, p. 374-384.

(Brief review of papers on plant fossils since Goppert (1854; Java), Heer (1874, 1879; Ombilin, Sumatra), Geyley (1877; S Borneo), etc. until 1927)

Postuma, J.A. (1971)- Manual of planktonic foraminifera. Elsevier Publishing Co., Amsterdam, p. 1-417.

(‘Classic’ Shell manual of Mid-Cretaceous- Recent planktonic foraminifera)

Poumot, C. (1989)- Palynological evidence for eustatic events in the Tropical Neogene. Bull. Centre Rech. Exploration Production Elf Aquitaine 13, 2, p. 437-453.

Prakash, U. (1971)- Fossil woods from the Tertiary of Burma. Palaeobotany 20, 1, p. 48-70.

Prakash, U. & M.B. Bande (1980)- Some more fossil woods from the Tertiary of Burma. Palaeobotany 26, 3, p. 261-78.

Prijosesilo, P. (1972)- Calcareous nannoplankton, a new biostratigraphic tool in the oil industry with emphasis in Indonesia. Proc. 1st Ann. Conv. Indon. Petroleum Assoc. (IPA), Jakarta, p. 43-56.

(Brief review of use of nannofossils in Cenozoic of SE Asia)

Prins B. (1971)- Speculations on relations, evolution, and stratigraphic distribution of discoasters. In: A. Farinacci (ed.) Proc. 2nd Planktonic Conference, Roma 1970, Ediz. Tecnoscienza, 2, p. 1017-1031.

(Discussion of legitimacy of calcareous nannofossil genus Discoaster Tan Sin Hok 1927)

Proto Decima, F. & C. Masotti (1981)- The genus *Gephyrocapsa* (Coccolithophorales) in the Plio-Pleistocene of the Timor Trough. Memorie Scienze Geol., Padova, 34, p. 453-464.

- Raju, D.S.N. (1973)- *Miogypsina indica*, a new species of Miogypsinidae from the Miocene of India. Proc. Kon. Nederl. Akademie Wetenschappen B76, p. 140-142.
- Raju, D.S.N. (1974)- Study of Indian Miogypsinidae. Utrecht Micropal. Bull. 9, p. 1-148.
(*Study of Miogypsinoides- Miogypsina evolution in India, highly applicable to Indonesian faunas*)
- Reich, S., V. Warter, F.P. Wesselings, H. Zwaan, L. Lourens & W. Renema (2015)- Paleoeological significance of stable isotope ratios in Miocene tropical shallow marine habitats (Indonesia). Palaios 30, 1, p. 53-65.
(*Aragonitic shells of Burdigalian and Tortonian molluscs from C Java and E Kalimantan analyzed for $\delta^{18}O$ and $\delta^{13}C$ ratios. Depleted $\delta^{18}O$ and $\delta^{13}C$ ratios in brackish water samples. Also chemosymbiotic species show depleted $\delta^{13}C$ ratios. Seagrass communities yield comparatively enriched $\delta^{13}C$ ratios. Stable isotope ratios may provide additional evidence for distinguishing paleoenvironments*)
- Renema, W. (2002)- Larger foraminifera as marine environmental indicators. Scripta Geologica 124, p. 1-260.
- Renema, W. (2005)- The genus *Planorbulinella* (Foraminiferida) in Indonesia. Scripta Geologica 129, p. 137-146.
(*Late Oligocene- Miocene Planorbulinella from Java, SE Borneo, W Sulawesi. Two new species*)
- Renema, W. (2006)- Comment on $\delta^{13}C$ Significant Miocene larger foraminifera from South Central Java by M.K. BouDagher-Fadel and S.W. Lokier. Revue Paleobiologie, Geneve, 25, 1, p. 405-406.
(*Argues for maintaining Lepidocyclina and Eulepidina as separate genera*)
- Renema, W. (2007)- Fauna development of larger benthic foraminifera in the Cenozoic of Southeast Asia. In: W. Renema (ed.) Biogeography, time, and place: distributions, barriers, and islands, Topics in Geobiology 29, Springer, p. 179-215.
(*Overview of Far East Tertiary larger foraminifera zonations*)
- Renema, W. (2008)- Internal architecture of Miocene *Pseudotaberina* and its relation to Caribbean Archaiasins. Palaeontology 51, 1, p. 71-79.
(*Soritid LF Pseudotaberina malabarica described from material collected by Martin in 1911 from Burdigalian (Tf1) Jonggrangan Fm near Yogyakarta, C Java. Also known from W Java (Tf2), E Kalimantan, PNG, etc.*)
- Renema, W. (2015)- Spatiotemporal variation in morphological evolution in the Oligocene-Recent larger benthic foraminifera genus *Cycloclypeus* reveals geographically undersampled speciation. GeoResJ 5, p. 12-22.
(*online at: www.sciencedirect.com/science/article/pii/S2214242814000217*)
(*Genus Cycloclypeus ranges from Oligocene- Recent, first appearing in E Rupelian of Java and Kalimantan (C. koolhoveni). Late Oligocene- Recent C. eidae to C. carpenteri lineage in Mediterranean and Indo- West Pacific provinces. C. annulatus derived from C. eidae as separate lineage in late Early-M Miocene*)
- Renema, W., A. Racey & P. Lunt (2002)- Palaeogene Nummulitids (Foraminiferida) from the Indonesian Archipelago: a review. Cainozoic Res. 2, 1-2, p. 23-78. (*also in Renema 2002, Scripta Geologica 124, p. 110-165*)
(*60 species of Nummulites reported from Indonesia, only 7 believed to be valid. Sangiran mud volcano boulders of Nummulites-Pellatispira limestone with N. gerthi/ N. pengaronensis and planktonic foraminifera (P15; around M-L Eocene boundary. Timor Miomaffo samples with Nummulites and Pellatispira*)
- Renz, O. & H. Kupper (1946)- Uber morphogenetische Untersuchungen an Grossforaminiferen. Eclogae Geol. Helvetiae 39, p. 317-342.
(*online at: http://retro.seals.ch/digbib/view?pid=egh-001:1946:39::344*)
(*'On morphogenetic investigations of larger foraminifera'*)

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(Correlation between paleomagnetic reversal scale and calcareous nannofossil zonation in Indian Ocean for last 7 Myrs)

Riedel, W.R. & A. Sanfilippo (1974)- Radiolaria from the Southern Indian Ocean, DSDP Leg 26. In: B.P. Luyendyk & T.A. Davies (eds.) Initial Reports Deep Sea Drilling Project (DSDP) 26, Chapter 33. p. 771-813.
(online at: www.deepseadrilling.org/26/volume/dsdp26_33.pdf)
(Radiolaria from Leg 26 Sites 250-258 in Indian Ocean W of Australia. *Dictyomitra lilyae* Tan Sin Hok, 1927= Early Cretaceous (Albian?) age range. Pages 773-774: unpublished nannofossil work on Tan Sin Hok's Bebalain 150 sample from Rotti island by Bukry: presence of *Cretarhabdus crenulatus*, *Eiffellithus turriseiffeli*, *Manivitella pemmatoidea*, *Parhabdolithus embergeri*, *Vagalapilla matalosa*, *Watznaueria barnesae* and *W. biporta*, indicating Aptian-Turonian age. Other samples of Tan Sin Hok from Rotti (no. 149, 154, and 384) contain similar radiolarian assemblages and probably of same age)

Riedel, W.R. & A. Sanfilippo (1978)- Stratigraphy and evolution of tropical Cenozoic radiolarians. *Micropaleontology* 24, p. 61-96.
(Review of zonation and datum levels of low-latitude Cenozoic radiolarians)

Rogl, F. (1974)- The evolution of the *Globorotalia truncatulinoides* and *Globorotalia crassaformis* group in the Pliocene and Pleistocene of the Timor Trough, DSDP Leg 27, Site 262. In: J.J. Veivers et al. (eds.) Initial Reports Deep Sea Drilling Project (DSDP) 27, Washington, p. 769-771.
(online at: www.deepseadrilling.org/27/volume/dsdp27_37.pdf)
(DSDP Site 262 in Timor Trough SW of Timor Island with rel. thick U Pliocene-Pleistocene. Good record of evolutionary trends in *Globorotalia crassaformis*- *G. tosaensis*- *G. truncatulinoides* groups)

Rutten, L. (1924)- Kleine mededeelingen over foraminiferen uit Nederlandsch-Indie. Verslagen Kon. Nederl. Akademie Wetenschappen, Amsterdam, 23, 6, p. 539-544.
(see English version, Rutten (1924))

Rutten, L. (1924)- Some notes on foraminifera from the Dutch Indies. Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam, 23, 6, p. 529-534.
(online at: www.dwc.knaw.nl/DL/publications/PU00015069.pdf)
(English version of Rutten (1924). Includes: 1. *Linderina* limestone on Bacan (probably Late Miocene or Pliocene calcareous sandstone rich in *Planorbulinella*); (2) Embryonal chambers of *Lepidocyclina acuta* from Balikpapan area, E Kalimantan, (3) Age of limestone on island Kamara(ng) in Pare Pare Bay, S Sulawesi (Late Neogene, common *Operculina* without *Lepidocyclina*, etc.; (4) *Lepidocyclina* cf. *epigona* in *Globigerina*-chert of Skru Island (W New Guinea) (confirmation of small, but true *Lepidocyclina*))

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(Late Tertiary mollusc fauna from the Netherlands East Indies'. Mio-Pliocene? bivalves and gastropods from S West Papua (Noordwest, Bibis and Noord Rivers S of Central Range; collected by 1907 and 1909/1910 New Guinea expeditions) and W Java (Cirebon area). Also shark tooth *Carcharias gangeticus*. With one small plate)

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(Fossil Brechites (Aspergillen), particularly from the East Indies Tertiary'. Descriptions of tube-dwelling molluscs, including fossils from Pliocene of Muna Island and Miocene of Brunei, collected by Bothe)

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(ODP Hole 757B, Ninetyeast Ridge, SE Indian Ocean, with well-oxygenated deep-sea benthic foraminifera (*Cibicides cicatricosus*, *C. pseudoungerianus*, *Oridorsalis umbonatus*) dominant in late Oligocene- E Miocene, but declining through M Miocene as Site 757 became under influence of Indonesian Throughflow with water masses from Pacific Ocean. *Nuttallides umbonifera* major increase at ~11 Ma, coinciding with increase in Nd isotope values, indicating substantial transport of deep Pacific water to Indian Ocean through Indonesian seaway. *N. umbonifera* decreases drastically during 3-2.8 Ma, coinciding with closure of Indonesian seaway and switch in shallow ITF source from warm, saline S Pacific to cool, fresh N Pacific thermocline water)

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(online at: <http://svr4.terrapub.co.jp/e-library/cjm/pdf/0175.pdf>)

(Neogene planktonic foram biostratigraphy of Ninety East Ridge, N Indian Ocean, DSDP sites. Major epoch boundaries marked: by Top Globigerinoides fistulosus (Plio-Pleistocene), Base Globorotalia tumida (base Pliocene), Base Globoquadrina dehiscens (Base Miocene). Top Globoquadrina binaiensis is useful marker close to N5-N6 boundary in tropical Indian Ocean and Indo-Pacific region. Absence of Pulleniatina spectabilis suggests effective closing of Indonesian Seaway in M Miocene, etc.)

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(online at: <http://pustaka.geotek.lipi.go.id/wp-content/uploads/2016/02/Riset-Vol.5-No.2-2.pdf>)

(*'Statistical biometry of the length ratio in the genus Asterorotalia in wellbore Cengkareng'. Length-width ratios of 3 Asterorotalia species (A. inspinosa, A. multispinosa, A. trispinosa) in 200m deep Cengkareng well, NW Java*)

Takayama, T. (1984)- Coccolith biostratigraphy in Southeast Asia. In: T. Kobayashi, R. Toriyama & W. Hashimoto (eds.) Geology and Palaeontology of Southeast Asia, University of Tokyo Press, 25, p. 303-304. (*Very brief review of literature on calcareous nannoplankton in SE Asia. Very little work done in Indonesia*)

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(*'On the composition and origin of chalks and marls of the Moluccas'. Pioneering study of radiolarians and calcareous nannoplankton (Discoaster) from deep water sediments of Timor, Roti, Yamdena, Halmahera, etc. Very little stratigraphic context of samples. ((N.B. Radiolaria described from Roti are not of Late Tertiary age as assumed by TSH, but are of Early Cretaceous age (e.g. Eucyrtidium (now Archaeodictyomitra) brouweri; Baumgartner 1992, Jasin & Haile 1996, O'Dogherty 2009). Many of the new radiolarian species from Roti also present in Early Cretaceous of SW Sulawesi; Munasri 2013))*)

Tan Sin Hok (1927)- Discoasteridae Incertae Sedis. Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam, 30, 3, p. 411-419.

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(*'On Cycloclypeus: preliminary results of a biostratigraphic study'. Larger foram genus known from Early Oligocene- Recent. Reported in more detail in 1932*)
- Tan Sin Hok (1931)- Discoasteridae, Coccolithinae and Radiolaria. In: B.G. Escher et al. (eds.) De palaeontologie en stratigraphie van Nederlandsch Oost-Indie, Feestbundel K. Martin, Leidsche Geol. Mededelingen 5, p. 92-114.
(*Listings of calcareous nannoplanton and radiolaria species reported by 1931 from Indonesia*)
- Tan Sin Hok (1932)- On the genus *Cycloclypeus* Carpenter, Part 1 and an appendix on the Heterostegines of Tjimanggoe, S. Bantam, Java. Wetenschappelijke Mededeelingen Dienst Mijnbouw Nederlandsch-Indie, 19, p. 1-194.
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- Tan Sin Hok (1935)- Die peri-embryonalen Aquatorialkammern bei einigen Orbitoiden. De Ingenieur in Nederlandsch-Indie (IV, Mijnbouw en Geologie), 2, 12, p. 113-126.
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- Tan Sin Hok (1936)- Zur Kenntnis der Lepidocycliniden. Naturkundig Tijdschrift Nederlandsch-Indie 96, p. 235-280.
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- Tan Sin Hok (1936)- Zur Kenntnis der Miogypsiniden. De Ingenieur in Nederlandsch-Indie (IV), 3, 3, p. 45-61.
(*'On the knowledge of Miogypsinids'. First of series of five papers on miogypsinid evolution and species in Indonesia. Miogypsinids probably evolved from Rotalia. Five types/ stages: M. complanata, M. borneensis, M. ecuadorensis, M. indonesiensis and M. bifida*)
- Tan Sin Hok (1936)- Zur Kenntnis der Miogypsiniden. I Fortzetsung. De Ingenieur in Nederlandsch-Indie (IV) 3, 5, p. 84-98.
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- Tan Sin Hok (1936)- Zur Kenntnis der Miogypsiniden. II Fortzetsung und Schluss. De Ingenieur in Nederlandsch-Indie (IV), 3, 7, p. 109-123.
(*'On the knowledge of the Miogypsinids- Second continuation and end'. Discussion of growth patterns of miogypsinid and other larger forams and remarks on stratigraphic distribution and interregional correlations. No illustrations*)
- Tan Sin Hok (1936)- Over verschillende paleontologische criteria voor de geleding van het Tertiair. De Ingenieur in Nederlandsch-Indie (IV), 3, 9, p. 173-179.

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Tan Sin Hok (1937)- Weitere Untersuchungen über die Miogypsiniden II. De Ingenieur in Nederlandsch-Indie (IV), 4, 6, p. 87-111.

*('Further investigations on the Miogypsinids- II'. Mainly on *Miogypsina indonesiensis* group, here reclassified as subspecies of *M. cushmani*)*

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*(Review of larger foram genus *Spiroclypeus*. Stratigraphic range Late Oligocene- E Miocene (zone Te) and also in Late Eocene (Tb). On p. 179: mention of *Biplanispira* in Wani series of Buton)*

Tan Sin Hok (1939)- The results of phylomorphogenetic studies of some larger foraminifera (a review). De Ingenieur in Nederlandsch-Indie (IV), 6, 7, p. 93-97.

(Brief general review)

Tan Sin Hok (1939)- Remarks on the letter classification of the East Indian Tertiary. De Ingenieur in Nederlandsch-Indie (IV), 6, 7, p. 98-101.

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('A red algae-sponge symbiosis from the Lower Miocene of Indonesia')

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(online at: <http://retro.seals.ch/cntmng?type=pdf&rid=egh-001:1933:26::270&subp=hires>)

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Thalman, H.E. (1934)- Mitteilungen über Foraminiferen I. Eclogae Geol. Helvetiae 27, 2, p. 428-440.

(online at: <http://retro.seals.ch/cntmng?type=pdf&rid=egh-001:1934:27::628&subp=hires>)

*('Communications on foraminifera- I'. Brief, early review of Miocene- Pleistocene *Pseudorotalia* species from Indonesia. Includes chapters 1 on *Rotalia gaimardi*, 2 on *Rotalia conoides* from Cepu area, E Java, and 4 on two new species from the Plio-Pleistocene of Java, *Rotalia catilliformis* and *Rotalia alveiformis*)*

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(online at: <http://retro.seals.ch/digbib/view?pid=egh-001:1938:31::352>)
(*'Value and meaning of morphogenetic investigations on larger foraminifera for stratigraphy'. Mainly a brief review in the importance of work by Tan Sin Hok (1932-1937) on the 'morphogenetic' evolution of Cenozoic larger foraminifera Lepidocyclina, Spirochypeus, Miogypsina, Cyclochypeus, etc. from Indonesia*)
- Thalmann, H.E. (1942)- Occurrence of the genus *Lacazina* Munier-Chalmas in the East Indies. *Geol. Soc. America (GSA) Bull.* 53, 12, p. 1838-1839. (Abstract only)
(*Eocene limestones with larger foram Lacazina (= Lacazinella) often associated with Nummulites, Discocyclina and Alveolina. Known only from E half of East Indies Archipelago: E Sulawesi (Boealemo peninsula), W Papua (Pisang Island E of Misool; Onin Island, Dramai Island; S and E of Triton Bay; Setawka River in SW New Guinea; Birds Head between Rumberpon and Horna, and Sungei Ingsiim; on Wilhelmina Peak of Central Range; S and E of Paniai Lake), PNG (Chimu aerodrome), Kai Besar Island (between Riamroe and Yamtimur)*)
- Thalmann, H.E. (1946)- New occurrences of the foraminiferal genus *Hantkenina* in Europe and Asia. *Geol. Soc. America (GSA) Bull.* 57, 12, 2, p. 1236-1237. (Meeting abstract only)
(*Incl. presence of Eocene planktonic foram genus Hantkenina in E Kalimantan (many localities along upper reaches and tributaries of Mahakam River; Long Iram area), and C Seram (Wai Tali, Cape Pasanea; Germeraad, 1946)*)
- Theodoridis, S. (1983)- On the legitimacy of the generic name *Discoaster* Tan Sin Hok, 1927 ex Tan Sin Hok, 1931. *Int. Nannoplankton Assoc. (INA) Newsl.* 5, 1, p. 15-21.
(online at: [http://ina.tmsoc.org/JNR/NINA/INANews15\(1\).pdf](http://ina.tmsoc.org/JNR/NINA/INANews15(1).pdf))
(*Commonly used genus name Discoaster is technically invalid because at the time of first description no type species was designated (instead spp. assigned to 'subgenera' Eu-Discoaster and Helio-Discoaster)*)
- Theodoridis, S. (1984)- Calcareous nannofossil biozonation of the Miocene and revision of the Helicoliths and Discoasters. *Utrecht Micropal. Bull.* 32, p. 1-271.
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(*Miocene nannofossil zonation, partly based on Miocene material of Solo River section, Kendeng zone, E Java. Returns to emended definitions of Helio-discoaster Tan and Eu-discoaster Tan for Discoaster species*)
- Tobler, A. (1925)- Über eine ostindische *Lepidocyclina* mit mehrkammeriger Nucleoconch. *Eclogae Geol. Helvetiae* 19, p. 269-274.
(online at: <https://www.e-periodica.ch/digbib/view?pid=egh-001:1925-1926:19#284>)
(*'On an East Indies Lepidocyclina with multi-chambered embryon'. Lepidocyclina (probably Eulepidina) from E Miocene at Sungai Tjengal, N margin of Gumai Mts, S Sumatra, with multi-chambered embryon (not unusual aberrant growth in orbitoidal foraminifera, with no apparent ecological or biostratigraphic significance; JTvG)*)
- Tobler, A. (1927)- Verkalkung der Lateralkammern bei *Miogypsina*. *Eclogae Geol. Helvetiae* 20, 2, p. 323-330.
(*'Calcification of the lateral chambers in Miogypsina'. Incl. new species Miogypsina tuberosa, M. abunensis*)
- Ujie, H. (1966)- Evolutionary lineö of Miocene Miogypsinid populations- Restudy of Japanese Miogypsinids, Part 2. *Bull. Nat. Science Museum, Tokyo*, 9, 3, p. 413-430.
- Ujie, H. (1973)- Distribution of the Japanese *Miogypsina* with description of new species. *Bull. Nat. Science Museum, Tokyo*, 16, 1, p. 99-114.
- Umbgrove, J.H.F. (1928)- Het genus *Pellatispira* in het Indo-Pacifische gebied. *Dienst Mijnbouw Nederlandsch-Indie, Wetenschappelijke Mededeelingen* 10, p. 43-71.
(*'The genus Pellatispira in the Indo-Pacific area'. Review of Late Eocene (Ta-Tb) larger foram genus Pellatispira in Indonesian region. Seven species, five of which new*)

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('The nature of the Tertiary fauna of the Netherlands Indies'. Early attempt of interpretation of the nature of Indonesian Tertiary faunas by student of K. Martin)

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('A transitional form between Orthophragmina and Lepidocyclina from the Tertiary of Java'. Description of new genus and species Orthocyclina soeroeanensis from Kali Soeroean, Bagelen area, C Java. Looks like an advanced M-L Miocene radiate Lepidocyclina (Trybliolepidina). Names never used by other workers; JTVG)

Van der Vlerk, I.M. (1924)- *Miogypsina Dehaartii* nov. spec. de Larat (Moluques). Eclogae Geol. Helvetiae 18, p. 429-431.

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Van der Vlerk, I.M. (1925)- Het foraminiferen genus *Spiroclypeus* en zijn beteekenis voor de stratigraphie van het Tertair van den Indo-Australischen Archipel. Verhandelingen Geologisch-Mijnbouwkundig Genootschap Nederland Kol., Geol. Serie 8 (Verbeek volume), p. 561-568.

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Van der Vlerk, I.M. (1928)- Het genus *Lepidocyclina* in het Indo-Pacifische gebied. Wetenschappelijke Mededeelingen Dienst Mijnbouw Nederlandsch-Indie, 8, p. 7-86.

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(Early review of Oligo-Miocene larger foram genus Lepidocyclina. With species determination table)

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(Summary of Tertiary larger foram Ta-Tg 'Letter zonation' used in shallow marine carbonates of Indonesia)

Van der Vlerk, I.M. (1951)- Tabulation of determinations of larger foraminifera. In: M. Reinhard & E. Wenk (eds.) Geology of the Colony of North Borneo, Bull. Geological Survey Dept., British Territories in Borneo 1, p. 137-145.

(Incl. samples from Banggi and Kudat areas of E Miocene limestones with reworked Eocene Pellatispira, Discocyclina, etc.)

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(Includes measurements on *Operculina* foram material from SE Asia. Observed gradual decrease in grade of enclosure of second chamber by third in specimens from Eocene- Recent)
- Van der Vlerk, I.M. & R.E. Dickerson (1927)- Distinctions among certain genera of larger foraminifera for the field geologist of the East Indies. J. Paleontology 1, 3, p. 185-192.
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- Van der Vlerk, I.M. & H. Gloor (1968)- Evolution of an embryo. Genetica 39, p. 45-63.
(Measurements on embryonic chambers of *Lepidocyclus* from Java and Madura. Extent to which deuteroconch encloses protoconch or extent to which dividing-wall between them is curved ("degree of curvature") increases from 10% in M Oligocene to 67% in M Miocene. Rate of evolution changes from very slow to very fast to slow again and to fast again. First rapid change in M Oligocene when genus migrated from America to Europe and to Far East- Australia. Second phase of rapid evolution from earliest Miocene up to extinction of genus)
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- Van Eijden, A.J.M. & G.M. Ganssen (1995)- An Oligocene multi-species foraminiferal oxygen and carbon isotope record from ODP Hole 758A (Indian Ocean): paleoceanographic and paleo-ecologic implications. Marine Micropaleontology 25, p. 47-65.
(Oligocene- basal Miocene (Zones P19-P22/N4) O and C isotope stratigraphy of benthic and planktonic forams from E Indian Ocean ODP Hole 758A. Lack of covariance in planktonic and benthic $\delta^{18}O$ ratios indicates that many Oligocene sea level fluctuations, including major fall at 30 Ma, not of glacio-eustatic origin)
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- Van Gorsel, J.T. (2014)- An introduction to Cenozoic macrofossils of Indonesia. Berita Sedimentologi 30, p. 63-76.
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(Brief overview of principal groups and literature of Cenozoic macrofossils known from outcrops in Indonesia. Prior to 1930's macrofossils (mainly molluscs), were principal objects of paleontological and biostratigraphic studies in Indonesia. Since then focus shifted to microfossils. Cenozoic marine macrofossil assemblages from Indonesia all represent tropical faunas of Indo-Pacific province affinity)

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(online at: www.iagi.or.id/fosi/files/2014/04/BS29-Biostratigraphy_SEAsia_S.pdf)
(Overview of Cenozoic biostratigraphy and biofacies interpretation of SE Asia. Principal microfossil groups used in region are foraminifera, calcareous nannofossils and palynology. Also brief reviews of work on ostracodes, diatoms and radiolaria)
- Van Konijnenburg-van Cittert, J.H.A., I.M. van Waveren & J. Jonkers (2004)- Catalogue of the Mesozoic and Cenozoic holotypes in the collection of plant fossils in the Nationaal Natuurhistorisch Museum, Leiden. *Nationaal Natuurhistorisch Museum (NNM) Techn. Bull.* 7, p. 1-27.
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(Inventory of holotypes of fossil plants in Leiden Naturalis museum collections, mainly from Tertiary in Java, in 'Martin Collection'. Incl. *Jurassic Novoguineoxylon lacunosum* from Kamundan (W Papua), species from Java Mio-Pliocene described by Goeppert (1854), Crie (1888), Krausel 1926, etc.)
- Van Morkhoven, F.P.C.M., W.A. Berggren & A.S. Edwards (1986)- Cenozoic cosmopolitan deep-water benthic foraminifera. *Bull. Centre Rech. Exploration-Production Elf-Aquitaine*, Mem. 11, p. 1-421.
- Van Regteren Altena, C.O. (1938)- Renamed Mollusca from the Dutch East Indian Tertiary. *Natuurkundig Tijdschrift Nederlandsch-Indie* 98, p. 209-212.
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(online at: www.repository.naturalis.nl/document/549583)
(Listings of arthropod fossils from Indonesia, as known in 1931: (1) Permian trilobites (*Phillipsia*, *Neoproetus indicus*, *Griffithides sumatrensis*) from Timor, Leti, Sumatra, W Papua; (2) Neogene ostracodes, (3) Cenozoic crab fossils from Java, Kalimantan, Sulawesi, W Papua and M Jurassic *Eryma boehmi* n.sp. from of Jefbie, Misool)
- Van Straelen, V. (1938)- Crustacea decapodes Cenozoiques des Indes Orientales neerlandaises. *Leidsche Geol. Mededelingen* 10, p. 90-103.
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(*'Cenozoic decapod crustaceans from the Netherlands East Indies'*. Review of Neogene crab fossils from Neogene of Java (*Calappa sangiranensis* n.sp., *Philyra*, *Ixoides*, *Cancer javanicus* n.sp, etc.), Madura (*Calappa madoerensis* n. sp.), Eocene of Sumba (*Ranina (Lophoranina) soembaensis* n.sp.), etc.)
- Van Vessem, E.J. (1977)- The internal structure of *Miogypsina polymorpha* and *Miogypsina bifida*. *Proc. Kon. Nederl. Akademie Wetenschappen B80*, 5, p. 421-428.
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- Van Vessem, E.J. (1978)- Study of *Lepidocyclinidae* from Southeast Asia, particularly from Java and Borneo. *Utrecht Micropal. Bull.* 19, p. 1-163.
(online at: <http://igitur-archive.library.uu.nl/dissertations/2011-0624-200310/Utrecht%20Micropaleontological%20Bulletins-19-van%20Vessem.pdf>)
(Quantitative study of lepidocyclinids of *Nephrolepidina* group from 42 samples from N Borneo (Klias Peninsula, Kinabatangan River), E Kalimantan (Kutei, Sangkulirang), C and E Java (Lodan, Tremboel, Boegoel wells) and Madura. Assemblages subdivided into five successive biometric units, called species: *L. isolepidinoides*, *L. sumatrensis*, *L. angulosa*, *L. martini* and *L. ruttieni*)
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(Holotype of *Globorotalia barisanensis* Le Roy 1939 from M Miocene Lower Palembang Fm in upper Kassikan section, Tapung Kiri River, C Sumatra, is non-keeled species, transitional between *Gr. peripheroacuta* and *Gr. praefohsi* (zones N10-N11). Holotype should be viewed as senior synonym of *Gr. peripheroacuta*, but more practical to conserve latter name)

Zachariasse, W.J. & Sudijono (2012)- New data on the morphology and classification of the Oligocene-Miocene planktonic foraminifer *Paragloborotalia siakensis* (LeRoy, 1939). *J. Foraminiferal Research* 42, 2, p. 156-168.

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X.3. Jurassic- Cretaceous

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(Study of diversity, distribution patterns, and endemism of Late Tithonian ammonites. Himalayan Kutch ammonites part of Indo-Madagascan Province)

Baumgartner, P.O., A. Bartolini, E.S. Carter, M. Conti, G. Cortese, T. Danelian, P. De Wever et al. (1995)- Middle Jurassic to Early Cretaceous radiolarian biochronology of Tethys based on Unitary Associations. In: P.O. Baumgartner et al. (eds.) Middle Jurassic to Lower Cretaceous Radiolaria of Tethys: occurrences, systematics, biochronology, Memoires Geologie, Lausanne, p.

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Belford D.J. & V. Scheibnerova (1971)- Turonian foraminifera from the Carnarvon Basin, Western Australia, and their palaeogeographical significance. Micropaleontology 17, p. 331-344.

(Presence of E-M Turonian planktonic foraminifera Praeglobotruncan stephani, P. hagni, P. imbricata, P. helvetica and Hedbergella spp from wells in Carnarvon Basin show Tethyan character)

Bolli, H.M. (1974)- Jurassic and Cretaceous calcisphaerulidae from DSDP Leg 27, Eastern Indian Ocean. In: J.J. Veevers et al. (eds.) Initial Reports Deep Sea Drilling Project (DSDP) 27, p. 843-907.

(online at: www.deepseadrilling.org/27/volume/dsdp27_39.pdf)

(19 new species of Pithonella, family Calcisphaerulidae, from U Jurassic and Cretaceous sediments from Sites 259, 260, 261, and 263 of Leg 27 in E Indian Ocean. Previously, calcisphaerulidae (av. size 40-120µ) described only from thin sections, like Stomiosphaeridae and Cadosinidae from Late Jurassic- earliest Cretaceous pelagic limestones of Seram, Timor, Roti, Buton and Misool by Wanner 1940 and Vogler 1941)

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(General review of Jurassic larger foraminifera)

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(On ranges of Buchia (= Aucella) bivalve mollusc species in Oxfordian-Tithonian. Now assigned to genus Malayomaorica)

Challinor, A.B. (1989)- The succession of *Belemnopsis* in the Late Jurassic of Eastern Indonesia. Palaeontology 32, 3, p. 571-596.

(*Belemnopsis* from Misool and Sula all part of *B. moluccana* lineage. Misool Late Jurassic stratigraphy condensed rel. to Sula. Misool: 85m of Oxfordian Demu Fm carbonate/ shale overlain by ~100m of Kimmeridgean-Tithonian Lelinta shale with minor sandstone)

Challinor, A.B. (1991)- Belemnite successions and faunal provinces in the Southwest Pacific, and the belemnites of Gondwana. BMR J. Australian Geol. Geophysics 12, 4, p. 301-325.

(online at: www.ga.gov.au/corporate_data/81298/Jou1991_v12_n4_p301.pdf)

(*M Jurassic- E Cretaceous belemnites from SW Pacific, New Guinea, Misool, Sula, tied to dinoflagellate zonations. Two belemnite provinces in SW Pacific region from M Jurassic- E Cretaceous: (1) Tethyan: E Indonesia, W Papua, PNG, parts of N and W Australia; (2) S Pacific: New Zealand, most of Australia*)

Challinor, A.B. (1992)- Belemnites of the Southwest Pacific. In: G.E.G. Westermann (ed.) The Jurassic of the Circum-Pacific, World and Regional Geology 3, Cambridge University Press, p. 308-309.

(*Brief summary of Jurassic belemnites in E Indonesia, PNG, New Zealand. Three main assemblages Dicoelites-Conodicoelites (Late Bajocian- E Oxfordian), Hibolithes (late Callovian- Oxfordian) and Belemnopsis (basal Oxfordian- latest Tithonian)*)

Cloos, H. (1916)- Doggerammoniten aus den Molukken. I. Text. Habilitationsschrift Hohen Phil. Fak. Kongl. Universitat Marburg, Schweizerbart, Stuttgart, p. 1-50.

(*'Dogger (= M Jurassic) ammonites from the Moluccas'. On Hammoceratids from Misool and Mangoli, Stephanoceratids from Mangoli and Taliabu. Text volume only; part 2 never published due to WWI*)

Colom, G. (1965)- Essais sur la biologie, la distribution géographique et stratigraphique des Tintinnoidens fossiles. Eclogae Geol. Helvetiae 58, 1, p. 319-334.

(online at: <http://dx.doi.org/10.5169/seals-163267>)

(*'Review of the biology, geographic and stratigraphic distribution of the fossil Tintinnids'. Classic paper on Jurassic-Cretaceous tintinnid nannofossils, incl. records of Late Jurassic Calpionella alpina group in PNG (Maril Shale; Rickwood 1955) N Australia (Brunnschweiler 1960)*)

Cookson, I.C. & A. Eisenack (1958)- Microplankton from Australia and New Guinea Upper Mesozoic sediments. Proc. Royal Soc. Victoria 70, p. 19-79.

(online at: <http://takata.slv.vic.gov.au/...>)

(*Early paper of Late Jurassic- Early Cretaceous dinoflagellates. Mainly taxonomic descriptions of 75 species from Australian NW shelf, some from PNG (Omati River, Era River)*)

Cookson, I.C. & A. Eisenack (1960)- Upper Mesozoic microplankton from Australia and New Guinea. Palaeontology 2, 2, p. 243-261.

(online at: http://cdn.palass.org/publications/palaeontology/volume_2/pdf/vol2_part2_pp243-261.pdf)

(*Upper Jurassic- basal Cretaceous dinoflagellates and hystrichospheres from Canning basin, W Australia and other localities in Australia and New Guinea*)

Cookson, I.C. & A. Eisenack (1974)- Mikroplankton aus Australischen Mesozoischen und Tertiaeren Sedimenten. Palaeontographica, B, Palaeophytologie, 148, p. 44-93.

(*'Microplankton from Australian Mesozoic and Tertiary sediments'*)

Crame, J.A. (1983)- The occurrence of the Upper Jurassic bivalve *Malayomaorica malayomaorica* (Krumbeck) on the Orville Coast, Antarctica. J. Mollusc. Stud. 49, p. 61-76.

(online at: <http://mollus.oxfordjournals.org/content/49/1/61.full.pdf>)

(*First record of Malayomaorica malayomaorica in Antarctica. Late Jurassic bivalve species (originally assigned to Aucella, then Buchia) mainly limited to Kimmeridgean. Appears to be typical of margins of S Hemisphere Late Jurassic Gondwanaland, including NW Australia, New Zealand, New Caledonia and E Indonesia (Misool, Timor, New Guinea, Sula, E Sulawesi, Ceram, Buru; JTvG)*)

- Dhondt, A.V. (1992)- Cretaceous inoceramid biogeography: a review. *Palaeogeogr. Palaeoclim. Palaeoecology* 92, p. 217-232.
(*Cretaceous inoceramid bivalves did not thrive in shallow or warm seas, and therefore rare in Tethyan shallow deposits. Occur mainly in temperate seas, and distribution often bipolar. Not much on SE Asia*)
- Fontaine, H. & L. Beauvais (1986)- Distribution of the Jurassic corals in Southeast Asia. In: P.Q. Tuong (ed.) *Proc. First Conf. Geology of Indochina, Ho Chi Minh City 1986*, Gen. Dept. of Geology Vietnam, 1, p. 137-145.
(*On Jurassic corals from S Vietnam, Cambodia, S Laos, Philippines (Mindoro, Calamian Islands, NE Palawan), Borneo (W Sarawak, W Kalimantan), Sumatra, Thailand (Mae Sot)*)
- Hallam, A. (1977)- Jurassic bivalve biogeography. *Paleobiology* 3, p. 58-73.
(*No maps. Incl. Late Jurassic SW Pacific Province: with Malayomaorica as only endemic bivalve genus. Same or closely related species in Spiti Shales of Himalayas. Buchia and Retroceramus abundant in the Arctic/ Antarctic, but also common in lower latitudes*)
- Hayami, I. (1984)- Jurassic marine bivalve faunas and biogeography in Southeast Asia. In: T. Kobayashi et al. (eds.) *Geology and Palaeontology of Southeast Asia 25*, University of Tokyo Press, p. 229-237.
(*Unique E Jurassic (Pliensbachian?) heavy bivalve assemblage from Timor with Lithiotis, Pachymegalodon, Gervilleioperna, etc. described from Fatu Lst of Timor by Krumbeck (1923). Upper Jurassic bivalves in W Borneo part of East Asian Province with Philippines and Japan. Timor-Roti, Seram, Misool, etc., are part of Maorian Province with Malayomaorica and Retroceramus haasti*)
- Hofker, J., Jr. (1963)- Studies on the genus *Orbitolina* (Foraminiferida). *Leidsche Geol. Mededelingen* 29, p. 181-253.
(*online at: www.repository.naturalis.nl/document/549624*)
(*Study of mid-Cretaceous (Barremian-Cenomanian) 'Tethyan' larger foram genus Orbitolina. Includes material from W Kalimantan Seberuang area collected by Van Schelle and Wing Easton collections, and classified as relatively primitive 'Group I- Lower Aptian' species*)
- Iba, Y. & S. Sano (2006)- *Mesorbitolina* (Cretaceous larger foraminifera) from the Yezo Group in Hokkaido, Japan and its stratigraphic and paleobiogeographic significance. *Proc. Japan Academy, B*, 82, 7, p. 216-223.
(*Aptian Orbitolina (Mesorbitolina) parva from limestone olistoliths in lower Yezo Group, Hokkaido, represent first report of this species from Circum-North Pacific*)
- Iba, Y., S. Sano & T. Miura (2011)- Orbitolinid foraminifers in the Northwest Pacific: their taxonomy and stratigraphy. *Micropaleontology* 57, 2, p. 163-171.
(*Four orbitolinid species ('Palorbitolina lenticularis', Praeorbitolina cf. wienandsi, Mesorbitolina parva, M. texana) recognized in Late Hauterivian- Early Albian of Japan- S Sakhalin*)
- Jaworski, E (1933)- Revision der Arieten, Echioceraten und Dactylioceraten des Lias von Niederlandisch-Indien. *Neues Jahrbuch Mineral. Geol. Palaont., Beilage Band 70, B*, p. 251-333.
(*Revision of the arietes, echiocerates and dactyliocerates from the Liassic of Netherlands Indies'. Mainly taxonomic descriptions of Early Jurassic ammonites from Roti, Babar, Timor and Sula Islands from collections in Amsterdam, Leiden, Utrecht, Delft, Bonn, Berlin and Basel: Arnioceras spp., Arietites, Dactylioceras spp., Coeloceras moermanni, etc.. Little on stratigraphy, no maps*)
- Jeletzky, J.A. (1963)- *Malayomaorica* gen. nov. (Family Aviculopectinidae) from the Indo-Pacific Upper Jurassic, with comments on related forms. *Palaeontology* 6, p. 148-160.
(*online at: http://palaeontology.palass-pubs.org/pdf/Vol%206/Pages%20148-160.pdf*)
(*S Hemisphere Late Jurassic bivalves described as Buchia and Aucella differ from N Hemisphere-Boreal Buchia, therefore assigned to new genus Malayomaorica. Typical of Kimmeridgean of Gondwana margin, including NW Australia, New Zealand New Guinea, Misool, Sula, E Sulawesi, Timor, Ceram, Buru; JTvG*)

- Kruizinga, P. (1931)- Cephalopoda. In: B.G. Escher et al. (eds.) De palaeontologie en stratigraphie van Nederlandsch Oost-Indie, Leidsche Geol. Mededelingen 5 (K. Martin memorial volume), p. 297-389.
(online at: www.repository.naturalis.nl/document/549628)
(Summary of state of knowledge of ammonites and belemnites in Indonesia in 1931. Highest number of species known is from Timor. Other significant cephalopod faunas on Roti, Sula Islands, Buru and Misool. Most known species of Triassic age, other rich faunas of Jurassic and Permian, but relatively few species from Cretaceous)
- Leupold, W. & W. Maync (1935)- Das Auftreten von *Choffatella*, *Pseudocyclammina*, *Lovcenipora* (*Cladocoropsis*) und *Clypeina* im alpinen Faziesgebiet. *Eclogae Geol. Helvetiae* 28, p. 129-139.
(online at: <http://retro.seals.ch/digbib/view?pid=egh-001:1935:28::191>)
(*The occurrences of Choffatella, Pseudocyclammina, Lovcenipora (Cladocoropsis) and Clypeina in the Alpine facies region'. First record of Late Jurassic Pseudocyclammina associated with Cladocoropsis mirabilis Felix from Switzerland. Assemblage formerly known from Japan and Barisan Mts of Sumatra*)
- Liard, T. & R. Liard (2016)- Mesozoic vertebrate footprints discoveries from ASEAN. In: Proc. 52nd Annual Session Coord. Comm. Geoscience Progr. E and SE Asia (CCOP), Bangkok, p. 40-51.
(online at: www.ccop.or.th/download/as/52as2.pdf)
(*Mesozoic vertebrate footprints found in several SE Asia countries with Indochinese redbeds, incl. in six Late Triassic- E Cretaceous formations in NE Thailand. Also in Laos, Malay Peninsula Singapore (Sentosa), Cambodia*)
- Lucas, S.G. (2006)- The *Psittacosaurus* biochron, Early Cretaceous of Asia. *Cretaceous Research* 27, p. 189-198.
(*E Cretaceous primitive ceratopsian dinosaur Psittacosaurus widespread in Asia, from W Siberia, Mongolia, China to Thailand, and possibly Japan. Psittacosaurus signifies Barremian-Albian time, ~105-125 Ma*)
- Mamgain, V.D. & B.R.J. Rao (1965)- Orbitolines from the limestone intercalations of Dras Volcanics, Jammu and Kashmir State. *J. Geol. Soc. India* 6, p. 122-129.
(*Barremian- Aptian Orbitolina (incl. Orbiqia drasensis n.sp.) in limestone intercalations in volcanic rocks of Dras, in Jammu and Kashmir state. Also Orbitolina trochus*)
- Matsumaru, K., M. Aizawa, K. Mukai & A. Furusawa (2007)- Note of orbitolinid foraminifera from the Lower Aptian (Cretaceous) Shimanoshita Mudstone, Lower Yezo Group, Hokkaido, Japan. *J. Saitama University Fac. Educ.* 56, 1, p. 367-372.
(*Mid-Cretaceous Orbitolina at several localities across accretionary prism of Japan and also Taiwan Shimanoshita location E Aptian with Palorbitolina lenticularis, Mesorbitolina parva, Praeorbitolina*)
- Matsumaru, K., M. Ehiro & S. Kojima (2006)- On *Orbitolina* (Foraminiferida) from the Shyok suture zone, Ladakh, NW India. *J. Palaeontol. Soc. India* 51, 2, p. 43-49.
(online at: http://palaeontologicalsociety.in/vol51_2/v4.pdf)
(*E-M Albian Orbitolina from Lower Shyok Fm in Shyok suture zone, Ladakh, NW India, in sediments overlying ultramafic unit. Incl. Mesorbitolina texana, M. minuta, Simplorbitolina cf. conulus*)
- Matsumaru, K. & A. Furusawa (2007)- On orbitolinid foraminifera from the lower Aptian (Cretaceous) of Hokkaido, Japan. *J. Palaeontological Soc. India* 52, 1, p. 39-44.
(online at: http://palaeontologicalsociety.in/vol52_1/v4.pdf)
(*Five E Aptian orbitolinid species in Takisato Orbitolina Lst of Hokkaido: Palorbitolina lenticularis, Mesorbitolina parva, M. minuta, M. libanica, Paleodictyoconus conica*)
- Matsuoka, A. (1995)- Jurassic and Lower Cretaceous radiolarian zonation in Japan and in the western Pacific. *The Island Arc* 4, p. 140-153.
(*Radiolarian zonation for Jurassic- Lower Cretaceous from Japan outcrop sections and W Pacific seafloor; applicable to low and middle paleolatitude portions of Paleo-Pacific ocean. 11 zones proposed*)

Matsuoka, A., Y. Aita, K. Wakita, Munasri, G. Shen, H. Ujiie, K. Sashida, V.S. Vishnevskaya, N.Y. Bragin & F. Cordey (1996)- Mesozoic radiolarians and radiolarian-bearing sequences in the circum-Pacific regions: a report of the Symposium 'Radiolarians and orogenic belts'. *The Island Arc* 5, 2, p. 203-213.
(Collection of 7 extended abstracts)

Munasri (2000)- Microfossils radiolaria in Indonesia: introducing the technique of preparation. *Proc. 29th Ann. Conv. Indon. Assoc. Geol. (IAGI), Bandung*, 4, p. 259-264.

Munasri (2001)- Radiolarian research in some Mesozoic provinces in Indonesia. *Berita Sedimentologi* 16, p. 26-30.

(Brief review of radiolaria studies from Cretaceous of C Java (Karangsambung), M Cretaceous from S Sulawesi (Bantimala), Jurassic-Cretaceous from SE Kalimantan (Meratus Range), M-L Triassic and E Cretaceous from W Timor (Nefokoko, Kefamenanu, Kolbano) and M Jurassic from Rotti island)

Munasri (2012)- Penggunaan fosil radiolaria dalam sintesis geologi. *Pros. Pemaparan Hasil Penelitian Pusat Penelitian Geoteknologi LIPI, Bandung* 2012, p. 337-350.

(*The use of fossil radiolaria in geological synthesis'. Review of Mesozoic radiolarian research in Indonesia. Radiolarian fossils found in deep-sea environments and are used for biostratigraphy, tectonic reconstructions, paleo-oceanography and paleogeography. With summary of 15 areas in Indonesia with radiolarian sediments*)

Munasri, K. Wakita & K. Sashida (1999)- Fosil radiolaria sebagai alat biostratigrafi yang baru di Indonesia. *Proc. 27th Ann. Conv. Indon. Assoc. Geol. (IAGI), 2 (Sed. Pal. Strat.), Yogyakarta*, p. 48-52.

(*Fossil radiolaria as a new biostratigraphic tool in Indonesia'. Review of radiolaria studies on Java, Sulawesi, SE Kalimantan, Timor*)

O'Dogherty, L. (2009)- Inventory of Mesozoic radiolarian species (1867-2008). *Geodiversitas* 31, 2, p. 371-481.
(*Useful listing of 6296 Mesozoic radiolarian species names, in combinations as originally described, with approximate ages. E.g. helpful in confirming correctness of Hojnós (1934) Late Jurassic- E Cretaceous age assignments of E Sulawesi radiolarian rocks*)

O'Dogherty L., E.S. Carter, P. Dumitrica, S. Gorican, P. De Wever, A.N. Bandini, P.O. Baumgartner & A. Matsuoka (2009)- Catalogue of Mesozoic radiolarian genera. Part 2: Jurassic-Cretaceous. *Geodiversitas* 31, 2, 271-356.

(*Illustrated catalogue of type species of 581 genera of Jurassic- Cretaceous radiolaria. No range charts*)

O'Dogherty, L. & J. Guex (2002)- Rates and pattern of evolution among Cretaceous radiolarians: relations with global paleoceanographic events. In: *Proc. INTERRAD 9, Micropaleontology of Radiolarians, Micropaleontology* 48, Suppl. 1, p. 1-22.

Oloriz, F. & G.E.G. Westermann (1998)- The perisphinctid ammonite *Sulaites* n. gen. from the Upper Jurassic of the Indo-Southwest Pacific. *Alcheringa* 22, 3-4, p. 231-240.

(*New genus Sulaites comprises Oxfordian group of 'Perisphinctes' sularus and moluccanus, described from Sula Islands, and Late Oxfordian-?E Kimmeridgian 'Pseudoparabolicseras aramaraii' group described from W Papua. Genus Sulaites also known from W Papua, PNG and probably New Zealand and Nepal*)

Oosting, A.M. (2004)- Palaeoenvironmental and climatic changes in Australia during the Early Cretaceous. *Thesis University Utrecht*, p. 1-203.

(online at: <http://dspace.library.uu.nl/handle/1874/1578>)

(*Biochronostratigraphy for Tethyan and Boreal M Cretaceous traditionally based on ammonites, but because of lack of useful ammonites in Australian M Cretaceous, and faunal and floral latitudinal contrasts, correlations between different realms is not straightforward. Dinoflagellate cyst events combined with changes in carbon-isotope stratigraphy used here to assess Barremian- Albian stage boundaries in Australia*)

- Pannekoek, A.J. (1931)- Brachiopoda. In: B.G. Escher et al. (eds.) De palaeontologie en stratigraphie van Nederlandsch Oost-Indie, Leidsche Geol. Mededelingen 5 (K. Martin memorial volume), p. 396-435.
(Summary of state of knowledge of fossil brachiopods in Indonesia in 1931)
- Philippe, M., A. Boura, C. Oh & D. Pons (2014)- *Shimakuroxylon* a new homoxyloous Mesozoic wood genus from Asia, with palaeogeographical and palaeoecological implications. Review Palaeobotany Palynology 204, p. 18-26.
(New type of (Late?) Jurassic-E Cretaceous fossil wood with radial pitting of 'japonicum type', named here *Shimakuroxylon*. Geographic distribution limited to terranes which lined S-most E Asia during Jurassic (Lhasa, Indochina, Semitau, etc.). W Kalimantan specimen in British Museum collected from Buduk (Boedak) 100km N of Pontianak, associated with bivalves identified as *M Jurassic* by Newton (1903) (probably Late Jurassic?). Also present in Outer Zone of SW Japan. Probably indicator for warm and wet climates)
- Philippe, M., H.E. Jiang, K. Kim, C. Oh, D. Gromyko, M. Harland, I.S. Paik & F. Thevenard (2009)- Structure and diversity of the Mesozoic wood genus *Xenoxylon* in Far East Asia: implications for terrestrial palaeoclimates. Lethaia 42, p. 393-406.
(Mesozoic fossil wood *Xenoxylon* is indicator of wet temperate biotopes and is common in Far East Asia in Carnian-Maastrichtian. It is part of 'Northern-type' leaf-flora (also call Tetori-type or Siberian-Canadian), although still present in Vietnam. Diversity peak of *Xenoxylon* spp. centred on NE China, where wet-temperate climate probably prevailed through Late Triassic- Cretaceous (genus not known from Indonesia or Gondwana))
- Remane, J. (1985)- Calpionellids. In: H.M. Bolli, J.B. Saunders & K. Perch-Nielsen (eds.) Plankton Stratigraphy, Cambridge University Press, p. 555-572.
(Review of Late Tithonian- E Valanginian planktonic protozoans of unknown affinities. Includes reported, but not illustrated, presence of calpionellids in PNG by Rickwood (1955))
- Renz, G.W. (1974)- Radiolaria from Leg 27 of the Deep Sea Drilling Project. In: J.J. Veevers et al. (eds.) Initial Reports Deep Sea Drilling Project (DSDP) 27, p. 769-841.
(online at: www.deepseadrilling.org/27/volume/dsdp27_38.pdf)
(Study of Cretaceous radiolarians from Leg 17 sites, mainly Site 261 in eastern Indian Ocean and Site 262 in Timor Trough of SW Timor. Succession of three assemblages, from young to old: (1) *Bathropyramis timorensis*, (2) *Eucyrtis columbarius* and (3) *Spongocyclia lanigera* Assemblage, of uncertain ages (but placed in ~Berriasian-Aptian range by Sanfilippo and Riedel 1985, Fig. 2; JTvG). Includes brief discussion of Tan Sin Hok (1927) Roti sample 149 assemblage, which is believed to be younger than this DSDP material)
- Riding, J.B. (2012)- A compilation and review of the literature on Triassic, Jurassic, and earliest Cretaceous dinoflagellate cysts. American Assoc. Stratigr. Palynologists (AASP), Contr. Ser. 46, Dallas, p. 1-119.
(online at: http://nora.nerc.ac.uk/19423/1/Jurassic_dinocyst_reference_list_-_revised_manuscript_March_2012_word_2003.pdf)
- Riding, J.B. (2013)- The literature on Triassic, Jurassic and earliest Cretaceous dinoflagellate cysts: supplement 1. Palynology 37, 2, p. 345-354.
- Sahni, M. R. (1937)- Discovery of *Orbitolina*-bearing rocks in Burma, with a description of *Orbitolina birmanica* sp. nov. Records Geological Survey India 71, p. 360-375.
- Sahni, M.R. & V.V. Sastri (1957)- A monograph of the orbitolines found in the Indian continent (Chitral, Gilgit, Kashmir), Tibet and Burma, with observations on the age of the associated volcanic series. Mem. Geol. Survey India, Palaeontologia Indica 33, 3, p. 1-50.
- Sano, S.I. & P.W. Skelton (2010)- *Epidiceras* (Bivalvia, Hippuritoidea) from the Tithonian-Berriasian Torinosu-type Limestones of the Sakawa Area, Southwest Japan. Turkish J. Earth Sciences 19, p. 733-743.
(online at: <http://journals.tubitak.gov.tr/earth/issues/yer-10-19-6/yer-19-6-5-0905-2.pdf>)

(Primitive rudists Epidiceras speciosum and E. guirandi from Tithonian-Berriasian Torinosu limestones in SW Japan. Epidiceras speciosum also present in Kimmeridgean-Tithonian Bau Limestone of SW Sarawak. Tethyan rudists extend into W Pacific province)

Sarjeant, W.A.S., W. Volkheimer & W.P. Zhang (1992)- Jurassic palynomorphs of the Circum-Pacific region. In: G.E.G. Westermann (ed.) The Jurassic of the Circum-Pacific, World and Regional Geology 3, p. 273-292. *(Includes discussion of Jurassic palynomorphs/ dinoflagellates of Papua New Guinea, Australia. The only Jurassic palynoflora from SE Asia is partly published work from Misool by Helby and Hasibuan: Yefbie Shale has characteristic Toarcian Susadinium assemblage and Bajocian- E Bathonian Dissiolioidinium association; base Demu Fm has Late Callovian- E Oxfordian Rigaudella aemula zone, Late Oxfordian- E Kimmeridgean Wanaea spectabilis zone in rest of Demu Fm and basal Lelinta shale; later assemblages suggest age as young as Kalyptea wisemaniae zone, E Berriasian)*

Sato, T. (1956)- Correlation du Jurassique inferieur japonais en basant sur les ammonites fossiles. J. Geol. Soc. Japan 62, 732, p. 490-503. *(Japanese with French abstract)*
(online at: www.jstage.jst.go.jp/article/geosoc1893/62/732/62_732_490/_pdf)
(Incl. circum-Pacific 'Aalenian' (Late Toarcian?) ammonite distribution map, showing distribution of Hammatoceras in E Indonesia)

Sato, T. (1975)- Marine Jurassic formations and faunas in Southeast Asia and New Guinea. In: T. Kobayashi & R. Toriyama (eds.) Geology and palaeontology of Southeast Asia, University of Tokyo Press, 15, p. 151-189.

Sato, T. & T. Ishibashi (1984)- Ammonoids of Southeast Asia. In: T. Kobayashi, R. Toriyama & W. Hashimoto (eds.) Geology and palaeontology of Southeast Asia, University of Tokyo Press, 25, p. 267-272.

Sato, T. & G.E.G. Westermann (1991)- 4. Japan and Southeast Asia. In: G.E.G. Westermann & A.C. Ricardi (eds.) Jurassic taxa ranges and correlation charts for the Circum-Pacific. Newsletters Stratigraphy 24, 1-2, p. 81-108.
(Useful compilation of distribution and ranges of Jurassic macrofossils in Indonesia)

Scheibnerova, V. (1971)- Foraminifera and the Mesozoic biogeoprovinces. Records Geol. Survey New South Wales 13, p. 135-174.

Scrivenor, J.B. (1912)- Radiolaria-bearing rocks in the East Indies. Geol. Magazine (V), 9, 6, p. 241-248.
(Review of mainly Mesozoic radiolarian-bearing rocks on the Malay Peninsula and Indonesia. Radiolarites of Danau Fm of C Borneo (probable Jurassic age) do look like oceanic deposits, but other radiolaria-bearing rocks often associated with clastic material and may be of shallower marine origin)

Sha, J. (2007)- Cretaceous trigonioidid (non-marine Bivalvia) assemblages and biostratigraphy in Asia with special remarks on the classification of Trigonioidacea. J. Asian Earth Sci. 29, 1, p. 62-83.
(Seven zones distinguished in distribution of Cretaceous Trigonioides-group fresh water molluscs. Mainly on mainland Asia (China, Korea, some Thailand) and Japan; nothing on Indonesia)

Sha, J. (2010)- Historical distribution patterns of trigonioidids (non-marine Cretaceous bivalves) in Asia and their palaeogeographic significance. Proc. Royal Society (London), B (Biol. Sci.), 277, p. 277-283.
(online at: <http://rspb.royalsocietypublishing.org/content/early/2009/07/15/rspb.2009.0936.full.pdf>)
(Non-marine trigonioidid bivalves five phases of radiation in Cretaceous of Pal-Asia: pre-Aptian (?Valanginian/ Hauterivian- Barremian), Aptian, Albian, Cenomanian and Turonian-Maastrichtian. Distribution patterns show two distinct paleo-river systems feeding trigonioidids. Trigonioidid distribution pattern suggests Japan was attached to part of E China and/or Korea in Valanginian-Cenomanian (no records from Indonesia))

Sha, J., A. Meesook & X.K. Nguyen (2012)- Non-marine Cretaceous bivalve biostratigraphy of Thailand, Southern Lao PDR and Central Vietnam. J. Stratigraphy 36, 2, p. 382-399.

(Cretaceous of Thailand, Lao and Vietnam entirely in non-marine facies (Khorat Group). Two trigoniodid bivalve assemblages: Aptian *Trigonioides kobayashii*- *Plicatounio* assemblages and mainly Albian *Trigonioides diversicostatus*- *Pseudohyria* assemblage)

Skelton, P.W. (1985)- Preadaptation and evolutionary innovation in rudist bivalves. *Special Papers in Palaeontology* 33, p. 159-173.

(Includes mention of early rudists *Epidiceras speciosum* (Goldfuss) and *Valletia* sp. from Bau Limestone, SW Sarawak, in collections of British Museum of Natural History, London)

Skelton, P.W., S.I. Sano & J.P. Masse (2013)- Rudist bivalves and the Pacific in the Late Jurassic and Early Cretaceous. *J. Geol. Soc., London*, 170, p. 513-526.

(Rudist distribution in Pacific region. Very little on SE Asia region rudists)

Skwarko, S.K. & F. Hasibuan (1989)- A brief review of literature on the larger marine invertebrates in the Cretaceous of Indonesia with list of fossils hitherto identified. *Geol. Res. Dev. Centre (GRDC), Bandung, Seri Paleontologi* 6, p. 44-52.

(Listing of 32 papers with descriptions of Cretaceous marine macrofossils from Indonesia since 1883. 22 faunas documented, 8 from Kalimantan, 3 each from Sumatra, Sula Islands, Misool and W Papua, one from Sulawesi. Bivalve molluscs (80 species) and cephalopods (70 species) are most diverse groups. Most determinations in need of revision)

Stevens, G.R. (1964)- The belemnite genera *Dicoelites* Boehm and *Prodictoelites* Stolley. *Paleontology* 7, 4, 9, 606-620.

(online at: <http://palaeontology.palass-pubs.org/pdf/Vol%207/Pages%20606-620.pdf>)

(Belemnite genus name *Dicoelites* first used by Boehm (1906) for *D. dicoelus* Rothpletz from Callovian-Lower Oxfordian of Roti Island, then in 1912 for material from Callovian-Kimmeridgean? of Wai Miha, Taliabu, Sula islands (*D. keeuwensis*). Both have two grooves, but latter re-assigned to new genus *Conodicoelites*)

Stevens, G.R. (1965)- The Jurassic and Cretaceous belemnites of New Zealand and review of the Jurassic and Cretaceous belemnites of the Indo-Pacific region. *Paleont. Bull., Geol. Survey New Zealand* 36, p. 1-283.

(Major review of J-K belemnites. In Oxfordian development of Indo-Pacific province. Kimmeridgean abundant *Belemnopsis* developed in Indo-Pacific, incl. *Belemnopsis uhligi* complex (*Belemnopsis* spp., incl. *uhligi*, *indica*, *moluccana*, etc.). Usually associated with *Buchia* and *Inoceramus*. In Tithonian *uhligi* complex persists, but progressively replaced by *Hibolithes* and *Duvalia* assemblage. Etc.)

Stolley, E. (1929)- Uber Ostindische Jura-Belemniten. *Palaontologie von Timor, Schweizerbart, Stuttgart*, 16, 29, p. 91-213.

(‘On East Indies Jurassic belemnites’. *Belemnites* from Molengraaff, Jonker and Weber collections from Timor, Roti, Misool, Sula islands, Seram, E Sulawesi and Yamdena/Tanimbar. Includes reports of *Belemnopsis aucklandica* from Timor (Ofu) and Roti, re-assigned to *Belemnopsis uhligi-jonkeri* group by Stevens 1964. *B. aucklandica* from Yamdena, re-described as *Belemnopsis stolleyi* by Stevens 1964)

Street, C. & P.R. Bown (2000)- Palaeobiogeography of Early Cretaceous (Berriasian-Barremian) calcareous nannoplankton. *Marine Micropaleontology* 39, p. 265-291.

(Early Cretaceous nannoplankton biogeography *Watznaueria* spp. dominant in all settings. Assemblage composition relatively uniform between ~50° N and S. High-paleolatitude assemblages less rich, lower diversity and with more *Crucibiscutum salebrosum*, *Stradnerlithus silveradius*, *Broinsonia matalosa*, etc.. Argo Abyssal Plain, NW of Australia, southern high-latitude assemblage)

Taylor, B.A. & D.W. Haig (2001)- Barremian Foraminifera from the Muderong Shale, oldest marine sequence in the Cretaceous of the southern Carnarvon Basin, Western Australia. *Micropaleontology* 47, p. 125-143.

(E Cretaceous Muderong Shale from S Carnarvon Basin outcrop and wells with restricted marine *Ammobaculites* spp.- *Haplophragmoides*- *Miliammina*- *Verneuilinoides* association)

Thierry, J. (1976)- Paleobiogeographie de quelques Stephanocerataceae (Ammonitina) du Jurassique moyen et superieur; une confrontation avec la theorie mobiliste. *Geobios* 9, 3, p. 291-331.
(*Paleogeography of Middle-Late Jurassic ammonites, showing 'Tethyan' Macrocephalites- Mayaites group distribution*)

Van Gorsel, J.T. (1978)- Late Cretaceous orbitoidal foraminifera. In: R.H. Hedley and C.G. Adams (eds.) *Foraminifera* 3, Academic Press, London, p. 1-120.
(*General review of Campanian- Maastrichtian orbitoidal larger foraminifera. In SE Asia members of 'Caribbean-Tropical Pacific' assemblage with Pseudorbitoides, Orbitoides, Asterorbis, etc. present in PNG, W Papua and E Philippines. Occurrence of Omphalocyclus in Kalimantan, never described elsewhere*)

Van Gorsel, J.T. (2014)- An introduction to Mesozoic faunas and floras of Indonesia. *Berita Sedimentologi* 31, p. 27-56.

(online at: www.iagi.or.id/fosi/files/2014/12/BS31-Biostratigraphy_SEAsia_Part3.pdf)

(*Review of Mesozoic fossils of Indonesia. Mesozoic-age faunas relatively widespread in Indonesia, from Sumatra, Java and Kalimantan in W to Sulawesi, Outer Banda Arc (Sumba, Timor, Tanimbar, Seram), Sula Islands and New Guinea in East. Triassic low-latitude Tethyan faunas present in both W and E Indonesia. Late Jurassic ammonites and bivalves from E Indonesia- New Guinea of more temperature character*)

Von Hillebrandt, A., P. Smith, G.E.G. Westermann & J.H. Callomon (1992)- Ammonite zones of the Circum-Pacific region. In: G.E.G. Westermann (ed.) *The Jurassic of the Circum-Pacific*, Cambridge University Press, p. 247-272.

(*Jurassic ammonite zonations of Circum-Pacific region. Lower Jurassic (Toarcian) ammonites known from Kalimantan, Sula Islands, Misool and Timor and Roti. M Jurassic ammonites mainly on Sula Islands and New Guinea (Bajocian-Bathonian Sulaites, Lower Callovian Macrocephalites keeuwensis assemblage. U Jurassic (Oxfordian Mayaites) also rich on Sula Islands; Kimmeridgean ammonites virtually unknown*)

Von Hillebrandt, A., G.E.G. Westermann, J.H. Callomon & R.L. Dettner (1992)- Ammonites of the Circum-Pacific region. In: G.E.G. Westermann (ed.) *The Jurassic of the Circum-Pacific*, Cambridge University Press, New York, p. 342-359.

(*Review of Jurassic ammonite stratigraphic and geographic distributions in Pacific region. Sula- New Guinea sub-province of Indo-Pacific Province in Bajocian- Bathonian, characterized by endemic Irianites, Satoceras and Praetulites. In Oxfordian more extended Indo-SE Pacific realm, with mayaitids also in New Zealand*)

Wan, X., Y. Wu & G. Li (2003)- Distribution of Mid-Cretaceous Orbitolinids in Xizang (Tibet) and its paleobiogeographic implications. *Acta Geologica Sinica* 77, 1, p. 1-8. (*Chinese with English Abstract*)

(online at: www.jourlib.org/paper/4876549#.V9XKwvkrKUk)

(*Mid-Cretaceous Orbitolinid larger foraminifera common in Barremian- Cenomanian of shallow marine Neotethys margins. In Tibet limited to Lhasa Block (= SE Eurasia margin in M Cretaceous) and parts of Qiantang, extending E to Myanmar and W to Ladakh. Not present on India Plate*)

Wandel, G. (1936)- Beitrage zur Kenntnis der Jurassischen Molluscenfauna von Misool, Ost Celebes, Buton, Seran und Jamdena. In: J. Wanner (ed.) *Beitrage zur Palaeontologie des Ostindischen Archipels* 13, Neues Jahrbuch Mineral. Geol. Palaeont., Beilage Band 75B, p. 447-526.

(*'Contributions to the knowledge of Jurassic molluscs from Misool, East Sulawesi, Buton, Seram and Yamdena'. Description of Mollusca, mainly collected by F. Weber. Misool faunas include upper Liassic Harpoceraten beds, lower Dogger Hammoceraten beds, Oxfordian Aucella malayomaorica marls (also in E Sulawesi), etc.*)

Williams, G.L. & J.P. Bujak (1985)- Mesozoic and Cenozoic dinoflagellates. In: H. M. Bolli, J. B. Sauder & Katharina Perch-Nielsen (eds.) *Plankton Stratigraphy*, vol. 2, Radiolaria, diatoms, silicoflagellates, Cambridge University Press, p. 847-965.

Yabe, H. & S. Hanzawa (1926)- *Choffatella* Schlumberger and *Pseudocyclammina*- a new genus of arenaceous foraminifera. Science Reports Tohoku Imperial University, 2nd series, Geology, 9, p. 9-13.
(online at: <http://ir.library.tohoku.ac.jp/re/bitstream/10097/30196/1/KJ00004178170.pdf>)
(New genus name *Pseudocyclammina* for Late Jurassic foram '*Cyclammina*' *lituus* from Torinosu Limestone of Japan, which species is very similar to *Choffatella cyclamminoides* n. sp. described by Silvestri (1925) from Sungi Tunj, Korinci, Jambi Province, Sumatra)

Yabe, H. & S. Toyama (1927)- *Cladocoropsis mirabilis* Felix from the Torinosu Limestone of Japan. Japan. J. Geol. Geogr. 5, p. 107-110.
(On (Late) Jurassic reefal sponge or branching stromatoporoid *Cladocoropsis* in Pacific accreted terrane of Japan, frequently erroneously assigned to (Triassic) genus *Lovcenipora*. Widespread in Tethyan lagoonal-reefal limestone facies (Leinfelder et al. 2005), also known from Sumatra and Borneo)

Yin, J. & R. Enay (2004)- Tithonian ammonoid biostratigraphy in eastern Himalayan Tibet. Geobios 37, 5, p. 667-686.
(Rich ammonoid faunas in Tithonian- Lw Berriasian in E Himalayas of Tibet, with Tithonian *Virgatosphinctes-Aulacosphinctoides* and *Uhligites-Aulacosphinctes*; U Tithonian dominated by *Blanfordiceras wallichi*, etc. Strong affinities with E Indonesia- New Guinea and SW Pacific ammonoid faunas. Also presence of Kimmeridgean *Sulaites Belemnopsis galoi*)

Zhang, Q., A.P. Rasnitsyn, B. Wang & H. Zhang (2018)- Myanmarinidae, a new family of basal Apocrita (Hymenoptera: Stephanoidea) from mid-Cretaceous Burmese amber. Cretaceous Research 81, p. 86-92.
(online at: <https://www.sciencedirect.com/science/article/pii/S019566711730366X>)
(New family of wasps Myanmarinidae established from species discovered in M Cretaceous (E Cenomanian, ~99 Ma) Burmese amber from amber mines in Hukawng Valley of Kachin State, Myanmar)

X.4. Triassic

Ager, D.V. (1968)- The supposedly ubiquitous Tethyan brachiopod *Halorella*. J. Paleontol. Soc. India 5-9, p. 54-70.

(online at: <http://palaeontologicalsociety.in/vol5/v11.pdf>)

(Late Triassic rhynchonellid brachiopod *Halorella* common in Europe. *Halorella nimassica* described from Timor by Krumbeck (1921-1924) not true *Halorella*, but assigned to *Timorhynchia* n. gen.. *Halorella* spp. described from Seram by Wanner (1907) look more like true *Halorella*, but here placed in *Halorelloidea*)

Al-Shaibani, S., D. Altiner, P. Bronnimann, D.J. Carter & L. Zaninetti (1982)- *Triasina hantkeni* Majzon, 1954 (Foraminifera), dans le Trias supérieur de la Tethys (Europe et Asie). Archives Sciences Geneve 35, 2, p. 137-142.

(*Triasina hantkeni* Majzon 1954 (foraminifer), in the Upper Triassic of the Tethys (Europe and Asia). Norian-Rhaetian small benthic foram *Triasina*, known in Tethys from Europe to E Indonesia)

Ando, H. (1987)- Paleobiological study of the Late Triassic bivalve *Monotis* from Japan. The University of Tokyo Museum Bull. 30, p.

(online at: www.um.u-tokyo.ac.jp/publish_db/Bulletin/no30/no30000.html)

(Monograph of Late Triassic 'flat clam' *Monotis* in Japan, with discussion of global distribution)

BouDagher-Fadel, M.K. (2008)- The Mesozoic larger benthic foraminifera: the Triassic. In: Evolution and geological significance of larger benthic foraminifera, Chapter 3, Developments in Palaeontology and Stratigraphy, Elsevier, 21, p. 119-156.

(General review of Triassic foraminifera)

Brayard, A. & H. Bucher (2008)- Smithian (Early Triassic) ammonoid faunas from northwestern Guangxi (South China): taxonomy and biochronology. Fossils and Strata 55, p. 1-179.

Carter, E.S. (2007)- Global distribution of Rhaetian radiolarian faunas and their contribution to the definition of the Triassic-Jurassic boundary. In: S.G. Lucas & J.A. Spielmann (eds.) The global Triassic, New Mexico Museum of Natural History and Science Bull. 41, p. 27-31.

(online at: [http://paleo.cortland.edu/globaltriassic/Bull41/09-Carter%20\(radiolarians\).pdf](http://paleo.cortland.edu/globaltriassic/Bull41/09-Carter%20(radiolarians).pdf))

(Includes comparison with Rhaetian radiolarian faunas from Meto River, W Timor as described by Rose (1994). Assemblages not typically Tethyan but mix of cosmopolitan taxa and species with stronger affinities to Japan and Philippines)

Chablais, J. (2010)- Sedimentology and biostratigraphy of the Upper Triassic atoll-type carbonates of the Sambosan Accretionary Complex (Panthalassan domain; Japan). Doct. Thesis Universite Geneve, Sc.4212, p. 1-204.

(online at: <https://archive-ouverte.unige.ch/unige:8438>)

Chablais, J., R. Martini, F. Kobayashi, G.M. Stampfli & T. Onoue (2011)- Upper Triassic foraminifers from Panthalassan carbonate buildups of Southwestern Japan and their paleobiogeographic implications. Micropaleontology 57, 2, p. 93-124.

(60 species of foraminifera in U Triassic atoll-type carbonates of Sambosan Accretionary Complex, SW Japan. With paleobiogeographic distribution analysis between Neo-Tethys and Panthalassa: six faunal provinces defined on foram assemblages)

Chablais, J., R. Martini & T. Onoue (2010)- *Aulotortus friedli* from the Upper Triassic gravitational flow deposits of the Kumagawa River (Kyushu, southwest Japan). Paleontological Research 14, 2, p. 151-160.

(Involutinid benthic foram *Aulotortus friedli* reported from U Triassic (Norian-Rhaetian) carbonates from capped seamount in Sambosan Accretionary Complex. From shallow-water limestone clasts in debris flow along Kumagawa River)

- Chablais, J., R. Martini, S. Rigaud, E. Samankassou, T. Onoue & H. Sano (2008)- New Upper Triassic foraminifers of Sambosan accretionary complex (Japan); a tool for sedimentological and paleobiogeographic understanding of the Panthalassan Ocean. Abstracts 33rd Int. Geological Congress, Oslo (*Abstract only*)
(Late Jurassic- E Cretaceous Sambosan accretionary complex in SW Japan with U Triassic reefal limestones typical of seamount atoll in Panthalassan Ocean. Four foram associations: (1) lagoonal: common Aulotortidae, Nodosariidae and Endotebidae; (2) Back- and fore-reef: mainly Duostomina and Variostoma; (3) reefal: Galeanella, Høyenella, Ophthalmidium and Cucurbita; (4) Shoal facies rich in ooids and near-monospecific Pilammina sulawesiana association (as known from Sulawesi). Carnian-Norian age matches Tethyan carbonate platform/ reefs in Alps and Asinepe Limestone in Seram. Foraminifera Tethyan tropical affinity, suggesting paleoposition at low-middle latitude in S Hemisphere, in agreement with presence of endemic foraminifers and corals of Timor and Sulawesi. Sambosan AC seamounts moved >15000 km to be accreted against Asian blocks. Distance in accordance with velocity and direction of plates related to Neo-Tethyan ridge opening)
- Chablais, J., R. Martini, E. Samankassou, T. Onoue & H. Sano (2010)- Microfacies and depositional setting of the Upper Triassic mid-oceanic atoll-type carbonates of the Sambosan Accretionary Complex (southern Kyushu, Japan). *Facies* 56, p. 249-278
- Chonglakmani, C. & J.A. Grant-Mackie (1984)- Handbook of Triassic index fossils (preliminary). Dept. Mineral Resources, Bangkok, 21p.
(online at: http://library.dmr.go.th/Document/DMR_Technical_Reports/1984/24271.pdf)
(Selection of age-significant Triassic microfossils from Thailand and adjacent regions. Ammonites and thin-shelled molluscs (Daonella, Halobia, Monotis) most important. With 5 plates and range chart)
- Cirilli, S. (2010)- Upper Triassic- lowermost Jurassic palynology and palynostratigraphy: a review. In: S.G. Lucas (ed.) *The Triassic timescale*, Geol. Soc., London, Spec. Publ. 334, p. 285-314.
(Late Triassic- E Jurassic palynostratigraphy and latitudinal control on distribution of 'Onslow' (rel. warm, southern Tethys margin) vs. 'Ipswich' (rel. cool, Gondwanan) microfloral provinces in S Hemisphere)
- Diener, C. (1918)- Nachtrage zur Dibranchiatenfauna der Halstatter Kalke. *Jahrbuch Geol. Reichsanstalt*, 1918, 68, 3, p. 475-492
(online at: <http://opac.geologie.ac.at/wwwopacx/...>)
('Additions to the Dibranchiate fauna of the Halstatter Limestone'. Mainly comparison of Late Triassic belemnoid faunas from Timor and North Calcareous Alps, Austria. In both areas very similar thin-ribbed Aulacoceras sulcatum group. Prefers to maintain Aulacoceras timorensis Wanner as separate species)
- Dobruskina, I.A. (1994)- Triassic floras of Eurasia. Österreich. Akademie Wissenschaften, Erdwissensch. Komm., Band 10, Springer Verlag, Vienna, p. 1-422.
(Review of Triassic floras, incl. from Thailand (Norian- Rhaetian near base of Khorat Group), Vietnam (Tonkin flora) and Sarawak (Krusin flora, near basal conglomerates of Halobia clastics series))
- Dolby, J.H. & B.E. Balme (1976)- Triassic palynology of the Carnarvon Basin, Western Australia. *Review Palaeobotany Palynology* 22, p. 105-168.
(Five Triassic palynological assemblage zones in wells from Carnarvon Basin: I. Kraeuselisporites saeptatus (Griesbachian-Smithian), II. Tigrisporites playfordii (Smithian-Anisian), III. Staurosaccites quadrifidus (Anisian-Carnian), IV. Samaropollenites speciosus (Carnian) and V. Minutosaccus crenulatus (Carnian-?Norian). Provincialism in M-L Triassic floras:(1) Onslow microflora on NW Shelf, with mixed Gondwanan-European elements; (2) Ipswich microflora: less diverse Falcisporites-dominated assemblages in E and S Australia; European elements not present)
- Foster, C.B., B.E. Balme & R. Helby (1994)- First record of Tethyan palynomorphs from the Late Triassic of East Antarctica. *J. Australian Geol. Geophysics* 15, p. 239-246.
(online at: www.ga.gov.au/corporate_data/49409/Jou1994_v15_n2.pdf)
('Onslow-type'/ 'Tethyan' Norian microflora from Prince Charles Mts, E Antarctica, with Minutosaccus crenulatus, Ovalipollis ovalis, Samaropollenites speciosus, Falcisporites australis, etc.)

Gardin, S., L. Krystyn, S. Richoz, A. Bartolini & B. Galbrun (2012)- Where and when the earliest coccolithophores? *Lethaia*, 10.1111, 17p.

(First coccoliths appear in Late Triassic, with oldest species Crucirhabdus minutus and Prinsiosphaera triassica appearing in latest Norian. Across Norian-Rhaetian boundary increase in abundance of Prinsiosphaera triassica and appearance of Euconusphaera zlabachensis (two most important Rhaetian pelagic carbonate producers). Both present on Timor, Wombat Plateau (NW Australia) (also on Seram?; JTvG))

Grant-Mackie, G.A. (1975)- The stratigraphy and taxonomy of the Upper Triassic bivalve *Monotis* in New Zealand. Ph.D. Thesis University of Auckland, p. 1-380.

(online at: <https://researchspace.auckland.ac.nz/handle/2292/2580>)

(20 taxa recognized in New Zealand Late Triassic bivalve genus Monotis)

Grant-Mackie, G.A. (1978)- Subgenera of the Upper Triassic bivalve *Monotis*. *New Zealand J. Geol. Geophysics* 21, 1, p. 97-111.

(online at: www.tandfonline.com/doi/abs/10.1080/00288306.1978.10420726)

(Proposal of five subgenera of Monotis. Monotis s.s. resembles salinaria group, M. (Entomonotis) includes M. ochotica, subcircularis, and zabaikalica groups; M. (Eomonotis) typha group and M. (Maorimonotis))

Grant-Mackie, G.A. (1978)- Systematics of New Zealand *Monotis* (Upper Triassic Bivalvia)- subgenus *Entomonotis*. *New Zealand J. Geol. Geophysics* 21, 4, p. 483-500.

(online at: www.tandfonline.com/doi/pdf/10.1080/00288306.1978.10424073)

Hallam, A. (1981)- The end-Triassic bivalve extinction event. *Palaeogeogr. Palaeoclim. Palaeoecology* 35, p. 1-44.

(Important mass extinction episode in latter part of Triassic, affecting primarily deeper marine taxa like bivalves Halobia and Monotis. Major extinction of other bivalves, corals, ammonites, etc. at end of Triassic, possibly related to major eustatic sea level drop?)

Hasibuan, F. (2010)- The Triassic marine biota of Eastern Indonesia and its interregional and global correlation: a review. *J. Geologi Indonesia* 5, 1, p. 31-47.

(online at: www.bgl.esdm.go.id/publication/index.php/dir/article_detail/263)

(Marine macrofossil biostratigraphy of Triassic in Indonesia. Mainly on ammonoids from Timor and Misool, and correlations with regions outside Indonesia)

Hasibuan, F. & Purnamaningsih (1998)- Pre-Tertiary biostratigraphy of Indonesia. In: J.L. Rau (ed.) *Proc. 34th Sess. Sess. Co-ord. Comm. Coastal Offshore Geosc. Programs E and SE Asia (CCOP)*, Taejon, Korea 1997, 2, Techn. Repts, p. 40-54.

(Review of Paleozoic- Mesozoic marine macrofossil biostratigraphy of Indonesia, particularly in Misool island)

Hautmann, M. (2001)- Die Muschelfauna der Nayband-Formation (Obertrias, Nor- Rhat) des ostlichen Zentraliran. *Beringeria* 29, p. 1-181.

(online at: <http://opus.bibliothek.uni-wuerzburg.de/frontdoor/index/index/docId/1817>)

(The bivalve fauna of the Nayband-Formation (U Triassic, Norian-Rhaetian) of east-central Iran'. Well-preserved bivalve fauna with >100 species. Paleogeographic analysis of Tethyan bivalve faunas suggests E Tethys province, with N (Iran, Yunnan, Vietnam, Burma, W Sumatra) and S subprovince (Lhasa-block, E Indonesia terranes; attached to Gondwana until end Triassic and separated later by opening of 'Ceno-Tethys' Ocean (= Mesotethys?; JTvG))

Hautmann, M., M.J. Benton & A. Tomasovych (2008)- Catastrophic ocean acidification at the Triassic-Jurassic boundary. *Neues Jahrbuch Geol. Palaont., Abhandl.* 249, p. 119-127.

(On end-Triassic extinction of reefal organisms and end of carbonate deposition at Triassic- Jurassic boundary in many parts of world, caused by ocean acidification, tied to volcanic degassing)

Hautmann, M. (2012)- Extinction: end-Triassic mass extinction. In: eLS online, John Wiley & Sons, p. 1-10.
(*On mass extinction at end of Triassic, at ~200 Ma. This event eliminated conodonts and nearly annihilated corals, sphinctozoan sponges and ammonoids. Probably caused by volcanic activity of Central Atlantic Magmatic Province. Lead to virtual absence of reef systems for nearly 10 Myrs in E Jurassic.*)

Helby, R., V.D. Wiggins & G.J. Wilson (1987)- The circum-Pacific occurrence of the Late Triassic dinoflagellate *Sverdrupiella*. Australian J. Earth Sci. 34, p. 151-152.
(*Late Triassic dinoflagellate genus Sverdrupiella Bujak and Fisher widespread, abundant and relatively diverse in Norian strata. Reported from Seram, E Indonesia, in Norian Kanikeh Fm, associated with undescribed dinoflagellate suite including suessioids and Heibergella (=Hebecysta balmei zone?; JTvG). Circum-Pacific distribution of Sverdrupiella in Late Triassic similar to distribution of Late Triassic bivalve Monotis*)

Hinde, G.J. (1908)- Radiolaria from Triassic and other rocks of the Dutch East Indian Archipelago. In: R.D.M. Verbeek, Molukkenverslag. Geologische verkenningstochten in het oostelijke gedeelte van den Nederlandsch Oostindische Archipel. Jaarboek Mijnwezen Nederlandsch Oost-Indie 37 (1908), Wetenschappelijk Gedeelte, p. 694-736.

(*Radiolaria from Timor, Savu, Ceram, Sulawesi, Buru and Mangoli collected by Verbeek, probably mainly of Late Triassic-Jurassic age. 83 species identified, 74 new. Richest assemblages from Halobia-Daonella-bearing cherty limestones from Rote and Savu and Halobia limestone from Timor. Fewer, but similar species in loose chert pebbles collected at Seram and E Sulawesi*)

Ichikawa, K. (1958)- Zur Taxonomie und Phylogenie der triadischen "Pteriidae" (Lamellibranchiata) mit besonderer Berücksichtigung der Gattungen *Claraia*, *Eumorphotis*, *Oxytoma* und *Monotis*. Palaeontographica, A111, 5-6, p. 131-212.

(*On the taxonomy and phylogeny of the Triassic 'Pteriidae' (Lamellibranchiata), with particular emphasis of the genera Claraia, Eumorphotis, Oxytoma and Monotis'. Includes description of new species Monotis (Entomonotis) timorica from Timor (which is same as Monotis subcircularis Gabb; Westermann 1962)*)

Ishibashi, T. (1975)- Some Triassic ammonites from Indonesia and Malaysia. In: T. Kobayashi & R. Toriyama (eds.) Geology and Palaeontology of Southeast Asia, University of Tokyo Press, 16, p. 45-56

Kanmera, K. (1964)- Triassic coral faunas from the Konose Group in Kyushu. Mem. Fac. Science, Kyushu University, Ser. D Geology, 15, p. 117-147.

(*Corals from U Triassic Pacific seamount limestones in Japan. Includes mention of species previously known only from Timor*)

Kobayashi, F., R. Martini & L. Zaninetti (2005)- Anisian foraminifers from allochthonous limestones of the Tanoura formation (Kurosegawa Terrane, West Kyushu, Japan). Geobios.38, 6, p. 751-763.

(*35 species of M Triassic foraminifera in allochthonous oolitic limestone blocks in Carnian Tanoura Fm in Kurosegawa Terrane of W Kyushu. Blocks of Anisian in age, based on Pilamina densa and Meandrospira dinarica, associated with Triadodiscus, Aulotortus, etc.. Terrane was part of N Gondwana margin, then isolated eastwards before E Cretaceous amalgamation with S China in E Cretaceous*)

Kobayashi, T. & T. Kimura (1944)- A study on the radiolarian rocks. J. Fac. Science, Imperial University Tokyo, sec. 2, 7, 2, p. 75-187.

(*Includes review of Paleozoic- Mesozoic radiolaria data from Sumatra, Kalimantan, etc. Kalimantan Danau Fm radiolaria transitional between Jurassic and Carboniferous faunas, therefore possibly more likely of Triassic age. Cherts in Tuhul Fm of S Sumatra are M-L Triassic or Permo-Triassic in age*)

Kobayashi, T. & M. Tamura (1983)- The Arcto-Pacific Realm and the Trigoniidae in the Triassic Period. Proc. Japan Academy 59, B, p. 207-210.

(*Family Trigoniidae evolved from Myophoriidae polyphyletically in M and Late Triassic. Triassic bivalves of New Zealand, New Caledonia and New Guinea constitute distinct fauna. U Triassic cosmopolitan genus*

Monotis with paleogeographically restricted species; Borneo is junction of three *Monotis* seas: (1) *salinaria* group, distributed from Europe-Himalaya to Borneo; (2) *ochotica* group from Siberia to Borneo through Japan and (3) *subcircularis* group from Canada to New Zealand and Borneo through E Pacific coast)

Kobayashi, T. & M. Tamura (1984)- The Triassic Bivalvia of Malaysia, Thailand and adjacent areas. In: T. Kobayashi et al. (eds.) *Geology and Palaeontology of Southeast Asia 25*, University of Tokyo Press, p. 201-227. (*Review of Triassic bivalves Claraia, Daonella-Halobia, Monotis, Trigoniceae (incl. Myophoria, Costatoria), megalodontids in Malay Peninsula, Thailand and Sumatra*)

Koike, T. (1984)- Summary of Triassic conodonts of Southeast Asia. In: T. Kobayashi, R. Toriyama & W. Hashimoto (eds.) *Geology and Palaeontology of Southeast Asia*, University of Tokyo Press, 25, p. 295-302. (*Brief review of Triassic conodont faunas in Malay Peninsula, Thailand and Indonesia (Carnian of Lake Toba, Sumatra; Anisian-Ladinian and Carnian and W Timor; Norian of Timor Leste)*)

Kristan-Tollmann, E. (1988)- A comparison of Late Triassic agglutinated foraminifera of Western and Eastern Tethys. *Abhand. Geol. Bundesanstalt, Vienna*, 41, p. 245-253.
(online at: www.landesmuseum.at/pdf_frei_remote/AbhGeolBA_41_0245-0253.pdf)
(*Examples of common species of Triassic arenaceous and calcareous agglutinated foraminifera across Tethys realm (mainly from Austrian Calcareous Alps, PNG Kuta Limestone and Timor). Timor fauna includes Verneulinoides mauritii and Variostoma helictum*)

Kristan-Tollmann, E. (1991)- Triassic Tethyan microfauna in Dachstein limestone blocks in Japan. In: T. Kotaka, J.M. Dickins et al. (eds.) *Proc.Int. Symp. Shallow Tethys 3*, Sendai 1990, Saito Hoon Kai Spec. Publ. 3, p. 35-49.
(*First description of U Triassic foraminifera from Panthalassan seamount reefal limestone in Sambosan accretionary complex in Japan; see also Chablais et al. 2008*)

Kristan-Tollmann, E. (1995)- Weitere Beobachtungen an Rhaetischen nannofossilien der Tethys. *Geol. Palaont. Mitteilungen Innsbruck* 20, p. 1-11.
(online at: www2.uibk.ac.at/downloads/c715/gpm_20/20_001-011.pdf)
(*'Additional observations on Rhaetian nannofossils of the Tethys'. Eoconusphaera zlabachensis and Prinsiosphaera triassica are most common species in uppermost Triassic of calcareous Alps; also present off Wombat Plateau, NW Australia, confirming Tethys-wide distribution*)

Kummel, B. (1969)- Ammonoids of the Late Scythian (Lower Triassic). *Bull. Museum Comparative Zoology, Harvard University*, 137, p. 311-701.
(online at: www.archive.org/details/bulletinofmuseum13719681969harv)
(*Treatise on Early Triassic/ Scythian ammonoids, including material from Timor (p. 349-351), mainly from 'Block E near Nifoekoko', described previously by Welter (1922). Contains Hungarites, Pronorites spp, etc.*)

McRoberts, C.A. (2008)- Rhaetian (Late Triassic) *Monotis* (Bivalvia: Pectinoida) from the eastern Northern Calcareous Alps (Austria) and the end-Norian crisis in pelagic faunas. *Palaeontology* 51, 3, p. 721-735.
(*Species of marine bivalves of pectinoid genus Monotis provide useful biochronologic indices for Late Triassic (M Norian-earliest Rhaetian). Profound extinction event in pelagic realm at Norian-Rhaetian boundary where ~15 monotids became extinct. Surviving Monotis dwarfed compared to Norian predecessors*)

McRoberts, C.A. (2010)- Biochronology of Triassic bivalves. In: S.G. Lucas (ed.) *The Triassic Timescale*, Geol. Soc., London, Spec. Publ. 334, p. 201-219.
(*General zonation scheme for Triassic based on bivalves Claraia, Peribositria, Enteropleura, Daonella (M Triassic), Halobia (Carnian-M Norian), Eomonotis and Monotis (Late Norian). Widely distributed across Tethys, Panthalassa and Boreal regions*)

Metcalfe, I. & R.S. Nicol (2007)- Conodont biostratigraphic control on transitional marine to non-marine Permian-Triassic boundary sequences in Yunnan-Guizhou, China. *Palaeogeogr. Palaeoclim. Palaeoecology* 252 p. 56-65.

*(Permian- Triassic boundary defined by first appearance of conodont species *Hindeodus parvus*, also bivalve *Claraia*. In S Chian Permo-Triassic boundary marked by two volcanic ash beds)*

Metcalfe, I., R.S. Nicoll & B.R. Wardlaw (2007)- Conodont index fossil *Hindeodus changxingensis* Wang fingers greatest mass extinction event. *Palaeoworld* 16, p. 202-207.

*(Marine conodont fossil species, *Hindeodus changxingensis* restricted to very narrow stratigraphic interval from Permian-Triassic extinction event into very earliest Triassic ('disaster species?'). Geographically widespread in Tethyan Region)*

Nicoll, R.S. & C.B. Foster (1998)- Triassic biozonation and stratigraphy, 1998 Chart 20. Australian Geol. Survey Org. (AGSO), 1p. *(chart)*

(online at: www.ga.gov.au/corporate_data/76687/Chart_20_NWS_Triassic.pdf)

Nicoll, R.S., I. Metcalfe & C.Y. Wang (2002)- New species of the conodont genus *Hindeodus* and the conodont biostratigraphy of the Permian-Triassic boundary interval. *J. Asian Earth Sci.* 20, 6, p. 609-631.

*(Four new species of conodont genus *Hindeodus* just above Permian- Triassic boundary in S. China; boundary based on first appearance of *Hindeodus parvus*. Change in conodont biofacies at P-T boundary from *Neogondolella* (*Clarkina*)-dominated faunas to *Hindeodus*-dominated faunas, associated with increase in silt)*

O'Dogherty L., E.S. Carter, P. Dumitrica, S. Gorican, P. De Wever, A. Hungerbuhler, A.N. Bandini & A. Takemura (2009)- Catalogue of Mesozoic radiolarian genera. Part 1: Triassic. *Geodiversitas* 31, 2, p. 213-270.

O'Dogherty L., E.S. Carter, S. Gorican & P. Dumitrica (2010)- Triassic radiolarian biostratigraphy. In: S.G. Lucas (ed.) *The Triassic Timescale*, Geol. Soc., London, Spec. Publ. 334, p. 163-200.

(General discussion of Triassic radiolarian biostratigraphy. Work on Triassic in Indonesia limited to Sashida et al. 1999 on Timor. Many studies on Thailand Triassic)

Payne, J.L., M. Summers, B.L. Rego, D. Altiner, J. Wei, M. Yu & D.J. Lehrmann (2011)- Early and Middle Triassic trends in diversity, evenness, and size of foraminifers on a carbonate platform in south China: implications for tempo and mode of biotic recovery from the end-Permian mass extinction. *Paleobiology* 37, 3, p. 409-425.

(Gradual increase in diversity of foraminifera through E- M Triassic. Model of E-M Triassic carbonate platform of 'Great Bank of Guizhou', S China: E Triassic with widespread thrombolite limestone, M Triassic (Anisian) platform margin Tubiphytes reef, etc.)

Payne, J.L. & B. van de Schootbrugge (2007)- Life in Triassic oceans: links between planktonic and benthic recovery and radiation. In: P. Falkowski & A.H. Knoll (eds.) *Evolution of primary producers in the sea*, Academic Press, Amsterdam, p. 165-189.

(Review of faunal trends through Triassic. E Triassic global reef gap after end-Permian extinctions, commonly associated with black shale. Increase in coral and algal diversity through M Triassic, but reefs dominated by Tubiphytes. E-M Carnian reefs dominated by Porifera, Norian-Rhaetian reefs dominated by corals. E Jurassic is another reef gap, again with common black shale)

Peybernes, C. (2016)- Upper Triassic mid-oceanic shallow water ecosystems of the Panthalassa Ocean: insights from the Sambosan Accretionary Complex, Southwest Japan. *Doct. Thesis Universite de Geneve, Sc 4914*, p. 1-229.

(online at: <https://archive-ouverte.unige.ch/unige:84250>)

(U Triassic carbonates of Sambosan Accretionary Complex in SW Japan: (1) limestone clasts embedded in volcanoclastic matrix with microbialite-rich Ladinian?- Lower Carnian reef biota; (2) sponge-dominated Late Carnian- Norian (Rhaetian?) reefs (built on top of basalts of low-latitude Panthalassic seamount).)

Paleogeographic affinities with S. Tethys. Limestone commonly as clasts in volcanoclastic breccias, probably mass-movement deposits from seamount collapse in mid-oceanic realm (very few ooids?)

Peybernes, C., J. Chablais & R. Martini (2015)- Upper Triassic (Ladinian?-Carnian) reef biota from the Sambosan Accretionary Complex, Shikoku, Japan. *Facies* 61, 4, p. 1-27.

(M-L Triassic (Ladinian?-Carnian) reef limestone from Sambosan Accretionary Complex, Shikoku Island, SW Japan, with scleractinian corals, calcified sponges, calcareous algae, foraminifera and microproblematica (older than previously identified reef limestones in Sambosan Complex))

Peybernes, C., J. Chablais, T. Onoue, G. Escarguel & R. Martini (2016)- Paleocology, biogeography, and evolution of reef ecosystems in the Panthalassa Ocean during the Late Triassic: Insights from reef limestone of the Sambosan Accretionary Complex, Shikoku, Japan. *Palaeogeogr. Palaeoclim. Palaeoecology* 457, p. 31-51.

(Ur Triassic sponge-coral- Tubiphytes reef limestone from Sambosan Accretionary Complex at Shikoku Island, Japan, with two types of reefs, Ladinian?- E Carnian and Late Carnian-Rhaetian? Strong paleobiogeographic affinity of Late Triassic W Panthalassa reef biota with those of S Tethys Ocean)

Peybernes, C., J. Chablais, T. Onoue & R. Martini (2016)- Mid-oceanic shallow-water carbonates of the Panthalassa domain: new microfacies data from the Sambosan Accretionary Complex, Shikoku Island, Japan. *Facies* 62, 4, p. 1-27.

(During Late Triassic carbonate platforms expanded on continental shelves and island arcs in Tethys realm and coeval mid-oceanic shallow-water environments of Panthalassa domain. U Triassic limestone of Sambosan Accretionary Complex, SW Japan, suggests typical Sambosan platform probably carbonate bank with submerged margins and mosaic of microfacies in platform interior instead of atoll-type platform)

Retallack, G.J. (1977)- Reconstructing Triassic vegetation of eastern Australasia; a new approach for the biostratigraphy of Gondwanaland. *Alcheringa* 1, 3-4, p. 247-278.

Rettori, R. (1995)- Foraminiferi del Trias inferiore e medio della Tetide: revisione tassonomica, stratigrafica ed interpretazione filogenetica. *Doct. Thesis, Dept. Geologie et Paleontologie, Universite de Geneve*, p. 1-147. *(In Italian; Unpublished)*

(Foraminifera of the lower and middle Trias of the Tethys: taxonomic review, stratigraphic and phylogenetic interpretation'. Revised taxonomy of E and M Triassic foraminifera from Tethys region)

Rigaud, S., R. Martini, R. Rettori & G.D. Stanley (2010)- Stratigraphic potential of the Upper Triassic benthic foraminifers. *Albertiana* 38, p. 34-39.

(online at: <http://archive-ouverte.unige.ch/unige:6737>)

(Summary of rich Carnian-Norian benthic foraminiferal assemblages in isolated limestone remnant of Panthalassa Ocean in N Wallowa Mts, Oregon. Foraminifera ~75% well-known Tethyan species, with comparable stratigraphic distribution, incl. Triasina oberhauseri, Aulotortus tumidus, A. communis, A. tenuis, etc. Also with Norian Heterastridium conglobatum)

Rigaud, S., R. Martini & R. Rettori (2013)- A new genus of Norian involutinid foraminifers: its morphological, biostratigraphic, and evolutionary significance. *Acta Palaeontologica Polonica* 58, 2, p. 391-405.

(online at: www.app.pan.pl/archive/published/app58/app20110072.pdf)

(New genus name Aulosina for Late Triassic (Norian- E Rhaetian) involutinid foraminifera Triasina oberhauseri, morphologically transitional between Aulotortus and (Rhaetian) Triasina hantkeni)

Schafer, P. & J.A. Grant Mackie (1998)- Revised systematics and palaeobiogeography of some Late Triassic colonial invertebrates from the Pacific region. *Alcheringa* 22, 1-2, p. 87-122.

(Revision of U Triassic colonial organisms from New Zealand, New Caledonia, Timor, etc. Heterastridium conglobatum, a hydrozoan of uncertain affinity and possible pelagic lifestyle, is known from Norian of Tethys (Hallstatt Lst in Alps, Middle East, etc.), Timor, New Caledonia, New Zealand and W North America. 'Monotrypella timorica' is calcareous demosponge)

- Stanley G.D. & T. Onoue (2015)- Upper Triassic reef corals from the Sambosan Accretionary Complex, Kyushu, Japan. *Facies* 61, 1, p. 1-27.
(*Ten U Triassic coral taxa, incl. Retiophyllia, from limestones of Sambosan accretionary complex of Japan, with remains of reefs and carbonate sediment deposited on Pacific volcanic atolls. High degree of endemism; some paleogeographic connection with W Tethys, Pamir Mts and Timor (Craspedophyllia ramosa Roniewicz)*)
- Thenius, E (1980)- Zum Problem der "szirkumpazifischen" und der Tethys-Verbreitung mariner Evertebraten in der Trias. *Ann. Naturhist. Museum Wien* 83, p. 285-301
(online at: www.landesmuseum.at/pdf_frei_remote/ANNA_83_0285-0301.pdf)
(*'On the problem of 'Circum-Pacific' and the Tethys distribution of marine invertebrates in the Triassic'. Figure 2 shows distribution of Norian bivalve Monotis, modified from Westermann (1973): in Indonesia with 'Arctic-W Pacific' M. ochotica and M. subcircularis in NW Kalimantan, with 'Tethyan' M. salinaria and M. subcircularis on Timor*)
- Vachard, D. & H. Fontaine (1988)- Biostratigraphic importance of Triassic foraminifera and algae from South-East Asia. *Revue Paleobiologie, Geneve*, 7, 1, p. 87-98.
(*Triassic forams from Thailand, NW Malay Peninsula, Indonesia (Sibaganding limestone of Sumatra, Seram), Philippines (Malajon Island), Myanmar, Vietnam*)
- Van Voorthuysen, J.H. (1940)- Beitrag zur Kenntnis des inneren Baus von Schale und Siphon bei triadischen Ammoniten. *Doct. Thesis, University of Amsterdam*, p. 1-143.
(*Study of internal structure of U Triassic ammonites from Timor (Tropitida, Placites spp., Cladiscitidae, Phylloceratidae and Arcestidae)*)
- Vozenin-Serra, C. (1971)- Notes sur des bois Mesozoïques et Cenozoïque du Viet-nam et du Cambodge. *Archives Geol. Vietnam* 14, p. 1-47.
(*Notes on the Mesozoic and Cenozoic woods from Vietnam and Cambodia*)
- Vozenin-Serra, C. (1977)- Contribution à l'étude de la paleoflore du Sud-est Asiatique (Cambodge, Laos, Vietnam). *These Doct. Etat., Université de Paris*, p. 1-310. (*Unpublished*)
(*Contribution to the study of the paleoflora of SE Asia (Cambodia, Laos, Vietnam)*)
- Vozenin-Serra, C. (1983)- Etat de nos connaissances sur les flores mesozoïques du Sud-Est Asiatique. *Comptes Rendus 108e Congres Nat. Soc. Savantes, Grenoble* 1983, 1, *Sciences de la Terre*, 2, p. 101-116.
(*Status of our knowledge of the Mesozoic floras of SE Asia'. Review of Triassic-Cretaceous floras, mainly from Vietnam, Thailand, etc.. For Indonesian region only mentions W Sarawak Krusin flora of Kon'no 1972, which is part of Late Triassic 'Dictyophyllum- Clathropteris floral province' of SW Pacific at end-Triassic (also known from Vietnam, Thailand, W Japan)*)
- Vozenin-Serra, C. (1984)- Etat de nos connaissances sur les flores du Paleozoïque superieur et du Mesozoïque du Sud-Est Asiatique. *Interpretations paleogeographiques. Mem. Soc. Geologique France* 147, p. 169-181.
(*Status of our knowledge of the Upper Paleozoic and Mesozoic floras of SE Asia and paleogeographic interpretations*)
- Westermann, G.E.G. (1973)- Species distribution of the world-wide Triassic pelecypod *Monotis* Bronn. *Proc. 22nd Int. Geological Congress, India 1964, Sect. 8*, p. 374-389.
- Zammit, M. (2010)- A review of Australasian ichthyosaurs. *Alcheringa* 34, 3, p. 281-292.
(*Ichthyosaur fossils recorded from M Triassic of Timor (Mixosaurus sp.), from U Triassic of New Caledonia (Shonisauru) and Lower Cretaceous of Australia and New Zealand (Platypterygius)*)
- Zaninetti, L. (1976)- Les foraminifères du Trias, essai de synthèse et corrélation entre les domaines mesogènes européens et asiatiques. *Rivista Italiana Paleontol. Strat.* 82, p. 1-258.
(*Synthesis of Triassic foraminifera and correlation between European and Asian domains*)

X.5. Paleozoic

Archbold, N.W. (1983)- West Australian Permian brachiopoda: their taxonomy, biostratigraphy and provincialism; with an appendix of published articles including a description of Permian brachiopoda from Irian Jaya, Indonesia. Ph.D. Dissertation, University of Melbourne, 2 vols.

Archbold, N.W. (2001)- Permian Productida of Australasia: palaeobiogeographical and palaeoclimatological implications. In: S.L. Long et al. (eds.) Brachiopods, chapter 37, CRC Press, p. 363-371.
(Permian Productid brachiopods few genera in common between Westralian (rel. warm, S Tethys margin) and Austrazean (colder water, mainly endemics, strong links with New Zealand) provinces)

Archbold, N.W. & T. Hogeboom (2000)- Subsurface Brachiopoda from borehole cores through the Early Permian sequence of the Carnarvon Basin, Western Australia: correlations with palynological biostratigraphy. Proc. Royal Soc. Victoria 112, p. 93-109.

Asama, K., A. Hongnusunthi, J. Iwai, E. Konono, S.S. Rajah & M. Veeraburas (1975)- Summary of the Carboniferous and Permian plants from Thailand, Malaysia and adjacent areas. In: T. Kobayashi & R. Toriyama (eds.) Geology and Palaeontology of Southeast Asia, University of Tokyo Press, 15, p. 77-101.
(online at: http://library.dmr.go.th/library/DMR_Technical_Reports/1975/324.pdf)
(Oldest plants in SE Asia from Lower Carboniferous: known from Malaysia only (Kuantan flora, with *Lepidodendron*, on E Malaya Block). Five known Permian floras. Permian Jambi flora of Sumatra greatest similarities with Artinskian-Kungarian Shansi Fm of N China. Four other U Permian Cathaysian floras with *Gigantopteris*: Linggiu and Jengka floras from E Malay Peninsula; Phetchabun and Loei floras of N Thailand. Permian plants from W New Guinea are Gondwana-type flora, but some apparent Cathaysian elements)

Belasky, P. (1994)- Biogeography of Permian corals and the determination of longitude in tectonic reconstructions of the Paleopacific region. Canadian Soc. Petrol. Geol. Spec. Publ., p. 621-646.
(Mainly focused on American terranes. South China was center of diversity of Permian Tethyan coral province and was located near Permian equator and W margin of Paleopacific Ocean)

BouDagher-Fadel, M.K. (2008)- The Palaeozoic larger benthic foraminifera: the Carboniferous and Permian. In: Evolution and geological significance of larger benthic foraminifera, Chapter 2, Developments in Palaeontology and Stratigraphy, Elsevier, 21, p. 39-118.
(General review of Paleozoic larger foraminifera, mainly Carboniferous-Permian fusulinids. End of Permian is major extinction event)

Bronnimann, P., J.E. Whittaker & L. Zaninetti (1978)- *Shanita*, a new pillared Miliocene foraminifera from the Late Permian of Burma and Thailand. Rivista Italiana Paleont. 84, p. 63-92.
(New late M- Late Permian pillared miliolid *Shanita amosi* from W margin of Shan Plateau, E Myanmar. Species mainly characteristic of M Permian of Sibumasu terranes?)

Cantrill, R.C. (2003)- Aspects of Ordovician conodonts and the stratigraphy of Thailand, Malaysia, and Tasmania. Ph.D. Thesis, University of Tasmania, p. 1-158
(online at: http://eprints.utas.edu.au/19158/1/whole_CantrillRobinCrawford2003_thesis.pdf)
(Incl. Ordovician conodonts from shallow tropical Lower Setul Lst from Langkawi Island (Tremadoc- Ashgill), Thung Song Lst of mainland Thailand and Ko Tarutao, Karmberg Lst of central S Tasmania)

Cantrill, R.C. & C. Burrett (2003)- The Greater Gondwana distribution of the Ordovician conodont *Panderodus nogamii* (Lee) 1975. Courier Forschungsinstitut Senckenberg 245, 1, p. 407-421.
(*Panderodus nogamii* (formerly *Scolopodus nogamii*), first described from N Korea, also in Lw Ordovician of Thailand, Malaysia, N and S China, Australia and Argentina. It ranged through M- early U Ordovician and was restricted to shallow water carbonates in tropical- subtropical paleolatitudes of Greater Gondwana)

- Chapman, F. & W.J. Parr (1937)- On the discovery of fusulinid foraminifera in the Upper Palaeozoic of Northwest Australia. *Victorian Naturalist* 53, p. 175-179.
(Describe presence of fusulinid genera *Verbeekina* and *Neoschwagerina* in NW Australia. These were later shown to be fish remains (Crespin 1958, Quilty 1975). (No fusulinid forams recorded yet from Australia, but present on Timor and possibly also in Birds Head of New Guinea; JTvG)
- Cleal, C.J. (2017)- A global review of Permian macrofloral biostratigraphical schemes. In: S.G. Lucas & S.Z. Shen (eds.) *The Permian Timescale*, Geol. Soc., London, Spec. Publ. 450, p.
(Incl. mention of Djambi flora of Sumatra, which It may be regarded as transitional flora with taxa characteristic of both Euramerica (e.g. medullosaleans and marattialean ferns) and Cathaysia (e.g. *Tingia*, *Cathaysiodendron*) realms)
- De D. Hornibrook, N. (1951)- Permian fusulinid foraminifera from the North Auckland Peninsula, New Zealand. *Trans. Royal. Soc. New Zealand* 79, 2, p. 319-321.
(online at: http://rsnz.natlib.govt.nz/volume/rsnz_79/rsnz_79_02_004230.pdf)
(Permian fusulinid foraminifera from limestone blocks associated with spilitic pillow lavas from Whangaroa Harbour, North Island, are first record of fusulines New Zealand. *Verbeekina*, *Neoschwagerina margaritae*, *Yabeina multiseptata* probably of M Permian (Wordian- Capitanian) age)
- De Neve, G.A. (1961)- Correlation of fusulinid rocks from southern Sumatra, Bangka, and Borneo, with similar rocks from Malaya, Thailand and Burma. *Proc. 9th Pacific Science Congress, Bangkok 1957, Geology and Geophysics* 12, p. 249. (Abstract only)
(Four occurrences of U. Paleozoic rocks with fusulinids in Indonesia, incl. Sumatra localities of limestone with *Neoschwagerina* and *Fusulina* spp. in Palembang area, S Sumatra, (3a) E of Bukit Pendopo, discovered by Keil and (3b) 18 km W of Palembang, in Sekaju area pebbles with fusulinids in Old Neogene conglomerate by Van Tuyn (1931))
- Dickins, J.M. (1956)- Permian pelecypods from the Carnarvon Basin, Western Australia. *Bureau Mineral Res. Geol. Geoph., Bull.* 29, p. 1-42.
(online at: https://s3-ap-southeast-2.amazonaws.com/corpdata/224/Bull_029.pdf)
- Dickins, J.M. (1957)- Permian pelecypods and gastropods from the Carnarvon Basin, Western Australia. *Bureau Mineral Res. Geol. Geoph., Bull.* 41, p. 1-75.
- Dickins, J.M. (1963)- Permian pelecypods and gastropods from Western Australia. *Bureau Mineral Res. Geol. Geoph., Bull.* 63, p. 1-203.
(online at: https://d28rz98at9flks.cloudfront.net/173/Bull_063.pdf)
(>150 species of pelecypods and 60 gastropods from Permian of Carnarvon Basin, and Canning/ Fitzroy Basins. Lower Permian four stages, lower stage characterized by 'Eurydesma fauna')
- Dzulkaflī, M.A., Basir Jasin & M.S. Leman (2016)- Taksonomi radiolaria dari genus *Pseudoalbeillella* berusia Perm dari Pos Blau, barat daya Kelantan, Semenanjung Malaysia. *Bull. Geol. Soc. Malaysia* 62, p. 13-21.
(online at: <https://gsmpublic.files.wordpress.com/2017/04/bgsm2016003.pdf>)
(Taxonomy of the Permian radiolarian genus *Pseudoalbeillella* from Pos Blau, SW Kelantan, Peninsular Malaysia. Seven species of Permian *Pseudoalbeillella* radiolarian genus in chert between Gua Musang and Cameron Highlands, SW of Kelantan. Association of *Pseudoalbeillella* with *Hegleria mammilla* indicates *Pseudoalbeillella globosa* Assemblage Zone (early M Permian; Roadian))
- Edgell, H.S. (2004)- Upper Devonian and Lower Carboniferous Foraminifera from the Canning Basin, Western Australia. *Micropaleontology* 50, p. 1-26.
(Foraminifera from U Devonian reef complex and overlying Lower Carboniferous in N Canning Basin of NW Australia 20 species of tournayellids and endothyrids. Striking resemblance to microfaunas of Russia, Kazakhstan and South China)

- Fortey, R.A. & L.R.M. Cocks (1986)- Marginal faunal belts and their structural implications, with examples from the Lower Palaeozoic. *J. Geol. Soc.*, London, 143, p. 151-160.
(*Record of Ordovician (Llanvirn) graptolites in Heluk River, E Irian Jaya (4°25'S, 139°17'E). Assigned to isograptid biofacies and taken as evidence of Ordovician ocean margin here. Oldest fossils in Indonesia ?*)
- Foster, C.B. (1979)- Permian plant microfossils of the Blair Athol coal measures, Baralaba coal measures, and basal Rewan formation of Queensland. *Geol. Survey Queensland, Publ. 372*, p. 1-244.
(*Permian palynology of Bowen Basin, NE Australia*)
- Foster, C.B. (1982)- Spore-pollen assemblages of the Bowen Basin, Queensland (Australia): their relationship to the Permian/Triassic boundary. *Review Palaeobotany Palynology 36*, p. 165-183.
(*Five palynofloral zones in M Permian- E Triassic of Bowen Basin, from old to young: 'Upper Stage 5' (= Dulhuntyipora zone of authors; commonly associated with Glossopteris); Playfordiaspora crenulata Zone (M Permian; = youngest coal seams and with last known Glossopteris), Protohaploxylinus microcorpus Zone (also with P. samoilovichii), Lunatisporites pellucidus Zone (also contains Falcisporites= Alisporites?; latest Permian or E Triassic?) and Protohaploxylinus samoilovichii Zone (= E Triassic). No range charts (Morante 1996 suggests Base P. microcorpus is ~Base E Triassic = base of Mt Goodwin shale in Bonaparte basin)*)
- Foster, C.B., G.A. Logan, R.E. Summons, J.D. Gorter & D.S. Edwards (1997)- Carbon isotopes, kerogen types and the Permian-Triassic boundary in Australia: implications for exploration. *The APPEA J. 37*, p. 472-489.
(*Permian- Triassic boundary characterized by massive extinction of marine fauna. In non-marine sections in E Australia, top of coal measures used as top Permian. Carbon isotopic ($\delta^{13}C$) shift of either organic matter or carbonates may be used to delimit P-T boundary*)
- Furnish, W.M. & B.F. Glenister (1970)- Permian ammonoid *Cyclolobus* from the Salt Range, West Pakistan. In: *Stratigraphic boundary problems: Permian and Triassic of West Pakistan*, p. 153-175.
(*On M Permian ammonite Cyclolobus, incl. occurrences from Basleo and Ruasnain, W Timor*)
- Gerth, H. (1931)- Porifera. In: B.G. Escher et al. (eds.) *Onze palaeontologische kennis van Nederlandsch Oost Indie*, Leidsche Geol. Mededelingen 5 (Feestbundel K. Martin), p. 115-119.
(*online at: www.repository.naturalis.nl/document/549435*)
(*Porifera (sponges) chapter in 'Our paleontological knowledge of the Netherlands East Indies'. Isolated sponge needles known from various formations in Indonesia, but whole sponges mainly known from Permian and Triassic of Timor. Permian of Timor 25 species, mainly siliceous sponges. Triassic of Timor mainly calcareous sponges. No figures*)
- Gould, R.E. (1975)- The succession of Australian Pre-Tertiary megafossil floras. *The Botanical Review 41*, 4, p. 453-483.
(*Review of Devonian- Cretaceous floras of Australia, incl. Devonian Baragwanathia flora, Permian Glossopteris flora, Triassic Dicroidium flora, etc.*)
- Hashemi, H. & G. Playford (2005)- Devonian spore assemblages of the Adavale Basin, Queensland (Australia): descriptive systematics and stratigraphic significance. *Revista Espanola Micropal. 37*, 3, p. 317-417.
- Hayasaka, I. (1917)- On the brachiopod genus *Lyttonia* with several Japanese and Chinese examples. *J. Geol. Soc. Tokyo 24*, p. 43-53.
- Heritsch, F. (1937)- Die rugosen Korallen und die Stratigraphie der Permformation. In: F. E. Suess Festschrift, *Mitteilungen Geol. Gesellschaft Wien*, 29, p. 307-328.
(*online at: www2.uibk.ac.at/downloads/oegg/Band_29_307_328.pdf*)
(*'The rugose corals and the stratigraphy of the Permian'. Review of Permian coral zonation, including discussion of M Permian Basleo coral fauna of Timor, as first described by Gerth (1921)*)

Heritsch, F. (1937)- Rugose Korallen aus dem Salt Range, aus Timor und aus Djoulfa, mit Bemerkungen über die Stratigraphie des Perms. Sitzungsberichte Akademie Wissenschaften, Wien, Math.-Naturw. Kl. Abt. 1, 146, p. 1-16.

(Rugose corals from the Salt Range (Himalaya), from Timor and from Djoulfa, with remarks on the stratigraphy of the Permian'. Brief descriptions of some Permian rugose corals)

Hess, H. (1999)- Permian. In: H. Hess et al. (eds.) Fossil crinoids, Cambridge University Press, p. 160-165.

(Timor Permian crinoid faunas most diverse and abundant in world, with 320 species described by Wanner, most new and unique to Timor. Permian crinoids from Australia cooler water faunas, with much lower diversity than Timor faunas)

Hill, D. (1939)- The Permian corals of Western Australia. J. Royal Soc. Western Australia 23, p. 43-64.

(13 species, most new, including one Verbeekia, genus first described from Timor)

Hill, D. (1939)- Further Permian corals from Western Australia. J. Royal Soc. Western Australia 27, p. 57-72.

(Description of 16 species from Perth, Canning and Carnarvon basins, including one Verbeekiella, genus first described from W Timor by Penecke 1908)

Hill, D. (1957)- The sequence and distribution of Upper Palaeozoic coral faunas. Australian J. Science 19, p. 42-61.

(Review of Permian corals, including Timor material)

Igo, H. (1984)- Summary of the Palaeozoic conodonts from Malaysia and Thailand. In: T. Kobayashi, R. Toriyama & W. Hashimoto (eds.) Geology and Palaeontology of Southeast Asia, University of Tokyo Press, 25, p. 289-293.

(Brief review of Paleozoic conodonts in SE Asia. Oldest conodonts are of Ordovician age, from S Thailand)

Ishii, K.I. (1975)- On the genus *Colaniella* and its biostratigraphic significance. J. Geosciences Osaka City University 19, 6, p. 107-138.

(online at: http://dlisv03.media.osaka-cu.ac.jp/infolib/user_contents/kiyo/DBe0190006.pdf)

Small latest Permian benthic foram genus Colaniella, generally associated with fusulinids (Palaeofusulina, Reichelina, Staffella) and small foraminifera (Pachyphloia, Globivalvulina, Agathammina, Endothyra, etc.). Common in Japan, S China, Himalayas, Mediterranean, also in Thailand, Malay Peninsula (Kelantan)

Ishii, K., Y. Okimura & K. Ichikawa (1985)- Notes on Tethys biogeography with reference to Middle Permian fusulinaceans. In: K. Nakazawa & J.M. Dickins (eds.) The Tethys: her paleogeography and paleobiogeography from Paleozoic to Mesozoic, Tokai University Press, Tokyo, p. 139-155.

Isozaki, Y. (2006)- Guadalupian (Middle Permian) giant bivalve Alatoconchidae from a mid-Panthalassan paleoatoll complex in Kyushu, Japan: a unique community associated with Tethyan fusulines and corals. Proc. Japan. Acad., B82, 1, p. 25-32.

(online at: <http://ea.c.u-tokyo.ac.jp/earth/Members/Isozaki/06Alatoconchidae.pdf>)

(Large Alatoconchidae bivalves in M Permian, with typical Tethyan fusulinids of Neoschwagerina and Lepidolina zones. Range up to end-Guadalupian extinction level)

Isozaki, Y. & D. Aljinovic (2009)- End-Guadalupian extinction of the Permian gigantic bivalve Alatoconchidae: end of gigantism in tropical seas by cooling. Palaeogeogr. Palaeoclim. Palaeoecology 284, p. 11-21.

(Large, thick Permian Alatoconchidae bivalves from E-M Permian shallow-marine carbonates in 9 areas in low-latitudes of Tethyan and Panthalassan domains, incl. Thailand, Malaysia, Philippines, and Japan. Always in association with large fusulines (Verbeekinidae) and/or rugose corals (Waagenophyllidae). This 'tropical trio' became extinct near Guadalupian-Lopingian boundary, probably due to temperature drop (Kamura cooling))

Jones, P.J. (2011)- Latest Devonian (Strunian) Ostracoda from the Buttons Formation, Bonaparte Basin, Northwestern Australia: Biostratigraphy, Palaeoecology and Palaeozoogeography. Mem. Assoc. Australasian Palaeont. 39, p. 261-322.

Kanmera, K., K. Ishii & R. Toriyama (1976)- The evolution and extinction patterns of Permian Fusulinaceans. In: T. Kobayashi & W. Hashimoto (eds.) Geology and Palaeontology of Southeast Asia, University of Tokyo Press, 17, p. 129-154.

(Review of parallel evolution of several lineages of fusulinid foraminifera, each with short periods of rapid diversification, interspersed with longer periods of relative stability. No sudden and catastrophic extinctions of fusulinaceans, but gradual waning of group through later Permian)

Kawamura, T. & H. Machiyama (1995)- A Late Permian coral reef complex, South Kitakami Terrane, Japan. Sedimentary Geology 99, p. 135-150.

(M Permian Iwaizaki Lst of S Kitakami Terrane in NE Japan, represents coral reef complex. With rugose and tabulate corals, solenoporacean algae, calcisponges, Tubiphytes, Archaeolithoporella, etc. High diversity unique among Permian reefs, most of which are mainly formed by calcisponges and calcareous algae. Coral reefs developed mainly around S China and Indochina continents, in tropics. Calcisponge reefs and Tubiphytes-algal crust reefs common in tropical- subtropical regions; stromatolite-bryozoan reefs in arid areas)

Kemp, E.M., B.E. Balme, R.J. Helby, R.A. Kyle, G. Playford & P.L. Price (1977)- Carboniferous and Permian palynostratigraphy in Australia and Antarctica: a review. BMR J. Australian Geol. Geophysics 2, p. 177-208.

(online at: www.ga.gov.au/corporate_data/80927/Jou1977_v2_n3_p177.pdf)

Kobayashi, F. (2005)- Permian foraminifers from the Itsukaichi-Ome area, West Tokyo, Japan. J. Paleontology 79, 3, p. 413-432.

(Continuous carbonate deposition of >70 My on Panthalassan buildup in Carboniferous-Permian limestone blocks in Itsukaichi- Ome area. Blocks and breccias resulted from collapse of seamount and tectonic mixing with trench-fill deposits in Jurassic accretionary complexes of Chichibu Terrane. 105 species of Permian and 65 species of Carboniferous forms in 24 fusulinacean zones)

Kobayashi, F. (2011)- Permian fusuline faunas and biostratigraphy of the Akasaka Limestone (Japan). Revue Paleobiologie, Geneve, 30, 2, p. 431-574.

(online at: www.ville-ge.ch/mhng/paleo/paleo-pdf/30-2/pal_30_2_01a.pdf)

(Mainly M Permian Akasaka Lst in C Japan with 63 species of fusulinids, divided into 7 zones: Parafusulina nakamigawai (U Kungurian), Cancellina nipponica (Lw Roadian), Neoschwagerina simplex (U Roadian), N. craticulifera (Lw Wordian), N. colaniae (U Wordian) Yabeina globosa (Capitanian) and Nanlingella suzukii Zone (Wuchiapingian))

Kobayashi, F. (2012)- Permian non-fusuline foraminifers of the Akasaka Limestone (Japan). Revue Paleobiologie, Geneve, 31, 2, p. 313-335.

(online at: www.ville-ge.ch/mhng/paleo/paleo-pdf/31-2/pal_31_2_03.pdf)

(Description of diverse Permian smaller foram assemblages with Tethyan affinities, from 250m thick Akasaka Lst, deposited on Permian Panthalassan seamount and emplaced as exotic block in Jurassic-E Cretaceous accretionary complexes of Mino Terrane in C Japan. Associated with rich fusulinid assemblages, with 7 zones.)

Kobayashi, F. (2012)- Middle and Late Permian foraminifers from the Chichibu Belt, Takachiho Area, Kyushu, Japan: implications for faunal events. J. Paleontology 86, p. 669-687.

(M-L Permian- Triassic carbonates (<100m thick?) with fusulinids in S Chichibu Belt of C Kyushu, originated as Panthalassan seamount, now in ?Jurassic accretionary complex. Permian (Guadalupian-Lopingian) and Triassic ages)

Kobayashi, F., C.A. Ross & J.R.P. Ross (2010)- Thailandina and Neothailandina, and their subfamily Thailandininae: an example of an invalid taxonomic group of Permian fusuline foraminifera. J. Paleontology 84, 2, p. 360-361.

(Thailandina and Neothailandina new genera of Permian fusulinids from Rat Buri Limestone proposed by Toriyama and Kanmera (1968), based on unique wall structure. However, thailandinid wall is secondary mineralization of calcite as seen in specimens of Staffellidae, Misellina, etc.)

Kobayashi, T. & T. Hamada (1978)- Three suites of Carboniferous trilobites in Southeast Asia. Proc. Japan Academy, B, 54, 3, p. 92-95.

(online at: https://www.jstage.jst.go.jp/article/pjab1977/54/3/54_3_92/_pdf)

(18 species of trilobites known from Carboniferous of SE Asia. Oldest assemblage in Langgon Red Beds in NW Malay Peninsula (Langgonbole, Waribole, Macrobole, etc.). Younger assemblage (Dinantian) with Linguphillipsia (= Phillipsia of older authors?))

Krassilov, V.A. (2000)- Permian phytogeographic zonation and its implications for continental position and climates. Paleontological Journal (Moscow) 34, Suppl. 1, p. 587-598.

(online at: <http://paleobotany.ru/pdf/Krassilov%202000%20-%20Permian%20Phytogeographic%20Zonation%20and%20Its.pdf>)

(Revised scheme of Permian plant geography. Contrary to prevalent opinion views Sumatra (Jambi) and West Irian Jaya floras as 'mixed Eurogondwana' floras, and mapped in 'subtropical humothermic belt' with 'Gondwanan' India- Australia floras)

Krijnen, W.F. (1931)- Palaeozoic and Mesozoic Gastropoda, Lamellibranchiata and Scaphopoda. In: B.G. Escher et al. (eds.) De palaeontologie en stratigraphie van Nederlandsch Oost-Indie, Leidsche Geol. Mededelingen 5 (K. Martin Memorial Volume), p. 164-205.

(online at: www.repository.naturalis.nl/document/549430)

(Extensive listings of Paleozoic- Mesozoic molluscs (gastropods, bivalves) known from Indonesia in 1931. No figures)

Laveine, J.P., S. Zhang & Y. Lemoigne (2003)- Additional documentation to the knowledge of the Late Palaeozoic floras of east and southeast Asia: general conclusions and references. Revue Paleobiologie, Geneve, 22, p. 831-849.

(Floras suggest that Indochina, E Malaysia, and S and N China were closely connected during Carboniferous)

Lee, J.S. (1931)- Distribution of the dominant types of the fusulinoid foraminifera in the Chinese Seas. Acta Geologica Sinica (Bull. Geol. Soc. China) 10, p. 273-290.

Leven, E.Y. (1993)- Main events in Permian history of the Tethys and fusulinids. Stratigraphy Geol. Correlation 1, 1, p. 59-75.

Leven, E.Y. (1997)- Permian stratigraphy and fusulinida of Afghanistan with their paleotectonic implications. Geol. Soc. America (GSA), Spec. Paper 316, p. 1-134.

(Complete Permian section in Afghanistan, with rich fusulinid faunas: 58 genera, 282 species, incl. 41 new. Asselian- Sakmarian in N Afghanistan and N Pamir tropical shelf carbonates and fusulinid assemblages. Age-equivalent rocks of S Afghanistan- S Pamir all siliciclastic, lacking fusulinids, with cold-water macrofaunas typical of Peri-Gondwanan seas. In S Afghanistan first fusulinids in Sakmarian, low diversity, mainly species of Pseudofusulina. By late Yahtashian- Bolorian (late E Permian= ~late Artinskian-Kungurian; JTvG), due to milder climate and widespread transgression, distinction between S and N fusulinid assemblages starts to disappear. In C-S Afghanistan occurrences of Monodioxodina in Bolorian (= Kungurian; late E Permian), Neoschwagerina- Verbeekina- Sumatrana in Murgabian-Midian (M Permian) and miliolid Shanita amosi-Hemigordiopsis renz in Midian-Dzhulfian (M-L Permian))

Leven, E.J. & H.J. Campbell (1998)- Middle Permian (Murgabian) fusuline faunas, Torlesse Terrane, New Zealand. New Zealand J. Geol. Geophysics 41, p. 149-156.

(online at: www.tandfonline.com/doi/pdf/10.1080/00288306.1998.9514799)

(Two fusuline foram limestone localities in Torlesse Gp of Canterbury, S Island, New Zealand. Limestones associated with volcanics and hemipelagic sediments which appear 'allochthonous' (fortuitous accumulations

associated with oceanic seamounts). Low diversity fauna dominated by *Parafusulina* (*Skinnerella*) *japonica*, also *Parafusulina* (*S.*) *cuniculata*. Fauna correlates best with late M Permian (E Murgabian) sequences of Tethyan affinity in Eurasia)

Leven, E.J. & J.A. Grant-Mackie (1997)- Permian fusulinid foraminifera from Wherowhero Point, Orua Bay, Northland, New Zealand. *New Zealand J. Geol. Geophysics* 40, p. 473-486.

(online at: www.tandfonline.com/doi/pdf/10.1080/00288306.1997.9514777)

(Abundant, diverse E-M Midian fusulinids (24 species) from Waipapa Terrane, N Island. Probably East Paleotethys-Panthalassa seamount fauna. Key species *Neoschwagerina margaritae*, *Yabeina* spp, *Reichelina* sp, *Lepidolina shiraiwensis*, etc. Much more diverse than Murgabian faunas from Torlesse, S Island)

Long, J.A. (1990)- Late Devonian Chondrichthyans and other microvertebrate remains from Northern Thailand. *J. Vertebrate Paleontology* 10, 1, p. 59-71.

(Microvertebrates from limestones near Burmese border town of Mae Sam Lap, N Thailand, dated as Late Famennian by conodonts. Fauna contains chondrichthyans, several types of chondrichthyan scales, actinopterygian scales and teeth, and rare acanthodian scales. Taxa suggest close affinity between Shan-Thai, East Gondwana, and S China Terranes at end of Devonian)

Macurda, D.B. (1983)- Systematics of the fissiculate Blastoidea. *University of Michigan Papers on Paleontology*, Ann Arbor, 22, p. 1-291.

(Strictly taxonomic review of Permian blastoids, much of which based on Timor material. No location info, biostratigraphic succession, etc.)

Mamet, B. (1974)- Une zonation par foraminifères du Carbonifère inférieur de la Téthys Occidentale. *Compte Rendus 7th Int. Congrès Stratigraphie et de Géologie du Carbonifère*, Krefeld, 1971, 3, p. 391-408.

(A foraminifera zonation of the Lower Carboniferous of the Western Tethys')

Mamet, B.L. & E. Saurin (1970)- Sur la microfaune des foraminifères carbonifères du Sud-est asiatique. *Bull. Soc. Géologique France* (7) 12, 2, p. 356-363.

(On the Carboniferous foraminiferal microfauna of Southeast Asia'. Eight Carboniferous foram assemblages, similar to Europe/ Asia, described from Laos, Vietnam, Malaysia)

Martodjojo, Sujono (1964)- A study of the superfamily Adrianitaceae. *Contr. Dept. Geology, Institute Technology Bandung* 58, p. 75-81.

(Two groups recognized in ?Permian ammonoid family, from Timor?)

McLoughlin, S. (1990)- Some Permian glossopterid fructifications and leaves from the Bowen Basin, Queensland, Australia. *Rev. Palaeobotany Palynology* 62, p. 11-140.

McLoughlin, S. (1993)- Glossopterid megafossils in Permian Gondwanic non-marine biostratigraphy. In: R.H. Findlay et al. (eds.) *Proc. Gondwana Eight- Assembly, evolution and dispersal*, Balkema, Rotterdam, p. 253-264.

(Review of Permian *Glossopteris* floras, characteristic of Gondwana. NE Australian Strong provincialism: Bowen Basin no *Glossopteris* species in common with Indian or South African successions))

McLoughlin, S. (1995)- New records of *Bergiopteris* and glossopterid fructifications from the Permian of Western Australia and Queensland. *Alcheringa* 19, 3, p. 175-192.

Metcalf, I. & Y. Isozaki (2009)- Current perspectives on the Permian-Triassic boundary and end-Permian mass extinction: Preface. *J. Asian Earth Sci.* 36, p. 407-412.

(End-Permian mass extinction now dated at 252.6 ± 0.2 Ma (U-Pb) and Permian-Triassic GSSP level is dated by interpolation at 252.5 Ma. Conodonts evolved rapidly in first 1 million years following mass extinction leading to high-resolution conodont zones. Nature of double-phased Late Permian extinction (at Guadalupian-

Lopingian boundary and P-T boundary, linked to large igneous provinces, suggests superplume activity that involved geomagnetic polarity change and massive volcanism)

Morante, R. (1996)- Permian and early Triassic isotopic records of carbon and strontium in Australia and a scenario of events about the Permian-Triassic boundary. *Historical Biology* 11, p. 289-310.
*(Organic carbon in wells in Australian basins showed negative $\delta^{13}C$ excursions of 6-10%, believed to correlate with negative $\delta^{13}C$ excursion in marine carbonates at Permian-Triassic boundary around world. Shift consistently near base of miospore *Protohaploxylinus microcorpus* Zone of Helby et al. (1987))*

Nestell, M.K. & G.P. Pronina (1997)- The distribution and age of the genus *Hemigordiopsis*. In: C.A. Ross et al. (eds.) *Late Paleozoic foraminifera; their biostratigraphy, evolution, and paleoecology; and the mid-Carboniferous boundary*, Cushman Found. Foraminiferal Research, Spec. Publ. 36, 3, p. 105-110.
*(M-L Permian foraminifer *Hemigordiopsis* appears to be characteristic of 'Cimmerian' (includes *Sibumasu*) terranes that rifted off N Gondwana margin in Permian, now in belt from Mediterranean to Peninsular Thailand and W Malay Peninsula)*

Newell Arber, E.A. (2005)- Catalogue of the fossil plants of the *Glossopteris* flora in the Department of Geology, British Museum (Natural History); being a monograph of the Permo-Carboniferous flora of India and the Southern Hemisphere. British Museum (Natural History). Dept. of Geology, London, p. 1-255.
(online at: [www.books.google.com/...](http://www.books.google.com/))
(Old monograph on Carboniferous-Permian plant fossils of Gondwanaland (mainly India))

Nicoll, R.S. & I. Metcalfe (2011)- The Permian conodont biostratigraphy of Australia and New Zealand. In: XVII Int. Congress Carboniferous and Permian, Perth 2011, Geol. Survey W Australia, Record 2011/20, p. 96.
(Abstract only)
*(Summary of Permian conodont studies. High paleolatitude Permian conodont faunas of W Australia dominated by *Vjalovognathus* with occasional *Hindeodus*, *Mesogondella* and *Sweetognathodus*. Lower latitude faunas from Timor, Pakistan, Nepal/Tibet higher diversity, attributed to warmer temperatures)*

Okimura, Y., K. Ishii & C. A. Ross (1985)- Biostratigraphical significance and faunal provinces of Tethyan Late Permian smaller foraminifera. In: K. Nakazawa & J.M. Dickins (eds.) *The Tethys: her paleogeography and paleobiogeography from Paleozoic to Mesozoic*, Tokai University Press, Tokyo, p. 115-138.

Ota, A. & Y. Isozaki (2006)- Fusuline biotic turnover across the Guadalupian-Lopingian (Middle-Upper Permian) boundary in mid-oceanic carbonate buildups: biostratigraphy of accreted limestone in Japan. *J. Asian Earth Sci.* 26, p. 353-368.
*(Fusulinid biostratigraphy of upper M- lower U Permian shallow-water limestones at Kamura and Akasaka in SW Japan. Both sections represent seamount carbonate buildups developed on basaltic basement in mid-oceanic environment. Sections contain abundant Tethyan fusulines and record extinction of M Permian large-sized fusuline family *Verbeekinae* at Guadalupian- Lopingian boundary in mid-Panthalassa, similar to shallow-water Tethyan shelf areas)*

Palmieri, V. (1994)- Permian Foraminifera in the Bowen Basin, Queensland. *Queensland Geology* 6, p. 1-125.

Palmieri, V., C.B. Foster & E.V. Bondareva (1994)- First record of shared species of Late Permian small foraminiferids in Australia and Russia: time correlations and plate reconstructions. *AGSO J. Australian Geol. Geophysics* 15, p. 359-365.
(online at: https://d28rz98at9flks.cloudfront.net/81403/Jou1994_v15_n3_p359.pdf)
(At least 12 species of small calcareous foraminiferids from early Late Permian assemblages from Arctic Russia also occur in assemblages from E Australian Ingelara Fm of Bowen Basin)

Pia, J. (1937)- Die wichtigsten Kalkalgen des Jungpalaeozoicums und ihre geologische Bedeutung. *Comptes Rendus 2nd Congres Avancement Etudes de Stratigraphie du Carbonifere*, Heerlen 1935, 2, p. 765-856.

(‘The most important calcareous algae from the Late Paleozoic and their stratigraphic significance’. Incl. description of M Permian algae assemblages from Sumatra (Fontaine 1989))

Pickett, J.W. (2011)- Fossil corals of Australia, New Zealand, New Guinea and Antarctica: bibliography and index. Mem. Assoc. Australasian Palaeont. 40, p. 1-189.

(Bibliography and index of published fossil coral research from Antarctica, Australia, New Guinea and New Zealand, covering 1343 species names, 607 genus names and 639 references)

Posthumus, O. (1931)- Plantae. In: B.G. Escher et al. (eds.) Onze palaeontologische kennis van Nederlandsch Oost Indie, Leidsche Geol. Mededelingen 5 (Feestbundel K. Martin), p. 485-508.

(online at: www.repository.naturalis.nl/document/549382)

(Listings of Permian- Pleistocene fossil plant and calcareous algae species from Indonesia, as known in 1931: mainly from Permian of Sumatra and Tertiary of Java, Sumatra, Kalimantan)

Ross, J. (1978)- Biogeography of Permian ectoproct bryozoa. Palaeontology 21, 2, p. 341-356.

(online at: <http://palaeontology.palass-pubs.org/pdf/Vol%2021/Pages%20341-356.pdf>)

(Overview of Permian bryozoa distribution, incl. comments on Timor assemblages)

Segroves, K.L. (1969)- Saccate plant microfossils from the Permian of Western Australia. Grana Palynologica 9, p. 174-227.

(online at: www.tandfonline.com/doi/pdf/10.1080/00173136909436435)

(29 species of saccate spores from Permian of N Perth Basin)

Shen, S.Z. (2018)- Global Permian brachiopod biostratigraphy: an overview. In: S.G. Lucas & S.Z. Shen (eds.) The Permian timescale, Geol. Soc., London, Special Publ. 450, p. 289-320.

(Permian brachiopod successions in five major paleobiogeographical realms. For Gondwanaland and peri-Gondwanan regions including Cimmerian blocks, Bandoproductus, Cimmeriella characteristic of Cisuralian (E Permian). Lower Permian brachiopods from Mengkareng Fm in Sumatra (Crippa et al. 2014) viewed as Sakmarian in age and grouped with S Thailand- Malaysia Cimmerian/ Sibumasu faunas)

Shen, S.Z. & G.R. Shi (1996)- Diversity and extinction patterns of Permian Brachiopoda of South China. Historical Biology 12, p. 93-110.

Shen, S.Z. & G.R. Shi (2002)- Paleobiogeographical extinction patterns of Permian brachiopods in the Asian-western Pacific region. Paleobiology 28, p. 449-463.

(End-Permian extinction eliminated ~90% of genera and 95% of species of Brachiopoda. End-Guadalupian extinction less profound)

Shen, S.Z., H. Zhang, W.Z. Li, L. Mu & J.F. Xie (2006)- Brachiopod diversity patterns from Carboniferous to Triassic in South China. Geological Journal 41, p. 345-361.

(Carboniferous to Triassic includes (1) 100 My-long stable biodiversity stage from Late Carboniferous- late Middle Permian, with highly diverse brachiopod faunas; (2) end-Permian most severe mass extinction in Phanerozoic; (3) bleak stage in E Triassic and (4) rapid recovery stage in M Triassic)

Smith, T.E., T. Bernecker, S. Bodorkos, J. Gorter, L. Hall, T. Hill, E. Holmes, A. Kelman, K. Khider, J. Laurie et al. (2017)- The impact of recalibrating palynological zones to the chronometric timescale: revised stratigraphic relationships in Australian Permian and Triassic hydrocarbon-bearing basins. AAPG/SEG 2017 Int. Conf. Exhibition, London, Search and Discovery Art. 51443, 9p. *(Poster Presentation)*

(online at: http://www.searchanddiscovery.com/documents/2017/51443smith/ndx_smith.pdf)

(Recalibration of Permian and Triassic spore-pollen palynozones and numerical ages from high-precision radiometric dating of tuffs)

Smith, T.E. & D. Mantle (2013)- Late Permian palynozones and associated CA-IDTIMS dated tuffs from the Bowen Basin, Australia. Geoscience Australia Record 2013/46, p. 1-39.

(online at: https://d28rz98at9flks.cloudfront.net/72990/Rec2013_046.pdf)

(Calibration of Late Permian palynozones with radiometric ages of associated tuffs. *Dulhuntyispora parvithola* zone APP5 spans >5 Myrs (~254.4- 263 Ma). Latest Permian *Playfordiaspora crenulata* and *Protohaploxypinus microcorpus* palynozones APP6 between ~252-254.4 Ma) (see also Laurie et al. 2016)

Stehli, F.G. (1961)- New genera of Upper Paleozoic Terebratuloids. *J. Paleontology* 35, 3, p. 457-466.

(New genus and species name *Timorina broili* for small terebratulid brachiopod, originally described as *Notothyris minuta* by Broili (1916) from M Permian of Basleo, Timor)

Stephenson, M.H. (2008)- A review of the palynostratigraphy of Gondwanan Late Carboniferous to Early Permian glaucigenic successions. In: C.R. Fielding et al. (eds.) *Resolving the Late Paleozoic Ice Age in time and space*, Geol. Soc. America (GSA), Spec. Paper 441, p. 317-330.

(E Permian W Australian, Arabian and S African sequences can be correlated using taxa like *Converrucosporites confluens* and *Pseudoreticulatispora pseudoreticulata*. *C. confluens* and *P. pseudoreticulata* zones considered to be Sakmarian, and *Striatopodocarpites fusus* zone is Artinskian. Difficult to correlate Gondwana palynological assemblages precisely to Russian type areas because of scarcity of marine fauna in Gondwana and different paleolatitudes, so Carboniferous-Permian boundary cannot be precisely correlated in Gondwana by palynology)

Sun, K. (1999)- Origin, evolution and extinction of Cathaysia flora. *Chinese Science Bull.* 44, 2, p. 100-108.

(Carboniferous- Permian Cathaysia flora mainly distributed in China, Korea, Japan, Laos, Thailand, Sumatra and Malaysia. Mixed Cathaysian and Gondwanan flora known in S Tibet, Kashmir, Turkey and New Guinea. Cathaysian flora developed from global uniform E Carboniferous *Lepidodendropsis* flora)

Taboada, A.C., A.J. Mory, G.R. Shi, D.W. Haig & M.K. Pinilla (2015)- An Early Permian brachiopod-gastropod fauna from the Calytrix Formation, Barbwire Terrace, Canning Basin, Western Australia. *Alcheringa* 39, 2, p. 207-223.

(Small brachiopod-gastropod fauna from core near base of Calytrix Fm in glacially-influenced Grant Group on Barbwire Terrace, Canning Basin. Age probably Sakmarian, but possibly as old as Asselian. With palynomorphs of *Pseudoreticulatispora confluens* Zone)

Teichert, C. & B.F. Glenister (1952)- Fossil Nautiloid faunas from Australia. *J. Paleontology* 26, p. 730-752

Tien, Nguyen D. (1989)- *Sphairionia sikuoides* gen. et sp. nov., a Permian incertae sedis organism: *Sphairionia*. In: *Comptes Rendus 11th Congress Carboniferous Stratigraphy and Geology, Beijing 1987*, 3, p. 73-78.

(Description of 'small bubble', either lagenid foraminifer or charophyte algae from M Permian of W Thailand and Cambodia. Also already described in 1988 'Note on two 'Incertain Sediments' from the Permian of West Thailand', *CCOP Tech. Bull.* 20. (also reported from Thailand and other areas of Tethys; Pronina 1996))

Tong, J. & G.R. Shi (2000)- Evolution of Permian and Triassic foraminifera in South China. In: H. Yin, J.M. Dickins et al. (eds.) *Permian-Triassic evolution of Tethys and Western Circum-Pacific, Developments in palaeontology and stratigraphy* 18, Elsevier, p. 291-307.

(Paper mainly on stratigraphic distribution of foram genera. No paleobiogeography, no fossil illustrations)

Tripathi, C. & G. Singh (1985)- Carboniferous flora of India and its contemporaneity in the world. *Comptes Rendus Dixieme Congres Int. Stratigraphie et de Geologie du Carbonifere*, Madrid 1983, p. 295-306.

Tripathi, C. & G. Singh (1987)- Gondwana and associated rocks of the Himalaya and their significance. In: G.D. McKenzie (ed.) *Gondwana Six: Stratigraphy, Sedimentology, and Paleontology*, 6th Int. Gondwana Symposium, Columbus, Ohio, 1985, Amer. Geophys. Union (AGU), Geophys. Monogr. Series 41, p. 195-205.

(Along N margin of India Plate (Permian rift margin) two Permian Gondwanan domains, both with widespread diamictite, *Glossopteris* flora and *Eurydesma* fauna: (1) (S) Lesser Himalaya belt with Permian Volcanics directly on Precambrian/ Cambrian basement and with *Glossopteris* flora; (2) (N) Tethyan Himalaya belt (Salt Range-Ladakh- Thakkola- Lingshi) with more complete Cambrian- Permian section, more marine influence)

(limestones) and mixed Gondwana-Cathaysia flora. In Kashmir Basin Artinskian? Mamal Fm above Panjal Volcanics with rich E Permian flora, incl. Gondwanan *Glossopteris*, endemic *Gangamopteris kashmirensis*, also common 'Cathaysian' elements like *Taeniopteris*, *Rajahia*, *Lobatanularia*, *Gingkophyllum* and *Parasphenophyllum*. Also endemic vertebrate fauna. In Karakorum Basin (= Lhasa or Qiantang Block?) *Fenestella* Shale, overlain by diamictite, *Gangamopteris* plant bed and fusulinid lst)

Vachard, D. (2016)- Macroevolution and biostratigraphy of Paleozoic foraminifers. In: Stratigraphy and Timescales, 1, Chapter 4, Elsevier, p. 257-323.

Vachard, D. (2017)- Permian smaller foraminifers: taxonomy, biostratigraphy and biogeography. In: S.G. Lucas & S.Z. Shen, The Permian Timescale, Geol. Soc., London, Spec. Publ. 450, p.

Vachard, D. & J. Ferriere (1991)- Une association a *Yabeina* (foraminifere fusulinoide) dans le Midien (Permien superieur) de la region de Whangaroa (Baie d'Orua Nouvelle-Zelande). *Revue Micropaleontologie* 34, p. 201-230.

(*A Yabeina association (fusulinid foraminifera) in the Midian (U Permian) of the Whangaroa region (Orua Bay, New Zealand'. Microfauna/ microflora from exotic limestone blocks embedded in volcanic and volcano-sedimentary units in Whangaroa area, New Zealand. Algae dominated by Tubiphytes. Smaller foraminifera common Tethyan species. Fusulinids mainly Reichelina, Codonofusiella, Chusenella, also Yabeina parvula. Outcrop is terrane that belonged to Cathaysia and which had migrated 3000 km S across Paleopacific)*)

Vachard, D., L. Pille & J. Gaillot (2010)- Palaeozoic foraminifera: systematics, palaeoecology and responses to global changes. *Revue Micropaleontologie* 53, p. 209-254.
(*Review of biostratigraphy and facies models of Paleozoic forams*)

Van Gorsel, J.T. (2014)- An introduction to Paleozoic faunas and floras of Indonesia. *Berita Sedimentologi* 31, p. 6-26.

(*online at: www.iagi.or.id/fosi/files/2014/12/BS31-Biostratigraphy_SEAsia_Part3.pdf*)

(*Review of Ordovician-Permian fossils of Indonesia. E Paleozoic faunas mainly in W Papua. Late Paleozoic (mainly Permian) faunas and floras more widespread, mainly on Sumatra, Timor and W Borneo. Paleozoic fossils from Indonesia are mainly marine organisms, but non-marine Permian plant fossils are also known from Sumatra and West Papua. Some assemblages or species signify 'low-latitude Tethyan' settings; others have 'anti-tropical/subtropical Tethyan' or 'Gondwanan' affinities*)

Von Staff, H. (1909)- Beitrage zur Kenntnis der Fusuliniden. *Neues Jahrbuch Mineral. Geol. Palaont., Beilage Band 27*, p. 461-508.

(*'Contribution to the knowledge of the fusulinids'. Permian larger foram Schwagerina verbeeki Geinitz from Padang Highlands, W Sumatra should be classified in new genus Verbeekina (see also Thompson 1936; Genus name still used today, and is 'Tethyan' species, also common in S China, Thailand, Tibet, Crimea, etc.; JTvG)*)

Wang, Y., K. Ueno, Y.C. Zhang & C.Q. Cao (2010)- The Changhsingian foraminiferal fauna of a Neotethyan seamount: the Gyanyima Limestone along the Yarlung-Zangbo Suture in southern Tibet, China. *Geological Journal* 45, p. 308-318.

(*Late Guadalupian- Triassic limestone blocks along Yarlung-Zangbo Suture (between Lhasa Block to N and Himalaya Plate in S), probably remnants of Neotethyan seamounts. Gyanyima Lst with diverse latest Permian foraminiferal fauna dominated by Reichelina pulchra, Colaniella parva and Dilatofusulina. Can be correlated with Palaeofusulina sinensis Zone in E Tethys. With common corals, mainly Waagenophyllum, Ipciphyllum, etc. Composition of fauna suggests paleogeographic position at lower latitudes in Neotethys (NB: = Mesotethys of other authors?; JTvG)*)

Waterhouse, J.B. (1973)- Permian brachiopod correlations for South-East Asia. In: B.K. Tan (ed.) *Proc. Reg. Conference on the Geology of SE Asia, Kuala Lumpur 1972*, Bull. Geol. Soc. Malaysia 6, p. 187-210.

(*online at: <https://gsmpubl.files.wordpress.com/2014/09/bgsm1973014.pdf>*)

(Correlations of Permian brachiopod assemblages in Indonesia (Timor), Malaysia, Thailand, Vietnam, Burma, etc., using fusulinids and ammonoids)

Xu, G. & R.E. Grant (1994)- Brachiopods near the Permian-Triassic Boundary in South China. *Smithsonian Contr. Paleobiology* 76, p. 1-68.

(online at: www.sil.si.edu/smithsoniancontributions/paleobiology/pdf_hi/SCtP-0076.pdf)

(Latest Permian(Changxingian) in S China with Cathaysian Tethyan brachiopod assemblage of 164 species, incl. *Leptodus* spp.. After major extinction event 20 species in E Triassic (lower Griesbachian))

Yabe, H. & S. Hanzawa (1931)- Palaeozoic and Mesozoic foraminifera. In: B.G. Escher et al. (eds.) *De palaeontologie en stratigraphie van Nederlandsch Oost-Indie* (Feestbundel K. Martin), Leidsche Geol. Mededelingen 5, p. 23-34.

(online at: www.repository.naturalis.nl/document/549381)

(Listings of Paleozoic- Mesozoic foraminifera reported from Indonesia: Carboniferous- Permian (Sumatra, Timor, Leti, Luang), Triassic- Jurassic (Sumatra) and Cretaceous (Sumatra, Java, Borneo, Timor, Roti, Ceram, etc.))

Yancey, T.E. & D.W. Boyd (1983)- Revision of the Alatoconchidae: a remarkable family of Permian bivalves. *Palaeontology* 26, p. 497-520.

(online at: http://cdn.palass.org/publications/palaeontology/volume_26/pdf/vol26_part3_pp497-520.pdf)

(Review of *M Permian large, thick-walled bivalves, including material from Kinta Valley, Malay Peninsula (H.S. Lee mine, etc.). Oldest known alatoconchids Shikamaia (Tanchintongia) perakensis and Saikraconcha (Dereconcha) kaparensis, of probable E Artinskian age. Typical Tethyan fauna, adapted to warm-water, carbonate bank environments*)

Zaninetti, L., J. Whittaker & D. Altiner (1979)- The occurrence of *Shanita amosi* Bronnimann, Whittaker and Zaninetti (Foraminifera) in the Late Permian of the Tethyan region. *Notes Laboratoire Paleontologie Universite de Geneve* 5, 1, p. 1-7.

(Late Permian small miliolid foraminifer *Shanita* appears to be marker for M-L Permian of N Gondwana margin; see also Jin & Yang, 2005)

Zhou, W., M. Wan, R.A. Koll & J. Wang (2017)- Occurrence of the earliest gigantopterid from the basal Permian of the North China Block and its bearing on evolution. *Geological J.*, 2017, p. 1-10. (in press).

(Gigantopterid plants characteristic floral element in Permian Cathaysian floras. However, in China oldest known occurrences later than in N America (Artinskian) and Sumatra/Indonesia (Asselian-Sakmarian). New gigantopterid *Gigantonoclea cf. mira* from basal Permian (Asselian) strata in N China Block represents oldest unequivocal evidence for gigantopterids)

X.6. Quaternary Hominids, Mammals and associated stratigraphy

Aimi, M. (1989)- A mandible of *Sus stremmi* Koenigswald 1933 from Cisaat, Central Java, Indonesia. Geol. Res. Dev. Centre (GRDC), Bandung, Seri Paleontologi 6, p. 4-10.

(New mandible (jaw) of pig species from coarse sands of Kali Glagh Fm at Cisaat, Bumiayu region, C Java)

Aimi, M. & F. Aziz (1985)- Vertebrate fossils from the Sangiran dome, Mojokerto, Trinil and Sambungmacan, Indonesia. In: N. Watanabe & D. Kadar (eds.) Quaternary geology of the hominid bearing formations in Java. Geol. Res. Dev. Centre (GRDC), Bandung, Spec. Publ. 4, p. 155-198.

Aimi, M. & Sudijono (1979)- On the problematical species *Aceratherium boschi* von Koenigswald 1933. Bull. Geol. Res. Dev. Center 1, p. 37-45.

(online at: http://www.rhinosourcecenter.com/pdf_files/149/1498297867.pdf)

*(On latest Miocene?-Pliocene? rhinoceros molar from calcarenite in upper Halang Beds in Cisande River, W Java. First described by Von Koenigswald in 1933. Here believed to be referable to *Rhinoceros sondaicus* and age control is questionable)*

Allen, H. (1991)- Stegodonts and the dating of stone tool assemblages in island S.E. Asia. Asian Perspectives 30, p. 243-266.

(online at: <http://hl-128-171-57-22.library.manoa.hawaii.edu/bitstream/10125/16998/1/AP-v30n2-243-265.pdf>)

*(Stone tools found associated with *U* Pleistocene-Holocene *Homo* fossils on Java (Ngandong, Wajak, etc.), but not with any certainty with *M* Pleistocene *Homo erectus*)*

Amano, N., A.M. Moigne, T. Ingicco, F. Semah, R. DueAwe & T. Simanjuntak (2016)- Subsistence strategies and environment in Late Pleistocene- Early Holocene Eastern Java: evidence from Braholo Cave. Quaternary Int. 416, p. 46-63.

(Climatic shifts during Pleistocene- Holocene transition in Island SE Asia resulted in changes in landscapes, impacting vertebrate community composition and human subsistence economies. Braholo Cave in E Java with mainly arboreal fauna in Late Pleistocene - E-M Holocene, but older cave deposits dominated by animal taxa associated with open environments (bovids, cervids). Reflects forest expansion at onset of Holocene)

Ambrose, S.H. (1998)- Late Pleistocene human bottlenecks, volcanic winter, and differentiation of modern humans. J. Human Evolution 34, p. 623-651.

(Toba eruption on Sumatra may have caused human population bottleneck and modern human races may have differentiated abruptly only 70,000 years ago (see also commentary by Gathorne-Hardy 2003))

Ambrose, S.H. (2003)- Did the super-eruption of Toba cause a human population bottleneck? Reply to Gathorne-Hardy and Harcourt-Smith. J. Human Evolution 45, p. 231-237.

*(~73 ka Toba eruption larger than previously estimated, and caused millennium of coldest temperatures of *U* Pleistocene. Genetic studies suggest real population bottleneck during first half of last glacial period, but no mass extinctions. We are descendants of few small groups of tropical Africans who united in face of adversity)*

Anderson, C. (1937)- Palaeontological notes no. 4; fossil marsupials from New Guinea. Records Australian Museum 20, p. 73-76.

Ansyori, M.M. (2010)- Fauna from the oldest occupation layer in Song Terus cave, Eastern Java, Indonesia-biochronological significance of the Terus layer. Masters Thesis, Mus. Natl. Histoire Naturelle, Paris, p. 1-71.

(online at: http://hopsea.mnhn.fr/pc/thesis/M2_Ansyori_MIRZA.pdf)

(Oldest archeological assemblage in Song Terus cave in Weru, Pacitan, S Mountains of S Java ranges in age from ~300-80 ka (M-L Pleistocene). Late Pleistocene faunas of upper Terus Layer (80-120 ka) resemble Punung fauna of Badoux. Big fauna dominated by Cervidae, Bovidae and Suidae. Tropical forest environment)

Anton, S.C. (1997)- Developmental age and taxonomic affinity of the Mojokerto child, Java, Indonesia. American J. Physical Anthropology 102, 4, p. 497-514.

(Mojokerto child (Perning I), Java, discovered in 1936, has been assigned to *Australopithecus* and multiple species of *Homo modjokertensis*, etc. Developmental age range probably 4-6 years)

Anton, S.C. (1999)- Cranial growth in *Homo erectus*: how credible are the Ngandong juveniles? *American J. Physical Anthropology* 108, 2, p. 223-236.

(Ngandong 5 and 9 skulls are adults, 8 an older juvenile and 2 is a juvenile. Adult cranial contours and pattern of contour development similar between Ngandong adults and other *H. erectus* adults. Nothing to suggest that Ngandong transitional in vault shape between *H. erectus* and *H. sapiens*, despite relatively large brain)

Anton, S.C. (2001)- Cranial evolution in Asian *Homo erectus*. *Geol. Res. Dev. Centre (GRDC), Bandung, Spec. Publ.* 27, p. 39-46.

Anton, S.C. (2002)- Evolutionary significance of cranial variation in Asian *Homo erectus*. *J. Physical Anthropology* 118, 4, p. 301-323.

(Principal components analysis of calvarial shape suggest regional differentiation between N Asian and SE Asian *H. erectus*. Most recent SE Asian fossils (e.g. Ngandong) conform to SE Asian pattern)

Anton, S.C. (2003)- Natural history of *Homo erectus*. *Yearbook Physical Anthropology*, Wiley, 46, p. 126-170. (online at: <http://studylib.net/download/8851017>)

(In Indonesia earliest hominid crania (Sangiran) few in number, often badly deformed and ~1.6- 1.8 Ma old. More common hominids between 0.9- 1.5 Ma, with cranial capacity of ~800-1000cc. Later Indonesian hominids (Ngandong, Sambungmacan) <100ka in age, and lack upper facial, mandibular or dental remains. Cranial size 900- >1200cc, average >1000cc. Main differences between earlier and later Indonesian *H. erectus*: brain size increase, increases in vault height, and decreases in postorbital constriction. *H. erectus*, notable for increased body size, originated around Plio-Pleistocene boundary in Africa and quickly dispersed into W and E Asia.)

Anton, S.C. & C.C. Swisher (2003)- Early dispersals of *Homo* from Africa. *Annual Rev. Anthropology* 33, p. 271-296.

(Hominin presence outside Africa started at ~1.6-1.8 Ma (*H. erectus*). Includes discussion on reliability of ages of Sangiran hominid ('poo-poo everything'; JTvG). Earliest hominins at Sangiran older than 1.0 Ma and probably 1.3 Ma or older)

Aplin, K. & K.M. Helgen (2010)- Quaternary murid rodents of Timor Part I: New material of *Coryphomys buehleri* Schaub, 1937, and description of a second species of the genus. *Bull. American Museum Natural History* 341, p. 1-80.

(online at: <http://digitallibrary.amnh.org/handle/2246/6077>)

(Archeological excavations in E Timor in 1968- 2002 provided new material of Late Pleistocene and recently extinct gigantic murine (rat) *Coryphomys* (originally described by Hooijer 1965))

Argue, D., C.P. Groves, M.S.Y. Lee & W.L. Jungers (2017)- The affinities of *Homo floresiensis* based on phylogenetic analyses of cranial, dental, and postcranial characters. *J. Human Evolution* 107, p. 107-133.

(online at: www.sciencedirect.com/science/article/pii/S0047248417300866)

(Analyses of multiple morphological characteristics suggest *H. floresiensis* (~65-90ka) is closest to early hominins (>1.75 Ma; *Homo habilis*?), suggesting probably long-surviving relict of early hominin lineage, with hitherto unknown migration out of Africa. Not recent descendants of either *H. erectus* or *H. sapiens*)

Arif, J., Y. Kaifu, H. Baba, M.E. Suparka, Y. Zaim & T. Setoguchi (2002)- Preliminary observation of a new cranium of *Homo erectus* (Tjg-1993.05) from Sangiran, Central Jawa. *Anthropological Science* 110, 2, p. 165-177.

(New well-preserved hominid skull found in 1993 from Bapang (Kabuh) Fm at Tanjung village, Sangiran region, C Java. Relocated to basal or middle part of Bapang Fm)

Audley-Charles, M.G. & D.A. Hooijer (1973)- Relation of Pleistocene migrations of pygmy stegodonts to island arc tectonics in Eastern Indonesia. *Nature* 241, p. 197-198.

(Pleistocene pygmy stegodonts in Sulawesi, Flores and Timor, areas now separated by deep seas. Dwarf Stegodon populations coexisted in Flores and Timor, and apparently wandered back and forth in Pleistocene)

Aziz, F. (1983)- Notes on a new *Meganthropus* S.33 from the Sangiran Dome, Central Java. Geol. Res. Dev. Centre (GRDC), Bandung, Seri Paleontologi 4, p. 56-60.

Aziz, F. (1989)- *Macaca fascicularis* (Raffles) from Ngandong, East Java. Geol. Res. Dev. Centre (GRDC), Bandung, Seri Paleontologi 5, p. 50-56.
(Macaque fossil tooth from Pleistocene of Ngandong along Solo River, site of Homo soloensis. Supports earlier interpretations of open-country habitat)

Aziz, F. (1990)- Pleistocene mammal faunas of Sulawesi and their bearings to paleozoogeography. Ph.D. Thesis, Kyoto University, p. 1-106.

Aziz, F. (2000)- A new insight on the Pleistocene fauna of Sangiran and other hominid sites in Java. Geol. Res. Dev. Centre (GRDC), Bandung, Seri Paleontologi 10, p. 49-57.
(Discussion of the De Vos 1982 and Sondaar 1982 Java mammalian biostratigraphy scheme)

Aziz, F. (2001)- New insight on the Pleistocene fauna of Sangiran and other hominid sites in Java. In: T. Simanjuntak et al. (eds.) Sangiran: man, culture and environment in Pleistocene times, Yayasan Obor Indonesia, Jakarta, p. 260-271.
(Same paper as Aziz (2000))

Aziz, F. (2002)- New discovery of a hominid skull from Cemeg, Sambungmacan, Central Java: an announcement. J. Sumber Daya Geologi 7, 125, p. 2-7.
(Displaced hominid skull from Solo River sediments near Cemeng, W of Trinil, C Java, here called Sambungmacan 4. Probably Homo erectus of Pleistocene age)

Aziz & H. Baba (eds.) (2013)- *Homo erectus* in Indonesia. Recent progress of the study and current understanding, Centre for Geological Survey, Bandung. p. 1- .

Aziz, F., H. Baba & S. Narasaki (1994)- Preliminary report on recent discoveries of fossil hominids from the Sangiran area, Java. J. Geologi Sumberdaya Mineral 4, 29, p. 11-16.
(New hominid skull and mandible fragments, found by local collectors in E part of Sangiran Dome, C Java)

Aziz, F., H. Baba & N. Watanabe (1996)- Morphological study on the *Homo erectus* Sangiran 17 skull based on the new reconstruction. Geol. Res. Dev. Centre, Seri Paleontologi 8, p. 11-25.

Aziz, F. & J. de Vos (1989)- Rediscovery of the Wadjak Site (Java, Indonesia). J. Anthropological Soc. Nippon 97, 1, p. 133-144.
(online at: www.jstage.jst.go.jp/article/ase1911/97/1/97_1_133/_pdf)
(Site of Wajak cave at Gunung Lawa near Tjermee/ Campur Darat villages in C Java, with 'Wajak man' hominid remains and originally excavated by Dubois in 1890, still exists (latest Pleistocene or Holocene; see Storm et al., 2013)

Aziz, F. & J. de Vos (1999)- The fossil faunas from the Citarum area, West Java, Indonesia. In: J.W.F. Reumer and J. de Vos (eds.) Elephants have a snorkel!, Papers in honor of Paul Y. Sondaar, DEINSEA 7, p. 21-32.
(online at: www.hetnatuurhistorisch.nl/.)
(Four fossil mammal faunas from Citarum area, Bandung Basin, W Java: (1) Banuraja, with Sus, Panthera, Manis palaeojavanicus, etc., with age of ~0.8 Ma; (2) Cipatik/Cililin lake deposits with fossil fish of possibly Pleistocene age. (3) Ciharuman with fossils dated as ~29.6-42.3 k; (4) Cipeundeuy with Elephas maximus, Rhinoceros sondaicus, Rusa, Elephas maximus with age of ~0.42- 0.36 Ma)

- Aziz, F., P.Y. Sondaar, J. de Vos, G.D. van den Bergh & Sudijono (1995)- Early dispersal of man on islands of the Indonesian Archipelago: facts and controls. *Anthropological Science* 103, 4, p. 349-368.
(online at: https://www.jstage.jst.go.jp/article/ase1993/103/4/103_4_349/_pdf)
(Migration of hominids across sea barriers much earlier than Neolithic. Distance of island to mainland and food supply limiting factors on human colonization of islands. On islands of SE Asia giant rats may have served as food supply for Paleolithic Man. M Pleistocene faunal turnover on Flores. Java *Homo erectus* s.s. associated with 3 mammalian assemblages Ci Saat (~1.2 Ma), Trinil HK (Grenzbank- lower Bapang/ Kabuh Fm of Sangiran; ~1.0 Ma) and Kedung Brubus (U Bapang/ Kabuh Fm between middle and lower tuff of Sangiran; ~0.8 Ma). Ngandong fauna with *Homo erectus soloensis* <0.8 Ma. Punung and Wajak faunas with *H. sapiens*. On Flores two endemic island faunas: (1) dwarf *Stegodon* and giant tortoise *Geochelone*, and (2) younger fauna with *Stegodon trigonocephalus*, giant rats and hominid lithic industry)
- Aziz, F., P.Y. Sondaar, J.J.M. Leinders & J. de Vos (1989)- Fossil faunas and early man of Java. *Geol. Res. Dev. Centre (GRDC), Bandung, Seri Paleontologi* 6, p. 1-3.
(Brief summary of succession of seven Pleistocene mammal/ hominid assemblages of Java)
- Aziz, F., P.Y. Sondaar, G.D. van den Bergh & J. de Vos (1995)- *Homo erectus* in S.E. Asia: time space and migration routes, II. The Java case. In: J. Gibert et al. (eds.) *Proc. Int. Conf. The hominids and their environment during the Lower and Middle Pleistocene of Eurasia*, Orce 1995, p. 363-368.
- Aziz, F. & G.D. van den Bergh (1995)- A dwarf *Stegodon* from Sambungmacan (Central Java, Indonesia). *Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam*, 98, 3, p. 229-241.
(New dwarf *Stegodon* jaw fragment found in 1992 in shallow marine Kalibeng Limestone at Sambungmacan. Age may be latest Pliocene or earliest Pleistocene. Site may have been margin of a paleo-island in Kendeng zone. Overlying clastics at this site yielded 1973 'Solo Man' *Homo erectus* skull cap discovery and stone tools)
- Baab, K.L. (2016)- The place of *Homo floresiensis* in human evolution. *J. Anthropological Sci.* 94, p. 5-18.
(online at: www.isita-org.com/jass/Contents/2016vol94/Baab/26829572.pdf)
(Two evolutionary scenarios for small-bodied *Homo floresiensis* on Flores in Late Pleistocene: (1) *H. floresiensis* was dwarfed descendent of *H. erectus*, or (2) remnant of older lineage, perhaps descended from *H. habilis*. Could be either)
- Baab, K.L., K.P. McNulty & K. Harvati (2013)- *Homo floresiensis* contextualized: a geometric morphometric comparative analysis of fossil and pathological human samples. *PlosOne* 8, 7, e69119, p. 1-11.
(online at: <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0069119>)
(Geometric morphometric analyses of LBI cranium shows *Homo floresiensis* is distinct from healthy modern humans and from those with pathological conditions (hypothyroidism, Laron syndrome, microcephism), and is most similar to *Homo erectus* (but smaller))
- Baab, K.L. & Y. Zaim (2017)- Global and local perspectives on cranial shape variation in Indonesian *Homo erectus*. *Anthropological Science* 125, 2, p. 67-83.
(online at: https://www.jstage.jst.go.jp/article/ase/125/2/125_170413/_pdf/-char/en)
(Skull shapes of *Homo erectus* from Sangiran, Ngandong, Sambungmacan, and Ngawi, and compared to *H. erectus* from outside of Java. Asian *H. erectus* fossils can be distinguished from African/Georgian ones. Late Indonesian *H. erectus* from sites like Ngandong, distinct from all other *H. erectus* groups, including older C Java fossils. Younger Sangiran fossils more closely approach Ngandong/Sambungmacan/Ngawi pattern)
- Baba, H. & F. Aziz (1992)- Human tibial fragment from Sambungmachan, Java. In: T. Akazawa et al. (eds.) *The evolution and dispersal of modern humans in Asia*, Tokyo, p. 349-361.
- Baba, H., F. Aziz, Y. Kaifu, G. Suwa, R.T. Kono & T. Jacob (2003)- *Homo erectus* calvarium from the Pleistocene of Java. *Science* 299, p. 1384-1388.
(*Homo erectus* calvarium from Sambungmacan, C Java. Overall morphology intermediate between earlier and later Javanese *Homo erectus*)

Baba, H., F. Aziz & S. Narasaki (2000)- Restoration of the face of Javanese *Homo erectus* Sangiran 17 and re-evaluation of regional continuity in Australasia. In: W. Dong (ed.) Proc. 1999 Beijing Int. Symposium on paleoanthropology, Acta Anthropologica Sinica 19 (Suppl.), p. 34-40.

(Facial characteristic of restored Sangiran 17 skull do not support hypothesis of Thorne and Wolpoff of regional continuity between H. erectus and Late Pleistocene Australians)

Baba, H., F. Aziz, S. Narasaki, Sudijono, Y. Kaifu, A. Suprijo, M. Hyodo, E.E. Susanto & T. Jacob (2000)- A new hominid incisor from Sangiran, Central Java. J. Human Evolution 38, 6, p. 855-862.

(New hominid lower left central tooth from near village of Bukuran, ESE Sangiran dome area)

Baba, H., F. Aziz, S. Narasaki, Sudijono, Y. Kaifu, I. Saefudin & E.E. Susanto (2004)- Frontal bone fragment of *Homo erectus* from Sangiran, Java. Human Evolution 19, 3, p. 197-201.

(Homo erectus frontal bone fragment found in 1994 in Brangkal River river floor, Sangiran area. Original stratigraphic level not known, possibly from 'Grenzbank')

Baba, H., F. Aziz & N. Watanabe (1990)- Morphology of the fossil hominid tibia from Sambungmacan, Java. Bull. National Science Museum, Tokyo, D15, p. 9-18.

(online at: <http://ci.nii.ac.jp/naid/110000008554/en>)

(Hominid tibial fragment Sm 2 collected in 1977 with other vertebrate bones from Sambungmacan, presumably from Kabuh equivalent beds. Rel. advanced character)

Bacon, A.M., K. Westaway, P.O. Antoine, P. Düringer, A. Blin, F. Demeter, J.L. Ponche, J.X. Zhao, L.M. Barnes et al. (2015)- Late Pleistocene mammalian assemblages of Southeast Asia; new dating, mortality profiles and evolution of the predator-prey relationships in an environmental context. Palaeogeogr. Palaeoclim. Palaeoecology, 422, p. 101-127.

(On mammal remains in Late Pleistocene karst deposits in N Laos, N Vietnam, Punung (C Java) and Sibrambang (W Sumatra))

Badoux, D.M. (1959)- Fossil mammals from two fissure deposits at Punung (Java) with some remarks on migrations and evolution of mammals during the Quaternary in South East Asia. Doct. Thesis University of Utrecht, p. 1-151.

(Description of 'Punung' mammal fauna' from karst hills of S Mountains, E Java, collected by Von Koenigswald in 1930's. (see also Storm et al (2005) for details of locality, paleoenvironment (rainforest) and age (~0.1 Ma))

Bae, C.J. (2010)- The late Middle Pleistocene hominin fossil record of eastern Asia: synthesis and review. American J. Physical Anthropology 143, Suppl. 51, p.75-93.

(Traditionally, M Pleistocene hominin fossils that cannot be allocated to Homo erectus s.l. or modern H. sapiens in E Asia, classified as archaic, early, or premodern H. sapiens. Increasing number of M Pleistocene hominin fossils currently being assigned to H. heidelbergensis, but little evidence in E Asia to support assignment to H. heidelbergensis. Best to continue to use term archaic H. sapiens)

Bae, C.J. (2018)- Hominin distribution and density patterns in Pleistocene China: climatic influences. Palaeogeogr. Palaeoclim. Palaeoecology, p. *(in press)*

(Hominins during E - M Pleistocene appear restricted to C and S China. By advent of late M Pleistocene hominins found regularly in N China. Hominins restricted range due to climatic variation during E- early M Pleistocene, but more successful to adapt to changing climates in late M Pleistocene)

Balzeau, A. (2005)- Specificités des caractères morphologiques internes du squelette céphalique chez *Homo erectus*. Doct. Thesis Museum Natl. Histoire Naturelle, Paris, p. 1-394.

(online at: http://hopsea.mnhn.fr/pc/thesis/PhD_Balzeau2005.pdf)

(Internal morphologic characteristics of Homo erectus skull)

- Balzeau, A., D. Grimaud-Herve & T. Jacob (2005)- Internal cranial features of the Mojokerto child fossil (East Java, Indonesia). *J. Human Evolution* 48, p. 535-553.
- Balzeau, A. (2013)- Thickened cranial vault and parasagittal keeling: correlated traits and autapomorphies of *Homo erectus*? *J. Human Evolution* 64, 6, p. 631-644.
- Balzeau, A. & P. Charlier (2016)- What do cranial bones of LB1 tell us about *Homo floresiensis*? *J. Human Evolution* 93, p. 12-24.
(*No support for attribution of holotype of Homo floresiensis (LB1) from Liang Bua, Flores, to H. sapiens*)
- Bandet, Y., F. Semah, S. Sartono & T. Djubiantono (1989)- Premier peuplement par les mammiferes d'une region de Java Est, a la fin du Pliocene: age de la faune du Gunung Butak, pres de Kendungbrubus (Indonesie). *Comptes Rendus Academie Sciences, Paris* 308, p. 867-870.
(*'First population by mammals of a region of E Java at the end of the Pliocene: age of the Gunung Butak fauna near Kedungbrubus'. Along flanks of Gunung Butak marine sediments abruptly overlain by coarse and slightly transported volcanic breccia. Fossil mammals appear just above, in fluvial and lahar beds. Top of basal breccia dated 1.87 Ma. Emerged tongues of land due to volcanoes colonized by mammals by latest Pliocene*)
- Barker, G., H. Barton, M. Bird, P. Daly, I. Datan, A. Dykes, L. Farr et al. (2007)- The 'human revolution' in lowland tropical Southeast Asia: the antiquity and behavior of anatomically modern humans at Niah Cave (Sarawak, Borneo). *J. Human Evolution* 52, 3, p. 243-261.
(*Anatomically modern humans in Niah cave, Sarawak, N Borneo. New dates and lithostratigraphy relate Deep Skull to evidence of human activity between ~46,000- 34,000 years ago*)
- Barry, J.C., N.M. Johnson, S.M. Raz & L.L. Jacobs (1985)- Neogene mammalian faunal change in southern Asia: correlations with climatic, tectonic, and eustatic events. *Geology* 13, p. 637-640.
- Bartstra, G.J. (1974)- Notes about Sangiran (Java, Indonesia). *Quartar* 25, p. 1-11.
(*online at: www.quartaer.eu/pdfs/1974/1974_01_bartstra.pdf*)
(*Brief review of Sangiran dome Pleistocene stratigraphy, ~10km N of Solo, and localities of hominid fossils*)
- Bartstra, G.J. (1976)- Contributions to the study of the Palaeolithic Patjitan culture, Java, Indonesia. Thesis University of Groningen, Brill, Leiden, p. 1-121.
(*Study of Pacitanian Paleolithic artifacts, first discovered by Von Koenigswald in 1935 in Baksoko River terrace gravels in Southern Mountains of C Java. Mammals in nearby Punung fissure deposit of M Pleistocene age (Djetis and Trinil associations; Hooijer appendix). Includes good overview of geology of Southern Mountains (Gunung Sewu) of C Java, incl. Wonosari limestone karst terranes, Pleistocene river terraces, etc..*)
- Bartstra, G.J. (1977)- The height of the river terraces in the transverse Solo valley in Java. *Modern Quaternary Research in Southeast Asia* 3, Balkema, Rotterdam, p. 143-155.
(*Quaternary terraces in transverse valley of Solo River N of Ngawi, previously studied by De Terra (1943), Sartono (1976), etc.. Highest terrace up to 40-50m above present Solo river level (T1; poorly preserved), second terrace at ~20m above river (T2), third ~5m above river (T3; best preserved; location of villages). Ngandong Solo Man fossils in T2/20m terrace*)
- Bartstra, G.J. (1977)- Walanae Formation and Walanae terraces in the stratigraphy of South Sulawesi (Celebes, Indonesia). *Quartar* 27/28, p. 21-30.
(*Geologic setting of terraces of Walanae River, which contain Pleistocene vertebrate fossils (Archidiskodon-Celebochoerus fauna of Hooijer, 1948), and stone artefacts (Tjabenge industry). Author believes stone artifacts to be younger than S Sulawesi fossils*)
- Bartstra, G.J. (1978)- The age of the Djetis Beds in East and Central Java. *Antiquity* 52, 204, p. 56-58.
(*On age of JETIS Fauna (incl. Homo erectus) from Mojokerto area*)

- Bartstra, G.J. (1978)- The Patjitan culture: a preliminary report on new research. In: F. Ikawa-Smith (ed.) Early Palaeolithic in South and East Asia, Mouton Publishers, The Hague, p. 29-36.
(*Paleolithic 'Pacitanian' relatively advanced stone tools from along Baksoko River near Punung, S coast of E Java, first described by Von Koenigswald (1936). 1500 additional artifacts collected in 1972 excavations. Three fluvial terraces, all with stone artifacts but unfossiliferous. Pacitan culture may be work of Homo soloensis*)
- Bartstra, G.J. (1982)- The river-laid strata near Trinil, site of *Homo erectus*, Java, Indonesia. Modern Quaternary Research in Southeast Asia 7, Balkema, Rotterdam, p. 97-130.
(*Historic review of stratigraphic interpretations of Pleistocene Trinil Beds of C Java, the site of first Pithecanthropus and of abundant vertebrate fossils collected by Dubois, Selenka, etc. Two fluvial sand horizons along Solo River at Trinil: (1) Lower horizon (Kabuh Beds) of M and Late Pleistocene age; (2) upper horizon of Late Pleistocene Solo River terrace deposits. Sands composed of andesitic material and unconformably overlie Late Neogene marine marls*)
- Bartstra, G.J. (1982)- *Homo erectus erectus*: the search for his artifacts. Current Anthropology 23, 3, p. 318-320.
(*Years of fieldwork in C Java between 1977-1981 failed to find conclusive evidence for E-M Pleistocene tools used by Homo erectus. Many stone artifacts found across E Java, but could be from modern Homo*)
- Bartstra, G.J. (1983)- The fauna from Trinil, type locality of *Homo erectus*: a reinterpretation, Comment I: The vertebrate bearing deposits of Kedungbrubus and Trinil, Java, Indonesia. Geologie en Mijnbouw 62, 2, p. 329-336.
(*online at: <https://drive.google.com/file/d/0B7j8bPm9Cse0TXdLZ3dtNVloTHc/view>*)
(*De Vos et al. (1982) suggested classic Pleistocene vertebrate stratigraphy of Java as established by Von Koenigswald is incorrect, calling Jetis-fauna younger than Trinil fauna. On stratigraphic grounds this view is untenable and Van Koenigswald's stratigraphy is essentially correct. See also Hooijer 1983*)
- Bartstra, G.J. (1983)- Some remarks upon fossil man from Java, his age, and his tools. Bijdragen Taal, Land Volkenkunde 139, 4, Leiden, p. 421-434.
(*online at: www.kitlv-journals.nl/index.php/btlv/article/view/2001/2762*)
(*Review of stratigraphy and hominid fossils of C Java. Solo River deposits near Trinil two units: (1) upper unit typical modern Solo river terrace deposits with Homo soloensis, (2) lower unit Pleistocene clays, silts, sands and gravels, with Homo erectus*)
- Bartstra, G.J. (1984)- Dating the Pacitanian: some thoughts. In: P. Andrews & J.L. Franzen (eds.) The early evolution of Man with special emphasis on South East Asia and Africa, Courier Forschungsinstitut Senckenberg 69, p. 253-258.
- Bartstra, G.J. (1985)- Sangiran, the stone implements of Ngebung and the Paleolithic of Java. Modern Quaternary Research in Southeast Asia 9, Balkema, Rotterdam, p. 99-113.
- Bartstra, G.J. (1987)- Late *Homo erectus* or Ngandong man of Java. Palaeohistoria 29, p. 1-7.
(*online at: <https://ugp.rug.nl/Palaeohistoria/article/download/24867/22315>*)
(*Review of Ngandong man ('Homo soloensis') from 'High Terrace' deposits of Solo river in Kendeng zone of Java, Generally regarded as last representative of Homo erectus in SE Asia. Associated with rich mammal fauna, mainly bovids, indicative of open forest environment. Oldest Solo terrace sediments in C Java must date from beginning of N-ward directed drainage pattern and probably Late Pleistocene in age. U-series ages from Ngandong bone samples mainly between ~40-80 ka. No in-situ stone implements, but nearby surface finds of small chalcedony artefacts ('Ngandong Industry')*)
- Bartstra, G.J. (1994)- Indonesia in the period of *Homo habilis* and *Homo erectus*. In: S.J. de Laet et al. (eds.) History of humanity: prehistory and the beginnings of civilization, 1, UNESCO, Paris, p. 89-99.

- Bartstra, G.J. (1994)- Indonesia in the period of *Homo sapiens neanderthalensis*. In: S.J. de Laet et al. (eds.) History of humanity: prehistory and the beginnings of civilization, 1, Chapter 17, UNESCO, Paris, p. 167-175.
- Bartstra, G.J. (1997)- A fifty years commemoration: fossil vertebrates and stone tools in the Walanae valley, South Sulawesi, Indonesia. *Quartaer* 47/48, p. 29-50.
(online at: www.quartaer.eu/pdfs/1997/1997_02_bartstra.pdf)
(History of discovery of Pleistocene mammals and hominid artifacts along the Walanea River in S Sulawesi in 1947 by archeologist H.R. van Heekeren and vertebrate paleontologist D.A. Hooijer)
- Bartstra, G.J. & Basoeki (1989)- Recent work on the Pleistocene and the Palaeolithic of Java. *Current Anthropology* 30, 2, p. 241-244.
- Bartstra, G.J., M. Basoeki & B. Santosa Azis (1976)- Solo Valley research 1975 Java, Indonesia. *Modern Quaternary Research in Southeast Asia* 2, Balkema, Rotterdam, p. 23-36.
(Brief review of Pleistocene geology along Solo River in Trinil and Ngawi areas. Discovery of stone implements in high terrace gravels)
- Bartstra, G.J. & D.A. Hooijer (1992)- New finds of fossil vertebrates from Sulawesi, Indonesia. *Lutra* 35, p. 113-122.
- Bartstra, G.J., D.A. Hooijer, B. Kallupa & M.A. Akib (1992)- Notes on fossil vertebrates and stone tools from Sulawesi, Indonesia, and the stratigraphy of the northern Walanae depression. *Palaeohistoria* 33/34, p. 1-18.
(online at: <http://rjh.uib.ro/palaeohistoria/article/view/25054/22512>)
(Pleistocene *Archidiskodon-Celebochoerus* vertebrate fauna and artifacts of the Cabenge Industry. Fossils and artifacts may not be contemporaneous. Singkang embayment/ Tempe depression separates SW peninsula of Sulawesi from rest of island and was covered by sea until recently)
- Bartstra, G.J., S.G. Keates, Basoeki & B. Kallupa (1991)- On the dispersion of *Homo sapiens* in Eastern Indonesia: the Palaeolithic of South Sulawesi. *Current Anthropology* 32, 3, p. 317-321.
(*Homo sapiens* reached Sulawesi around 50,000 B.P. (Walanae Fm); *Homo erectus* never reached Sulawesi)
- Bartstra, G.J., S. Soeghondo & A. van der Wijk (1988)- Ngandong man: age and artifacts. *J. Human Evolution* 17, 3, p. 325-337.
(*Homo soloensis* found in 1930's in High Terrace of Solo River near Ngandong, with associated small stone implements. Th/U ages for Ngandong vertebrate remains suggest Upper Pleistocene age (~30-100 ka?))
- Bednarik, R.G. (1997)- The initial peopling of Wallacea and Sahul. *Anthropos* 92, p. 355-367.
(online at: www.ifrao.com/wp-content/uploads/2015/02/97Wallacea.pdf)
(Review of Pleistocene migrations of hominids into Indonesia and Australia)
- Bednarik, R.G. (2000)- Pleistocene Timor: some corrections. *Australian Archaeology* 5, p. 16-20.
(Review of Pleistocene mammal fossils (*Stegodon*, giant tortoise) and some questionable relicts of Pleistocene hominids on Timor)
- Bednarik, R.G. (2002)- The maritime dispersal of Pleistocene humans. *Migration and Diffusion* 3, 10, p. 6-33.
(online at: www.ifrao.com/wp-content/uploads/2014/06/dispersal.pdf)
- Bellwood, P. (1987)- The prehistory of island Southeast Asia: a multidisciplinary review of recent research. *J. World Prehistory* 1, 2, p. 171-224.
(Sundaland region in W of SE Asia archipelago and isolated islands of Wallacea in E witnessed complex trajectories of human movement and evolution during Pleistocene)
- Bellwood, P.S. (2007)- Prehistory of the Indo-Malaysian Archipelago. Australia National University (ANU) Press, Canberra, p. 1-384.

(online at: <http://epress.anu.edu.au/pima/pdf/pima-whole.pdf>
(3rd edition of 1985 textbook.)

Bellwood, P.S. (2017)- First Islanders: prehistory and human migration in island Southeast Asia, Wiley-Blackwell, p. 1-384.

Bellwood, P.S. (2017)- *Homo erectus* and *Homo floresiensis*- Archaic hominins in island Southeast Asia. In: First Islanders: prehistory and human migration in island Southeast Asia, Wiley, Chapter 3, p. 34-85.
(Discussion of lithic stone tool industries reportedly associated with *Homo erectus* in various regions of island SE Asia. Two categories: (1) 'chopper/chopping-tool industries' characterized by Java Pacitanian industry and supposedly work of *Homo erectus*; (2) 'pebble and flake industries' more characteristic of early *Homo sapiens*)

Berry, E.W. (1916)- The environment of the ape man. The Scientific Monthly 3, 2, p. 161-169.
(Early discussion of environmental setting of Pleistocene *Pithecanthropus erectus* (Java man). Recognized that during Pleistocene glacial lowstands Sumatra and Java were connected with Borneo and Malay Peninsula, forming landmass. Java Pleistocene mammal faunas of Siamese and Indian affinity and believed to have migrated from SE Asia mainland in NW)

Bettis, E.A., A.K. Milius, S.J. Carpenter, R. Larick, Y. Zaim, Y. Rizal, R.L. Ciochon, S.A. Tassier-Surine, D. Murray, Suminto & S. Bronto (2009)- Way out of Africa: Early Pleistocene paleoenvironments inhabited by *Homo erectus* in Sangiran, Java. J. Human Evolution 56, 1, p. 11-24.
(Stratigraphy and paleosols at Sangiran, C Java, document environments of *Homo erectus* in E Pleistocene. Earliest human immigrants encountered low-relief lake-margin landscape dominated by moist grasslands with open woodlands in driest positions. By 1.5 Ma, large streams filled lake and landscape became more riverine. Long-term shift toward regional drying or longer dry seasons through E Pleistocene)

Bettis, E.A., Y. Zaim, R.R. Larick, R.L. Ciochon, Suminto, Y. Rizal, M. Reagan & M. Heizler (2004)- Landscape development preceding *Homo erectus* immigration into Central Java, Indonesia: the Sangiran Formation Lower Lahar. Palaeogeogr. Palaeoclim. Palaeoecology 206, p. 115-131.
(Sangiran Lower Lahar Unit debris flow age 1.90 Ma, terminates Late Pliocene shallow marine sedimentation)

Bettis, E.A., Y. Zaim & Y. Rizal (2009)- Plio-Pleistocene climatic and volcanic controls on high to moderate accommodation space systems in the Solo Basin, Central Java, Indonesia. AAPG Hedberg Conf. Variations in fluvial-deltaic and coastal reservoirs deposited in tropical environments, Jakarta 2009, 3p.
(online at: www.searchanddiscovery.com/abstracts/pdf/2010/hedberg_indonesia/abstracts/ndx_bettis.pdf)
(Extended abstract. Late Pliocene- Pleistocene marginal marine, lacustrine and fluvial sediments exposed in Sangiran Dome interpreted in terms of interactions between tectonics and climate change over past 2 My)

Beyer, H.O. & D.J. Steinberg (1957)- New finds of fossil mammals from the Pleistocene strata of the Philippines. National Research Council of the Philippines, Quezon City, Bull. 41, p. 220-238.

Bibi, F. & G. Metais (2016)- Evolutionary history of large herbivores of South and Southeast Asia (Indomalayan Realm). In: F.S. Ahrestani & M. Sankaran (eds.) The ecology of large herbivores in South and Southeast Asia, Springer Verlag, p. 15-88.
(Comprehensive review of Cenozoic large herbivores in E and SE Asia)

Bilsborough, A. (2005)- *Homo erectus* revisited: aspects of affinity and diversity in a Pleistocene hominin species. Anthropologie 43, 2-3, p. 129-158.
(No convincing morphological case for differentiating early African specimens (*H. ergaster*) or '*Meganthropus*' material from *Homo erectus*. Long interval between early (Sangiran- Trinil- Kedung Brubus) and latest *H. erectus* (Ngandong- Sambungmacan). Regional trends include increase in brain size and cranial robusticity, dental reduction, etc.. *Homo floresiensis* probably derived from SE Asian *Homo erectus* via transience event and selection for endemic dwarfing)

- Bird, M.I., D. Taylor & C. Hunt (2005)- Palaeoenvironments of insular Southeast Asia during the last glacial period; a savanna corridor in Sundaland? *Quaternary Science Reviews* 24, 20-21, p. 2228-2242.
(*Geomorphology, palynology, biogeography and vegetation/climate modelling suggests N-S 'savanna corridor' through Sundaland continent through Last Glacial Period at time of lowered sea-level. Minimal interpretation of 50-150 km wide zone of open savanna vegetation along divide between S China and Java Seas, forming land bridge between Malay Peninsula, Sumatra, Java and Borneo and served as barrier to dispersal of rainforest-dependent species between Sumatra and Borneo. Savanna corridor may have provided convenient route for rapid early dispersal of modern humans through region and on into Australasia*)
- Bocherens, H., F. Schrenk, Y. Chaimanee, O. Kullmer, D. Morike, D. Pushkina & J.J. Jaeger (2017)- Flexibility of diet and habitat in Pleistocene South Asian mammals: Implications for the fate of the giant fossil ape *Gigantopithecus*. *Quaternary Int.* 434, p. 148-155.
(*Giant fossil ape Gigantopithecus blacki from SE Asia survived until ~100,000 years ago. Known only from isolated teeth and lower jaw fossils. Carbon isotopes of tooth enamel from N Thailand suggest Gigantopithecus was forest-dweller with vegetarian diet. Demise possibly due to forest reduction during glacial periods*)
- Boediharto, R. (1964)- New finds of vertebrate layers in the Wonogiri and Wonosari areas, Central Java. *Geol. Survey Indonesia Bull.* 1, 2, p. 47-49.
- Boivin, N., D.Q. Fuller, R. Dennell, R. Allaby & M.D. Petraglia (2013)- Human dispersal across diverse environments of Asia during the Upper Pleistocene. *Quaternary Int.* 300, p. 32-47.
(*New, more complex out-of-Africa scenario involving multiple exits, varying terrestrial routes, a sub-divided African source population, slower progress to Australia, and interbreeding with archaic varieties of Homo*)
- Bonde N. & B. Westergaard (2004)- Progress in hominid classification: cladistic approaches. In: *Miscelanea en homenaje a Emiliano Aguirre, Paleoantropologia*, p. 37-57.
(*Elegant general review of hominid evolution*)
- Borel, A., R. Cornette & M. Baylac (2017)- Stone tool forms and functions: a morphometric analysis of modern humans' stone tools from Song Terus Cave (Java, Indonesia). *Archaeometry* 59, 3, p. 455-471.
(*Stone industries from beginning of Holocene of SE Asia difficult to characterize typo-technologically*)
- Borel, A., C. Gaillard, M.H. Moncel, R. Sala, E. Pouydebat, T. Simanjuntak & F. Semah (2013)- How to interpret informal flakes assemblages? Integrating morphological description, usewear and morphometric analysis gave better understanding of the behaviors of anatomically modern human from Song Terus (Indonesia). *J. Anthropological Archaeology* 32, 4, p. 630-646.
(*Analysis of thousands of Holocene (~11-5 ka) hominid stone tools from upper ('Keplek') levels of Song Terus cave in Southern Mountains of Central Java*)
- Bouteaux, A. (2005)- Paleontologie, paleoecologie et taphonomie des mammiferes du Pleistocene moyen ancien du site a hominides de Sangiran (Java central, Indonesie). *Doct. Thesis Museum Nat. Histoire Naturelle, Paris*, p. 1-368.
(*online at: http://hopsea.mnhn.fr/pc/thesis/PhD_Bouteaux2005.pdf*)
(*'Paleontology, paleoecology and taphonomy of the E-M Pleistocene mammals from the Sangiran hominid site, Central Java'*)
- Bouteaux, A. (2008)- Etude taphonomique d'assemblages fauniques de sites a *Homo erectus* du dome de Sangiran (Pleistocene moyen, Java central, Indonesie). *Annal. Paleont.* 94, 4, p. 229-243.
(*'Taphonomic study of faunal assemblages of Homo erectus sites at Sangiran Dome (M Pleistocene, Central Java, Indonesia'. Most bone assemblages from H. erectus sites come from fluvial volcanic-sedimentary Kabuh layers (E-M Pleistocene). Herbivores dominate assemblages (large bovids like Bubalus palaeokerabau or Bibos palaesondaicus and smaller cervids like Axis lydekkeri). Carnivores are rare. High degree of fragmentation of fossils related to fissuration and fluvial transport*)

- Bouteaux, A. & A.M. Moigne (2010)- New taphonomical approaches: the Javanese Pleistocene open-air sites (Sangiran, Central Java). *Quaternary Int.* 223-224, p. 220-225.
(*Excavations in Sangiran Dome produced numerous mammal fossils, including Homo erectus. Bones most common in M Pleistocene fluvial Kabuh Fm volcanoclastics, dominated by teeth and extremities of large bovids and smaller cervids, mostly in fragments. Modification of assemblages by water action. Carnivores and traces of their actions rare. Anthropoc influence at Ngebung 2 site, with occurrence of lithic artifacts*)
- Bouteaux, A., A.M. Moigne & T. Jacob (2008)- Palaeontology, palaeoecology and taphonomy of Middle Pleistocene: mammals in the hominid site of Sangiran dome. In: E. Indriati (ed.) Recent Advances on Southeast Asian palaeoanthropology and archaeology, *Int. Seminar on Southeast Asian Paleanthropology*, Yogyakarta, p. 160-168.
- Bouteaux, A., A.M. Moigne, F. Semah & T. Jacob (2007)- Les assemblages fauniques associes aux sites a *Homo erectus* du dome de Sangiran (Pleistocene moyen, Java, Indonesie). *Compt. Rendus Palevol* 6, 3, p. 169-179.
(*The faunal assemblages associated with Homo erectus sites at Sangiran (M Pleistocene, Java)'. Homo erectus in fluvial deposits outcropping in several localities. Thirteen taxa of M Pleistocene mammals determined. Lithic tools rare at these sites. Mechanical action of water responsible for accumulations*)
- Bouteaux, A., A.M. Moigne & K. Setiagama (2008)- Etudes archeozoologiques de sites javanais du Pleistocene: les sites de plein air du dome de Sangiran (Java central) et le site en grotte de Song Terus (Java est). In: *Archaeozoology of the Near East VIII, Travaux Maison de l'Orient et de la Mediterranee*, 49, p. 79-97.
(*online at: www.persee.fr/doc/mom_1955-4982_2008_act_49_1_2702*)
(*Archeozoologic studies at Pleistocene sites of Java: Sangiran Dome (C Java) and Song Terus cava (E Java)'*)
- Braches, F. & R. Shutler (1984)- The Philippines and Pleistocene dispersal of mammals in island Southeast Asia. *Philippine Quart. Culture and Society* 12, p. 106-115.
(*Presence of Pleistocene mammalian faunas on Luzon and Mindanao had lead Von Koenigswald (1935) to propose Pleistocene migration route from mainland SE Asia to Borneo/ Java through Philippines. However, Luzon probably island fauna and Philippines probably played no major role in Pleistocene dispersal of 'Sino-Malayan faunas' to Java*)
- Brandon-Jones, D. (1998)- Pre-glacial Bornean primate impoverishment and Wallace's Line. In: R. Hall & J.D. Holloway (eds.) *Biogeography and geological evolution of SE Asia*, Backhuys Publ., Leiden, p. 393-403.
(*online at: http://searg.rhul.ac.uk/searg_uploads/2016/01/Brandon-Jones.pdf*)
- Brandt, R.W. (1976)- The Hoabinhian of Sumatra : some remarks. *Modern Quaternary Research in Southeast Asia* 2, p. 49-52.
(*'Hoabinhian' stone tools from Medan area, N Sumatra. Called 'sumatraliths', made of andesite. Named after E Holocene stone artifact assemblages from N Vietnam*)
- Brasseur, B., M.A. Courty, B. Deniaux, N. Fedoroff, B. Poreda & F. Semah (2007)- The geodynamic context of the ca. 0.8 Ma layers in the Sangiran Dome (Central Java, Indonesia): traces of the fall-event linked to the Australasian tektites strewn field? In: N.R. Catto (ed.) *17th INQUA Congress, The tropics: heat engine of the Quaternary*, Cairns, *Quaternary Int.* 167-168, Supplement, p. (*Abstract only*)
- Brasseur, B. (2009)- Dynamique et histoire des depots du Pleistocene inferieur et moyen ancien du dome de Sangiran (Java central, Indonesie): caracterisation des surfaces d'occupation a *Homo erectus*. Ph.D. Thesis, *Museum Nat. Histoire Naturelle*, Paris, p. 1-360. (*Unpublished*)
(*Dynamics and history of lower and early M Pleistocene deposits of Sangiran dome (central Java, Indonesia): characterization of Homo erectus occupation layers'. Thick Quaternary sediments of Sangiran dome with oldest human fossils dated to 1.5 Ma, but mainly in Bapang/Kabuh Fm fluvio-volcanic layers dated 1- 0.7 Ma (also with tektite horizon). Ngebung 2 hill with only preserved human occupation surface dating to 0.8 Ma. Propose reconstruction of rivers pathways and development at ~1.0 Ma of alluvial fan coming from N and linked to*)

active tectonic phase. Frequent weathering and reworking of volcanic tuffaceous material may explain wide range of radiometric dates in hominid bearing series. Several mudflows rapidly covered Ngebung 2 *H. erectus* occupation surface)

Brasseur, B., F. Semah, A.M. Semah & T. Djubiantono (2011)- Approche paleopedologique de l'environnement des hominides fossiles du dome de Sangiran (Java central, Indonesie). Quaternaire (Paris) 22, 1, p. 13-34.

(online at: <http://quaternaire.revues.org/pdf/5815>)

(Study of paleo-soils in Pleistocene of Sangiran Dome area, C Java. Six paleosol types. First fully terrestrial level identified at base of U Pucangan Fm, corresponding to development of open landscape on earlier sites of wide coastal swamps. Higher up, environments indicative of seasonal climate with long dry season, alternating with periods of more humid palustrine conditions. Recurrent aridity proxies in Grenzbank and Kabuh series (with most common hominid fossils). Soils reflect long dry season and open vegetation landscape, in agreement with stratigraphical and palynological observations)

Brasseur, B., F. Semah, A.M. Semah & T. Djubiantono (2015)- Pedo-sedimentary dynamics of the Sangiran dome hominid bearing layers (Early to Middle Pleistocene, Central Java, Indonesia): a palaeopedological approach for reconstructing *Pithecanthropus* (Javanese *Homo erectus*) palaeoenvironment. Quaternary Int. 376, p. 84-100.

(Paleosols in Pleistocene of Sangiran dome, C Java. Base of Upper Sangiran (= Pucangan) Mb earliest continental deposits with fresh-water molluscs, corresponding to development of open landscape with wide coastal marshes and mangroves, with rain forest cover on hinterland. Higher in stratigraphic succession, seasonal climate with long dry season alternating with periods of more humid palustrine conditions. From U Sangiran Mb to lower Bapang (= Kabuh Fm) Mb, erosion of soil cover caused accumulation of pedosediments in topographic depressions. Recurrent aridity proxies in paleosols of Bapang (= Kabuh) Fm, reflecting long dry season and open vegetation landscape)

Broadfield, D., R.L. Holloway K. Mowbray, A. Silver & S. Marquez (2001)- The endocast of Sambungmacan 3 (Sm3): a new *Homo erectus* from Java. Anatomical Record 262, 4, p. 369-379.

Brongersma, L.D. (1935)- Notes on some recent and fossil cats, chiefly from the Malay archipelago. Zoologische Mededelingen 18, p. 1-90.

(online at: www.repository.naturalis.nl/document/149407)

Brongersma, L.D. (1937)- On fossil remains of a Hyaenid from Java. Zoologische Mededelingen 20, p. 186-202.

(online at: www.repository.naturalis.nl/document/150150)

(On hyaenid fossils from Kedung Brubus, C Java, in Dubois collection)

(Study of Recent cats in Indonesian region and on Pleistocene fossils in Dubois collection from Trinil, C Java)

Brongersma, L.D. (1937)- Notes on fossil and prehistoric remains of Felidae from Java and Sumatra. Comptes Rendus XIIe Congres Int. Zoologie, Lisbon 1935, p. 1855-1865.

Brongersma, L.D. (1941)- On the remains of carnivora from cave deposits in Java and Sumatra, with notes on recent specimens, I. Zoologische Mededelingen, 23, p. 114-148.

(online at: www.repository.naturalis.nl/document/149372)

(Descriptions of Late Pleistocene carnivore fossils from C Java caves: dog from Gua Lawa (=Wajak man locality) and a marten/weasel (*Martes*) from Gua Jimbe)

Brongersma, L.D. (1941)- De verzameling van Indische fossielen (Collectie Dubois). De Indische Gids, Maart 1941, p. 97-116.

(*The Indies fossils collection (Collection Dubois)*)

- Brongersma, L.D. (1958)- On an extinct species of the genus *Varanus* (Reptilia, Sauria) from the island of Flores. *Zoologische Mededelingen* 36, 7, p. 113-125.
(online at: www.repository.naturalis.nl/document/149846)
(Late Pleistocene(?) lizard *Varanus hooijeri* n.sp. from cave deposits on Flores, collected by T.L. Verhoeven. Associated with Mesolithic flake and blade industry)
- Brothwell, D.R. (1960)- Upper Pleistocene human skull from Niah caves, Sarawak. *Sarawak Museum J.* 9, p. 323-349.
- Brown, P. (1992)- Recent human evolution in East Asia and Australasia. *Philosophical Trans. Royal Soc. London, B*, 337, p. 235-242.
(online at: www.peterbrown-palaeoanthropology.net/Brown%201992%20235-242.pdf)
- Brown, P. (1994)- Cranial vault thickness in Asian *Homo erectus* and modern *Homo sapiens*. *Courier Forschungs-Institut Senckenberg* 171, p. 33-46.
(Thickened cranial vault bone argued to distinguished *Homo erectus* from *H. sapiens*, but considerable overlap with modern Australian aboriginal populations and (Chinese) archaic *Homo sapiens*)
- Brown, P. (2012)- LB1 and LB6 *Homo floresiensis* are not modern human (*Homo sapiens*) cretins. *J. Human Evolution* 62, p. 201-224.
(Late Pleistocene *Homo floresiensis* from Liang Bua cave, Flores, associated with stone artefacts and bones of *Stegodon*. Recent arguments that characteristics of *H. floresiensis* consistent with dwarfism and delayed development in modern human (*Homo sapiens*) cretins deemed invalid: no modern human skeleton known with attributes of *H. floresiensis*)
- Brown, P. & T. Maeda (2009)- Liang Bua *Homo floresiensis* mandibles and mandibular teeth: a contribution to the comparative morphology of a new hominin species. *J. Human Evolution* 57, 5, p. 571-596.
(Morphological and metrical comparisons of mandibles of *Homo floresiensis* from Liang Bua place them outside *H. sapiens* and *H. erectus* ranges of variation. Mandibles, cranial and postcranial anatomy, limb proportions and functional anatomy of wrist and shoulder in many respects closer to African early *Homo* or *Australopithecus* than to later *Homo*)
- Brown, P., T. Sutikna, M. Morwood, R.P. Soejono, Jatmiko, E.W. Saptomo et al. (2004)- A new small-bodied hominin from the Late Pleistocene of Flores, Indonesia. *Nature* 431, p. 1055-1061.
(Tiny hominid *Homo floresiensis* from Liang Bua cave on Flores)
- Brumm, A., F. Aziz, G.D. van den Bergh, M.J. Morwood, M.W. Moore, I. Kurniawan, D.R. Hobbs & R. Fullagar (2006)- Early stone technology on Flores and its implications for *Homo floresiensis*. *Nature* 441, 7093, p. 624-628.
(C Flores Soa Basin sites contain stone artefacts associated with *Stegodon florensis*, Komodo dragon, rat, etc., dated as 840-700 ka. Apparent technological continuity with those excavated from Late Pleistocene at Liang Bua cave, 50 km to W, dated as 95-74 and 12 ka, and associated with small-bodied *Homo floresiensis*)
- Brumm, A., G.M. Jensen, G.D. van den Bergh, M.J. Morwood, I. Kurniawan, F. Aziz & M. Storey (2010)- Hominins on Flores, Indonesia, by one million years ago. *Nature* 464, 7289, p. 748-752.
(Wolo Sege, a new site in Soa Basin with *in situ* stone artefacts stratigraphically below previously discovered Mata Menge site. Ignimbrite overlying artefact layers erupted 1.02 Ma, providing new minimum age for hominins on Flores and predates disappearance from Soa Basin of 'pygmy' *Stegodon* and giant *Geochelone*)
- Brumm A., I. Kurniawan, M.W. Moore, Suyono, R. Setiawan, Jatmiko, M.J. Morwood & F. Aziz (2009)- Early Pleistocene stone technology at Mata Menge, Central Flores, Indonesia. In: F. Aziz et al. (eds.) *Geology, palaeontology and archaeology of the Pleistocene Soa Basin, Central Flores, Indonesia*, Chapter 4, Pusat Survei Geologi, Bandung, Spec. Publ. 36, p. 119-137.

(E Pleistocene stone tool assemblage from Mata Menge in Soa Basin, Flores, is oldest Palaeolithic stone assemblage in well-dated stratigraphic context in SE Asia. 91% of 459 artefacts made from volcanic rocks)

Brumm, A., M.C. Langley, M.W. Moore, B. Hakim, M. Ramli, I. Sumantri, B. Burhan, A.M. Saiful, L. Siagian, Suryatman, R. Sardi, A. Jusdi, Abdullah, A.P. Mubarak et al. (2017)- Early human symbolic behavior in the Late Pleistocene of Wallacea. Proc. National Academy Sciences USA 114, 16, p. 4105-4110.

(Leang Bulu Bettue cave and rock-shelter in SW Sulawesi with relicts of Late Pleistocene (~30-22ka) Homo sapiens. Include previously unknown items of personal ornamentation, portable art, etc., fashioned from body parts of endemic animals)

Brumm, A. & M.W. Moore (2012)- Biface distributions and the Movius Line: a Southeast Asian perspective. Australian Archaeology 74, p. 32-46.

(online at: <http://ro.uow.edu.au/cgi/viewcontent.cgi?article=7783&context=scipapers>)

(Movius Line suggests that 'true' Acheulean biface stone tools, especially handaxes, are common only in Africa and W Eurasia, but bifaces relatively common in SE Asia (e.g. Pacitan/Java, Walanae River/Sulawesi, etc.))

Brumm, A., G.D. van den Bergh, M. Storey, I. Kurniawan, B.V. Alloway, R. Setiawan, E. Setiyabudi, R. Grun et al. (2016)- Age and context of the oldest known hominin fossils from Flores. Nature 534, 7606, p. 249-253.

(Excavations in fluvial valley-fill sandstone at M Pleistocene (0.7 Ma) Mata Menge site, Soa Basin, C Flores, yielded hominin fossils ancestral to Late Pleistocene Homo floresiensis. Hominins inhabited savannah-like open grassland habitat with wetland component, in relatively dry climate, Hominin fossils occur alongside remains of insular fauna (Stegodon florensis, giant rat Hooijeromys nusatenggara, Varanus komodoensis, etc.) and simple stone technology)

Buffetaut, E. (1989)- The contribution of vertebrate paleontology to the geodynamic history of SE Asia. In: A.M.C. Sengor et al. (eds.) Tectonic evolution of the Tethyan Region, NATO Advanced Study Inst., Ser. C, 259, p. 645-653.

(Continental fossil vertebrates good indicators of former land connections between continental blocks. Vertebrate fauna from Norian Huai Hin Lat Fm of NE Thailand close affinities with faunas from Laurasia, and indicates continental link between Indochina microcontinent and Laurasia in Late Triassic)

Bulbeck, D. (2004)- South Sulawesi in the corridor of island populations along East Asia's Pacific Rim. In: S.G. Keates & J. Pasveer (eds.) Quaternary Research in Indonesia, Chapter 12, Modern Quaternary Research in Southeast Asia 18, Balkema, Leiden, p. 221-258.

Bulbeck, D., I. Sumantri & P. Hiscock (2004)- Leang Sakapao 1, a second dated Pleistocene site from South Sulawesi, Indonesia. In: S.G. Keates & J. Pasveer (eds.) Quaternary Research in Indonesia, Chapter 8, Modern Quaternary Research in Southeast Asia 18, p. 111-128.

(Rock shelter at base of limestone cliff in SW Sulawesi with evidence of Late Pleistocene (~31-20 ka) human habitation (stone artefacts, pottery, etc.))

Chaimanee, Y. (1997)- Les rongeurs du Plio- Pleistocene de Thailand. Doct. Thesis University Montpellier II, p. 1-215.

(online at: http://library.dmr.go.th/Document/DMR_Technical_Reports/1997/546.pdf)

('The rodents of the Plio-Pleistocene of Thailand'. 20 Late Pliocene- Pleistocene rodent localities in Thailand, with 41 species, most of them extant species in Thailand or in Sundaland)

Chaimanee, Y. (1998)- Plio-Pleistocene rodents of Thailand. Thai Studies in Biodiversity 3, Bangkok, p. 1-303.

(Study of rodent fossils from 20 fissure fill and cave deposits. English version of 1997 French thesis)

Chaimanee, Y. (2004)- *Siamopithecus eocaenus*, anthropoid primate from the Late Eocene of Krabi, Thailand. In: C.F. Ross & R.F. Kay (eds.) Anthropoid origins: new visions, Kluwer/Springer, New York, Chapter 14, p. 329-356.

(Late Eocene primate Siamopithecus eocaenus from Krabi coal mine in Peninsular Thailand is anthropoid. Large primate, of body size estimated between 8-9 kg, with many shared dental characters with other Asian taxa such as Fondaungia, Amphipithecus, and Myanmarpithecus (amphipithecids))

Chaimanee, Y. (2009)- Diversity of Cenozoic mammals in Thailand; contribution to palaeoenvironments. J. Geol. Soc. Thailand 1, p. 11-16.

(online at: <http://library.dmr.go.th/Document/J-Index/2009/2973.pdf>)

(Oldest mammalian fossils of Thailand in late Eocene Krabi basin, Peninsular Thailand (27 taxa). Species association indicates humid tropical forest. Nong Ya Plong Late Oligocene locality with many groups of mammals, all new. Several M-L Miocene mammalian localities in N Thailand, incl. first hominoid fossils (orang-utan-like, 12, 8 Ma) in SE Asia. Pliocene and Pleistocene fossils were recovered from caves and fissure fills, with micromammals indicating cooler climate than today from Pliocene- M Pleistocene, with mixture of grasslands with forests. More humid climate with tropical rain forests appears after E Pleistocene, in relation with monsoon development and led to explosion of Rattus group in region)

Chaimanee, Y., O. Chavasseau, V. Lazzari, A. Euriat & J.J. Jaeger (2013)- A new Late Eocene primate from the Krabi Basin (Thailand) and the diversity of Palaeogene anthropoids in southeast Asia. Proc. Royal Society (London), Biological Sci., 280, 1771, 20132268, 9p.

(online at: <http://rspb.royalsocietypublishing.org/content/royprsb/280/1771/20132268.full.pdf>)

(Recent discoveries from M Eocene of Myanmar and China suggest anthropoid primates originated in Asia rather than Africa. Asian Eocene anthropoids two distinct groups, eosimiiforms and amphipithecids. Description of new small anthropoid primate from Late Eocene of Krabi, Krabia minuta, which shares several derived characters with amphipithecids)

Chaimanee, Y. & J.J. Jaeger (1993)- Pleistocene mammals of Thailand and their use in the reconstruction of the paleoenvironments of Southeast Asia. Spafa J. 3, p. 4-10.

Chaimanee, Y., J.J. Jaeger & V. Suteethorn (1993)- Pleistocene micromammals of Thailand: contribution to paleoenvironmental changes, biochronology and biodiversity. In: T. Thanasuthipitak (ed.) Int. Symposium Biostratigraphy of mainland Southeast Asia: facies and paleontology (BIOSEA), Chiang Mai University, 1, p. 125-136.

(online at: http://library.dmr.go.th/Document/Proceedings-Yearbooks/M_1/1993/6786.pdf)

(11 M-L Pleistocene localities in Thailand with 19 genera of rodents (squirrels, rats, mice))

Chaimanee, Y., D. Jolly, M. Benammi, P. Tafforeau, D. Duzer, I. Moussa & J.J. Jaeger (2003)- A Middle Miocene hominoid from Thailand and orangutan origins. Nature 422, p. 61-65.

Chaimanee Y., V. Lazzari, M. Benammi, A. Euriat & J.J. Jaeger (2015)- A new small pliopithecoid primate from the Middle Miocene of Thailand. J. Human Evolution 88, p. 15-24.

Chaimanee, Y., R. Lebrun, C. Yamee & J.J. Jaeger (2011)- A new Middle Miocene tarsier from Thailand and the reconstruction of its orbital morphology using a geometric-morphometric method. Proc. Royal Society (London), B 278, p. 1956-1963.

(online at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3107645/pdf/rspb20102062.pdf>)

(New species of nocturnal primate Tarsius from M Miocene of Mae Moh coal mine, N Thailand. (today Tarsius is endemic to islands of SE Asia)

Chaimanee, Y., V. Suteethorn, J.J. Jaeger & S. Ducrocq (1997)- A new late Eocene anthropoid primate from Thailand. Nature 385, p. 429-431.

(New anthropoid from Late Eocene lignite seam near Krabi, S Thailand. Species about size of Aegyptopithecus, can be related to Burmese forms, and provides evidence for SE Asian evolutionary centre for anthropoids)

Chaimanee, Y., V. Suteethorn, P. Jintasakul, C. Vidthayanon, B. Marandat & J.J. Jaeger (2004)- A new orang-utan relative from the Late Miocene of Thailand. Nature 427, p. 439-441.

(online at: https://www.khoratgeopark.com/kgp/researchs/2004_Chaimanee%20et%20al.pdf)
(Lower jaw of new species of *Khoratpithecus piriyai* from sandpit in Late Miocene of Khorat Plateau, NE Thailand. Associated with tropical floras)

Chaimanee, Y., T. Thein, S. Ducrocq, A.N. Soe, M. Benammi, T. Tun, T. Lwin, S. Wai & J.J. Jaeger (2000)- A lower jaw of *Pondaungia cotteri* from the Late Middle Eocene Pondaung Formation (Myanmar) confirms its anthropoid status. *Proc. National Academy Sciences* 97, 8, p. 4102-4105.
(online at: www.pnas.org/content/97/8/4102.full.pdf)

Chaimanee, Y., C. Yamee, B. Marandat & J.J. Jaeger (2007)- First Middle Miocene rodents from the Mae Moh Basin (Thailand): biochronological and paleoenvironmental implications. In: *Mammalian paleontology on a global stage: papers in honor of Mary R. Dawson*, Bull. Carnegie Museum Natural History, Pittsburgh, 39, p. 157-163.
(First report of *M Miocene microvertebrates from Mae Moh coal mine, Lamphang Province, N Thailand, incl. Tarsius sp., insectivores and rodents (Prokanisamys, Neocometes). From Q and K coal seams, previously dated between 13.1-13.3 Ma, but very similar to Mae Long fauna from Li Basin, dated between 16-18 Ma. Associated with fragments of primitive deer Stephanocemas cf. rucha and pig Conohyus thailandicus*)

Chaimanee, Y., C. Yamee, P. Tian, K. Khaowiset, B. Marandat, P. Tafforeau, C. Nemoz & J.J. Jaeger (2006)- *Khoratpithecus piriyai*, a late Miocene hominoid of Thailand. *American J. Physical Anthropology* 131, p. 311-323.
(Lower jaw of *Khoratpithecus piriyai*, a Late Miocene orangutan-like hominoid from NE Thailand. Originated from fluvial sand-gravel deposits of large river, associated with fossil tree trunk and large vertebrate remains. Associated mammal fauna gives geological age between 9-6 Ma)

Chaimanee, Y., C. Yamee, P. Tian & J.J. Jaeger (2007)- Diversity of Cenozoic mammals in Thailand: paleoenvironment and age updated. In: W. Tantiwanit (ed.) *Int. Conf. Geology of Thailand: Towards sustainable development and sufficiency economy (GEOTHAI07)*, Bangkok, Dept. Mineral Resources, p. 73-79.
(online at: http://library.dmr.go.th/library/Proceedings-Yearbooks/M_1/2007/12704.pdf)
(Brief review of mammal occurrences in Tertiary basins of Thailand: Krabi Basin (Late Eocene, tropical swamp), Nong Ya Plong (Late Oligocene, tropical), Mae Moh basin (M Miocene, tropical with temperate elements), Chiang Muan (M Miocene), Khorat (Late Miocene))

Choi, K. & D. Driwantoro (2007)- Shell tool use by early members of *Homo erectus* in Sangiran, central Java, Indonesia: cut mark evidence. *J. Archaeological Science* 34, 1, p. 48-58.
(1.6- 1.5 Ma old cut marks on Pleistocene bovid bones from Pucangan Fm in Sangiran, inflicted by thick clamshell flakes, document use of first tools in Sangiran and oldest evidence of shell tool use in world)

Ciochon, R.L. (2009)- The mystery ape of Pleistocene Asia. *Nature* 459, 7249, p. 910-911.
(Reports of fossil teeth, etc., of E Pleistocene humans in SE China (Longgupo, etc.) and interpreted as related to *Homo erectus* probably erroneous; instead belong to an unknown ape species, living in forested region)

Ciochon, R.L. (2010)- Divorcing hominins from the *Stegodon-Ailuropoda* fauna: new views on the antiquity of hominins in Asia. In: J.G. Fleagle et al. (eds.) *Out of Africa I: The first hominin colonization of Eurasia*, Chapter 8, Springer, p. 111-126.
(Pleistocene *Stegodon-Ailuropoda* (= Panda) fauna of S China and peninsular SE Asia contains ape species previously attributed to early hominins, but no clear evidence. Early hominins may have inhabited parts of S China without forest, but not with heavily forested, humid-climate adapted *Stegodon-Ailuropoda* mammalian fauna. *Homo erectus* likely arrived in Java between 1.8-1.6 Ma, but at ~900 ka hominins and most other contemporary large mammals seem to have left area)

Ciochon, R.L. & G.F. Gunnell (2002)- Eocene primates from Myanmar: historical perspectives on the origin of Anthrozoidea. *Evolutionary Anthropology* 11, p. 156-168.

Ciochon, R.L. & G.F. Gunnell (2004)- Eocene large-bodied primates of Myanmar and Thailand: morphological considerations and phylogenetic affinities. In: C.F. Ross & R.F. Kaya (eds.) *Anthropoid origins: new visions*, Chapter 11, Springer, New York, p. 249-282.

(Eocene large-bodied primates known from SE Asia: Pondaungia and Amphipithecus from Myanmar and Siamopithecus from Thailand, traditionally viewed as anthropoids)

Ciochon, R.L., V.T. Long, R. Larick, L. Gonzales, R. Grun, J. de Vos et al. (1996)- Dated co-occurrence of *Homo erectus* and *Gigantopithecus* from Tham Khuyen Cave, Vietnam. *Proc. National Academy Sciences USA* 93, p. 3016-3020.

(online at: www.pnas.org/content/93/7/3016.full.pdf)

*(Tham Khuyen Cave deposits in N Vietnam with hominoid teeth dated as 475 ± 125 ka (electron spin resonance). Teeth represent *Homo erectus* and *Gigantopithecus blacki*. Co-occurrence demonstrates >1 million years of co-existence of these two species throughout E Asia in E-M Pleistocene)*

Corlett, R.T. (2010)- Megafaunal extinctions and their consequences in the tropical Indo-Pacific. In: S.G. Haberle et al. (eds.) *Altered ecologies: fire, climate and human influence on terrestrial landscapes*, Terra Australis 32, ANU Press, Chapter 8, p. 117-131.

(online at: www.jstor.org/stable/pdf/j.ctt24h8rj.10.pdf)

(Global Quaternary Megafauna Extinction (QME) event eliminated 2/3 of all mammal genera, with most well-dated extinctions occurring between ~50-30 ka. Java probably had fully modern fauna by 120 ka. In Indo-Pacific hominin impacts probably major factor behind most large vertebrate extinctions and range restrictions in the past 130 kyrs and probably earlier ones)

Cosijn, J. (1931)- Voorloopige mededeeling omtrent het voorkomen van fossiele beenderen in het heuvelterrein ten Noorden van Djetic en Pening (Midden Java). *Verhandelingen Geologisch-Mijnbouwkundig Genootschap Nederland Kol., Geol. Serie 9, 2*, p. 113-119.

('Preliminary communication on the occurrence of fossil bones in the hill country N of Jetic and Pening, C Java'. Localities N of Mojokerto. Bone-bearing layers similar to those from Trinil, and considered to be Pliocene in age (now viewed as Pleistocene; JTvG))

Cosijn, J. (1932)- Tweede mededeeling over het voorkomen van fossiele beenderen in het heuvelland ten Noorden van Djetic en Pening (Java). *Verhandelingen Geologisch-Mijnbouwkundig Genootschap Nederland Kol., Geol. Serie 9, 3*, p. 135-148.

('Second communication on the occurrence of fossil bones in the hill country N of Jetic and Pening, C Java')

Corvinus, G. (2003)- *Homo erectus* in East and Southeast Asia, and the questions of the age of the species and its association with stone artifacts, with special attention to handaxe-like tools. *Quaternary Int.* 117, p. 141-151.

*(Many fossil remains of *H. erectus* found in C Java, but not sure which tools belonged to *H. erectus*. Sangiran and Ngandong industries of small flakes provisionally connected with *H. erectus soloensis*. Handaxe-like tools from Pacitan, Java and Cabenge, Sulawesi are of uppermost Pleistocene age and work of modern humans)*

Covert, H.H., M.W. Hamrick, T. Dzanh & K.C. McKinney (2001)- Fossil mammals from the Late Miocene of Vietnam. *J. Vertebrate Palaeontology* 21, p. 633-636.

Curnoe, D., I. Datan, P.S.C. Tacon, C.L.M. Ung & M.S. Sauffi (2016)- Deep skull from Niah Cave and the Pleistocene peopling of Southeast Asia. *Frontiers Ecology Evolution* 4, 75, p. 1-17.

(online at: <http://journal.frontiersin.org/article/10.3389/fevo.2016.00075/full>)

(Late Pleistocene Deep Skull from Niah Cave in Sarawak the oldest (>50 ka) anatomically modern human from island SE Asia)

Danisworo, C. (1987)- Lithostratigraphy and magnetostratigraphy of the Quaternary deposits in the Sangiran area, Central Java, Indonesia. *Doct. Thesis, Vrije Universiteit, Brussel*, p. *(Unpublished)*

- Danisworo, C. (1992)- Magnetostratigraphy of Plio-Pleistocene deposits in the Sangiran area, Central Java. Proc. 21st Ann. Mtg. Indon. Assoc. Geol. (IAGI), Yogyakarta, 2, p. 477-485.
(*Normal and reversed magnetic polarities identified in Late Pliocene- Pleistocene in Sangiran Dome. Gauss-Matuyama boundary (2.48 Ma) just above Balanus Limestone of Puren Fm (U Kalibeng Fm). Normal polarity in Cemoro (Pucangan) Fm claystone probably Olduvai event (~1.87-1.67 Ma). Base Jaramillo event (0.97 Ma) below 'Grenzbank' at base Bapang (Kabuh) Fm. Brunhes- Matuyama reverse to normal transition (0.73 Ma) between TB3 and TB4 tuff horizons in Bapang (Kabuh) Fm (see also Hyodo et al. 1988, 2011, Sunardi 2010)*)
- Danisworo, C. (2001)- Stratigraphic position (in the Quaternary stratigraphy) and the age of *Pithecanthropus erectus* VIII discovered in the Sangiran area, Central Java. Proc. 30th Ann. Conv. Indon. Assoc. Geol. (IAGI) and 10th Reg. GEOSEA Congress, Yogyakarta, Majalah Geologi Indonesia 16, Spec. Ed., p. 131-139.
(*Pithecanthropus erectus VIII skull considered to be from within Jagan Tuff Member, lower Bapang Fm., between 0.97- 0.90 Ma old, or in Pleistocene Jaramillo magnetic event*)
- Dawson, M.R. (1971)- Fossil mammals of Java I. Notes on Quaternary Leporidae (Mammalia, Lagomorpha) from Central Java. Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam, B74, p. 27-32.
(*On fossil rabbits/ hares from Pleistocene of Sangiran, C. Java*)
- Delfino, M. & J. De Vos (2010)- A revision of the Dubois crocodylians, *Gavialis bengawanicus* and *Crocodylus ossifragus*, from the Pleistocene *Homo erectus* beds of Java. J. Vertebrate Paleontology 30, p. 427-441.
(*Revision of two extinct Javanese crocodylian species Gavialis bengawanicus Dubois 1908 and Crocodylus ossifragus Dubois 1908 (= C. siamensis Schneider 1801). Both found with Stegodon- Homo erectus fauna, which is considered to be largely result of E Pleistocene dispersal from Siwaliks Hills via Siva-Malayan route*)
- Delfino, M. & J. De Vos (2014)- A giant crocodile in the Dubois Collection from the Pleistocene of Kali Gedeh (Java). Integrative Zoology 9, 2, p. 141-147.
(*Unpublished crocodylian specimen collected by Dubois in latest E Pleistocene of Kali Gedeh tentatively referred to genus Crocodylus. ~1m long lower jaw indicate total length of ~6-7 m*)
- Delson, E., K. Harvati, D. Reddy, L.F. Marcus, K. Mowbray, G.J. Sawyer, T. Jacob & S. Marquez (2001)- The Sambungmacan 3 *Homo erectus* calvaria: a comparative morphometric and morphological analysis. Anatomical Record 262, 4, p. 380-397.
(*Sambungmacan (Sm) 3 calvaria, discovered on Java in 1977, was illegally removed from Indonesia in 1998. Sm 3 probably Homo erectus, with greatest similarity to specimens from Ngandong*)
- De Lumley, H., F. Semah & T. Simanjuntak (1993)- Les outils du Pithecanthrope. Les dossiers d'Archeologie 184, p.62-68.
(*'The tools of Pithecanthropus'*)
- Demeter, F., A.M. Bacon, Nguyen Kim Thuy, Vu The Long, H. Matsumura, Ha Huu Nga, M. Schuster, Nguyen Mai Huong & Y. Coppens (2004)- An archaic *Homo* molar from Northern Vietnam. Current Anthropology 45, 4, p. 535-541.
(*Human tooth from Ma U'Oi Cave, N Vietnam, interpreted as archaic Homo, with characteristics transitional between H. erectus and H. sapiens. Associated fauna characteristic of Stegodon-Ailuropoda (Panda) complex, of estimated late M Pleistocene- Late Pleistocene age*)
- Demeter, F., L.L. Shackelford, A.M. Bacon, P. Durringer, K. Westaway, T. Sayavongkhamdy et al. (2012)- Anatomically modern human in Southeast Asia (Laos) by 46 ka. Proc Nat. Academy Sciences U.S.A. 109, 36, p. 14375614380.
(*online at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3437904/pdf/pnas.201208104.pdf>*)
(*Modern human cranium from Tam Pa Ling (Cave of Monkeys), ~260 km NNE of Vientiane, Laos. Sediments minimum age of 51-46 ka. Maximum age of ~63 ka from U-dating of bone. Establishes evidence for fully modern humans in mainland SE Asia by ~50 ka*)

De Neve, G.A. (1949)- Note on the occurrence of the remains of a Cetacean in the alluvial tin deposits of the island of Billiton. *Chronica Naturae* 105, 4, p. 118-120.

(online at: <http://colonial.library.leiden.edu/...>)

(*Vertebra of whale in Quaternary tin ore-bearing deposits near Manggar, Belitung. Related to fin whale Balaenoptera*)

De Neve, G.A. (1949)- Opmerking over de fossiele wervel gevonden in Billiton. *Chronica Naturae* 105, 11, p. 293-294.

(*Remark on the fossil vertebra found on Billiton'. Second whale vertebra fossil from Manggar, Belitung, probably from marine shell layer first identified by Verbeek at ~2m(?) below sea level*)

Deninger, K. (1910)- Uber einen Affenkiefer aus den Kendeng-Schichten von Java. *Centralblatt Mineralogie Geologie Palaont.* 1910, p. 1-3.

(online at: www.biodiversitylibrary.org/item/192869#page/25/mode/1up)

(*On a monkey jaw from the Kendeng beds of Java'. Pleistocene fossil jaw with molars collected by Elbert near Saradan, Madiun District (younger than Trinil bone bed). Assigned to Inuus nemestrinus (macaque family)*)

Dennell, R.W. (2004)- Hominid dispersals and Asian biogeography during the Lower and early Middle Pleistocene, c. 2.0- 0.5 Mya. *Asian Perspectives* 43, 2, p. 205-226.

Dennell, R.W. (2005)- The Solo (Ngandong) *Homo erectus* assemblage: a taphonomic assessment. *Archaeology in Oceania* 40, 3, p. 81-90.

(*Homo erectus site near base of Solo River terrace deposits at Ngandong, excavated by Oppenoorth of Geological Survey in 1931-1933, differs from other sites with hominin remains in fluvial deposits, because 12 crania are present, but few other skeletal elements (fluvial disarticulation, large carnivores or headhunters?). Most of >25,000 mammalian fossils excavated from Ngandong now lost*)

Dennell, R.W. (2009)- *The Palaeolithic settlement of Asia.* Cambridge University Press, p. 1-548.

Dennell, R.W. (2014)- Hallam Movius, Helmut de Terra, and the line that never was; Burma 1938. In: K. Boyle et al. (eds.) *Living in the landscape: essays in honour of Graeme Barker, McDonald Inst. Archaeological Research, Cambridge*, p. 11-34.

Dennell, R. (2015)- Life without the Movius Line: the structure of the East and Southeast Asian Early Palaeolithic. *Quaternary International* 400, p. 14-22.

(*Movius Line is no longer appropriate view of Early Paleolithic of E and SE Asia, and should be disregarded. E Asia not isolated throughout E-M Pleistocene, but open to immigration during interglacials. M Pleistocene 'Acheulean' stone tool assemblages possibly present in Ngebung (Sangiran) C Java*)

Dennell, R.W., J. Louys, H.J. O'Regan & D.M. Wilkinson (2014)- The origins and persistence of *Homo floresiensis* on Flores: biogeographical and ecological perspectives. *Quaternary Science Reviews* 96, p. 98-107.

(*Stone artifacts suggest hominids arrived on Flores before 1 Ma and small hominin species (Homo floresiensis) lived on Flores in Late Pleistocene. Flores was always island, at least 19 km from other islands on Sunda Shelf, suggesting early hominids reaching Flores were capable of using watercraft*)

Dennell, R.W. & M.D. Petraglia (2012)- The dispersal of *Homo sapiens* across southern Asia: how early, how often, how complex? *Quaternary Science Reviews* 47, p. 15-22.

(*Timing and the paths of colonization of S Asia by Homo sapiens poorly known. Dispersal from E Africa between 60- 40 ka, but U Pleistocene population history of S Asia likely complex*)

Dennell, R.W. & W. Roebroeks (2005)- An Asian perspective on early human dispersal from Africa. *Nature* 438, 7071, p. 1099-1104.

- De Terra, H. (1943)- Pleistocene geology and early man in Java. In: Research on early man in Burma, Trans. American Philosophical Soc., N.S. 32, 3, p. 437-464.
(Review of work by Dubois, Von Koenigswald, etc. on Pleistocene stratigraphy and hominid sites of Java, incl. Mojokerto, Sangiran, Trinil, Ngandong, Pacitan. Includes study of Solo River Quaternary terraces)
- De Terra, H. (1949)- Geology and climate as factors of human evolution in Asia. In: W.W. Howell (ed.) Early man in the Far East, Symposium, American Assoc. Phys. Anthropologists, Chicago 1946, p. 7-15.
- De Terra, H. & H.L. Movius (1943)- Research on early man in Burma, with supplementary reports upon the Pleistocene vertebrates and molluscs of the region, and Pleistocene geology and early Man in Java. Trans. American Philosophical Soc., N.S. 32, 3, p. 267-464.
(Results of American SE Asian Expedition for early Man)
- Detroit, F. (2000)- The period of transition between *Homo erectus* and *Homo sapiens* in East and Southeast Asia: new perspectives by the way of geometric morphometrics. In: W. Dong (ed.) Proc. 1999 Beijing Int. Symposium on paleoanthropology, Acta Anthropologica Sinica 19 (Suppl.), p. 75-81.
(Comparison of morphometric components of human skulls from ~2.5 Ma- present. Always clear distinction between *H. erectus* and *H. sapiens* cranial architecture. Ngandong specimens (= '*H. soloensis*') sometimes considered archaic *Homo sapiens*, but typical *Homo erectus* architecture)
- Detroit, F. (2002)- Origine et evolution des *Homo sapiens* en Asie du Sud-Est: descriptions et analyses morphometriques de nouveaux fossiles. Doct. Thesis Museum Nat. Histoire Naturelle, Paris, p. 1-445.
(online at: http://hopsea.mnhn.fr/pc/thesis/Detroit_2002_PhD_thesis.pdf)
('Origin and evolution of *Homo sapiens* in SE Asia: overview and morphometric analyses of new fossils'. Study of U Pleistocene- Holocene *Homo sapiens* populations from Malaysia, Java (Wajak, Tulungagung, Gua Lawa, Gunung Sewu, etc.), Flores, Thailand (Moh Khiew), Palawan (Tabon). Two periods in Pleistocene evolution of *Homo*: (1) time of *Homo erectus*, marked by some endemism in SE Asia archipelago, (2) intensified migrations with first arrival of *H. sapiens* in M Pleistocene)
- Detroit, F. (2006)- *Homo sapiens* in Southeast Asian archipelagos: the Holocene fossil evidence with special reference to funerary practices in East Java. In: H.T. Simanjuntak et al. (eds.) Proc. Symp. Austronesian diaspora and the ethnogeneses of people in Indonesian archipelago, Solo, Indonesian Inst. Science (LIPI), Jakarta, p. 186-204.
(On *Homo sapiens* fossils from Gunung Sewu area, Southern Mountains of Java (Song Terus, Song Keplek, Goa Braholo), and their funeral practices)
- De Vos, J. (1983)- The Pongo faunas from Java and Sumatra and their significance for biostratigraphical and paleo-ecological interpretations: Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam, B86, p. 417-425.
(Fossil faunas from Punung, Java, and Sumatran caves. Biostratigraphically intermediate between Ngandong and Wadjak faunas, and both indicative of humid forest climate)
- De Vos, J. (1985)- Faunal stratigraphy and correlation of the Indonesian hominid sites. In: E. Delson (ed.) Ancestors, the hard evidence, A.R. Liss, New York, p. 215-220.
(Review of succession of Pleistocene mammalian faunas from E Java, as also described by Sondaar (1984). From old to young: Satir, Ci Saat, Trinil HK, Kedung Brubus, Ngandong, Punung and Wajak. Oldest faunas rel. poor island faunas. Kedung Brubus fauna reflects greatest interchange with Asian mainland. Oldest hominids in Sangiran of Trinil HK or Ci Saat age)
- De Vos, J. (1994)- *Homo modjokertensis*; vindplaats, ouderdom en fauna. Cranium 11, 2, p. 103-107.
(online at: <http://natuurtijdschriften.nl/download?type=document&docid=523348>)
('*Homo modjokertensis*; locality, age and fauna'. Discussion of Swisher et al. (1994), who suggest new 1.81 Ma radiometric age of *Homo modjokertensis* beds, indicating *Homo erectus*-like fossils may have originated in Asia, not in Africa as generally assumed. Magnetostratigraphic work, associated mammals and uncertainty about exact level of *H. modjokertensis* skull suggest Swisher's Ar/Ar age and conclusions may be wrong)

De Vos, J. (1995)- The migration of *Homo erectus* and *Homo sapiens* in SE Asia and the Indonesian Archipelago. In: J.R.F. Bower & S. Sartono (eds.) Human evolution in its ecological context, Proc. Pithecanthropus Centennial Congress, Leiden, vol. 1, Evolution and ecology of *Homo erectus*, DSWO Press, p. 239-260.

De Vos, J. (1996)- Faunal turnovers in Java in relation to faunas of the continent. *Odontologie* 1, p. 32-36.

De Vos, J. (2002)- A century of Dutch paleo-anthropological research in Indonesia. In: H. Vermeulen & J. Kommers (eds.) Tales from academia; history of anthropology in the Netherlands, 2. Niccos, Nijmegen Studies in Development and Cultural Change 40, p. 1095-1116.

De Vos, J. (2004)- The Dubois collection: a new look at an old collection. In: C.F.Winkler Prins, & S.K. Donovan (eds.) VII Int. Symp. 'Cultural Heritage in Geosciences, Mining and Metallurgy: Libraries - Archives - Museums, Leiden 2003, Scripta Geologica, Spec. Issue, 4, p. 267-285.

(Online at: www.repository.naturalis.nl/document/148593)

(Description of large Dubois collection in Leiden Naturalis museum and its role in studies of Java Pleistocene stratigraphy, mammal faunas, faunal migrations, hominid evolution, etc.)

De Vos, J. (2014)- The history of palaeoanthropological research in Asia: reasons and priorities for future cooperation in research and preservation of sites and collections. In: N. Sanz (ed.) Human origin sites and the World Heritage Convention in Asia, UNESCO World Heritage Papers 39, p. 68-82.

(online at: <http://unesdoc.unesco.org/images/0022/002291/229174e.pdf>)

(Review of history of paleoanthropology in SE Asia and principal localities in Indonesia)

De Vos, J. & F. Aziz (1987)- Note on two upper canines of *Megantereon* sp. (Mammalia, Felidae) from the Pleistocene of Java. Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam, B90, p. 57-63.

(Teeth of sabre-tooth cat, found by Indonesian-Japanese team in 'Grenzbank' Bed in Sangiran Dome, C Java, and reported as *Homotherium zwierzyckii*. These canines belong to *Megantereon* sp.)

De Vos, J. & F. Aziz (1989)- The excavations by Dubois (1891-1900), Selenka (1906-1908) and the Geological Survey by the Indonesian-Japanese Team (1976-1977) at Trinil (Java, Indonesia). *J. Anthropological Soc. Nippon* 97, 3, p. 407-420.

(online at: [www.journalarchive.jst.go.jp/...](http://www.journalarchive.jst.go.jp/))

De Vos, J., F. Aziz & P.Y. Sondaar (1993)- Les faunes quaternaires de Java. In: F. Semah & D. Grimaud-Herve (eds.) Le Pithecanthrope de Java, a la decouverte du chainon manquant, Les dossiers d'Archeologie 184, p. 56-61.

(*The Quaternary faunas of Java*. Age of Ngandong hominids (*H. soloensis* or 'advanced *H. erectus*) ~80,000 to 250,000 years)

De Vos, J., F. Aziz, P.Y. Sondaar & G.D. van den Bergh (1995)- *Homo erectus* in S.E. Asia: time space and migration routes, III. Migration routes and evolution. In: J. Gibert et al. (eds.) Proc. Int. Conf. The hominids and their environment during the Lower and Middle Pleistocene of Eurasia, Orce 1995, p. 369-381.

(Brief review of Pleistocene mammal fossil occurrences in SE Asia. E-M Pleistocene migration via Siva-Malayan route from Siwaliks via Birma to Java brought in *Homo erectus* in M Pleistocene. During Late Pleistocene Sunda Shelf became connected with continent, causing migration from China, Vietnam, Cambodia via 'Sino-Malayan' corridor, bringing in *Homo sapiens* and leading to extinction of *Homo erectus*)

De Vos, J., F. Aziz, E. Setiabudi, G.D. van den Bergh & E.Y. Patriani (2007)- A new vertebrate fossil locality near Sumberdadi, Mojokerto (East Java, Indonesia). In: Int. Senckenberg conference, Late Neogene and Quaternary biodiversity and evolution: regional developments and interregional correlations, Weimar 2006, 2, CFS Courier Forschungsergebnisse Senckenberg 259, p. 175-180.

(Vertebrate fossils from new locality in sand quarry near Sumberdadi, ~30 km N of Mojokerto, E Java, include Stegodon trigonocephalus cf. ngandongensis, Bibos palaeosondaicus, Axis lydekkeri, Rusa sp. and crocodile remains. Advanced stage of Stegodon suggests late M - Late Pleistocene, comparable with Ngandong fauna)

De Vos, J. & A. Bautista (2001)- An update on the vertebrate fossils from the Philippines. National Museum Papers 11, p. 58-62.

De Vos, J., A. Bouteaux & A. Bautista (2007)- The mammalian faunas chronology in island Southeast Asia. In: A.M. Semah & K. Setiagama (eds.) First Islanders; human origins patrimony in Southeast Asia, p. 81-84. (online at: <http://hopsea.mnhn.fr/pc/brochures/2007HOPseaFI.pdf>) (Brief review of Pleistocene mammal fauna evolution of SE Asia. Parts of Java first emerged above sea level at ~1.8 Ma. First mammals to reach Java unbalanced island fauna (Satir Fauna of Bumiaju and Sangiran, with hippos (*Hexaptotodon*), cervids and mastodon (*Sinomastodon bumiajuensis*)). At 1.2 Ma better connection with Java, with arrival of more balanced Ci-saat fauna, including tigers, and more diverse Trinil Fauna with *Homo erectus* no later than 1.0 Ma. Around 0.8 Ma new migration to Java (Kedung Brubus Fauna, with first *Elephas*). Next fauna is Ngandong Fauna that includes Solo Man, a *Homo erectus* with larger brain size than older forms, that lived until ~0.2 Ma. Final faunas Punung Fauna (~120ka) and Wajak Fauna, both tropical rainforest assemblages, with *Homo sapiens*)

De Vos, J., S. Sartono, S. Hardja-Sasmita & P.Y. Sondaar (1982)- The fauna from Trinil, type locality of *Homo erectus*: a reinterpretation. *Geologie en Mijnbouw* 61, 2, p. 207-211. (online at: <https://drive.google.com/file/d/0B7j8bPm9Cse0ZIN5anhJdHF5YWs/view>) (Fauna at Trinil type locality is older than 'Jetis-fauna' of Von Koenigswald 1934 and also older than Kedung Brubus fauna. Many endemic species, suggesting island setting (see also comments of Bartstra 1983))

De Vos, J. & P.Y. Sondaar (1982)- The importance of the 'Dubois collection' reconsidered. *Modern Quaternary Research in Southeast Asia* 7, Balkema, Rotterdam, p. 35-63. (Review of Dubois collection of Pleistocene mammals from C Java, mainly from excavations at Trinil along Solo River and Kedung Brubus near Madiun in 1890's. Material in *Naturalis Museum, Leiden*, since. Much of material not collected in stratigraphic context. With locality maps and listings of species)

De Vos, J. & P.Y. Sondaar (1994)- Dating hominid sites in Indonesia. *Science* 266, p. 1726-1727. (Question correctness of Swisher et al. (1994) older-than-generally-accepted new radiometric ages of pumice associated with Java hominids at Mojokerto and Sangiran sites of C Java (1.8-1.66 Ma instead of 'conventional')

De Vos, J., P.Y. Sondaar, G.D. van den Bergh & F. Aziz (1994)- The *Homo* bearing deposits of Java and its ecological context. In: J.L. Lorenz (ed.) 4th Int. Conf. 100 years of *Pithecanthropus*: the *Homo erectus* problem, Frankfurt 1991, Courier Forschungsinstitut Senckenberg 171, p. 129-140. (Discussion of Quaternary faunal succession of Java: (1) Satir (lower Kali Klaga series in Bumiayu; island fauna), (2) Ci Saat (upper Kali Glagah series, Sangiran upper Black Clay; 1.2 Ma), (3) Trinil H.K. (1 Ma; with first *Homo erectus*; large amounts of bovids suggest rel. dry, glacial period), (4) Kedung Brubus Fauna (= upper Bapang Fm at Sangiran, ~0.8 Ma; also rel. dry climate), (5) Ngandong (with *Homo erectus soloensis*), (6) Punung (Late Pleistocene; common primates indicates humid tropical forest environment; last interglacial?), (7) Wajak (Wajak cave; Holocene with *Homo sapiens*). All Pleistocene Java hominids are *Homo erectus*, but with several subspecies)

De Vos, J., L.W. van den Hoek Ostende & G.D. van den Bergh (2007)- Patterns in insular evolution of mammals: a key to island palaeogeography. In: W. Renema (ed.) *Biogeography, time, and place: distributions, barriers, and islands*, Springer, p. 315-345. (Includes review of Pleistocene mammal island faunas of SE Asia)

De Vos, J. & T.L. Vu (2001)- First settlements: relations between continental and insular Southeast Asia. In: F. Semah et al. (eds.) *Proc. Int. Symp. Origine des peuplements et chronologie des cultures paleolithiques dans le sud-est asiatique*, Paris 1998, 24, p. 225-249.

Di Geronimo, I. & S. Sartono (1990)- Sangiran (Java, Indonesia): Upper Pliocene- Pleistocene molluscan environments. *Buletin Jurusan Geologi (ITB)* 20, p. 33-35.

DIRSP (Dutch-Indonesian Joint-Research Group on Sedimentology and Paleontology of South Sulawesi) (1995)- The geology and stratigraphy of the vertebrate-bearing deposits in the Sengkang Basin: The terrestrial faunal evolution of South Sulawesi during the Plio-Pleistocene. *Geol. Res. Dev. Centre (GRDC), Bandung, Spec. Publ.* 18, p. 1-112.

Djubiantono, T. (1992)- Les derniers depots marins de la depression de Solo (Java Central, Indonesie): chronostratigraphie et paleogeographie. *Doct. Thesis, Museum Nat. Histoire Naturelle, Paris*, p. 1-208. (*Unpublished*)

(‘The final marine deposits of the Solo Depression, Central Java; chonostratigraphy and paleogeography’. Kaliuter region of C Java at S flank of Kendeng Hills with thick regressive marine facies. Marine regression deatd as ~2.4 Ma. Two folding phases in Kendeng zone, one at 0.7 Ma, one before 1 Ma. Paleogeographic evolution of Solo Depression and associated fossiliferous sites)

Djubiantono, T. (1986)- Etude sedimentologique et paleomagnetique des derniers depots marins de la depression de Solo (Java, Indonesie). *Memoire de D.E.E., Museum Nat. Histoire Naturelle, Paris*, p.

(‘Sedimentological and paleomagnetic study of the last marine deposits of the Solo depression (Java, Indonesia’)

Djubiantono, T. (1993)- Umur alat batu Kedungcumpleng di daerah Kaliuter, Solo, Jawa Tengah. *Proc. 22nd Ann. Conv. Indon. Assoc. Geol. (IAGI), Bandung*, 1, p. 292-303.

(‘Age of the Kedungcumpleng stone tools in the Kaliuter area, Solo, Central Java’. Pleistocene correlations and chronostratigraphy and correlations of sections in Kaliuter area, 30km N of Solo. Kedungcumpleng site in Jaramillo paleomagnetic episode (0.87-0.97 Ma), and considered site with oldest hominid stone tools in Java today)

Djubiantono, T. & F. Semah (1991)- Lower Pleistocene marine-continental transitional beds in the Solo depression and their relation to the environment of the Pucangan hominids. In: P. Bellwood (ed.) *Indo-Pacific Prehistory 1990, Indo-Pacific Prehistory Assoc. Bull.* 11, p. 7-13.

(Online at: <http://ejournal.anu.edu.au/index.php/bippa/article/view/595/584>)

(Kaliuter River section 10 km N of Sangiran shows transition from Pliocene folded marine Lower Kalibeng Fm marls and Late Pliocene- E Pleistocene Upper Kalibeng Fm regressive series, unconformably overlain by unfolded M-U Pleistocene non-marine series with hominids. ‘Grenzbank’ is unconformity surface)

Djubiantono, T. & F. Semah (1993)- L’île de Java et son peuplement. In: F. Semah et al. (eds.) *Le Pithecanthrope de Java, Les dossiers d’Archeologie* 184, p. 12-19.

(‘Java island and its colonization by humans’. Grenzbank conglomerate in Sangiran linked to uplift and subsequent erosion of ranges surrounding Solo Depression (Kendeng hills and S Mountains))

Djubiantono, T. & F. Semah (1993)- L’evolution de la region de Solo au Quaternaire. In: *Le Pithecanthrope de Java, Les dossiers d’Archeologie* 184, p. 46-49.

Djubiantono, T., F. Semah & A.M. Semah (1992)- Chronology and palaeoenvironment of Plio- Pleistocene deposits in the Solo Depression (Central Java): the Kaliuter area and its relations with the ancient Javanese settlements. In: *Vlth Nat. Archaeological Congress on Indonesian Archaeology, Malang 1992, II*, p. 191-242.

(C Java around Lw-M Pleistocene boundary (1.0- 0.8 Ma) dramatic volcano-tectonic activity, involving uplift of ranges around Solo Depression: Kendeng zone last major phase of folding and probably S Mountains uplift)

Djubiantono, T., F. Semah, A.M. Semah, H. Saleki, C. Falgueres & G. Feraud (1994)- Pertanggalan radiometri pada lapisan pengandung *Homo erectus* di Ngebung (Jawa Tengah, Indonesia) hasil pendahuluan. *Proc. 23rd Ann. Conv. Indon. Assoc. Geol. (IAGI), Jakarta*, 1, p. 184-191.

('Radiometric dating of the Homo erectus-bearing layer in Ngebung (Central Java, Indonesia), preliminary results'. Ngebung site at NW side of Sangiran Dome with rather variable results from different radiometric dating methods just above 'Grenzbank' layer: Ar/Ar of amphibole from tuff ~811 +/- 25 ka; U/Th and ESR much younger)

Downing, K.F., G.G. Musser & L.E. Park (1998)- The first fossil record of small mammals from Sulawesi, Indonesia; the large murid, *Paruromys dominator*, from the Late(?) Pliocene Walanae Formation. In: Y. Tomida et al. (eds.) Advances in vertebrate paleontology and geochronology. Nat. Science Mus. Tokyo, Mon. 14, p. 105-121.

(Discovery of first small mammal fossils from Sulawesi: two teeth of large rat species, identified as Paruromys dominator, from Walanae Fm at Lakibong, SW Sulawesi)

Duangkrayom, J., S.Q. Wang, T. Deng & P. Jintasakul (2017)- The first Neogene record of *Zygodont* (Mammalia, Proboscidea) in Thailand: implications for the mammutid evolution and dispersal in Southeast Asia. *J. Paleontology* 19, 1, p. 179-193.

(online at: <https://www.cambridge.org/core/services/aop-cambridge-core/content/view/> etc)

(New material of Zygodont from Tha Chang sand pits in NE Thailand, of probably Late Miocene age, is first record of zygodont proboscidean in SE Asia)

Dubois, E. (1894)- *Pithecanthropus erectus*. Eine menschenähnliche Uebergangsform aus Java. Landsdrukkerij, Batavia, p. 1-64.

(online at: <https://ia802704.us.archive.org/28/items/Pithecanthropus00Dubo/Pithecanthropus00Dubo.pdf>)

(also in Jaarboek Mijnwezen Nederlandsch Oost-Indie 1895, Wetenschappelijk Gedeelte, p. 5-77)

('Pithecanthropus erectus a transitional human-like transitional form from Java' Classic first description of 'Java man' / Homo erectus, based on skull cap, femur (upper thigh bone) and molar from Trinil)

Dubois, E. (1896)- On *Pithecanthropus erectus*, a transitional form between man and the apes. *Trans. Royal Dublin Soc., Ser. 2, 6, p. 1-18.*

Dubois, E. (1908)- Das geologische Alter der Kendeng- oder Trinil-Fauna. *Tijdschrift Kon. Nederlands Aardrijkskundig Genootschap* (2), 25, p. 1235-1270.

('The geologic age of the Kendeng or Trinil fauna'. Suggests most likely age of hominid bearing beds is Late Pliocene (Subsequent workers all assume Pleistocene age))

Dubois, E. (1922)- The Proto-Australian fossil man of Wadjak. *Java. Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam, B 23, p. 1013-1051.*

(On 'Wajak Man', from slopes of Gunung Lawa near Wajak, C Java (believed by Dubois to be of Pleistocene age and ancestor of Australian aborigines, but age too young for that? (6-10 ka or younger; Storm 1995))

Dubois, E. (1924)- On the principal characters of the cranium and the brain, the mandible and the teeth of *Pithecanthropus erectus*. *Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam, 27, 3, p. 265-278.*

(Dutch version of Dubois 1926)

Dubois, E. (1924)- Figures of the calvarium and endocranial cast, a fragment of the mandible and three teeth of *Pithecanthropus erectus*. *Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam, 27, 5, p. 459-464.*

Dubois, E. (1926)- *Manis palaejavanica*, het reuzenschubdier van de Kendeng fauna. *Verslagen Kon. Nederl. Akademie Wetenschappen, Amsterdam, 35, 8, p. 949-958.*

(Dutch version of Dubois 1926)

Dubois, E. (1926)- *Manis palaejavanica*, the giant pangolin of the Kendeng fauna. *Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam, 29, 9, p. 1233-1243.*

(online at: www.dwc.knaw.nl/DL/publications/PU00015393.pdf)

(Description of large Pleistocene ant eater from Kedung Brubus, 40 km ESE of Trinil, C Java. Possibly suggesting drier climate than today)

Dubois, E. (1934)- New evidence of the distinct organization of *Pithecanthropus*. Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam, 37, 3, p. 139-145.

(online at: www.dwc.knaw.nl/DL/publications/PU00016532.pdf)

Dubois, E. (1935)- On the gibbon-like appearance of *Pithecanthropus erectus*. Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam, 38, 6, p. 578-585.

(online at: www.dwc.knaw.nl/DL/publications/PU00016738.pdf)

(Thighbones of *Pithecanthropus erectus* suggest close affinity with gibbon group apes)

Dubois, E. (1937)- On the fossil human skulls recently discovered in Java and *Pithecanthropus erectus*. Man (Royal Anthropological Institute of Great Britain and Ireland) 37, 1, p. 1-7.

(Recently discovered *Homo soloensis* is primitive *Homo sapiens* and proto-Australian. 'He has nothing in common with *Pithecanthropus erectus*')

Dubois, E. (1938)- The mandible recently described and attributed to *Pithecanthropus* by G.H.R. von Koenigswald, compared with the mandible of *Pithecanthropus erectus* described in 1924 by Eug. Dubois. Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam, 41, 2, p. 139-147.

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(Review of study of hominids of SE Asia and Australia since work of Dubois. Populations represented by fossils from Sangiran and Ngandong, Java, went extinct without contributing genes to modern Australians)

Eckhardt, R.B., M. Henneberg, A.S. Weller & K.J. Hsu (2014)- Rare events in earth history include the LB1 human skeleton from Flores, Indonesia, as a developmental singularity, not a unique taxon. Proc. National Academy Sciences USA 111, 33, p. 11961-11966.

(online at: www.pnas.org/content/111/33/11961.full.pdf)

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(*'On the age of the Kendeng beds with Pithecanthropus erectus Dubois'. Overview of Kendeng- Solo River Late Pliocene- Pleistocene stratigraphy. Recognizes two similar-looking fluvial packages at Trinil, the lower one the true Trinil beds with Pithecanthropus and of Early Pleistocene age ('Unterdiluvial')*)
- Elbert, J. (1909)- Dubois' Altersbestimmung der Kendengschichten- ein Wort der Entgegnung. Centralblatt Mineralogie Geologie Palaont. 1909, 17, p. 513-520.
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(*Paleomagnetic study from lava flows and dykes of Merapi and Merbabu, Bromo-Tengger, Lurus and Bawean Island. Ages mainly in Brunhes chron. Few reverse polarity flows probably emplaced during late Matuyama chron. Bawean leucite-bearing volcanics M Pleistocene age (0.3-0.8 Ma)*)
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(*'The bone industry of the Holocene Keplek horizon of Song Terus cave, Punung, E Java'. Gunung Sewu site*)
- Fae, M. (1996)- Lithostratigraphy and fossil hominids of the Sangiran-Krikilan area, Java (Yogyakarta, Indonesia). Memorie Scienze Geol., Padova, 48, p. 143-153.
(*Good review of 300-350m thick Late Pliocene- Pleistocene stratigraphy and hominid, mammal and mollusc distributions in Sangiran dome, C Java. From old to young: Shallow marine Late Pliocene Upper Kalibeng Fm, E Pleistocene Pucangan Fm Lower lahar and lacustrine black clay with diatomite beds and rich in Corbicula (first hominids possibly from top of formation), and M Pleistocene fluvial Kabuh Fm (with bulk of Homo erectus finds; tektite layer near top; common reworked marine microfauna). Capped by Notopuro Fm lahars with erosional base. Four mud volcanoes in center of dome, with rock fragments including Eocene limestone. Reliable stratigraphic information lacking for most hominid fossils*)
- Fairbairn, A.S., G.S. Hope & G.R. Summerhayes (2006)- Pleistocene occupation of New Guinea's highland and subalpine environments. World Archaeology 38, 3, p. 371-386.
(*online at: <http://palaeworks-dev.anu.edu.au/wp-content/uploads/2012/08/Fairbairmetal2006.pdf>*)
(*Human colonization of New Guinea Highlands pre-dated 35 ka. Plant food use dates from at least 31 ka, i.e. in earliest millenia of human presence. Humans persisted in intermontane valleys through Late Glacial Maximum*)
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(*About challenges of chronological framework of early human settlements of Java, from oldest Lower Pleistocene Homo erectus up to dispersals after Last Glacial Maximum*)
- Fauzi, M.R., M.F.S. Intan & T. Simanjuntak (2015)- Karakter teknologi litik *Homo erectus* progresif berdasarkan himpunan artefak dari Situs Matar, Bojonegoro. Kalpataru, Majalah Arkeologi 24, 1, p. 1-11.
(*online at: <https://jurnal.arkeologi.kemdikbud.go.id/index.php/kalpataru/article/view/41/18>*)
(*'Lithic technology characteristic of progressive Homo erectus based on artifact assemblage from Matar Site, Bojonegoro'. New Matar site on E banks of Solo River (equivalent of 20m terrace of Ngandong?) with stone tool assemblage of 'progressive Homo erectus'. Flakes and massive tools such as bola, spheroidal, polyhedrons, and chopper-chopping tools*)

Fauzi, M.R., M.M. Ansyori, D. Prastiningtyas, M.F.S. Intan, U.P. Wibowo, Wulandari, H. Rahmanendra, H. Widiyanto & T. Simanjuntak (2016)- Matar: a forgotten but promising Pleistocene locality in East Java. *Quaternary Int.* 416, p. 183-192.

(Matar locality near Ngandong on E bank of Solo River with fossils and lithic artifacts in terraces of poorly consolidated sand and gravels. With Stegodon trigonocephalus, Bubalus paleokarabau, Bibos paleosondaicus, and Hexaprotodon sivalensis, typical dry and open-woodland environment in M-U Pleistocene. Also lithic flake-tools and some crude core-tools, similar to Ngandong)

Forestier, H. (1999)- L'assemblage industriel de Song Keplek, Java Est (un nouveau regard sur l'outillage lithique de l'homme moderne au debut de l'Holocene en Indonesie). *Bull. Ecole francaise d'Extreme-Orient* 86, 1, p. 129-159.

(online at: www.persee.fr/doc/AsPDF/befeo_0336-1519_1999_num_86_1_3409.pdf)

('The industrial assemblage of Song Keplek, East Java; a new view on stone tools of modern man at the beginning of the Holocene in Indonesia'. Song Keplek stone tool assemblage from Punung area ~6000-4000 years old)

Forestier, H. (2007)- Les eclats du passe prehistorique de Sumatra : une tres longue histoire des techniques. *Archipel* 74, p. 15-44.

(online at: www.persee.fr/doc/AsPDF/arch_0044-8613_2007_num_74_1_3914.pdf)

(Rel. long history of prehistoric stone tool making in Sumatra, incl. Acheuleen tools from Ogan River tributaries in S Sumatra, possibly from Homo erectus)

Forestier, H., D. Driwantoro, D. Guillaud, Budiman & D. Siregar (2006)- New data for the prehistoric chronology of South Sumatra. In: T. Simanjuntak et al. (eds.) *Archaeology: Indonesian perspective*, R.P. Soejono's Festschrift, LIPI Press, Jakarta, p. 177-192.

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Forestier, H. & E. Patole-Edoumba (2000)- Les industries lithiques du Paleolithique tardif et du debut de l'Holocene en Insulinde. *Aseanie* 6, 1, p. 13-56.

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(Review of major Late Paleolithic lithic (stone tool) assemblages in Indonesia and Philippines)

Forestier, H., T. Simandjuntak, F. Detroit & V. Zeitoun (2010)- Unite et diversite prehistorique entre Java et Sumatra. *Archipel* 80, p. 19-44.

(online at: www.persee.fr/doc/AsPDF/arch_0044-8613_2010_num_80_1_4175.pdf)

('Prehistoric unity and diversity of Java and Sumatra'. Prehistory of Indonesia from 20000- 5000 BP. Java marked by technical heterogeneity in produced stone tools, Sumatra more homogenous technical choices, with a unifacial pebble shaping which still belongs to Hoabinhian tradition)

Forestier, H., T. Simandjuntak & D. Driwantoro (2005)- Les premiers indices d'un facies Acheuleen a Sumatra-Sud, Indonesia. In: L. Faton (ed.) *Asie du Sud-Est: de l'Homo erectus a l'Homo sapiens*, *Dossiers d'Archeologie* 302, 16-17.

('The first indications of an Acheuleen facies in South Sumatra'. Paleolithic stone tools from Ogan River tributaries)

Forestier, H., T. Simanjuntak, D Guillaud, D Driwantoro, K. Wiradnyana, D. Siregar, R. Due Awe & Budiman (2005)- Le site de Togi Ndrawa, ile de Nias, Sumatra nord : les premieres traces d'une occupation hoabinhienne en grotte en Indonesie. *Comptes Rendus Palevol* 4, p. 727-733.

(The Togi Ndrawa site, Nias Island, North Sumatra: the first record of a Hoabinhian cave settlement in Indonesia'. Late Pleistocene- E Holocene classic Hoabinhian pebble artefacts, forest and coastal fauna and human bones in Togi Ndrawa cave, NE Nias)

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(*No evidence to support hypothesis that Toba supereruption at 73.5 ka caused bottleneck in human, animal or plant populations*)
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- Grenet, M., J. Sarel, R. Fauzy, A.A. Oktaviana, B. Sugiyanto, J.M. Chazine & F.X. Ricaut (2016)- New insights on the late Pleistocene- Holocene lithic industry in East Kalimantan (Borneo): the contribution of three rock shelter sites in the karstic area of the Mangkalihat peninsula. *Quaternary Int.* 416, p. 126-150.
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(*Comparative study of parietal (skull) bones from Sangiran, Sambungmacan I and Ngandong. Some morphological metrical features allow separation of Sangiran and Ngandong samples. Sambungmacan I, whose chronological age is not well established, appears closer to Ngandong men*)
- Grimaud-Herve, D., A. Balzeau, H. Widiyanto, T. Djubiantono, F. Detroit, A.M. Moigne, A.M. Semah, A. Purnomo, M. Ansyori, B. Brasseur, T. Ingicco & F. Semah (2016)- Position of the posterior skullcap fragment from Sendang Klampok (Sangiran Dome, Java, Indonesia) among the Javanese *Homo erectus* record. *Quaternary Int.* 416, p. 193-209.
(*New part of Homo erectus skullcap fossil from 'Grenzbank' at Sendang Klampok in NNW Sangiran Dome, associated with rel. rich 'Trinil-type' mammal assemblage. Among more ancient hominids from Sangiran dome. Many characters closer to Ngandong hominins, different from those of Kabuh (Bapang) and Zhoukoudian Lower Cave specimens (??)*)
- Grimaud-Herve, D. & J.L. Franzen (1994)- Evolution of the Javanese fossil hominid brain. In: J.L. Lorenz (ed.) 4th Int. Conf. 100 years of *Pithecanthropus*: the *Homo erectus* problem, Frankfurt 1991, Courier Forschungsinstitut Senckenberg 171, p. 61-68.
- Grimaud-Herve, D., F. Valentin, F. Semah, A.M. Semah & H. Widiyanto (1994)- Le femur humain Kresna 11 compare a ceux de Trinil. *Comptes Rendus Academie Sciences, Paris* 318, II, p. 1139-1144.
1994.
(*The human femur Kresna 11 compared to those from Trinil'. Thigh bone named Kresna 11 discovered in 1992 from the 'Grenzbank' horizon in Sangiran Dome shows several Homo erectus features, similar to Trinil*)
- Grimaud-Herve, D. & H. Widiyanto (1993)- Les Hominides de Java. In: F. Semah & D. Grimaud-Herve (eds.) *Le Pithecanthrope de Java a la decouverte du chainon manquant, Les dossiers d'Archeologie* 184, p. 30-45.
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(*The fossil humans discovered in Java since the 1980's*)

Grimaud-Herve, D., H. Widiyanto, F. Detroit & F. Semah (2012)- Comparative morphological and morphometric description of the hominin calvaria from Bukuran (Sangiran, Central Java, Indonesia). *J. Human Evolution* 63, p. 637-652.

(Description of heavily mineralized Homo erectus skull discovered in 1977 near Sendangbusik, Bukuran area, E side of Sangiran dome, C Java. In cross-bedded fluvio-volcanic sands of lower Kabuh (Bapang) Fm, ~14m above 'Grenzbank')

Grimaud-Herve, D., H. Widiyanto & T. Jacob (2000)- Two new human fossil remains discovered in Sangiran (Central Java, Indonesia). In: W. Dong (ed.) Proc. 1999 Beijing Int. Symposium on paleoanthropology, *Acta Anthropologica Sinica* 19 (Suppl.), p. 41-45.

(Fragmented Homo erectus skull from Kabuh Beds at Grogol Wetan site. Ar-dating indicates 0.78 ± 0.29 Ma. Second hominid skull from Kabuh Beds at Bukuran site)

Grine, F. & J.L. Franzen (1994)- Fossil hominid teeth from the Sangiran Dome (Java, Indonesia). *Courier Forschungsinstitut Senckenberg* 171, p. 75-103.

Groves, C.P. (1976)- The origin of the mammalian fauna of Sulawesi (Celebes). *Zeitschrift Säugetierkunde* 41, 4, p. 201-216.

(online at: www.landesmuseum.at/pdf_frei_remote/Zeitschrift-Saeugetierkunde_41_0201-0216.pdf)

(Discussion of present-day mammal faunas of Sulawesi and relation to classic faunal province boundaries suggested for Indonesia ((Wallace, Weber, Lydekker Lines))

Groves, C.P. (1984)- Mammal faunas and the palaeogeography of the Indo-Australian Region. In: P. Andrews & J.L. Franzen (eds.) *The early evolution of man with special emphasis on Southeast Asia and Africa*. Courier Forschungsinstitut Senckenberg 69, p. 267-273.

Groves, C.P. (1985)- Plio-Pleistocene mammals in island southeast Asia. *Modern Quaternary Research in Southeast Asia* 9, Balkema, Rotterdam, p. 43-54.

Groves, C.P. (2001)- Mammals in Sulawesi: where did they come from and when, and what happened to them when they got there? In: I. Metcalfe, J.M.B. Smith et al. (eds.) *Faunal and floral migrations and evolution in SE Asia- Australia*, A.A. Balkema, Lisse, p. 333-342.

(Present day faunal endemism suggests Sulawesi was cluster of islands until quite late in geologic time)

Grun, R. & A. Thorne (1997)- Dating the Ngandong humans. *Science* 276, p. 1575-1576.

(Critique of Swisher et al. 1994, 1996 dating results of Ngandong hominids; consider the Solo high terrace to represent a mix of materials reworked from different levels, sites, and ages)

Hameau, S., C. Falgueres, J.J. Bahain, F. Semah, A.M. Semah & J.M. Dolo (2007)- ESR dating in Song Terus cave (East Java, Indonesia). *Quaternary Geochron.* 2, p. 398-402.

(Dating on animal teeth from Song Terus cave, Gunung Sewu, E Java shows that cave belongs to karstic system which has been in place since M Pleistocene (216, 392 ka))

Hardjasasmita, H.S. (1983)- Evolution of the genus *Sus* (Suidae, Mammalia) in Indonesia. Taxonomy, phylogeny and paleogeography. Ph.D. Thesis Inst. Teknologi Bandung (ITB), p. 1-177. *(Unpublished)*

(In Indonesia fossil suids (pig family) known from Pliocene- Holocene, mainly represented by genus Sus. On Sulawesi also Babyrousa and Celebochoerus. Two fossil species (Sus brachygnathus, S. macrognathus), one subspecies (Sus macrognathus terhaari) and two questionable species (Sus stremmi, S. sangiranensis), nine Recent species and subspecies are recognized)

Hardjasasmita, H.S. (1987)- Taxonomy and phylogeny of the Suidae (Mammalia) in Indonesia. *Scripta Geologica* 85, p. 1-68.

(online at: www.repository.naturalis.nl/document/148680)

(Overview of ?Pliocene- Recent wild pigs in Indonesia, mainly of genus Sus, mainly from Java)

Harrison, T. (1978)- Present status and problems for Paleolithic studies in Borneo and adjacent islands. In: F. Ikawa-Smith (ed.) *Early Palaeolithic in South and East Asia*, Mouton Publishers, The Hague, p. 38-57.
(*Few or no Paleolithic fossils found on Borneo (unlike Sulawesi, Java, etc.) and some may be Chinese drugstore imports. Niah cave in Sarawak rel. rich record of human and associated fossils dating to ~35 ka. MPleistocene tektites of coastal NW Brunei cannot be used for dating of 'Jerudong Terrace', as most or all are reworked into younger gravel terraces*)

Harrison, T., J. Krigbaum & J. Manser (2006)- Primate biogeography and ecology on the Sunda Shelf islands: a paleontological and zooarchaeological perspective. In: S.M. Lehman & J.G. Fleagle (eds.) *Primate biogeography*, Springer, New York, p. 331-372.
(*Non-human primates on Sundaland taxonomically diverse (27 species), and relatively high provinciality and endemism. By Late Pliocene main islands of Sunda Shelf had primate fauna that included Pongo pygmaeus, Hylobates spp., Macaca nemestrina etc. on Sumatra, Java, Borneo and Mentawai Islands. Most probably arrived during Pretiglian cold phase, starting at ~2.8 Ma, when sea levels fell by >100m*)

Hawkins, S., S. O'Connor, T.R. Maloney, M. Litster, S. Kealy, J.N. Fenner, K. Aplin et al. (2017)- Oldest human occupation of Wallacea at Laili Cave, Timor-Leste, shows broad-spectrum foraging responses to late Pleistocene environments. *Quaternary Science Reviews* 171, p. 58-72.
(*online at: <http://www.sciencedirect.com/science/article/pii/S0277379117302470>*)
(*Laili Cave in Laleia, Timor-Leste, preserves oldest human occupation in Wallacea (~43-45 ka), earlier than other Pleistocene sites known in Wallacea. Pleistocene humans used abundant local chert and engaged in mobile broad-spectrum foraging*)

Heaney, L.R. (1985)- Zoogeographic evidence for Middle and Late Pleistocene land bridges to the Philippine islands. *Modern Quaternary Research in Southeast Asia* 9, p. 127-143.
(*In Sunda shelf region rel. widespread faunal distribution, corresponding strongly with M and Late Pleistocene land bridge formation. Number of species corresponds with size of island area. Elephant species rel. widespread in SE Asia Pleistocene, probably because they are strong swimmers and do not necessarily indicate land bridges. Unlikely there was a land bridge between Asia and The Philippines, except M Pleistocene connection from NE Borneo to Palawan. Therefore unlikely that Homo erectus reached Philippines*)

Heaney, L.R. (1986)- Biogeography of mammals in SE Asia: estimates of rates of colonization, extinction and speciation. *Biological J. Linnean Soc.* 28, 1-2, p. 127-165.

Hemmer, H. (1971)- Fossil mammals of Java II. Zur Fossilgeschichte des Tigers (*Panthera tigris* L.) in Java. *Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam, B 74, 1, p. 35-52.*
(*'Fossil mammals of Java 2: the fossil record of the tiger Panthera tigris in Java'. On presence of extinct tiger 'Trinil Tiger' (Panthera tigris trinilensis) in beds of 1.2 Ma old at Trinil*)

Hemmer, H. (1971)- Fossil mammals of Java III. Zur Kenntnis der Evolution javanischer Kleinkatzen: *Prionailurus bengalensis koenigswaldi* ssp. n. und *Felis chaus* ssp. aus dem Neolithikum von Sampung, Mittel-Java. *Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam, B 74, p. 365-367.*
(*'On the knowledge of the evolution of javanese small cats...two new subspecies from the Neolithic of Sampung, C Java'*)

Hemmer, H. & G. Schutt (1972)- Pleistozane Leoparden (*Panthera pardus*) aus Java und Sudchina. *Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam, B76, p. 37-49.*
(*'Pleistocene leopards from Java and S China'*)

Hemmer, H. & G.H.R. von Koenigswald (1964)- Fossile Nebelparder (*Neofelis*) aus dem Pleistozan Sudchinas und Javas. *Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam, B 67, p. 1-16.*
(*'Fossil leopards (Neofelis) from the Pleistocene of South China and Java'*)

Henneberg, M., R.B. Eckhardt, S. Chavanaves & K.J. Hsu (2014)- Evolved developmental homeostasis disturbed in LB1 from Flores, Indonesia, denotes Down syndrome and not diagnostic traits of the invalid species *Homo floresiensis*. Proc. National Academy Sciences USA 111, 33, p. 11967-11972.

(online at: www.pnas.org/content/111/33/11967.full.pdf)

(LB1 type specimen of *Homo floresiensis* ('hobbit') viewed as anomalous specimen in small-bodied Australomelanesian *Homo sapiens* population, possibly afflicted by Down syndrome. Conclusion disputed by Westaway et al. 2015)

Henneberg, M. & J. Schofield (2008)- The Hobbit trap. Money, fame, science, and the discovery of a ñew species. Wakefield Press, Kent Town, S.A., p. 1-159.

(Book critical of *Homo floresiensis* ('hobbit') interpretations, claiming it to be much younger than reported and be 'normal' dwarfed *Homo sapiens* island population. Also 2011 2nd Edition)

Hennig, E. (1911)- Die Fischreste. In: E. Selenka & M. Blanckenhorn (eds.) Die Pithecanthropus Schichten auf Java, Engelmann, Leipzig, p. 54-60.

(Description of Pleistocene fish remains from Trinil, excavated by Selenka expedition)

Herman, D.Z. (2011)- Fossilization type of *Elephas hysudrindicus* from Blora on the basis of petrographic and Scanning Electron Microscopic analyses. J. Geologi Indonesia 6, 2, p. 75-84.

(online at: www.bgl.esdm.go.id/publication/index.php/dir/article_detail/304)

(2009 discovery of nearly complete skeleton of Pleistocene elephant *Elephas hysudrindicus* in Solo River terrace in Sunggun area near Medalem Village (not clear from what part of Pleistocene/ terrace level?; JTvG). Some precipitation of calcite and other authigenic minerals)

Hertler, C. & Y. Rizal (2005)- Excursion guide to the Pleistocene hominid sites in Central and East Java. JW Goethe University, Frankfurt, and ITB Bandung, 35p.

(at www.palaeo.net/biologie/material/Excursion%20guide.pdf)

(Overview of Pleistocene mammal fauna biostratigraphy, paleoanthropology and fossil hominid sites)

Hertler, C., Y. Rizal & Y. Zaim (2007)- Habitat differentiation in the Pleistocene of Jawa- Introduction of the new Pleistocene fossil locality Majalengka. Courier Forschungsinstitut Senckenberg 259, p. 165-175.

(Pleistocene mammal faunas from Java three successive faunas based proboscidean genera: (1) E Pleistocene *Mastodon*- *Geochelone* fauna, (2) early M Pleistocene *Stegodon*- *Homo erectus* fauna and (3) late M Pleistocene *Elephas*- *Homo sapiens* fauna. *Stegodon* - *Homo erectus* fauna contains elements from successive migration waves and different ecological settings. Introduce model for endemic evolution in Java and newly discovered Pleistocene mammal locality in W Java)

Hertler, C. & R. Volmer (2005)- Assessing prey competition in fossil carnivore communities- a scenario for prey competition and its evolutionary consequences for tigers in Pleistocene Java. Palaeogeogr. Palaeoclim. Palaeoecology 257, p. 67-80

(Five carnivore species overlapped in time in Java Pleistocene: two pantherines, a hyaenid and two canid species, each in one or more faunal levels. Significant increase in body mass of tigers in Ngandong faunal level reflects intense competition among carnivores in preceding Kedung Brubus level)

Hooijer, D.A. (1946)- Prehistoric and fossil rhinoceroses from the Malay Archipelago and India. Zoologische Mededelingen 26, 1, p. 1-138.

(online at: www.repository.naturalis.nl/document/150703)

(Description of rhinoceros fossils collected by Dubois in caves of C Sumatra in 1888-1890, Trinil, etc.)

Hooijer, D.A. (1947)- On fossil and prehistoric remains of *Tapirus* from Java, Sumatra and China. Zoologische Mededelingen 27, p. 253-299.

(online at: www.repository.naturalis.nl/document/149527)

- Hooijer, D.A. (1947)- *Pithecanthropus*, *Meganthropus* en *Gigantopithecus*. *Geologie en Mijnbouw* 9, 12, p. 230-239.
(online at: <https://drive.google.com/file/d/0B7j8bPm9Cse0VWdxUXpJQ19fYIU/view>)
(Review of Von Koenigswald (1940) and Weidenreich (1945) monographs on Java hominids)
- Hooijer, D.A. (1948)- *Rhinoceros sondaicus* Desmarest from kitchen-middens of Bindjai Tamiang, North Sumatra. *Geologie en Mijnbouw* 10, 5, p. 115-116.
(online at: <https://drive.google.com/file/d/0B7j8bPm9Cse0alp1ZkJOMzhwQkU/view>)
(*Rhinoceros tooth from Paleolithic (Late Pleistocene?) refuse-heap at Binjai Tamiang, 15km from mouth of Tamiang River in N Sumatra. Mound composed of layers of Meretrix mollusc shells alternating with ashy layers with stone tools and remains of land mammals, fish and crabs). Evidence of cannibalism. Rhinoceros tooth comparable to material from Sibrambang cave (Padang Highlands)*)
- Hooijer, D.A. (1948)- Prehistoric teeth of man and of the orang-utan from Central Sumatra, with notes on the fossil orang-utan from Java and Southern China. *Zoologische Mededelingen*, Leiden, 29, p. 175-301.
(online at: <http://repository.naturalis.nl/document/150691>)
(*Study of collection of teeth excavated by Dubois in late 1880's from Lida Ajer and other caves in Padang Highlands, C Sumatra. Includes orang-utan skulls and some hominid teeth indistinguishable from modern humans (may be oldest known Homo sapiens in Indonesian region (~70ka; Westaway et al. 2017). Also extensive study of Pleistocene orang-utan teeth from Java and S China*))
- Hooijer, D.A. (1948)- Pleistocene vertebrates from Celebes. I. *Celobochoecerus heekereni* nov.gen.nov. spec. *Proc. Kon. Nederl Akademie Wetenschappen* 6, 8, p. 1024-1032.
(*First of series of descriptions of Pleistocene mammal fossils from around Tjabenge, S Sulawesi, ~100 km NE of Makassar, collected by Van Heekeren*)
- Hooijer, D.A. (1948)- Pleistocene vertebrates from Celebes. II. *Testudo margae* nov. spec. *Proc. Kon. Nederl Akademie Wetenschappen* 6, 9, p. 1169-1182.
(*Pleistocene giant land tortoise fossils from S Sulawesi*)
- Hooijer, D.A. (1948)- Pleistocene vertebrates from Celebes. III. *Anoa depressicornis* (Smith) subsp. and *Babyrousa babyrussa beruensis* nov. subsp. *Proc. Kon. Nederl Akademie Wetenschappen* 6, 10, p. 1322-1330.
- Hooijer, D.A. (1949)- Pleistocene vertebrates from Celebes. IV. *Archidiskodon celebensis* nov. spec.. *Zoologische Mededelingen*, Leiden, 30, 14, p. 205-226.
(online at: www.repository.naturalis.nl/document/150021)
(*Pleistocene dwarf elephant fossils from S Sulawesi*)
- Hooijer, D.A. (1949)- The Pleistocene vertebrates of southern Celebes. *Chronica Naturae* 105, 5, p. 148-150.
- Hooijer, D.A. (1950)- The fossil hippopotamidae of Asia, with notes on the Recent species. *Zoologische Verhandelingen*, Leiden, 8, p. 3-124.
(online at: <http://repository.naturalis.nl/document/148880>)
(*Review of fossil Hippopotamus from Asia. Three species in Pleistocene of Java, formerly recored as Hippopotamus antiquus, H. simplex and H. namadicus by Von Koenigswald here renamed Hippopotamus sivalensis koenigswaldi (E Pleistocene Djetis fauna, rel. small, Trinil, Mojokerto, Kedung Brubus), H. sivalensis sivajavanicus and H. sivalensis soloensis n.ssp (M-U Pleistocene, descended from H. koenigswaldi)*)
- Hooijer, D.A. (1950)- Man and other mammals from Toalian sites in south-western Celebes. *Verhandelingen Kon. Nederl. Akademie Wetenschappen*, Amsterdam, Afd. Natuurkunde, 2, 46, p. 1-164.
(online at: www.dwc.knaw.nl/DL/publications/PU00011890.pdf)
(*Descriptions of Holocene ('Toalian'; Neolithic) subfossil human and mammal bones from of Bola Batoe cave near Badjo Barebo district, 20 km SW of Watampone in Central Bone and ~100 km NE of Makassar in and other SW Sulawesi sites*)

Hooijer, D.A. (1950)- Fossil evidence of Australomelanesian migrations in Malaysia? *Southwestern J. of Anthropology* 6, 4, p. 416-422.

(Presence of big-teeth humans resembling Australian aboriginals and Melanesians may once lived in Malaya-Indonesian region, as evidenced by Wajak man of Java (Dubois 1920) and subfossil man from Gua Lawa Sampung and Bojonegoro as described by Mijsberg (1932). View disputed by Von Koenigswald 1952)

Hooijer, D.A. (1951)- The geological age of *Pithecanthropus*, *Meganthropus* and *Gigantopithecus*. *American J. Physical Anthropology* 9, 3, p. 265-282.

(Review of Pleistocene Java mammal successions)

Hooijer, D.A. (1951)- Pygmy elephant and giant tortoise. *The Scientific Monthly* 72, 1, p. 3-8.

(On migration of earliest Pleistocene mammal 'island fauna' from S Sulawesi, probably from Java)

Hooijer, D.A. (1952)- *Palaeoloxodon* cf. *namadicus* (Falconer et Cautley) from Borneo. *Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam*, B55; 4, p. 395-398.

(Molar from Samarinda region, E Kalimantan, is first record of M Pleistocene Stegodon fauna on Borneo. Resembles M Pleistocene elephant Palaeoloxodon namadicus of S and E Asia. Represents link between Stegodon- Ailuropoda fauna of Java and Indochina)

Hooijer, D.A. (1952)- Fossil mammals faunas and the Plio-Pleistocene boundary in Java. *Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam*, B55, p. 436-443.

(Tidjulung and Kali Glagah mammal assemblages of Java, originally considered to be of Middle-Late Pliocene age by Von Koenigswald, etc., should be assigned to Lower Pleistocene)

Hooijer, D.A. (1953)- Pleistocene vertebrates from Celebes. V. Lower molars of *Archidiskodon celebensis* Hooijer. *Zoologische Mededelingen, Leiden*, 31, 28, p. 311-318.

(On teeth of Pleistocene dwarf elephant from S Sulawesi)

Hooijer, D.A. (1953)- Pleistocene vertebrates from Celebes. VI. *Stegodon* spec. *Zoologische Mededelingen, Leiden*, 32, 11, p. 107-112.

(online at: www.repository.naturalis.nl/document/149397)

(On Pleistocene small Stegodon sp. elephantoid from Cabenge area, Sopeng District, S Sulawesi, collected by Van Heekeren)

Hooijer, D.A. (1954)- Pleistocene vertebrates from Celebes. VIII. Dentition and skeleton of *Celebochoerus heekereni* Hooijer. *Zoologische Verhandelingen, Leiden*, 24, p. 1-46.

(online at: www.repository.naturalis.nl/document/149035)

(On Pleistocene pig from Cabenge area, S Sulawesi)

Hooijer, D.A. (1954)- Pleistocene vertebrates from Celebes. IX. Elasmobranchii. *Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam*, B57, 4, p. 475-485.

(On Pleistocene shark teeth from Tjabenge area, S Sulawesi)

Hooijer, D.A. (1954)- Pleistocene vertebrates from Celebes. X. Testudinata. *Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam*, B57, 4, p. 486-489.

(On Pleistocene large tortoise fossils from S Sulawesi)

Hooijer, D.A. (1954)- A pygmy *Stegodon* from the Middle Pleistocene of Eastern Java. *Zoologische Mededelingen* 33, 14, p. 91-102.

(online at: www.repository.naturalis.nl/document/149695)

(Dwarf elephantoid from area N of Djétis and Perring in E Java, collected by Cosijn)

- Hooijer, D.A. (1954)- Pleistocene vertebrates from Celebes. XI. Molars and a tusked mandible of *Archidiskodon celebensis* Hooijer. Zoologische Mededelingen, Leiden, 33, 15, p. 104-120.
(online at: www.repository.naturalis.nl/document/149831)
(?E Pleistocene elephantoids from near Cabenge, 100km NE of Makassar, SW Sulawesi))
- Hooijer, D.A. (1954)- Crocodylian remains from the Pleistocene of Celebes. Copeia 1954, p. 263-266.
- Hooijer, D.A. (1955)- Fossil Proboscidea from the Malay Archipelago and the Punjab. Zoologische Verhandelingen 28, p. 1-146.
(online at: www.repository.naturalis.nl/document/149023)
(On Pleistocene elephant fossils from Java, Sumatra, Sulawesi, India, etc.: *Stegodon*, *Stegolophodon*, *Archidiskodon*, *Elephas*, etc.))
- Hooijer, D.A. (1956)- The lower boundary of the Pleistocene in Java and the age of *Pithecanthropus*. Quaternaria 3, p. 5-10.
(Mammal fossils suggest Tjidjoelang and Kali Glagah faunas of Java are of basal Pleistocene age)
- Hooijer, D.A. (1957)- The correlations of fossil mammalian faunas and the Plio-Pleistocene boundary in Java. Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam, 60, 1, p. 125-128.
(Reiteration of 1952 position that Tjidjulang and Kali Glagah mammal faunas of Java should be assigned to Villafranchian, Early Pleistocene)
- Hooijer, D.A. (1957)- Report upon a collection of fossil vertebrates from Ola Bula, Central Ngada, Flores. Berita Madjelis Ilmu Pengetahuan Indonesia, Jakarta, November 1957, p. 6-9.
(Vertebrate remains discovered in 1956 at Ola Bula on Soa Plateau of Flores belong to extinct primitive Asian elephantids *Stegodon*, similar to *S. trionocephalus* Martin from Pleistocene of Java)
- Hooijer, D.A. (1957)- A *Stegodon* from Flores. Treubia 24, p. 119-129.
(online at: e-journal.biologi.lipi.go.id/index.php/treubia/article/download/2721/2332)
(*Stegodon* remains discovered by Verhoeven in 1956 at Ola Bula on Soa Plateau of Flores described as *Stegodon trionocephalus floresiensis*. Rel. common *Stegodon* fossils, but remarkable lack of associated fauna)
- Hooijer, D.A. (1957)- Three new giant prehistoric rats from Flores, Lesser Sunda Islands. Zoologische Medelingen 35, p. 229-314.
(online at: www.repository.naturalis.nl/document/150080)
(Three new forms of large Pleistocene rat fossils collected by Verhoeven in cave deposits at Liang Toge near Warukia, Manggarai, W Flores: *Papagomys armandvillei* besar, *P. verhoeveni* and *Spelaeomys florensis*. Associated with Mesolithic flake and blade industry)
- Hooijer, D.A. (1958)- Fossil Bovidae from the Malay Archipelago and the Punjab. Zoologische Mededelingen 38, p. 1-110.
(online at: www.repository.naturalis.nl/document/148928)
(Bovidae (buffaloes, cows, bison, etc.) rel. common in Pleistocene of Java, mainly of genera *Bibos*, *Bubalus*, *Leptobos*, *Duboisia*, etc.)
- Hooijer, D.A. (1958)- The Pleistocene vertebrate fauna of Celebes. Arch. Neerl. Zool. 13, Suppl. 1, p. 89-96.
(Pleistocene mammal faunas discovered in fluvial deposits of Tjabenge area SW Sulawesi by Van Heekeren in 1948 different from any Pleistocene fauna in Indo-Australian region: island fauna with dwarf elephant and buffalo, giant tortoise, freshwater sharks and rays, etc.)
- Hooijer, D.A. (1960)- Quaternary gibbons from the Malay Archipelago. Zoologische Verhandelingen 46, 1, p. 1-42.
(online at: <http://repository.naturalis.nl/document/148964>)

(Apes (Pongidae) from the Indonesian region include Late Pleistocene gibbons (*Symphalangus* and *Hylobates*) from limestone caves in Padang Highlands, C Sumatra, collected by Dubois. Possibly also incave material from C Java (Pacitan) and Sarawak)

Hooijer, D.A. (1962)- Quaternary langurs and macaques from the Malay archipelago. Zoologische Verhandelingen 55, 1, p. 1-64.

(online at: www.repository.naturalis.nl/document/148851)

(Pleistocene monkeys (*Presbytis*, *Trachypithecus*, *Macaca*) from limestone caves in Padang Highlands, C Sumatra, and cave deposits on Java)

Hooijer, D.A. (1962)- Paleontology of hominid deposits in Asia. Advancement Sci. 1962, p. 485-489.

Hooijer, D.A. (1964)- Pleistocene vertebrates from Celebes. XII. Notes on pygmy Stegodonts. Zoologische Mededelingen 40, 7, p. 37-44.

(online at: www.repository.naturalis.nl/document/149873)

(Sulawesi Stegodon decidedly smaller than *Stegodon trigonocephalus* Martin from Java, but probably similar to newly discovered pygmy stegodonts from Flores. Renamed *Stegodon sompoensis* n. sp.)

Hooijer, D.A. (1964)- Pleistocene vertebrates from Celebes. XIII. *Sus celebensis* Muller & Schlegel, 1845. Beaufortia 222, 16, p. 215-218.

(online at: www.repository.naturalis.nl/document/548530)

Hooijer, D.A. (1964)- New records of mammals from the Middle Pleistocene of Sangiran, Central Java. Zoologische Mededelingen 40, 10, p. 73-87.

(online at: www.repository.naturalis.nl/document/149780)

(On mammal fossils from Sangiran donated to Leiden museum by Van Heekeren and Houboldt. Not much new)

Hooijer, D.A. (1965)- Note on *Coryphomis buhleri* Schaub, a gigantic murine rodent from Timor. Israel J. Science 14, p. 128-133.

(Large Pleistocene rat fossils from Liang Leluat cave, SW Timor, collected by Verhoeven at Maubesi River)

Hooijer, D.A. (1967)- Indo-Australian insular elephants. Genetica 38, 1, p. 143-162.

(Pleistocene dwarfed elephants known from Celebes, Flores and Timor described and relationships considered. Pygmy forms arose independently on each island as result of isolation and genetic drift favouring small size. Wherever we find pygmy elephants we have also giant rodents)

Hooijer, D.A. (1969)- The *Stegodon* from Timor. Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam, B72, 3, p. 201-210.

(Additional description of Pleistocene dwarf elephant mandible and molars collected by Verhoeven E of Atambua, W Timor N coast, first described as *Stegodon timorensis* by Sartono 1969)

Hooijer, D.A. (1970)- Pleistocene South-East Asiatic pygmy stegodonts. Nature 225, 5231, p. 474-475.

Hooijer, D.A. (1971)- A giant land tortoise, *Geochelone atlas* (Faulconer & Cautley) from the Pleistocene of Timor. Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam, B74, 5, p. 504-525.

(Common material of giant land tortoise from Pleistocene gravel deposits at Raebia in Atambua area, W Timor, originally described as *Testudo margae* Hooijer (1948), indistinguishable from *Geochelone atlas* from E Pleistocene of Java)

Hooijer, D.A. (1972)- *Stegodon trigonocephalus florensis* Hooijer and *Stegodon timorensis* Sartono from the Pleistocene of Flores and Timor. Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam, B75, p. 12-33.

(Flores and Timor Middle-Late Pleistocene *Stegodon* elephants much smaller than Java *Stegodon*, from which they probably evolved)

- Hooijer, D.A. (1972)- *Varanus* (Reptilia, Sauria) from the Pleistocene of Timor. Zoologische Mededelingen, Museum Leiden 47, p. 445-448.
(online at: www.repository.naturalis.nl/document/149563)
(On Pleistocene 'komodo dragon'-like lizard fossils from gravel deposits, collected by Verhoeven at Raebia in Atambua area, W Timor)
- Hooijer, D.A. (1972)- Pleistocene vertebrates from Celebes. XIV. Additions to the *Archidiskodon-Celebochoerus* fauna. Zoologische Mededelingen 46, 1, p. 1-15.
(online at: www.repository.naturalis.nl/document/150627)
(Descriptions of new mammal material collected by 1970 Dutch-Indonesian expedition to Beru area, Sulawesi. Additional material of *Archidiskodon celebensis*, *Stegodon sompoensis*, *S. cf. trigonocephalus*, *Celebochoerus heekerei* and *Anoa depressicornis*)
- Hooijer, D.A. (1974)- *Elephas celebensis* (Hooijer) from the Pleistocene of Java. Zoologische Mededelingen 48, 11, p. 85-93.
(online at: www.repository.naturalis.nl/document/150495)
- Hooijer, D.A. (1975)- Quaternary mammals west and east of Wallace's line. In: G.J. Bartstra & W.A. Casparie (eds.) Modern Quaternary Research in Southeast Asia, A.A. Balkema, Rotterdam, 1, p. 37-51.
(Introduces concept of hypothetical M Pleistocene 'Stegoland' landmass, comprising Flores, Timor and Sulawesi, characterized by pygmy stegodonts *S. sompoensis* (based on erroneous assumption that elephants are not good swimmers and therefore unlikely to migrate between islands; JTvG))
- Hooijer, D.A. (1975)- Quaternary mammals west and east of Wallace's line. Netherlands J. Zoology. 25, p. 46-56.
(Same paper as above)
- Hooijer, D.A. (1981)- What, if anything new, is *Stegodon sumbaensis* Sartono? Modern Quaternary Research in Southeast Asia 6, Balkema, Rotterdam, p. 89-90.
(Nature of Sumba *Stegodon* described by Sartono (1979) still uncertain. Not necessarily pygmy *Stegodon*)
- Hooijer, D.A. (1982)- The extinct giant land tortoise and the pygmy stegodont of Indonesia. Modern Quaternary Research in Southeast Asia 7, Balkema, Rotterdam, p. 171-176.
(Mainly critical discussion of Sondaar (1981) paper on *Geochelone* faunas. All known *Geochelone* tortoises in Indonesia can be grouped in *G. atlas* and made their way to Indonesian islands by overseas dispersal (not land bridges). All pygmy stegodonts are conspecific, *Stegodon sompoensis*)
- Hooijer, D.A. (1982)- Premolars of *Elephas planifrons* Falconer & Cautley from the Pleistocene of Java. Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam, B85, 3, p. 265-272.
- Hooijer, D.A. (1983)- Comment II: Remarks upon the Dubois collection of fossil mammals from Trinil and Kedungbrubus in Java. Geologie en Mijnbouw 62, p. 337-338.
(online at: <https://drive.google.com/file/d/0B7j8bPm9Cse0TXdLZ3dtNVloTHc/view>)
(Comments on De Vos and Sondaar (1982) and De Vos et al. (1982) papers on Dubois collection. Part of problem is that the Dubois collections from Trinil may come from two different deposits: M Pleistocene Kabuh Fm and Late Pleistocene terrace sediments. Also Dubois collection from Kedungbrubus- Gunung Butak is mixture of Late Pliocene- E Pleistocene Jetis and M Pleistocene Trinil fauna)
- Hooijer, D.A. (1984)- The mammalian faunas of Trinil and Kedungbrubus in Java once more. Modern Quaternary Research in Southeast Asia 8, Balkema, Rotterdam, p. 95-102.
(Comments on De Vos et al. (1982) and Sondaar et al. (1983) papers. Hooijer does not accept that the more diverse Kedungbrubus fauna is younger than Trinil fauna, but are roughly equivalent)

- Hooijer, D.A. & B. Kurten (1984)- Trinil and Kedungbrubus: the *Pithecanthropus*-bearing fossil faunas of Java and their relative age. *Annales Zoologici Fennici* 21, p. 135-141.
(online at: www.sekj.org/PDF/anzf21/anzf21-135-141.pdf)
(Dispute De Vos (1982) interpretation that Trinil mammal fauna is older than Kedungbrubus fauna)
- Hope, G.S. & S.G.Haberle (2005)- The history of the human landscapes of New Guinea. In: A. Pawley et al. (eds.) *Papuan pasts: cultural, linguistic and biological histories of Papuan-speaking peoples*, Australian National University, Canberra, p. 541-554.
(online at: <http://palaeoworks.anu.edu.au/pubs/Hope&Haberle05.pdf>)
(Humans have been in highland valleys of New Guinea for at least 30,000 years and presumably occupied savannah plains that then connected New Guinea to Australia for 50,000 years or more)
- Hou, Yamei, R. Potts, B. Yuan, Z. Guo, A. Deino, W. Wang, J. Clark, G. Xie & W.W. Huang (2000)- Mid-Pleistocene Acheulean-like stone technology of the Bose Basin, South China. *Science* 287, 5458, p. 1622-1626.
(Stone artifacts from T4 terrace deposits in Bose basin, S China, associated with tektites dated to 803 ± 3 ka and represent oldest known cutting tools in E Asia, compatible with Acheulean technologies in Africa. Stone tool- tektite horizon also contains abundant charcoal and silicified wood fragments, suggesting episode of forest burning initiated by tektite event)
- Htike, Thaug & N.N. San (2014)- New discovery of anthracotheres (Mammalia, Artiodactyla) from the Middle Miocene of Sagaing Region, Upper Myanmar. *Shwebo University Research J.* 5, 1, p. 89-96.
(online at: <https://umoar.mu.edu.mm/handle/123456789/155>)
(Re-investigation of anthracotheres from M Miocene Male and Thanbinkan localities of Sagaing Region, Upper Myanmar. Four species recognized. Most are forest- dwelling brachyodont and bunodont species)
- Huffman, O.F. (1998)- An Early Pleistocene way of life- *Homo erectus* of Sangiran Dome, Central Java. In: P. Lunt, R. Netherwood & O F. Huffman (eds.) *Guidebook for field trip to Central Java, Oct 1998*, Indonesian Petroleum Assoc. (IPA), Jakarta, 15p.
(online at: www.utexas.edu/cola/files/776909)
- Huffman, O.F. (1999)- Pleistocene environmental variety in eastern Java and early *Homo erectus* paleoecology- a geological perspective. *Buletin Geologi (ITB)* 31, 2, p. 93-107
(Late Pliocene-Pleistocene paleogeography of E Java. *Homo erectus* homeland was volcanic archipelago)
- Huffman, O.F. (2001)- Plio-Pleistocene environmental variety in eastern Java and early *Homo erectus* paleoecology- a geological perspective. In: T. Simanjuntak et al. (eds.) *Sangiran: man, culture, and environment in Pleistocene times*, Proc. Int. Colloq. Sangiran Solo- Indonesia, Solo 1998, Jakarta. Nat. Res. Centre Archaeology, p. 231-256.
(online at: www.utexas.edu/cola/depts/anthropology/projects/huffman/6-SoloProc2001.pdf)
(Same paper as above. *Homo erectus*' homeland was volcanic archipelago with variety of paleoenvironments like Java today. With Late Pliocene-Pleistocene paleogeography; similar to Huffman (1999))
- Huffman, O.F. (2001)- Geologic context and age of the Perring/Mojokerto *Homo erectus*, East Java. *J. Human Evolution* 40, 4, p. 353-362.
(Perring/Mojokerto *Homo erectus* from Upper Pucangan Fm in E Kendeng hills of E Java likely to be of latest Pliocene age (1.81 Ma radiometric age of hornblende in associated tuff; Swisher et al.) and reflect early *H. erectus* occupation of Java (but relation of tuff and Mojokerto skull debated in later literature, e.g. Huffman et al. 2006; JTvG)
- Huffman, O.F., J. de Vos, A.W. Berkhout & F. Aziz (2010)- Provenience reassessment of the 1931-1933 Ngandong *Homo erectus* (Java), confirmation of the Bone-bed origin reported by the discoverers. *PaleoAnthropology* 2010, p. 1-60.
(online at: www.paleoanthro.org/journal/content/PA20100001.pdf)

(Geologists of Geological Survey of Netherlands Indies unearthed 14 Homo erectus fossils in 1931-1933 from Excavation site I Ngandong. Hominin discoveries and other vertebrate remains from thin, gravelly volcanoclastic stratum near base of fluvial terrace remnant ~20m above Solo River)

Huffman, O.F., P. Shipman, C. Hertler, J. de Vos & F. Aziz (2005)- Historical evidence of the 1936 Mojokerto skull discovery, East Java. *J. Human Evolution* 48, p. 321-363.

(Extensive review of history of discovery of Mojokerto child skull (Perning 1) in E Java in 1936, from hill-slope outcrop of folded conglomeratic sandstone in Duyffes' Pucangan Fm on Kedungwaru anticline. Now accepted as Homo erectus (long believed one of oldest hominids from Java. Radiometric age of 1.81 ± 0.04 Ma from pumice near discovery section by Swisher et al., 1994, but may be from deeper beds; Huffman et al. 2006)

Huffman, O.F. & Y. Zaim (2003)- Mojokerto Delta, East Jawa: paleoenvironment of *Homo modjokertensis*-first results. *J. Teknologi Mineral (ITB)*, 10, 2, p.

(manuscript online at: www.utexas.edu/cola/files/793055)

(Homo modjokertensis remains found in 1936 found in situ in Plio-Pleistocene bedrock at Perning site, SW of Surabaya. With Plio-Pleistocene paleogeographic map. Discovery site formed as fluvial channel on delta plain of ancient Mojokerto Delta)

Huffman, O.F., Y. Zaim, J. Kappelman, D.R. Ruez, J. de Vos, Y. Rizal, F. Aziz & C. Hertler (2006)- Relocation of the 1936 Mojokerto skull discovery site near Perning, East Java. *J. Human Evolution* 50, p. 431-451.

(Mojokerto skull discovery site was probably in beds 20m higher than ash layer dated as 1.81 Ma by Swisher et al. 1994, 2000)

Husain, M., S. Eko, H.A. Mahfi, W. Sunata & P. Sanyoto (1997)- Magnetostratigrafi daerah Patiayam, Kudus, Jawa Tengah. *Proc. 22nd Ann. Conv. Indon. Assoc. Geophys. (HAGI)*, Bandung, p.

(Magnetostratigraphy of the Patiayam area, Kudus, C Java'. Hominid fossils in Patiayam area near Top Brunhes normal polarity subchron)

Hutterer, K.L. (1983)- Absolute dates for the hominid-bearing deposits in Java: an overview. *Asian Perspectives* 25, 2, p. 53-65.

(online at: <https://scholarspace.manoa.hawaii.edu/bitstream/10125/19247/1/AP-v25n2-53-65.pdf>)

(Literature review of published radiometric dates of Upper Pucangan Beds (~0.85-1.2 Ma; with 'Djetis Fauna near top at ~0.8 Ma) and Lower Kabuh Beds (~0.5-0.7 Ma; with Trinil Fauna, ~0.5 Ma) and Notopuro Beds (<0.1 Ma; with Ngandong Fauna). Tektite from Sangiran $730,000 \pm 50,000$ yrs)

Hyodo, M. (2001)- The Sangiran geomagnetic excursion and its chronological contribution to the Quaternary geology of Java. In: T. Simanjuntak et al. (eds.) *Sangiran: man, culture, and environment in Pleistocene times*, *Proc. Int. Colloq. Sangiran Solo- Indonesia*, Solo 1998, Jakarta, Nat. Res. Centre Archaeology, p. 320-335.

(Sangiran geomagnetic excursion, characterized by westerly declinations, ranges from below T1 Tuff up to just above diatomite layer in Pucangan Fm. Age estimated 1.56-1.48 Ma. Good time marker for tectonic event in M Matuyama chron in C and E Java)

Hyodo, M., S. Matsuøura, Y. Kamishima, M. Kondo, Y. Takeshita, I. Kitaba, T. Danhara, F. Aziz, I. Kurniawan & H. Kumai (2011)- High-resolution record of the Matuyama-Brunhes transition constrains the age of Javanese *Homo erectus* in the Sangiran dome, Indonesia. *Proc. National Academy Sciences USA*, 108, 49, p. 19563-19568.

(online at: www.ncbi.nlm.nih.gov/pmc/articles/PMC3241771/pdf/pnas.201113106.pdf)

(Paleomagnetic study in Sangiran area. A reverse-to-normal polarity transition in 7m thick section across Upper Tuff in Bapang (= Kabuh) Fm, with 3 short reversal episodes overlain by thick normal polarity magnetozone. Pattern closely resembles Matuyama-Brunhes transition (~0.78 Ma). Hominid last occurrence and tektite level in Sangiran nearly coincident, just below Upper Middle Tuff, which underlies MB transition. Meteorite impact preceded M-B reversal by ~12 ka)

- Hyodo, M., H. Nakaya, A. Urabe, H. Saegusa, S. Xue, J. Yin & X. Ji (2002)- Paleomagnetic dates of hominid remains from Yuanmou, China, and other Asian sites. *J. Human Evolution* 43, 1, p. 27-41.
(*Geomagnetic data suggest Homo erectus-affinity Yuanmou, SW China, hominid remains from early Brunhes chron ~0.7 Ma*). *Hominid fossils from Sangiran and Mojokerto, Java, do not exceed 1.1 Ma in age*)
- Hyodo, M., W. Sunata & E.E. Susanto (1992)- A long-term geomagnetic excursion from Plio-Pleistocene sediments in Java. *J. Geophysical Research* 97, B6, p. 9323-9335.
(*Paleomagnetic records from Sangiran and Mojokerto suggest large-scale declination swing between Olduvai and Jamarillo events, lasting ~130,000 years*)
- Hyodo, M., W. Sunata, E.E. Susanto & H. Wahyono (1988)- Paleomagnetism of Plio-Pleistocene sediments in Sangiran, Central Java. In: M. Kono (ed.) *Rock magnetism and paleogeophysics* 15, DELP Publ. 23, Tokyo, p. 31-34.
(*online at:*
<http://peach.center.ous.ac.jp/rprep/Rock%20magnetism%20and%20Paleogeophysics%20vol15%201988.pdf>)
Nine polarity boundaries were located in outcrops of Sangiran area. The stratigraphic levels with Pithecanthropus fossils (uppermost Pucangan- Kabuh Fms) range from lower boundary of Jaramillo event at 0.97 Ma to Brunhes-Matuyama boundary at 0.73 Ma)
- Hyodo, M., N. Watanabe, W. Sunata & E.E. Susanto (1993)- Magnetostratigraphy of hominid fossil bearing formations in Sangiran and Mojokerto, Java. *Anthropological Science* 101, 2, p. 157-186.
(*online at: https://www.jstage.jst.go.jp/article/ase1993/101/2/101_2_157/_pdf*)
(*Paleomagnetic study of Plio-Pleistocene formation at Sangiran and Mojokerto. Levels of hominid fossils in Sangiran range from lower Jamarillo event at 0.97 Ma to Brunhes-Matuyama boundary at 0.73 Ma. Homo modjokertensis in Mojokerto lies at lower border of Jamarillo event at 0.97 Ma*)
- Ibrahim, Y.K., L.T. Tshen, K.E. Westaway, E.O. Cranbrook, L. Humphrey, R.F. Muhammad, J.X. Zhao & L.C. Peng (2013)- First discovery of Pleistocene orangutan (*Pongo* sp.) fossils in Peninsular Malaysia: biogeographic and paleoenvironmental implications. *J. Human Evolution* 65, 6, p. 770-797.
(*Nine isolated fossil Pongo teeth from Batu caves in Peninsular Malaysia are first fossil Pongo in Peninsular Malaysia, showing ancestral Pongo successfully passed biogeographical divide between mainland SE Asia and Sunda subregion before 500 ka. Pongo remains indicate prevailing forest habitat, implying that during Last Glacial Phase sufficient forest cover persisted in W coast plain of Peninsular Malaysia*)
- Indonesia-Japan Research Cooperation Programme (CTA-41) (1979)- Progress report of the Indonesia-Japan joint research project on geology of human fossil bearing formations in Java. Geol. Research Dev. Centre, Bandung, Bull. 1, p. 47-60.
- Indonesia-Japan Joint Research Team (1979)- Stratigraphy and geological structure in the Central Part of the Sangiran Dome. Geol. Research Dev. Centre, Bandung, Bull. 2, p. 55-61.
(*Brief description of Late Pliocene- Pleistocene stratigraphy exposed in Sangiran Dome, C Java. Structure is dome, with radial and concentric faults. With four mud volcanoes with exotic blocks and some natural gas seepage. Described in more detail in Watanabe & Kadar, 1985*)
- Indonesia-Japan Joint Study Team (1991)- Quaternary geology of the northern foot area of Mount Lawu and along the middle course of the Solo river, Central and East Java. Geol. Res. Dev. Centre (GRDC), Bandung, p. 1-84.
- Indonesia-Japan Joint Study Team (1990)- Stratigraphical correlation of the Quaternary system in the Sangiran area and its surroundings, Central Java. United Nations CCOP Techn. Bull. 21, p. 117-134.
- Indriati, E. (2004)- Indonesian fossil hominid discoveries from 1889 to 2003: catalogue and problems. In: S. Akiyama et al. (eds.) *Proc. Fifth and Sixth Symposia on collection building and natural history studies in Asia and the Pacific Rim*, National Science Museum Mon., Tokyo, 24, p. 163-177.

(Indonesian hominid fossil discoveries catalogue in 1975 listed 57 hominids, in 2003 list more than doubled, albeit lacking provenance for some discoveries)

Indriati, E. & S.C. Anton (2008)- Earliest Indonesian facial and dental remains from Sangiran, Java: a description of Sangiran 27. *Anthropological Science* 116, 3, p. 219-229.

(online at: https://www.jstage.jst.go.jp/article/ase/116/3/116_070814/_pdf)

(Sangiran 27 only known facial skeleton of Homo erectus. Probably from earliest Pleistocene Sangiran (Pucangan) Fm. Highly mineralized. Ar/Ar dates on bracketing tuffs suggest age of 1.58-1.66 Ma. Sangiran 27 best considered member of H. erectus, but more robust morphology than contemporaneous fossils from Georgia and Kenya)

Indriati, E., C.C. Swisher, C. Lepre, R.L. Quinn, R.A. Suriyanto, A.T. Hascaryo, R. Grun, C.S. Feibel et al. (2011)- The age of the 20 meter Solo River terrace, Java, Indonesia and the survival of *Homo erectus* in Asia. *Plos One* 6, 6, e21562, p. 1-10.

(online at: www.plosone.org/article/info:doi/10.1371/journal.pone.0021562)

(Wide range and conflicting results of radiometric ages for hominid-bearing beds of Solo River 20m terrace deposits in E Java. New radiometric ages suggest older age than currently accepted. Ar/Ar ages from '20m terrace' at Ngandong and Jigar 546 ± 12 ka, but ESR/U-series results 143 ka ± 20 ka, possibly indicating leaching of uranium)

Ingicco, T. (2010)- Les primates quaternaires de Song Terus (Java Est, Indonesie): implications paleobiogeographiques et archeozoologiques pour l'Asie du Sud-Est. *Doct. Thesis Museum Nat. Histoire Naturelle, Paris*, p. 1-281.

('The Quaternary primates of Song Terus (East Java, Indonesia): paleobigeographic and archeozoological implications for SE Asia')

Ingicco, T., J. de Vos & O.F. Huffman (2014)- The oldest gibbon fossil (Hylobatidae) from insular Southeast Asia; evidence from Trinil (East Java, Indonesia), lower/middle Pleistocene. *PloS One* 9, 6, E99531, p. 1-15.

(online at: <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0099531>)

(Fossil femur excavated by Dubois in 1891-1900 in E-M Pleistocene bone bed of Trinil and now in Dubois Collection at Naturalis, Leiden, recognized here as that of Hylobatidae (gibbon), making it oldest insular record in SE Asia. Living Hylobatidae inhabit evergreen rain forests, so paleoenvironment in greater Trinil area included forests of this kind in E-M Pleistocene)

Ingicco, T., A.M. Moigne, K.F. Setiagama, N. Amano, A. Kusno, A. Mirza, F.S. Detroit, A.M. Semah & F. Semah (2014)- The fauna of Song Terus cave (East Java, Indonesia) and LGM impact on the Sunda shelf: is the Keplek fauna an impoverished Wajak fauna? In: N. Amano et al. (eds.) *Southeast Asia: human evolution, dispersals and adaptations*, 17th Congress UISPP, Burgos, p. 110-115.

Ingicco, T., G. van den Bergh, J. de Vos, A. Castro, N. Amano & A. Bautista (2016)- A new species of *Celebochoerus* (Suidae, Mammalia) from the Philippines and the paleobiogeography of the genus *Celebochoerus* Hooijer, 1948. *Geobios* 49, 4, p. 285-291.

(Celebochoerus is suid (pig family) with large upper tusks, previously only known from Plio-Pleistocene of Sulawesi. Canine fragment of Celebochoerus from Cagayan Valley, Luzon, named Celebochoerus cagayanensis n. sp.. Probable migration route from Philippines to Sulawesi, possibly out of Taiwan)

Insani, H., U.P. Wibowo, E. Setiyabudi & I. Kurniawan (2015)- On variation of extinct Java Hippopotamuses: a note from a new finding of Hippopotamidae fossil from Subang, West Java, Indonesia. *Proc. Joint Conv. HAGI-IAGI-IAFMI-IATMI, Balikpapan*, JCB2015-277, 4p.

(New maxilla fossil of small hippopotamus from conglomeratic sandy layer of E Pleistocene Citalang Fm in Pasir Cabe, Wanareja Village, Subang District. Assigned to Hippopotamus sivalensis sivajavanicus)

Itihara, M., Sudijono, D. Kadar, T. Shibasaki, H. Kumai, S. Yoshikawa, F. Aziz et al. (1985)- Geology and stratigraphy of the Sangiran area. In: N. Watanabe & D. Kadar (eds.) Quaternary geology of the hominid fossil bearing formations in Java. Geol. Res. Dev. Centre (GRDC), Bandung, Spec. Publ. 4, p. 11-43.

Itihara, M., Sudijono, Wikarno & D. Kadar (1985)- Mud volcanoes in the Sangiran Dome. In: N. Watanabe & D. Kadar (eds.) Quaternary geology of the hominid fossil bearing formations in Java. Geol. Res. Dev. Centre (GRDC), Bandung, Spec. Publ. 4, p. 117-124.

Itihara, M., N. Watanabe, D. Kadar & H. Kumai (1994)- Quaternary stratigraphy of the hominid fossil bearing formations in the Sangiran area, Central Java. Courier Forschungsinstitut Senckenberg 171, p. 123-128.

Itihara, M., Wikarno & Y. Kagemori (1985)- Tektites from the Sangiran area. In: N. Watanabe & D. Kadar (eds.) Quaternary geology of the hominid fossil bearing formations in Java. Geol. Res. Dev. Centre (GRDC), Bandung, Spec. Publ. 4, p. 125-128.

(Horizon with tektites, glassy material from widespread M Pleistocene Australasian meteorite strewnfield, present between 2nd and 3rd Tuff Horizon in Bapang/ Kabuh Fm of Sangiran Dome)

Jablonski, N. G. & Tyler, D.E. (1999)- *Trachypithecus auratus sangiranensis*, a new fossil monkey from Sangiran, Central Java, Indonesia. Int. J. Primatology 20, 3, p. 319-326.

(Description of new subspecies of Javan lutung, based on tooth-bearing upper jaw fragment from volcanic breccia between U Kalibeng Fm and Lower Pucangan Fm, 500m S of Sangiran. Geochronological age 1.9 Ma, making it oldest monkey in SE Asia. Morphologic similarities to living leaf monkeys of Java, but larger (age disputed by Larick et al. 2000; probably younger))

Jacob, T. (1966)- The sixth skull cap of *Pithecanthropus erectus*. American J. Physical Anthropology 25, 3, p. 243-259.

(Sixth Pithecanthropus skull (named skull V) from cross-bedded sandstone of upper Trinil beds in Tanjung village, Sangiran, C Java)

Jacob, T. (1964)- A new hominid skull cap from Pleistocene Sangiran. Anthropologica, n.s. 6, p. 97-104.

Jacob, T. (1966)- The sixth skull cap of *Pithecanthropus erectus*. American J, Physical Athropology 25, 3, p. 243-259.

(New find of skull cap of Pithecanthropus erectus from upper Trinil beds of Sangiran, C Java. Pithecanthropine characteristics, with cranial capacity ~975 cm³. Absence of cranial base does not necessarily indicate that specimen was victim of cannibalism)

Jacob, T. (1967)- Some problems pertaining to the racial history of the Indonesian Region. Doct. Thesis, Rijksuniversiteit Utrecht, p. 1-156. *(Unpublished)*

Jacob, T. (1967)- Recent *Pithecanthropus* finds in Indonesia. Current Anthropology 8, 5, p. 501-504.

(New mandible and skull caps ('Skull VI' and 'Skull VII') of Pithecanthropus from Sangiran, C Java)

Jacob, T. (1972)- The absolute date of the Djetis beds at Modjokerto. Antiquity 46, p. 148-155.

Jacob, T. (1973)- Palaeoanthropological discoveries in Indonesia with special reference to the finds of the last two decades. J. Human Evolution 2, 6, p. 473-485.

(Reviews of paleoanthropological research in Indonesia since 1889. Three periods, with most finds in second one (1931-1941). Most finds are skull fragments of Pithecanthropus erectus, from M Pleistocene Kabuh Fm in Sangiran. K/Ar dating gives age of 1.9 ± 0.4 million years for Jetis beds at Perning (site of Mojokerto juvenile calvaria) and 0.83 Ma for (upper?) tuff from Trinil beds (Kabuh Fm) at Sangiran)

Jacob, T. (1974)- Studies on human variation In Indonesia. J. Natl. Medical Assoc. 66, 5, p. 389-399.

(online at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2609252/pdf/jnma00489-0061.pdf>)

Jacob, T. (1975)- Morphology and paleoecology of early man in Java. In: R.H. Tuttle (ed.) *Paleoanthropology morphology and paleoecology*, Mouton, The Hague, p. 311-325.
(Between 1889-1941 at least 31 hominid fossils discovered in Indonesia, mainly pithecanthropines. Since 1952 >17 additional individuals found)

Jacob, T. (1975)- The pithecanthropines of Indonesia. *Bull. Mem. Soc. Anthropologie, Paris* 13, 2, p. 243-256.
(online at: www.persee.fr/web/revues/home/prescript/article/bmsap_0037-8984_1975_num_2_3_1816)
(Bodily remains of *Pithecanthropus* of Java consist of cranial and lower limb bones of ~50 individuals, from Lower and Middle Pleistocene beds (~1.9 to 0.2 Ma). Hiatus of at least 150,000 years existed between last *Pithecanthropus* and first *Homo* remains in Asia)

Jacob, T. (1976)- Man in Indonesia: past, present and future. *Modern Quaternary Research in Southeast Asia* 2, Balkema, Rotterdam, p. 39-48.
(Brief review of hominids in Indonesian region in last 2 Myrs)

Jacob, T. (1977)- Evolution of man in Southeast Asia. *Berkala Ilmu Kedokteran (J. Medical Sciences)* 9, 4, p. 175-186.
(online at: <https://journal.ugm.ac.id/bik/article/download/4724/3981>)

Jacob, T. (1978)- The puzzle of Solo Man. *Modern Quaternary Research in Southeast Asia* 4, p. 31-40.
(Solo man from Ngandong first discovered in 1931 is *M Pleistocene pithecanthropine* (advanced *Homo erectus*). Solo man made stone tools. May have been cannibalistic, but not necessarily so)

Jacob, T. (1978)- New finds of Lower and Middle Pleistocene hominines from Indonesia. In: F. Ikawa-Smith (ed.) *Early Palaeolithic in South and East Asia*, Mouton Publishers, The Hague, p. 13-22.
(Brief review of occurrences of Pleistocene hominid fossils of Java. Most new finds of *M Pleistocene H. erectus* fragments from Kabuh Fm of Sangiran area. *K/Ar* ages of Kabuh Fm hominid-bearing beds average 830,000 years; associated tektites 710,000 years)

Jacob, T. (1979)- Hominine evolution in South East Asia. *Archaeology Physical Anthropology Oceania* 14, 1, p. 1-10.

Jacob, T. (1980)- The *Pithecanthropus* in Indonesia: phenotype, genetics and ecology. In L.K. Konigsson (ed.) *Current argument on Early Man*, Proc. Nobel Symposium, Karlskoga 1978, Pergamon Press, Oxford, p. 170-179.

Jacob, T. (1981)- Solo Man and Peking Man. In: B.A. Sigmon & J.S. Cybulski (eds.) *Homo erectus: papers in honor of Davidson Black*, University of Toronto Press, Toronto, p. 87-104.

Jacob, T. (1984)- The fossil skull cap from Sambungmachan and its implication to human evolution. *Berkala Bioantropologi Indonesia* 1, p. 19-27.

Jacob, T., E. Indriati, R.P. Soejono, K. Hsu, D.W. Frayer, R.B. Eckhardt, A. J. Kuperavage, A. Thorne & M. Henneberg (2006)- Pygmoid Australomelanesian *Homo sapiens* skeletal remains from Liang Bua, Flores: population affinities and pathological abnormalities. *Proc. National Academy Sciences USA* 103, 36, p. 13421-13426.
(online at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1552106/pdf/zpq13421.pdf>)
(Liang Bua 1 skull descrined as new species *Homo floresiensis* by Brown et al. (2004) and Morwood et al. (2005) not new species, but places within modern human ranges of variation, resembling Australomelanesian populations. LBI probably drawn from earlier pygmy *H. sapiens* population)

Jacob, T. & D. Kadar (1978)- A new pithecanthropine cranial endocast S34 from the Sangiran Dome area, Central Java. *Geol. Res. Dev. Centre (GRDC), Bandung, Seri Paleontologi* 1, p. 1-7.

- Jacob, T., R.P. Soejono, L.G. Freeman & F.H. Brown (1978)- Stone tools from Mid-Pleistocene sediments in Java. *Science* 202, 4370, p. 885-887.
(*Stone chopper and retouched flake from mid-Pleistocene channel fills at Sambungmacan, C Java*)
- Jaeger, J.J., A.N. Soe, O. Chavasseau, P. Coster, E.G. Emonet, F. Guy, R. Lebrun, A. Maung, A.A. Khyaw et al. (2011)- First hominoid from the Late Miocene of the Irrawaddy Formation (Myanmar). *PLoS One* 6, 4, e17065, p. 1-14.
(online at: <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0017065>)
(*Neogene fossil mammal fauna known in Irrawaddy Fm in C Myanmar for over a century. First hominoid fossil in Myanmar found together with Hipparion mammal fauna from Late Miocene Irrawaddy Fm (10.4- 8.8 Ma). New species of Khoratpithecus*)
- Jaekel, O. (1911)- Die fossilen Schildkrotenreste von Trinil. In: M.Selenka & M. Blanckenhorn (eds.) *Die Pithecanthropus-Schichten auf Java, Geologische und Palaontologische Ergebnisse der Trinil Expedition (1907 und 1908)*, Wilhelm Engelmann, Leipzig, p. 75-81.
(*The fossil turtle remains from Trinil'. Description of Pleistocene turtle fossils from Trinil, collected by Selenka expedition*)
- Janensch, W. (1911)- Die Reptilienreste (exkl. Schildkroten). In: M.Selenka & M. Blanckenhorn (eds.) *Die Pithecanthropus-Schichten auf Java, Geologische und Palaontologische Ergebnisse der Trinil Expedition (1907 und 1908)*, Wilhelm Engelmann, Leipzig, p. 61-74.
(*The reptilian remains (excluding turtles) of Trinil, C Java. Descriptions of Gavialis bengawanicus Dubois, Crocodilus ossifragus and varanus vertebrae*)
- Janssen, R. (2017)- Isotope records in vertebrate fossils: from the Cretaceous seas to Quaternary Sundaland. Ph.D. Thesis Vrije Universiteit, Amsterdam, p. 1-142.
(online at: <https://research.vu.nl/en/publications/isotope-records-in-vertebrate-fossils-from-cretaceous-seas-to-qua>)
(*Includes chapter on carbon and Sr isotopes of teeth enamel of Pleistocene mammals from Trinil-Sangiran, C Java, and Padang Highlands*)
- Janssen, R., J.C.A. Joordens, D.S. Koutamanis, M.R. Puspaningrum, J. de Vos, J.H.J.L. van der Lubbe & H.B. Vonhof (2016)- Tooth enamel stable isotopes of Holocene and Pleistocene fossil fauna reveal glacial and interglacial paleoenvironments of hominins in Indonesia. *Quaternary Science Reviews* 144, p. 145-154.
(online at: <https://research.vu.nl/ws/portalfiles/portal/41930773>)
(*Carbon and oxygen O- isotope composition of tooth enamel used to investigate diet and habitat of bovids, cervids and suids from Holocene and Pleistocene sites on Java and Sumatra. Data from Homo erectus bone samples possibly contaminated by diagenetic overprint. C4-dominated isotope signal suggests Trinil specimens in Dubois and Selenka collections were excavated from narrow stratigraphical interval representing dry, glacial climate state (similar in Sangiran)*)
- Joordens, J.C.A., F. d'Errico, F. Wesselingh, S. Munro, J. de Vos, J. Wallinga, C. Ankjaergaard et al. (2015)- *Homo erectus* at Trinil on Java used shells for tool production and engraving. *Nature* 518, 7538, p. 228-231.
(*Fossil freshwater mussel shells from 'Hauptknochenschicht' of Trinil, C Java (main bone layer; type locality of Homo erectus) with evidence for freshwater shellfish consumption by hominins, one shell tool and shell with geometric engraving. Sediment in shells dated with 40Ar/39Ar and luminescence dating methods as between ~0.54 and 0.43 Ma, i.e. younger than previously estimated. Engraving probably made by Homo erectus*)
- Joordens, J.C.A., F.P. Wesselingh, J. de Vos, H.B. Vonhof & D. Kroon (2009)- Relevance of aquatic environments for hominins: a case study from Trinil (Java, Indonesia). *J. Human Evolution* 57, p. 656-671.
(*Study of ecological context of Java hominids. Homo erectus site of Trinil contained near-coastal rivers, lakes, swamp forests, lagoons, and marshes with minor marine influence, laterally grading into grasslands. Trinil HK environments yielded edible molluscs and fish. Midden-like characteristics of large bivalve shell assemblages from Trinil HK indicate deliberate collection, possibly by hominin*)

Jungers, W., S.G. Larson, W. Harcourt-Smith, M.J. Morwood, T. Sutikna, Rokhus Due Awe & T. Djubiantono (2009)- Descriptions of the lower limb skeleton of *Homo floresiensis*. *J. Human Evolution* 57, 5, p. 538-554.

Junghuhn, F. (1857)- Over de fossiele zoogdierbeenderen te Patihajam, in de residentie Djapara, eiland Java. *Natuurkundig Tijdschrift Nederl-Indie* 14, p. 215-219.
(*On the fossil mammal bones at Patiyam in the Jepara Residency, Java'*)

Kadar, A.P. (1994)- A review of the Sangiran (Central Java) Plio-Pleistocene environment from marine and non-marine floras and faunas. In: J.L. Rau (ed.) Proc. 29th Sess. Comm. Co-ord. Joint Prospecting Mineral Resources in Asian Offshore Areas (CCOP), Hanoi 1992, 2, p. 51-60.
(*Discussion of paleoenvironments and fossils of Late Pliocene- Pleistocene formations of Sangiran Dome*)

Kahlke, H.D. (1972)- A review of the Pleistocene history of the Orang-Utan (*Pongo* Lacepede 1799). *Asian Perspectives* 15, p. 5-14.
(*Review of Pleistocene orang-utan localities in SE Asia (Java, Sumatra, Kalimantan, China, Laos, Vietnam)*)

Kaifu, Y. (2006)- Advanced dental reduction in Javanese *Homo erectus*. *Anthropological Science* 114, 1, p. 35-43.
(*online at: https://www.jstage.jst.go.jp/article/ase/114/1/114_1_35/_pdf/-char/ja*)
(*Postcanine tooth crowns of late E Pleistocene Homo erectus from Sangiran smaller than those of older H. erectus remains of same region. Javanese H. erectus still robust root systems, presumably primitive retention*)

Kaifu, Y. (2017)- Archaic hominin populations in Asia before the arrival of modern humans, their phylogeny and implications for the ðSouthern Denisovansö. *Current Anthropology* 58, Suppl. 17, p. S418-S433.
(*online at: <http://www.journals.uchicago.edu/doi/pdfplus/10.1086/694318>*)
(*Asian hominid fossil record scant, but suggests the presence of regionally different evolutionary lineages of archaic Homo in Pleistocene Asia. Javanese Homo erectus may be 'e southern Denisovans'*)

Kaifu, Y., J. Arif, K. Yokoyama, H. Baba, E. Suparka & H. Gunawan (2007)- A new *Homo erectus* molar from Sangiran. *J. Human Evolution* 52, 2, p. 222-226.
(*Njg 2005.05 molar originally from Bapang-AG levels of Sangiran region*)

Kaifu, Y., F. Aziz & H. Baba (2005)- Hominid mandibular remains from Sangiran: 1952-1986 collection. *American J. Physical Anthropology* 128, 3, p. 497-519.
(*Descriptions of 8 hominid mandibular and associated dental remains found between 1952-1986 from E Pleistocene deposits of Sangiran, C Java. All specimens are surface finds*)

Kaifu, Y., F. Aziz & H. Baba (2013)- The origins and early evolution of Indonesian *Homo erectus*: evidence from Sangiran. In: F. Aziz & H. Baba (eds.) *Homo erectus* in Indonesia. Recent progress of the study and current understanding, Centre for Geological Survey, Bandung, p. 43-64.

Kaifu, Y., F. Aziz, E. Indriati, T. Jacob, I. Kurniawan & H. Baba (2008)- Cranial morphology of Javanese *Homo erectus*: new evidence for continuous evolution, specialization, and terminal extinction. *J. Human Evolution* 55, p. 551-580.
(*Morphological changes in H. erectus skulls from Java: brain size expansion, anteroposterior lengthening of midcranial base and an anterior shift of posterior temporal muscle, etc. Crania from Sambungmacan transitional between earlier (Bapang Fm above Grenzbank in Sangiran) and later (Ngandong) morphotypes of Java. Development of unique features in later Javanese H. erectus supports hypothesis that this Javanese lineage went extinct without making significant contributions to ancestry of modern humans*)

Kaifu, Y., H. Baba & F. Aziz (2006)- Indonesian *Homo erectus* and modern human origins in Australasia; new evidence from the Sambungmacan region, central Java. In: Y. Tomida et al. (eds.) Proc. 7th and 8th Symp.

Collection building and natural history studies in Asia and the Pacific Rim, Natl. Science Museum Monograph 34, p. 289-294.

(online at: <https://www.kahaku.go.jp/research/researcher/papers/28135.pdf>)

(Fossil and genetic studies generally support African origins of modern humans. Current fossil evidence still insufficient to reject competing claim of continuity between Javanese Homo erectus and modern aboriginal Australians. New H. erectus fossils from Sambungmacan, C Java, intermediate between earlier and later groups of Javanese H. erectus and support discontinuity between H. erectus and H. sapiens in Australasia)

Kaifu, Y., H. Baba, F. Aziz, E. Indriati, F. Schrenk & T. Jacob (2003)- Taxonomic affinities and evolutionary history of the early Pleistocene hominids of Java: dentognathic evidence. American J. Physical Anthropology 128, 4, p. 709-726.

(Study of teeth of E Pleistocene Javanese hominids from Sangiran show morphological differences between younger and older groups. Primitive aspects of oldest Javanese hominids suggest hominids dispersed into E Eurasia in earlier Early Pleistocene)

Kaifu, Y., H. Baba, T. Sutikna, M.J. Morwood, D. Kubo, E.W. Saptomo, Jatmiko, R. Due Awe & T. Djubiantono (2011)- Craniofacial morphology of *Homo floresiensis*: description, taxonomic affinities, and evolutionary implication. J. Human Evolution 61, p. 644-682.

(Description of LB1/1 Homo floresiensis cranium. Reductive trend in facial skeleton comparable to H. sapiens, but craniometrically different. LB1 most similar to older Homo erectus from Sangiran and Trinil, consistent with hypothesis that H. floresiensis evolved from early Javanese H. erectus with dramatic island dwarfism)

Kaifu, Y., E. Indriati, F. Aziz, I. Kurniawan & H. Baba (2010)- Cranial morphology and variation of the earliest Indonesian hominids. In: C.J. Norton & D.R. Braun (eds.) Asian Paleanthropology: from Africa to China and beyond, Springer Science, Chapter 11, p. 143-157.

(Previous arguments suggest oldest Indonesian/ Sangiran hominids characterized by cranial robusticity, but hominids highly variable, with both robust and gracile morphotypes. Cranial size, shape and dentognathic morphology of earliest Indonesian hominids comparable to ~1.7 Ma early Homo erectus from E Africa)

Kaifu, Y., M. Izuhou & T. Goebel (2015)- Modern human dispersal and behavior in Palaeolithic Asia: summary and discussion. In: Y. Kaifu et al. (eds.) Emergence and diversity of modern human behavior in Paleolithic Asia, Texas A&M University Press, College Station, p. 535-566.

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(online at: <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0141614>)

(Dental remains of Homo floresiensis both primitive and advanced molar morphologies, a combination unknown in other hominin species. Consistent with alternative hypothesis that H. floresiensis derived from earlier Asian Homo erectus population and experienced size dwarfism in isolated insular setting)

Kaifu, Y., I. Kurniawan, D. Kubo, E. Sudiyabudi, G.P. Putro, E. Prasanti, F. Aziz & H. Baba (2015)- *Homo erectus* calvaria from Ngawi (Java) and its evolutionary implications. Anthropological Science 123, 3, p. 161-176.

(online at: https://www.jstage.jst.go.jp/article/ase/123/3/123_150702/_pdf)

(Endocranial volume of Ngawi 1 959 cm³. H. erectus crania from Ngawi and Sambungmacan generally similar to those of U Pleistocene Ngandong H. erectus, but also features close to terminal Pleistocene Bapang AG Homo erectus from Sangiran)

Kaifu, Y., E. Setiyabudi, I. Kurniawan, H. Baba & F. Aziz (2013)- Evolution of Indonesian *Homo erectus* in the Early Pleistocene: significance of Sangiran 17. In: F. Aziz & H. Baba (eds.) *Homo erectus* in Indonesia. Recent progress of the study and current understanding, Centre for Geological Survey, Bandung, p. 65-91.

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(New reconstruction of remarkably complete skull of E Pleistocene Homo erectus skull IX (Tjg-1993.05) from Bapang Fm-AG levels in Sangiran)

Kapid, R., J. Arif & D.E. Irawan (2016)- A review on paleoenvironment suitability for hominid fossils and other early vertebrate faunas: a case from Pucangan and Kabuh Formations, Central and East Java, Indonesia. *ScienceOpen Research* 2016, DOI: 10.14293/S2199-1006.1.SOR-LIFE.AH9PUY.v1, p. 1-7.

(online at: www.scienceopen.com/)

(Sangiran, Ngawi and Mojokerto site in C and E Java. Vertebrate remains and hominid fossils mainly accumulated in continental sediments associated with lacustrine and fluvial systems)

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(Review of possible Late Pleistocene human migration routes across Wallacea, the transitional island biogeographic zone between Sundaland (SE Asia) and Sahul (Australia-New Guinea))

Keates, S.G. (1998)- A discussion of the evidence for early hominids on Java and Flores. In: G.J. Bartstra (ed.) *Bird's Head approaches; Irian Jaya studies; a programme for interdisciplinary research*, *Modern Quaternary Research in Southeast Asia* 15, p. 179-191.

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(Stone artefacts from Walanae valley, SW Sulawesi, may represent earliest human (Homo sapiens) activity in early part of Late Pleistocene (first identified as Cabenge flake industry by Van Heekeren in late 1940's). With review of Late Pleistocene stone tool industries in other parts of Indonesia)

Keates, S.G. & G.J. Bartstra (1994)- Island migration of early modern *Homo sapiens* in Southeast Asia: the artifacts from the Walanae Depression, Sulawesi, Indonesia. *Palaeohistoria* 33/34, p. 19-30.

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(Lithic artifacts from Late Pleistocene river terraces in N Walanae depression, S Sulawesi)

Keates, S.G. & G.J. Bartstra (2001)- Observations on Cabengian and Pacitanian artefacts from island Southeast Asia. *Quartar* 51/52, p. 9-32.

(online at: http://quartaer.eu/pdfs/2001/2001_01_keates.pdf)

(Paleolithic stone artefact collections from Walanae valley near Cabenge in Sulawesi and from Baksoka valley near Pacitan, S Java, date largely to Late Pleistocene)

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(online at: <http://ci.nii.ac.jp/naid/110002703460/en>)
(Plio-Pleistocene mollusc assemblages from Sangiran Dome area, C Java: 25 species of marine bivalvia, 25 marine gastropoda, 3 non-marine bivalvia and 9 non-marine gastropoda identified from U Kalibeng Formation and Pucangan Fms. Paleoenvironmental conditions changed gradually from warm, shallow marine during U Kalibeng into tidal zone, then to fresh water facies during lower Pucangan. Return of shallow marine environment during lower U Pucangan. Fresh water conditions returned to area during upper U Pucangan)
- Koumans, F.P. (1949)- On some fossil fish remains from Java. Zoologische Mededeel., Leiden, 30, 5, p. 77-82.
(online at: www.repository.naturalis.nl/document/150405)
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- Kramer, A., T. Djubiantono, F. Aziz, J. S. Bogard, R.A. Weeks, D.C. Weinand et al. (2005)- The first hominid fossil recovered from West Java, Indonesia. J. Human Evolution 48, 6, p. 661-667.
(M Pleistocene hominid teeth from Cisancah River, Rancah, W Java, SE of Bandung)
- Kubo, D., R.T. Kono & Y. Kaifu (2013)- Brain size of *Homo floresiensis* and its evolutionary implications. Proc. Royal Society (London), B 280, 20130338, p.
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- Kumazawa, S. (1994)- Quaternary geology and hydrogeology of the Madiun Basin, Indonesia. J. Geosciences, Osaka City University, 37, 8, p. 213-242.
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- Laitman, J.T. & I. Tattersall (2001)- *Homo erectus newyorkensis*: an Indonesian fossil rediscovered in Manhattan sheds light on the middle phase of human evolution. Anatomical Record 262, 4, p. 341-343.
- Langbroek, M. & W. Roebroeks (2000)- Extraterrestrial evidence on the age of the hominids from Java. J. Human Evolution 38, p. 595-600.
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- Louys, J. (2016)- The giant rats of Timor. *Australasian Science* 37, 3, p. 24-26.
(*Dog-sized giant rats coexisted with humans for 40,000 years on Timor*)
- Louys, J., D. Curnoe & H. Tong (2007)- Characteristics of Pleistocene megafauna extinctions in Southeast Asia. *Palaeogeogr. Palaeoclim. Palaeoecology* 243, p. 152-173.
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(Extinction of large-bodied taxa from Pleistocene in mainland SE Asia and Indonesia (incl. proboscideans *Stegodon* and *Palaeloxodon*, pygmy hippopotamus *Hexaprotodon*, hyenas *Crocuta* and *Hyaena*, giant panda *Ailuropoda*, tapirs *Tapirus* and *Megatapirus* and giant Asian ape *Gigantopithecus*, cannot be assigned to single cause. Disappearance likely tied to both climatic and human agents)*)
- Louys, J. & E. Meijaard (2010)- Palaeoecology of Southeast Asian megafauna-bearing sites from the Pleistocene and a review of environmental changes in the region. *J. Biogeography* 37, 8, p. 1432-1449.
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- Louys, J., G.J. Price & S. O'Connell (2016)- Direct dating of Pleistocene *Stegodon* from Timor Island, East Nusa Tenggara. *PeerJ*. 2016, 4, e1788, p. 1-16.
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- Louys, J. & A. Turner (2012)- Environment, preferred habitats and potential refugia for Pleistocene *Homo* in Southeast Asia. *Comptes Rendus Palevol* 11, 2-3, p. 203-211.
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(*The stone artifacts from the Stegodon fossil beds of Mengeruda on Flores, Indonesia'. Pleistocene volcanoclastic fossiliferous beds on Soa Plateau, W Central Flores, contains Stegodon (Hooijer 1957), also Pleistocene tektites and variety of stone tools, similar to 'Sangiran industry' of C Java and 'Cabenge industry' of Sulawesi (now dated at Mata Menge site as ~880 ka: JTvG)*)

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Maringer, J. & J. Verschuuren (1981)- Zum Palaolithikum der Insel Timor, Indonesien. *Anthropos* 76, 3-4, p. 584-588.

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Marquez, S., K. Mowbray, G.J. Sawyer, T. Jacob & A. Silvers (2001)- New fossil hominid calvaria from Indonesia- Sambungmacan 3. *The Anatomical Record* 262, p. 344-368.

(online at: <http://onlinelibrary.wiley.com/doi/10.1002/ar.1046/pdf>)

(*On skull cap of M Pleistocene Homo cf. erectus from banks of Solo River near Poloyo village, Sambungmacan district, C Java. Absence of some classic characters attributed to Homo erectus can be interpreted as: (1) known cranial variation of H. erectus from Indonesia and China is extended; (2) calvaria shows evidence of evolutionary change within H. erectus; or (3) more than one species of Homo in M Pleistocene of Java*)

Martin, J.E., E. Buffetaut, W. Naksri, K. Lauprasert & J. Claude (2012)- *Gavialis* from the Pleistocene of Thailand and its relevance for drainage connections from India to Java. *PLoS ONE* 7, 9, e44541, 14p.

(online at: <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0044541>)

(*Occurrence of crocodylian Gavialis cf. bengawanicus in E Pleistocene of Tha Chang sandpit, Nakhon Ratchasima Province NE Thailand. Associated with Stegodon and other E Pleistocene mammal fauna. Scenario*

for dispersal of *Gavialis* from Indo-Pakistan to Indonesia. Dispersal by sea less likely than dispersal through fluvial drainages. (not much on geological setting and age control; *G. bengawanicus* Dubois also known from Trinil, C Java, associated with *Stegodon-Homo erectus* fauna; Dubois 1908, Delfino & De Vos, 2010; HvG)

Martin, K. (1884)- Ueberreste vorweltlicher Proboscidier von Java und Banka. Sammlungen Geol. Reichs-Museums, Leiden, Ser. 1, 4, p. 1-24.

(online at: www.repository.naturalis.nl/document/552394)

(*'Remnants of prehistoric elephants from Java and Bangka'*. Early paper on molars of Pleistocene elephantoids: *Stegodon* sp. from Pati Ajam, Java, *Elephas sumatranus* from Bangka)

Martin, K. (1884)- Ueberreste vorweltlicher Proboscidier von Java und Bangka. Jaarboek Mijnwezen Nederlandsch-Indie, 1884, p. 285-308.

(*'Remnants of prehistoric elephants from Java and Bangka'*. Reprint of Martin (1884))

Martin, K. (1886)- Fossile Säugetierreste von Java und Japan. Sammlungen Geol. Reichs-Museums, Leiden, Ser. 1, 4, p. 25-69.

(online at: www.repository.naturalis.nl/document/552399)

(*'Fossil mammal remains from Java and Japan'*. Early description of Pleistocene mammal remains collected by Raden Saleh in 1865-1866, mainly from C Java Solo area, mainly *Stegodon* molars and deer (also in *Jaarboek Mijnwezen Nederlandsch Oost-Indie* 16, p. 1-45))

Martin, K. (1887)- Fossile Säugetierreste von Java und Japan. Jaarboek Mijnwezen Nederlandsch Oost-Indie, Wetenschappelijk Gedeelte, 167, Palaeont. Nederl.-Indie 21, p. 1-45.

(*'Fossil mammal remains from Java and Japan'*. Reprint of Martin (1886))

Martin, K. (1888)- Neue Wirbelthierreste vom Pati-Ajam auf Java. Sammlungen Geol. Reichs-Museums, Leiden, Ser. 1, 4, p. 87-116.

(online at: www.repository.naturalis.nl/document/552407)

(*'New vertebrate remains from Pati-Ajam on Java'*. Early paper on Pleistocene mammals. Mainly molars of *Mastodon*, *Stegodon*, *Euelephas*, *Bos*, from Pati-Ajam mountains)

Martin, K. (1888)- Neue Wirbeltierreste vom Pati-Ajam auf Java. Jaarboek Mijnwezen Nederlandsch Oost-Indie 17 (1888), Wetenschappelijk Gedeelte, p. 20-48.

(*'New vertebrate remains from Pati-Ajam on Java'*. Reprint of Martin (1888))

Martin, R.D., A.M. MacLarnon, J.L. Phillips & W.B. Dobyns (2006)- Flores hominid: new species or microcephalic dwarf? *The Anatomical Record*, A, 288A, 11, p. 1123-1145.

(online at: <http://onlinelibrary.wiley.com/doi/10.1002/ar.a.20389/pdf>)

(*New hominids 'Homo floresiensis' from Flores, dated at ~18,000 yrs, very small but dentally adult. Commonly interpreted as insular dwarf derived from Homo erectus, but far too small to derive from Homo erectus by normal dwarfing. H. floresiensis most likely microcephalic Homo sapiens with advanced stone tools*)

Marwick, B. (2009)- Biogeography of Middle Pleistocene hominins in mainland Southeast Asia: a review of current evidence. *Quaternary Int.* 202, p. 51-58.

(online at: http://faculty.washington.edu/bmarwick/PDFs/Marwick_2009_QI.pdf)

(*Mainland SE Asia surrounded by M Pleistocene hominid remains in India, S China and Indonesia, but little evidence from mainland. Region fits into great arc of human dispersal from Africa to Australia, but not robust support for any migration model*)

Marwick, B., C. Clarkson, S. O'Connor & S. Collins (2016)- Early modern human lithic technology from Jerimalai, East Timor. *J. Human Evolution* 101, p. 45-64.

(*Jerimalai rock shelter in E Timor with large assemblage of Pleistocene stone artefacts and shell fish hooks dated to 42,000 yrs BP, one of oldest known sites of modern human activity in island SE Asia. Little change in lithic technology over 42,000 year sequence until addition of new types and raw materials in M Holocene.*)

Assemblage dominated by small chert cores and implements rather than pebble tools and choppers (common in island SE Asia as opposed to mainland SE Asia). Jerimalai assemblage resembles Liang Bua assemblage of Flores, associated with Homo floresiensis; both possibly created by modern humans)

Matsu'ura, S. (1982)- A chronological framing for the Sangiran hominids. Bull. National Science Museum, Tokyo, D8, p. 1-53.

(online at: <http://ci.nii.ac.jp/els/...>)

(Fluorine dating of ~250 E Pleistocene vertebrate fossils from Grenzbank and Kabuh Fms of Sangiran area, C Java, suggesting age range of ~0.8-1.1 Ma for Pithecanthropus Beds)

Matsu'ura, S. (1985)- A consideration of the stratigraphic horizons of hominid finds from Sangiran by the fluorine method. In: N. Watanabe & D. Kadar (eds.) Quaternary geology of the hominid fossil bearing formations in Java. Geol. Res. Dev. Centre (GRDC), Bandung, Spec. Publ. 4, p. 359-366.

Matsu'ura, S. (1986)- Fluorine and phosphate analysis of fossil bones from the Kabuh formation of Trinil. Bull. National Science Museum, Tokyo, D12, p. 1-9.

(online at: <http://ci.nii.ac.jp/naid/110000008540/en>)

(Bone samples from lower Kabuh Fm in Trinil area analysed for fluorine and phosphate for comparison with Sangiran other areas. No obvious conclusions?)

Matsu'ura, S., M. Kondo, F. Aziz, Sudijono, S. Narasaki & N. Watanabe (2000)- First known tibia of an early Javanese hominid. Current Anthropology 41, 2, p. 297-300.

(On modern-shaped hominid tibia recovered in 1977 from Sambungmacan, C Java)

McKenzie, K.G. & Sudijono (1981)- Plio-Pleistocene ostracoda from Sangiran, Jawa. Publ. Geol. Res. Dev. Centre, Seri Paleontologi 1, p. 29-51.

(Descriptions of 25 ostracode species in Late Pliocene Upper Kalibeng Fm and Pleistocene Pucangan Fm at Sangiran Dome, C Java. Shallow marine Kalibeng Fm fauna with Neonesidea, Cytherelloidea, Thalmannia, Hemicytheridea, etc. Lower Pucangan Fm with brackish water assemblage of Ishizakiella, Hemicytheridea, Ilyocypris, Stenocypris and Cyprinotus. Lacustrine Upper Pucangan Fm with Physocypris and Indocythere)

Medway, Lord (1972)- The Quaternary mammals of Malesia: a review. In: P. & M. Ashton (eds.) The Quaternary era in Malesia, Trans. 2nd Aberdeen-Hull Symposium Malesian Ecology, University of Hull Dept. Geogr. Misc. Ser. 13, p. 63-98.

Meijaard, E. (2003)- Mammals of South-East Asian islands and their Late Pleistocene environments. J. Biogeography 30, 8, p. 1245-1257.

(During Last Glacial Maximum several areas in Sunda region remained forest covered: W Sumatra, NW Borneo, Malacca Straits and around Palawan. Other areas possibly more open vegetation types like tree savanna, or open deciduous forest: Malay/Thai Peninsula, Java Sea, including Sunda Strait, and E Borneo)

Meijaard, E. (2004)- Solving mammalian riddles: a reconstruction of the Tertiary and Quaternary distribution of mammals and their palaeoenvironments in island South-East Asia. Ph.D. Thesis Australian National University, Canberra, p. 1-347.

(online at: <https://digitalcollections.anu.edu.au/handle/1885/47989>)

(New Miocene-Quaternary biogeographic models for SE Asia that help explain present-day distribution patterns and evolutionary relationships between mammal species)

Meijaard, E. & C.P. Groves (2006)- The geography of mammals and rivers in mainland Southeast Asia. In: M. Lehman & J.G. Fleagle (eds.) Primate biogeography- progress and prospects, Springer, New York, p. 305-330.

(Late Pliocene- E Pleistocene environmental changes in mainland SE Asia split up many tropical species leading to diversification, maintained during Pleistocene by further glacial periods. During last glacial maximum this may have led to isolation of rainforest-dependent species in several refugia. M Pleistocene

catastrophic comet collision around 0.77 Ma, with centre of impact in E Thailand or E Cambodia/S Laos, may have caused widespread extinction in mainland SE Asia in area possibly >1 million km²)

Meijer, H.J.M. (2014)- The avian fossil record in Insular Southeast Asia and its implications for avian biogeography and palaeoecology. PeerJ 2:e295; DOI 10.7717/peerj.295, p. 1-13.

(online at: <https://peerj.com/articles/295.pdf>)

(Review of bird fossils from Indonesia/ SE Asia islands. At least 63 species in 54 genera and 27 families recorded. Except for Eocene of Sumatra, all bird fossils are Pleistocene in age)

Meijer, H.J.M., T. Sutikna, E.W. Saptomo, R. Due Awe, Jatmiko, S. Wasisto, H.F. James, M.J. Morwood & M.W. Tocheri (2013)- Late Pleistocene-Holocene non-passerine avifauna of Liang Bua (Flores, Indonesia). J. Vertebrate Paleontology 33, 4, p. 877-894.

*(Liang Bua cave deposits, Flores, span last 95,000 years, with bird fossils throughout. Late Pleistocene assemblage with 23 taxa. Giant marabou *Leptoptilos robustus* and vulture *Trigonoceps* sp. now extinct)*

Meijer, H.J.M., L.W. van den Hoek Ostende, G.D. van den Bergh & J. de Vos (2010)- The fellowship of the hobbit: the fauna surrounding *Homo floresiensis*. J. Biogeography 37, 6, p. 995-1006.

*(Flores vertebrate fauna low species richness and disharmonic fauna, resulting from isolated position of island. *H. floresiensis* associated with common pygmy proboscidean *Stegodon florensis insularis*, giant rats (*Papagomys armandvillei*, *P. theodorverhoeveni*, *Spelaeomys florensis*) and other murids, bats, Komodo dragon (*Varanus komodoensis*, *V. hooijeri*), and large number of birds (incl. giant marabou *Leptoptilos*). Between fossil-bearing localities Ola Bula Fm (~ 900-800 ka) and Liang Bua (~95-0 ka) gap of ~700 kyr)*

Menzies, J.I. & C. Ballard (1994)- Some new records of Pleistocene megafauna from New Guinea. Science in New Guinea 20, p. 113-139.

Mijares, A.S., F. Dizon, P. Piper, R. Grun, P. Bellwood, M. Aubert, G. Champion, N. Cuevas, A. De Leon & E. Dizon (2010)- New evidence for a 67,000-year-old human presence at Callao Cave, Luzon, Philippines. J. Human Evolution 59, 1, p. 123-132.

*(Human third metatarsal from Callao Cave in N Luzon dated by U-series ablation as ~67 ka, making it oldest known modern human fossil in Philippines (and SE Asia?). Morphometric analysis indicates gracile structure, close to small-bodied *Homo sapiens*, but also within ranges of *Homo habilis* and *H. floresiensis*)*

Mijsberg, W.A. (1932)- Recherches sur les restes humains trouves dans les fouilles de l'abris-sous-roche de Goewa-Lawa a Sampoeng et des sites prehistoriques a Bodjonegoro (Java). In: Hommage du Service Archeologie des Indes Neerlandaises au Premier Congres des Prehistoriens d'Extreme-Orient a Hanoi, Batavia, p. 39-54.

(Investigations on the human remains found in the excavations of the Gua Lawa rock shelter in Sampung and prehistoric sites in Bojonegoro (Java). Report on skeletal remains of 'big-teeth' prehistoric people from East Java, reminiscent of Papua-Melanesian racial group)

Mishra, S., C. Gaillard, C. Hertler, A.M. Moigne & T. Simanjuntak (2010)- India and Java: contrasting records, intimate connections. Quaternary Int. 223-224, p. 265-270.

(Comparison of similarities of archeological, paleontological and hominin records of India and Java)

Mohler, W.A. (1946)- Zur Stratigraphie der Säugetierführenden Schichten von Java. Experientia, Basel, 2, 8, p. 287-292.

*(On the stratigraphy of mammal-bearing beds of Java'. Mammalian faunas recognized: Tji Djolang (M Pliocene), Kali Glagah (U Pliocene), Djetis with *Pithecanthropus* (Lower Pleistocene), Trinil with *Pithecanthropus* (M Pleistocene), Ngandong with *Homo neanderthalensis soloensis* (U Pleistocene), Sampoeng (Subrecent). Post-M Pleistocene folding (U Pleistocene Ngandong-terraces not folded))*

Moigne, A.M., R. Due Awe, F. Semah & A.M. Semah (2004)- The cervids from Ngebung site ('Kabuh series', Sangiran dome, Central Java) and their biostratigraphical significance. In: S.G. Keates & J. Pasveer (eds.)

Quaternary Research in Indonesia, Chapter 3, Modern Quaternary Research in Southeast Asia 18, Balkema, p. 31-44.

(Excavations in Lower Kabuh Fm at Ngebung site with fossil riverbank horizon formerly occupied by Homo erectus, with numerous stone artifacts and broken bones, dated at ~0.8 Ma (Ar-dating of overlying tuff by Salei 1997). Dominant animal fossils large bovids, smaller cervids and Stegodon, an association probably linked to human activity. Two cervids, Cervus (Rusa) and Axis lydekkeri ngebungensis)

Moigne, A.M., F. Semah & A.M. Semah, A. Bouteaux & R. Due Awe (2004)- Mammalian fossils from two sites of the Sangiran Dome (Central Jawa, Indonesia), in the biostratigraphical framework of the Jawanese Pleistocene. In: L.C. Maul & R.D. Kahlke (eds.) Late Neogene and Quaternary biodiversity and evolution: Regional developments and interregional correlations, Proc. 18th Int. Senckenberg Conf., Weimar, Terran Nostra, Stuttgart, p. 176-178. *(Extended Abstract)*

(online at: www.senckenberg.de/fis/doc/abstracts/68_Moigne_etal_2.pdf)

(Brief review of Bukuran and Ngebung 2 sites, Sangiran. Ngebung 2 with 'late Trinil HK' mammalian assemblage and dated as beginning of M Pleistocene (~0.9 Ma?))

Moncel, M.H., M. Arzarello, E. Boeda, T. Bonilauri, B. Chevrier, C. Gaillard, H. Forestier, Y. Li, F. Semah & V. Zeitoun (2018)- Assemblages with bifacial tools in Eurasia (second part). What is going on in the East? Data from India, Eastern Asia and Southeast Asia. *Comptes Rendus Palevol* 17, 1-2, p. 61-76.

(online at: www.sciencedirect.com/science/article/pii/S1631068315002122)

(Review of Pleistocene stone tools in Asia, incl. Indonesia: Baturaja-S Sumatra, Pacitan-Java, Ngebung/Sangiran-Java (part 1 of series was on stone tools in Europe))

Moncel, M.H., M. Arzarello, E. Boeda, T. Bonilauri, B. Chevrier, C. Gaillard, H. Forestier, Y. Li, F. Semah & V. Zeitoun (2018)- Assemblages with bifacial tools in Eurasia (third part). Considerations on the bifacial phenomenon throughout Eurasia. *Comptes Rendus Palevol* 17, 1-2, p. 77-97.

(online at: www.sciencedirect.com/science/article/pii/S163106831630032X)

(Bifacial stone tool technology believed to become widespread from 800-700 ka onwards, probably reaching Levant from Africa before moving toward Asia, then Europe. However, reality may be more complex. In Indonesia lithic pieces compatible with Acheulean traditions found without stratigraphic context in S Sumatra and associated with Homo erectus fossils at base of Kabuh Fm in Sangiran)

Moore, M.W. T. Sutikna, Jatmiko, M.J. Morwood & A. Brumm (2009)- Continuities in stone flaking technology at Liang Bua, Flores, Indonesia. *J. Human Evolution* 57, 5, p. 503-526.

(At Liang Bua, Flores, stratified unchanging artifact sequence spanning 95 kyr, with minor shift to unifacial flaking after 11 ka. Pleistocene pattern associated with Homo floresiensis skeletal remains. Holocene changes correlate with appearance of Homo sapiens)

Moore, M.W. & A. Brumm (2007)- Stone artifacts and hominins in island Southeast Asia: new insights from Flores, eastern Indonesia. *J. Human Evolution* 52, p. 85-102.

(Review of stone tool types in Indonesia. Large-sized 'core tools' commonly believed to be work Homo erectus and assemblages of small-sized 'flake tools' attributed to Homo sapiens, but both probably part of same sequences)

Morley, M.W. (2017)- The geoarchaeology of hominin dispersals to and from tropical Southeast Asia: a review and prognosis. *J. Archaeological Science* 77, p. 78-93.

(Review of geoarchaeology of Late Pleistocene modern human dispersals into and out of SE Asia, incl. Indonesian localities Punung/Wajak (Java) and Liang Bua (Flores))

Morwood, M.J., F. Aziz, G.D. van den Bergh, P.Y. Sondaar & J. De Vos (1997)- Stone artefacts from the 1994 excavation at Mata Menge, West Central Flores, Indonesia. *Australian Archaeology* 44, p. 26-34.

(online at: <https://www.library.uq.edu.au/ojs/index.php/aa/article/download/996/994>)

(1994 excavation in fluvial Ola Bula Fm at Mata Menge near Bajawa, C Flores, yielded M Pleistocene stone tool pieces (basalt and chert flakes) and faunal remains (large Stegodon, crocodile, giant rat). Likely

Matuyama- Brunhes boundary (and tektites from same site reported by Maringer and Verhoeven 1970 (but below main fossil layers?))

Morwood, M.J., P. Brown, Jatmiko, T. Sutikna, E. Wahyu Saptomo, K.E. Westaway et al. (2005)- Further evidence for small-bodied hominins from the late Pleistocene of Flores, Indonesia. *Nature* 437, p. 1012-1017. (*Homo floresiensis from Late Pleistocene of Flores has stature, limb proportions and endocranial volume of African Pliocene Australopithecus. Age of population from 95-74 to 12 thousand years ago. Excavation yielded more evidence for behavioural capabilities, including butchery of Stegodon and use of fire*)

Morwood, M.J. & W.L. Jungers (2009)- Conclusions: implications of the Liang Bua excavations for hominin evolution and biogeography. *J. Human Evolution* 57, p. 640-648. (*Liang Bua excavations on Flores stratified sequence of stone artifacts and faunal remains spanning ~95- 17 ka, and includes skeletal remains of Homo sapiens in Holocene and Homo floresiensis in Pleistocene. Small H. floresiensis not australopithecine and not dwarfing of ancestral H. erectus population, but probably late representative of small-bodied hominid lineage that exited Africa before emergence of Homo erectus*)

Morwood, M.J., P.B. O'Sullivan, F. Aziz & A. Raza (1998)- Fission-track ages of stone tools and fossils on the East Indonesian island of Flores. *Nature* 392, p. 173-176. (*Zircon fission-track dates from two fossil sites on Flores. Tangi Talo, with endemic fauna, dates to 0.90 ± 0.07 Ma, Mata Menge (with stone tools and elements of continental SE Asian fauna) 0.88- 0.80 Ma. Also older, reworked zircons with ages between 7- 14 Ma (also with Australasian tektites; Von Koenigswald 1957)*)

Morwood, M.J., P. O'Sullivan, E.E. Susanto & F. Aziz (2003)- Revised age for Mojokerto 1, an early *Homo erectus* cranium from East Java, Indonesia. *Australian Archaeology* 57, p. 1-4. (*online at: www.library.uq.edu.au/ojs/index.php/aa/article/viewFile/526/1690*) (*Field study and re-dating of two pumice horizons at site of Homo erectus skull found by Duijffes (1936) at Mojokerto, E Java, indicates age is <1.49 Ma, not much-hyped 1.8 Ma age of Swisher et al. (1984)*)

Morwood, M.J., R.P. Soejono, R.G. Roberts, T. Sutikna, C.S.M. Turney, K.E. Westaway et al. (2004)- Archaeology and age of a new hominin from Flores in eastern Indonesia. *Nature* 431, p. 1087-1091. (*Excavations at Liang Bua cave on Flores yielded tiny hominins, assigned to Homo floresiensis n.sp.. It existed from before 38 ka until at least 18 ka. Associated deposits contain stone artefacts and animal remains, including Komodo dragon and endemic, dwarfed species of Stegodon. H. floresiensis originated from early dispersal of Homo erectus and overlapped in time with Homo sapiens in region*)

Morwood, M.J., T. Sutikna, E.W. Saptomo, K.E. Westaway, Jatmiko et al. (2008)- Climate, people and faunal succession on Java, Indonesia: evidence from Song Gupuh. *J. Archaeological Science* 35, 7, p. 1776-1789. (*Song Gupuh cave in Gunung Sewu Limestones, E Java, over 16 m of deposits with faunal sequence spanning 70 ka. Terminal Pleistocene- Early Holocene period of maximum biodiversity. Human activity, especially after onset of Neolithic around 2.6 ka, contributed to progressive loss of species from area*)

Morwood, M.J. & P. van Oosterzee (2007)- A new human- The startling discovery and strange story of the hobbits of Flores, Indonesia. Harper Collins, p. 1-222. (*Popular book on 2004 discovery of Homo floresiensis and its interpretation as a new species. N.B.: There is a school of paleoanthropologists that still dispute this 'startling discovery; see e.g. Jacob et al. (2006), Martin et al. (2006), Bednarik (2008), Obendorf et al. (2008), Oxnard et al. 2010, Henneberg et al. (2011), Eckhardt et al. (2014) and others, who argue Morwood et al. misrepresented facts and misinterpreted significance of H. floresiensis, which they believe represents aberrant specimens of Homo sapiens*)

Movius, H.L. (1943)- The stone age of Burma. In: *Research on early man in Burma*, Trans. American Philosophical Soc., N.S., 32, 3, p. 341-393. (*Paleolithic stone tools from 'Anyathian' M-U Pleistocene terraces of Irrawaddy River in Upper Myanmar (hand adzes, choppers, scrapers). Early Anyathian similarities with Pacitanian of S Java*)

- Movius, H.L. (1944)- Early man and Pleistocene stratigraphy in southern and eastern Asia. Papers Peabody Museum Archaeology Ethnology, Harvard University, 19, 3, p. 1-125.
- Movius, H.L. (1948)- The Lower Palaeolithic cultures of southern and eastern Asia. Trans. American Philosophical Soc., new ser. 38, 4, p. 329-420.
(*Review of Pleistocene stratigraphy and hominids and stone tools in Java, NW India, Burma and N China*)
- Movius, H.L. (1949)- Lower Palaeolithic archaeology in southern Asia and the Far East. In: W.W. Howell (ed.) Early man in the Far East, Symposium, American Assoc. Phys. Anthropologists, Chicago 1946, p. 17-77.
(*Review of Pleistocene stratigraphy and hominids and stone tools in NW India, Burma, N China and Java*)
- Mubroto, B., Suminto & J. Kimura (1995)- Paleomagnetic analysis of sediments of the Kedungbrubus area. In: Sudijono et al. (eds.) Geology of Quaternary environment of the Solo- Madiun area, Central-East Java, Geol. Res. Dev. Centre, Spec. Publ. 17, p. 100-104.
- Mulyaningsih, S., Sampurno, Y. Zaim. D.J. Puradimaja, S. Bronto & D.A. Siregar (2006)- Perkembangan geologi pada Kuartar Awal sampai masa sejarah di dataran Yogyakarta. J. Geologi Indonesia 1, 2, p. 103-113.
(*online at: www.bgl.esdm.go.id/publication/index.php/dir/article_detail/170*)
(*'Developments in Quaternary geology until the beginning of history in the Yogyakarta plain'. Uplift of Southern Mts in E Pleistocene formed Yogyakarta Basin. Merapi volcanic activity took place since ± 42 ka or 0.67 Ma*)
- Mulvaney, D.J. (1970)- The Patjitanian industry: some observations. Mankind (Australian J. Anthropology) 7, 3, p. 184-187.
(*Pacitanian stone tools from Java S Mountains contain both hand-axes and flake tools and may not be as old as previously suggested*)
- Musser, G.G. (1981)- The giant rat of Flores and its relatives east of Borneo and Bali. Bull. Amer. Museum Natural History 169, 2, p. 67-176.
(*online at: <http://digitallibrary.amnh.org/handle/2246/568>*)
(*Five Pleistocene- Recent murids (rats) known only from Flores: *Papagomys armandvillei* and new species *P. theodorverhoeveni*, *Hooijeromys nusatenggara*, *Floresomys naso* and *Spelaeomys florensis*. *Komodomys rintjanus* occurs on Flores and Komodo Islands of Rintja and Padar*)
- Musser, G.G. (1982)- The Trinil rats. Modern Quaternary Research in Southeast Asia 7, Balkema, Rotterdam, p. 65-85.
(*Review of extant and fossil murid rodents of Java. Rare murid rodents in Pleistocene Trinil fauna represent two species incl. small *Rattus trinilensis* n.sp.*)
- Musser, G.G. & C. Newcomb (1983)- Malaysian murids and the giant rat of Sumatra. Bull. Amer. Mus. Natural History 174, p. 327-598.
- Musser, G.G., A. van de Weerd & E. Strasser (1986)- *Paulamys*, a replacement name for *Floresomys* Musser, 1981 (Muridae), and new material of that taxon from Flores, Indonesia. American Museum Novitates 2850, p. 1-10.
- Naumann, E. (1887)- Fossile Elephantenreste von Mindanao, Sumatra und Malakka. Abhandl. Zool. Museum Dresden 1, 6, p. 1-11.
(*Fossil elephant remains from Mindanao, Sumatra and Malacca*)
- Naumann, E. (1890)- *Stegodon mindanensis*, eine neue Art von Uebergangs-Mastodonten. Zeitschrift Deutschen Geol. Gesellschaft, Berlin, 42, 1, p. 166-169.
(*online at: <https://www.biodiversitylibrary.org/item/37733#page/176/mode/1up>*)

('Stegodon mindanensis, a new species of transitional mastodonts'. Brief note on elephantoid tooth from Mindanao in Dresden Museum, initially identified as same as Stegodon trigonocephalus from Java, but is different. No figures)

Ninkovich, D. & L.H. Burckle (1978)- Absolute age of the base of the hominid-bearing beds in Eastern Java. *Nature* 275, p. 306-308.

(Analysis of planktonic marine diatoms from marine intercalations in lowermost hominid-bearing beds and from underlying U Kalibeng Fm marine sediments in E Java (~2.1-1.9 Ma age for U Kalibeng assemblage))

Ninkovich, D., L.H. Burckle & N.D. Opdyke (1982)- Palaeogeographic and geologic setting for early man in Java. In: R.A. Scrutton & M. Talwani (eds.) *The ocean floor*, Wiley, New York, p. 211-227.

Noerwidi, S., Siswanto & H. Widiyanto (2016)- Primata besar di Jawa: spesimen baru *Gigantopithecus* dari Semedo. *Berkala Arkeologi* 36, 2. p. 141-160.

(online at: <http://berkalaarkeologi.kemdikbud.go.id/index.php/berkalaarkeologi/article/view/96/142>)

('Giant primate of Java: a new Gigantopithecus specimen from Semedo'. Two enigmatic mandible specimens found in 2014 at Semedo, SE of Tegal, C Java. Morphologically similar, but twice size of common primate's jaw. Semedo specimens close to Gigantopithecus blacki)

Obendorf, P.J., C.E. Oxnard & B.J. Kefford (2008)- Are the small human-like fossils found on Flores human endemic cretins? *Proc. Royal Society (London)*, B, 275, p. 1287-1296.

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(Hominid fossils from Liang Bua, Flores, Indonesia, including nearly complete skeleton dated to 18 ka and assigned to new species are probably ME endemic cretins, part of an inland population of Homo sapiens)

Obradovich, J.D. & C.W. Naeser (1981)- Indonesia, age of *Homo erectus* from Java. U.S. Geol. Survey (USGS) Prof. Paper 1275, p. 285-286.

O'Connell, C.A. & J.M. DeSilva (2013)- Mojokerto revisited: evidence for an intermediate pattern of brain growth in *Homo erectus*. *J. Human Evolution* 65, p. 156-161.

(online at: <https://www.bu.edu/anthrop/files/2013/08/OConnellDeSilvaJHE2013.pdf>)

O'Connell, J.F. & J. Allen (2004)- Dating the colonization of Sahul (Pleistocene Australia- New Guinea): a review of recent research. *J. Archaeological Science* 31, p. 835-853.

(Date for arrival of human colonization of Sahul area (Australia- New Guinea) generally assumed to be at ~40,000 BP or 60,000 BP. Postulated arrival dates before ~42-45 ka not well-supported by data)

O'Connor, S. (2007)- Pleistocene Timor: further corrections, a reply to Bednarik. *Australian Archaeology* 54, p. 46-51.

O'Connor, S. (2007)- New evidence from East Timor contributes to our understanding of earliest modern human colonisation east of the Sunda Shelf. *Antiquity* 81, p. 523-535.

(New age date of ~38,000-42,000 yrs BP from rock shelter of Jerimalai, E Timor is earliest evidence for migration by modern humans E of Sunda Shelf into Island SE Asia)

O'Connor, S. & K. Aplin (2007)- A matter of balance: an overview of Pleistocene occupation history and the impact of the Last Glacial Phase in East Timor and the Aru Islands, eastern Indonesia. *Archaeology in Oceania* 42, 3, p. 82-90.

(Late Pleistocene Last Glacial Maximum (~30- 15 ka) increased aridity and lowered sea level had significant impact on human hunter-gatherers in E Timor and Aru Islands)

O'Connor, S., J. Louys, S. Kealy & S.C. Samper Carro (2017)- Hominin dispersal and settlement East of Huxley's Line; the role of sea level changes, island size, and subsistence behavior. *Current Anthropology* 58, Suppl. 17, p. S567-S582.

(online at: <https://www.journals.uchicago.edu/doi/pdfplus/10.1086/694252>)

(Pleistocene pre-sapiens hominins opportunistic omnivores, probably constrained to environments with plentiful fresh water animals and plants; therefore rel. difficult to migrate across island archipelago. Homo sapiens probably able to subsist on marine resources and more easily moved through islands E of Huxley Line)

O'Connor, S., M. Spriggs & P. Veth (2002)- Excavation at Lene Hara Cave establishes occupation in East Timor at least 30,000-35,000 years ago. *Antiquity* 76, p. 45-50.

(First discovery of Late Pleistocene flake-based stone tools from Timor, in Lene Hara cave, Timor Leste (one of rel. many Late Pleistocene occurrences of small 'flake tool industries' in caves and rock shelters across E Indonesia region)

Olsen, J.W. & R.L. Ciochon (1990)- A review of evidence for postulated Middle Pleistocene occupations in Viet Nam. *J. Human Evolution* 19, 8, p. 761-788.

(Several archeological localities across Vietnam originally interpreted as of M Pleistocene age, but age control of many localities unreliable)

Oppenheimer, S. (2009)- The great arc of dispersal of modern humans: Africa to Australia. *Quaternary Int.* 202, p. 2-13.

(Late Pleistocene dispersal of anatomically modern humans out of Africa. Routes obeyed limitations placed by drinking water and climate-permissive corridors. First spread N in Eemian interglacial (~125 ka). Reached Indonesian region by 75-81 ka. Crossed Wallace Line to reach Australia at least by 48 ka (possibly 60 ka)

Oppenoorth, W.F.F. (1932)- De vondst van Palaeolithische menselijke schedels op Java. *De Mijningenieur* 13, 6, p. 106-110.

('The discovery of Paleolithic human skulls on Java'. On new hominid skull discoveries in lower part of 20m river terrace, left bank of Solo River at Ngandong, C. Java)

Oppenoorth, W.F.F. (1932)- *Homo (Javanthropus) soloensis*, een Plistoceene mensch van Java. Voorloopige mededeeling. *Wetenschappelijke Mededeelingen Dienst Mijnbouw Nederlandsch-Indie* 20, p. 49-75.

('Homo soloensis, a new Upper Pleistocene hominid from Solo River terrace at Ngandong, E Java'. First description of Ngandong hominid fossils (skullcaps, etc.). Associated with rich mammal assemblage (H. soloensis now variously viewed as 'advanced Homo erectus or separate species; JTvG))

Oppenoorth, W.F.F. (1932)- Ein neuer diluvialer Urmensch von Java. *Natur und Museum, Senckenberg, Frankfurt*, 62, 9, p. 269-279.

('A new Pleistocene hominid from Java. Similar to above papers on Ngandong 'Solo Man' discovery, in German)

Oppenoorth, W.F.F. (1936)- Een prehistorisch cultuurcentrum langs de Solo Rivier. *Tijdschrift Kon. Nederlands Aardrijkskundig Genootschap* (2) 53, p. 399-411.

('A prehistoric culture center along the Solo River'. On mammal and hominid remains in Pleistocene fluvial terraces near Ngandong, Solo River downstream of Ngawi, E Java. In addition to bones, also various man-made tools made from bones)

Oppenoorth, W.F.F. (1937)- The place of *Homo soloensis* among fossil men. In: G.G. Mac-Curdy (ed): *Early Man*, Lippincott Co., New York., p. 348-360.

(Homo soloensis from Ngandong, Java, viewed as oldest known representatives of 'Homo sapiens fossilis'. (Weidenreich 1943 viewed it as transition between Pithecanthropus and modern man; Koenigswald (1956) suggested Ngandong specimens too recent and advanced to be Pithecanthropus, but closer to Neandertals))

Orchiston, D.W. & W.G. Siesser (1982)- Chronostratigraphy of the Plio-Pleistocene fossil hominids of Java. *Modern Quaternary Research in Southeast Asia* 7, Balkema, Rotterdam, p. 131-149.

(Review of chronostratigraphy of hominid-bearing formations of C and E Java. Most radiometric dates without well documented stratigraphic position or analytical uncertainty, and of dubious value. Most reliable date is 0.83 Ma for pumice in Lower Kabuh Fm. Underlying marine U Kalibeng Fm Late Pliocene microfaunas)

O'Sullivan, P.B., M. Morwood, D. Hobbs, F. Aziz, Suminto, M. Situmorang, A. Raza & R. Maas (2001)- Archaeological implications of the geology and chronology of the Soa Basin, Flores, Indonesia. *Geology* 29, 7, p. 607-610.

(Zircon fission-track dates of tuffaceous deposits associated with stone artifacts attributed to Homo erectus in Soa lacustrine basin on Flores indicate early hominids must have begun colonizing E Indonesia by ~840 ka)

Oxnard C., P.J. Obendorf, B.J. Kefford & J. Dennison (2010)- Post-cranial skeletons of hypothyroid cretins show a similar anatomical mosaic as *Homo floresiensis*. *PlosOne* 5, 9, e13018, p. 1-11.

(online at: <http://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0013018&type=printable>)

(LB1 and LB6 skulls of 'Homo floresiensis' most likely, endemic cretins from population of unaffected Homo sapiens. Consistent with recent hypothyroid endemic cretinism throughout Indonesia, including nearby Bali)

Oxnard C., P.J. Obendorf, B.J. Kefford & J. Dennison (2012)- More on the Liang Bua finds and modern human cretins. *Homo* 63, 6, p. 407-412.

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(Fifteen Late Pleistocene small mammal species from cave in Ordovician limestone hill in S Thailand)

Petraglia, M.D., P. Ditchfield, S. Jones, R. Korisettar & J.N. Pal (2012)- The Toba volcanic super-eruption, environmental change, and hominin occupation history in India over the last 140,000 years. *Quaternary Int.* 258, p. 119-134.

(Middle Paleolithic hominins in India appear to have survived negative effects of Toba volcanic eruption and climatic fluctuations in Late Pleistocene)

Pickford, M., H. Nakaya, Y. Kanimatsu, H. Saegusa, A. Fukuchi & B. Ratanasthien (2004)- Age and taxonomic status of the Chiang Muan (Thailand) hominoids. *Comptes Rendus Palevol* 3, 1, p. 65-75.

(Age of Lufengpithecus chiangmuanensis Chaimanee 2003 originally estimated as ~13-13.5 Ma, but previous studies suggest age closer to ~12-11 Ma. L. chiangmuanensis synonym of L. keiyuanensis Wu)

Polanski, J.M., H.E. Marsh & S.D. Maddux (2016)- Dental size reduction in Indonesian *Homo erectus*: implications for the PU-198 premolar and the appearance of *Homo sapiens* on Java. *J. Human Evolution* 90, p. 49-54.

(Recent recovery of hominin maxillary third premolar, PU-198 in collections from Punung Cave (E Java) was used to suggest Homo sapiens appeared on Java between 143-115, ka. However, PU-198 overlaps in premolar sizes between H. erectus and H. sapiens, and indicate reduction in premolar size between early and late Javan H. erectus. Question appearance of H. sapiens on Java between 143-115 ka)

Polhaupessy, A.A. (1999)- Palynological evidence for a Pleistocene environment in Trinil, East Java. In: Proc. 35th Sess. Sess. Co-ord. Comm. Coastal Offshore Geosc. Programs E and SE Asia (CCOP), Subic Bay 1998, 2, Techn. Repts, p. 299-308.

(Two pollen zones distinguished in Pleistocene of Trinil (site of first Homo erectus in C Java) Pucangan Fm rel. low diversity grass-dominated terrestrial vegetation and lacustrine fresh water plants; Lower Kabuh Fm higher diversity mixed freshwater swamp and terrestrial vegetation, perhaps suggesting slightly drier climate than today)

Polhaupessy, A.A. (1999)- Quaternary palynological study of the Trinil area, East Jawa. *Geol. Res. Dev. Centre (GRDC), Bandung, Seri Paleontologi* 9, p. 1-7.

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(Review of palynological analyses at Quaternary deposits of Java, particularly sites with hominids or other vertebrate fossils: Bumiayu (Cisaat), Sangiran, Trinil, Solo and Madiun areas, etc. Many Pleistocene sites with abundant Graminae (grass) pollen, suggesting more seasonal climate with savannah grasslands. Pollen during Last Glacial Maximum with common *Dacrycarpus*, etc., suggest temperatures several degrees cooler than today)
- Pope, G.G. (1982)- Hominid evolution in East and Southeast Asia. Ph.D. Thesis University of California, Berkeley, p. 1-375.
- Pope, G.G. (1983)- Evidence on the age of the Asian Hominidae. Proc. National Academy Sciences USA 80, 16, p. 4988-4992.
(All known Asian hominids <1 Million years old, and all early Asian hominids can be accommodated in *Homo erectus*. Entire record of *Homo erectus* in Asia may only span period of ~0.9-0.3 Ma. Maximal exposure of continental shelves such as Sunda occurred at ~3 Ma, 1.25 Ma and 0.65-0.45 Ma. Exposures at 1.25 Ma and 0.65-0.45 Ma most likely provided opportunities for migration of hominids and Pleistocene mammals to Java)
- Pope, G.G. (1995)- The influence of climate and geography on the biocultural evolution of the Far Eastern hominids. In: E.S. Vrba et al. (eds.) Paleoclimate and evolution, with emphasis on human origins, Yale University Press, New Haven, p. 493-506.
- Pope, G.G. & J.E. Cronin (1984)- The Asian hominidae. J. Human Evolution 13, 5, p. 377-396.
(Majority of known Asian hominids less than 1.0 Ma old, with maximum age 1.3 Ma. All can be incorporated in *Homo erectus* or *Homo sapiens*. Asian fossil record suggests gradual change over ~1 million years)
- Pope, K.O. & J.E. Terrell (2008)- Environmental setting of human migrations in the circum-Pacific region. J. Biogeography 35, p. 1-21.
(Rapid expansion of modern humans from Africa into SE Asia along coastal routes facilitated by period of stable climate and sea level from ~45,000- 40,000 yr BP, enabling them to reach coasts of NE Russia and Japan by 38,000- 37,000 yr BP)
- Prasetyo, B. (2014)- Perkembangan budaya Akhir Pleistosen- Awal Holosen di Nusantara. Kalpataru, Majalah Arkeologi 23, 1, p.
(online at: <http://jurnalarkeologi.kemdikbud.go.id/index.php/kalpataru/article/view/47>)
(The cultural development during Late Pleistocene-Early Holocene in the Indonesian Archipelago'. Review of Late Pleistocene- Early Holocene human culture in various parts of Indonesia)
- Purnomo, A. (2007)- La sedimentation du lac de Guyang Warak (Punung-Java Est, Indonesie). Master Thesis, Museum Nat. Histoire Naturelle, C.E.R.P. de Tautavel, p. 1-83.
(online at: http://hopsea.mnhn.fr/pc/thesis/Purnomo_Andri_2007.pdf)
(Sedimentation of Guyang Warak lake (Punung, East Java, Indonesia'. South Central Java)
- Purnomo, A. (2008)- The sedimentation of Lake Guyang Warak (Punung-East Java, Indonesia). Annali dell'Università degli Studi di Ferrara Museologia Scient. Naturalistica. Spec. Vol. 2008, p. 151-154.
(Lake Guyang Warak, Punung, NW of Pacitan in S Mountains of C Java, close to famous Paleolithic Site Song Terus Cave. 6m long core shows almost same environment from at least 2000 BP)
- Purnomo, A. (2013)- Stratigraphie et sedimentation au Sud Est de Dome de Sangiran: l'environnement des *Homo erectus* au debut de Pleistocene moyen. Ph.D. Thesis Università degli Studi di Ferrare, Italy, p. 1-251.
(online at: http://eprints.unife.it/831/1/Purnomo_tesi.pdf)
(Stratigraphy and sedimentation at the SE Sangiran Dome: the environment of *Homo erectus* at the start of the Middle Pleistocene'. Depositional environments of Upper Pucangan- Grenzbank- Kabuh Formations, identification of soil horizons with human occupation, frequent volcanic eruptions, etc.))

Purnomo, A., F. Semah, A.M. Semah & T. Simanjuntak (2014)- Geological structure, sedimentation dynamics and prehistory in the Southeastern part of the Sangiran Dome (Java-Indonesia): research and conservation strategies. In: N. Amano et al. (eds.) Southeast Asia: Human evolution, dispersals and adaptations, 17th Congress UISPP, Burgos, p. 94-99.

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('On fossil bones from the Pandan', C Java. Pleistocene mammals re-described by Martin 1886)

Rahardjo, A.T. (1999)- Perubahan iklim dan batas umur Pliosen-Plistosen berdasarkan analisis foraminifera dan palinologi di daerah Mojoroto, Mojokerto- Jawa Timur. *Buletin Geologi (ITB)* 3, 1, p. 1-13.

('Climate change and Pliocene-Pleistocene age boundary based on foraminifera and palynology analysis in the Mojoroto area, Mojokerto, East Java')

Rahardjo, A.T. & A.M. Semah (1989)- Penelitian palynology daerah Sangiran. *Bull Dept. Geol. Inst Teknologi Bandung (ITB)* 1983, 9, p. 23-31.

('Palynology research in the Sangiran area')

Rasmussen, M., X. Guo, Y. Wang, K.E. Lohmueller, S. Rasmussen, A. Albrechtsen et al. (2011)- An aboriginal Australian genome reveals separate human dispersals into Asia. *Science* 334, 6052, p. 94-98.

(DNA genomic sequence of Aboriginal Australians shows they are descendants of early human dispersal into E Asia, ~62,000- 75,000 yrs ago, separate from dispersal of ancestors of modern Asians 25,000- 38,000 yrs ago)

Reich, D., N. Patterson, M. Kircher, F. Delfin, M.R. Nandineni, I. Pugach, A.M. Ko, Y.C. Ko et al. (2011)- Denisova admixture and the first modern human dispersals into Southeast Asia and Oceania. *American J. Human Genetics* 89, 4, p. 516-528.

(online at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3188841/pdf/main.pdf>)

(Ancestors of New Guineans, Aboriginal Australians, Near Oceanians, Polynesians, Fijians, E Indonesians, and Mamanwa ('negrito' group from Philippines) inherited part of ancestry from Denisovans, an archaic hominin group from Siberia. However, mainland E Asians, W Indonesians, Jehai (negrito group from Malaysia), and Onge (negrito group from Andaman Islands) have not)

Reis, K.R. & A.M. Garong (2001)- Late Quaternary terrestrial vertebrates from Palawan Island, Philippines. *Palaeogeogr. Palaeoclim. Palaeoecology* 171, p. 409-412.

(Humans first colonized Palawan at ~40,000 yr BP. Absence of large carnivores and primates suggests more insular affinity than Borneo, but higher diversity than truly oceanic islands in Late Quaternary)

Reynolds, T. & G. Barker (2014)- Reconstructing Late Pleistocene climates and human activities in northern Borneo from excavations in the Niah caves. In: Y. Kaifu et al. (eds.) *Emergence and diversity of modern human behavior in Paleolithic Asia, Peopling of the Americas Publications*, Texas A&M University Press, p. 140-157.

(Niah Caves in Sarawak home to oldest anatomically modern 'Deep Skull', now confidently dated as ~37.5 ka. First evidence for associated human activity at caves site goes back to ~50 ka)

Rightmire G.P. (1984)- Comparisons of *Homo erectus* from Africa and Southeast Asia. *Courier Forschungsinstitut Senckenberg* 69, p. 83-98.

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Rightmire, G.P. (1990)- The evolution of *Homo erectus*: comparative anatomical studies of an extinct species. Cambridge University Press, Cambridge, p. 1-276.

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- Rightmire G.P. (1992)- *Homo erectus*: ancestor or evolutionary side branch? *Evolutionary Anthropology* 1, p. 43-49.
- Rightmire G.P. (1994)- The relationship of *Homo erectus* to later Middle Pleistocene hominids. *Courier Forschungsinstitut Senckenberg*, 171, p. 319-326.
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- Rightmire G.P. (2001)- Patterns of hominid evolution and dispersal in the Middle Pleistocene. *Quaternary Int.* 75, p. 77-84.
(*At onset of Quaternary Homo erectus spread across Old World from Africa. Populations persisted in Far East until late in M Pleistocene, while H. erectus disappeared relatively early in West. Episode of hominid speciation in mid-Quaternary gave rise to anatomically more modern hominids called Homo heidelbergensis. Relationships of H. heidelbergensis to Neanderthals and recent humans still need clarification*)
- Rizal, Y. (1998)- Die Terrassen entlang des Solo-Flusses in Mittel- und Ost-Java. Thesis Universitat Koln, Cologne, p. 1-189. (*Unpublished*)
(*'The terraces along the Solo River in Central and East Java'*)
- Rizal, Y. (2005)- The ages of the Solo Terraces at the Ngancar and Ngandong Region, Middle Jawa, Indonesia. (*Abstract only*)
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(*Best estimates of ages of Pleistocene terraces along Solo River: High-terraces ~47 ka, Middle-terraces ~20 ka and Lower-terraces 1.65 + 1.5 ka*)
- Rizal, Y., Y. Zaim & Y. Iriani (2005)- Late Tertiary fossil whale from Surade, South Sukabumi, West Java. *Buletin Geologi (ITB)* 37, 1, p. 29-34.
- Roberts, R.G., K.E. Westaway, J.X. Zhao, C.S.M.Turney, M.I. Bird, W.J. Rink & L.K. Fifield (2009)- Geochronology of cave deposits in Liang Bua and of adjacent river terraces in the Wae Racang valley, western Flores, Indonesia: a synthesis of age estimates for the type locality of *Homo floresiensis*. *J. Human Evolution* 57, 5, p. 484-502.
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(*online at: <https://journals.lib.washington.edu/index.php/BIPPA/article/viewFile/11800/10428>*)
- Rozzi, R., D.E. Winkler, J. De Vos, E. Schulz & M.R. Palombo (2013)- The enigmatic bovid *Duboisia santeng* (Dubois, 1891) from the Early-Middle Pleistocene of Java: a multiproxy approach to its palaeoecology. *Palaeogeogr. Palaeoclim. Palaeoecology*, 377, p. 73-85.
(*During Pleistocene, faunal elements of Indo-Chinese origin entered Java and most Javanese mammalian taxa are close or identical to their mainland relatives, like fossil bovids, common in E-M Pleistocene 'Stegodon-Homo erectus fauna' (Bubalus palaeokerabau, Bibos palaeondaicus, Epileptobos groeneveldtii). Javanese bovid Duboisia santeng from Sangiran regarded as typical insular endemic species due to small size, but is present in late M Pleistocene of what is now Peninsular Malaysia*)
- Saegusa, H., Y. Thasod & B. Ratanasthien (2005)- Notes on Asian stegodontids. *Quaternary Int.* 126-128, p. 31-48.
(*Stegodontids (elephant-like proboscideans), flourished in Eocene and Quaternary of Asia. Significant recent finding of new stegodontid fossils at Nakhon Ratchasima, Thailand and Yuanmou Basin, Yunnan, show Late Miocene transition from stegolophodons to stegodons, suggesting stegodons originated in Asia*)

- Saleki, H. (1997)- Apport d'une intercomparaison de methodes nucleaires ($^{230}\text{Th}/^{234}\text{U}$, ESR et $^{40}\text{Ar}/^{39}\text{Ar}$) a la datation de couches fossiliferes pleistocenes dans le dome de Sangiran (Java, Indonesie). Ph.D. Thesis, Museum National Hist. Naturelle, Paris, p. 1-238. (*Unpublished*)
(*'Contribution to comparison of nuclear methods ($^{230}\text{Th}/^{234}\text{U}$, ESR and $^{40}\text{Ar}/^{39}\text{Ar}$) to the dating of Pleistocene fossiliferous beds in the Sangiran dome, Java'. Proposed chronology for Sangiran dome: (1) volcanic breccia deposited between 2.05 ± 0.08 and 1.56 ± 0.05 Ma, followed by Pucangan Fm; (2) Grenzbank in upper limit of Jaramillo period at 0.9 Ma; (3) rapid sedimentation with archeological layer with some bones which supposedly burnt at $\sim 0.8-0.9$ Ma, before Brunhes/Matuyama magnetic reversal; (4) Notopuro mud-flow unit deposited at 150 ± 10 ka (incl. 0.8 Ma of tuff overlying Ngebung *H. erectus* occupation site)*)
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(*Morphological study of Ngandong hominid skulls from Solo River 20m terrace at Ngandong, originally described as *Homo soloensis* Oppenoorth 1932. Here interpreted as advanced forms of *Homo erectus* ('*Homo erectus s.l.*', not *H. erectus s.s.*') (conclusion followed by many subsequent researchers, but validity questioned in older (Dubois 1937, Von Koenigswald 1956) and more recent studies, e.g., Zaitoun et al. 2010?, M. Westaway et al. 2015)*)
- Sartono, S. (1961)- Notes on a new find of a *Pithecanthropus* mandible. Geol. Survey Indonesia, Publ. Teknik, Seri Paleontologi 2, p. 1-51.
- Sartono, S. (1968)- Early man in Java: *Pithecanthropus* skull VII, a male specimen of *Pithecanthropus erectus*. Proc. Kon. Nederl. Akademie Wetenschappen B 71, 5, p. 396-422.
- Sartono, S. (1969)- On the Plio-Pleistocene boundary of Java. Bull. Nat. Inst. Geology and Mining (NIGM), Bandung 2, 2, p. 1-19.
(*In Sangiran area of C Java Plio-Pleistocene boundary should be placed between Corbicula beds and Lower Volcanic Breccia bed. Based on mammalian fauna it should be placed between 'Unterer Wirbeltierhorizont' and 'Oberer Wirbeltierhorizont' of Von Koenigswald*)
- Sartono, S. (1969)- *Stegodon timorensis*: a pygmy species from Timor (Indonesia). Proc. Kon. Nederl. Akademie Wetenschappen, B72, p. 192-202.
(*First description of Pleistocene dwarf elephant from Timor, collected by Verhoeven in 1964, 5 km E of Atambua*)
- Sartono, S. (1970)- On the stratigraphic position of *Pithecanthropus* mandible-C. Proc. Inst. Teknol. Bandung (ITB) 4, 4, p. 91-102.
(*online at: <http://journal.itb.ac.id/download.php?file=A70002.pdf&id=887&up=13>*)
(*Pithecanthropus C mandible is from surface of Lower Pleistocene Putjangan beds from Sangiran area, C Java. Encrusting matrix of mandible with planktonic (incl. *Globorotalia tumida*, *Gr. crassa*, *Globigerinoides obliquus*, *Pulleniatina*) and deeper marine smaller benthic foraminifera, presumably suggesting Lower Pleistocene age (NB: most forams in Sangiran fluvial Pleistocene deposits are reworked from underlying Kalibeng Fm marine beds; JTvG) (see also Siesser & Orchiston 1978)*)
- Sartono, S. (1971)- Observations on a new skull of *Pithecanthropus erectus* (*Pithecanthropus* VIII) from Sangiran, Central Java. Proc. Kon. Nederl. Akademie Wetenschappen B 74, 2, p. 185-194.
- Sartono, S. (1972)- Discovery of another hominid skull at Sangiran, Central Java. Current Anthropology 13, 1, p. 124-126.
(*New fossil *Homo erectus* skull discovered in 1969 at S flank Sangiran dome, at base of low bluff on S side of Putjung creek*)
- Sartono, S. (1973)- On an additional *Stegodon timorensis* Sartono. Publ. Teknik Direkt. Geol., Ser. Paleontol. 3, p. 1-13.

(Description of additional Stegodon tooth, collected by Verhoeven from sandy conglomerate overlying marine claystones near Umaklaren (Atambua), W Timor)

Sartono, S. (1973)- On Pleistocene migration routes of vertebrate fauna in Southeast Asia. In: B.K. Tan (ed.) Proc. Reg. Conf. Geology of Southeast Asia, Kuala Lumpur 1972, Bull. Geol. Soc. Malaysia 6, p. 273-286.

(online at: <https://gsmpubl.files.wordpress.com/2014/09/bgsm1973018.pdf>)

(Pleistocene vertebrates in SE Asia originated on Asian continent and migrated during Pleistocene into the island archipelago of Indonesia. Migration followed two routes, a western route across Sunda Land area, and an eastern route via Taiwan and Philippines toward Sunda Land area and Sulawesi)

Sartono, S. (1974)- Observations on a newly discovered jaw of *Pithecanthropus modjokertensis* from the lower Pleistocene of Sangiran, central Java. Proc. Kon. Nederl. Akademie Wetenschappen, B 77, 1, p. 26-31.

Sartono, S. (1975)- Implications arising from *Pithecanthropus* VIII. In: R.H. Tuttle (ed.) Palaeoanthropology, Mouton Publ., The Hague, p. 327-360.

(Three Pithecanthropus types in C Java: P. erectus (M Pleistocene, Trinil beds), P. modjokertensis (E Pleistocene Djatis Beds) and P. dubius (lowest Pleistocene of Sangiran). New Pithecanthropus fossil (P VIII) near-complete and rel. large cranium discovered in Kabuh Fm of Sangiran in 1969 different from typical Pithecanthropus morphology)

Sartono, S. (1976)- Genesis of the Solo terraces. Modern Quaternary Research in Southeast Asia 2, Balkema, Rotterdam, p. 1-21.

(Three well-known river terrace levels along transverse valley of Solo River, N of Ngawi, C-E Java: Upper Pleistocene High terrace (Ngandong; possibly coinciding with Riss glaciation), Low Terrace and Flood Terrace. Also three older, less well-known terraces identified, mainly from aerial photos. Highest terraces oldest (Early Pleistocene?) and 97m above Solo River. (see also Bartstra 1977))

Sartono, S. (1978)- The site of *Homo erectus* mandible F. Modern Quaternary Research in Southeast Asia 4, Balkema, Rotterdam, p. 19-24.

(Rel. complete Homo erectus trinilensis lower jaw from black claystones of Pucangan Fm in central part of Sangiran dome)

Sartono, S. (1979)- The discovery of a pygmy *Stegodon* from Sumba, East Indonesia: an announcement. Modern Quaternary Research in Southeast Asia 5, Balkema, Rotterdam, p. 57-63.

(First report of Pleistocene Stegodon mandible from Sumba (Watu Mbaka). Described as Stegodon sumbaensis)

Sartono, S. (1979)- The stratigraphy of the Sambungmacan site in Central Java. Modern Quaternary Research in Southeast Asia 5, Balkema, Rotterdam, p. 83-88.

(Gravels, sands and silts at small Sambungmacan site, off Solo River, C Java, in which Homo erectus cranium was found in 1973, now regarded as of part of Ngandong Fm of Late Pleistocene age. not E-M Pleistocene 'Grenzbank'/ Kabuh Fm- equivalent)

Sartono, S. (1979)- The age of the vertebrate fossils and artifacts from Cabenge in South Sulawesi. Modern Quaternary Research in Southeast Asia 5, Balkema, Rotterdam, p. 65-82.

(Fossiliferous terrace deposits of Walanae River most likely Pleistocene, possibly Holocene)

Sartono, S. (1980)- *Homo erectus ngandongensis*: the possible maker of the 'Sangiran flakes'. Anthropologie 18, p. 121-131.

(Primitive stone artefacts named 'Sangiran flakes' limited to Top Kabuh/ Base Notopuro Formations at Sangiran, none found in lower levels with hominid remains. Appear to be associated with more advanced Homo erectus ngandongensis)

Sartono, S. (1982)- Characteristics and chronology of early man in Java. In: H. and M. De Lumley (eds.) Congres Int. de Paleontologie Humaine, Nice (France), CNRS, 2, p. 495-541.

Sartono, S. (1984)- Notes on the Pleistocene stratigraphy of Java, Indonesia. *Modern Quaternary Research in Southeast Asia* 8, Balkema, Rotterdam, p. 129-135.

Sartono, S. (1985)- Datings of Pleistocene man of Java, Indonesia. *Modern Quaternary Research in Southeast Asia* 9, Balkema, Rotterdam, p. 115-125.

Sartono, S. (1985)- Pleistocene peopling of the Southeast Asian Archipelago. *Proc. 12th Indo-Pacific Prehistory Association Congress, Penablanca-Cagayan, Phillipines*, p. 1-12.

Sartono, S. (1986)- New lights on human evolution in Southeast Asia. In: G.H. Teh & S. Paramanathan (eds.) *Proc. 5th Reg. Congress Geology, Mineral and Energy Resources of SE Asia (GEOSEA V)*, Kuala Lumpur 1984, 2, *Bull. Geol. Soc. Malaysia* 20, p. 269-288.

(online at: www.gsm.org.my/products/702001-101423-PDF.pdf)

(Until 1980 subdivision of Pleistocene human fossils as proposed by Von Koenigswald (1968) was used. New discoveries in last 5 years necessitate re-assessment. Earliest wave of human migration into SE Asia (Java) at ~1.8 Ma, coincided with onset of Gunz glacial. Before this period most of SE Asia region still inundated by sea, hampering movement of early humans from Asia)

Sartono, S. (1987)- Migrasi manusia Plistocen Indonesia: kaitannya dengan tektonik lempeng. In: *Geologi Kuarter dan lingkungan hidup*, Geol. Res. Development Center, Bandung, Spec. Publ. 7, p. 7-20.

(*Pleistocene human migration in Indonesia: relation to plate tectonics*)

Sartono, S. (1987)- The long trek to the South. In: N. Thiramongkol (ed.) *Proc. Workshop on Economic geology, tectonics, sedimentary processes and environment of the Quaternary in Southeast Asia*, Haid Yai, Thailand 1986, IGCP 218/ Chulalongkorn University, Bangkok, p. 193-212.

(online at: http://library.dmr.go.th/Document/Proceedings-Yearbooks/M_1/1986/5083...)

(Review of hominid material from Pleistocene of Java and latest Pliocene- Pleistocene migration routes of hominids into Indonesian region from Asia. Migrations into Java probably aided by Pleistocene sealevel lowstands and exposed Sunda Shelf. Migrations into East Indonesia and Philippines probably not until Late Pleistocene)

Sartono, S. (1987)- Influence of plate tectonics on dispersals of Quaternary faunas in Southeast Asia. In: *Proc. Seminar on International developments in science*, Deutscher Akademie Austauschdienst, Bandung, p. 1-13.

Sartono, S. (1990)- Short guide to Sangiran and Trinil, Java. *Guidebook 14th Congr. Indo-Pacific Prehistory Association*, Yogyakarta, p. 1-34.

Sartono, S. (1991)- A new *Homo erectus* skull from Ngawi, East Java. *Bull. Indo-Pacific Prehistory Assoc.* 11, p. 23-35.

(online at: <http://ejournal.anu.edu.au/index.php/bippa/article/view/596/585>)

Sartono, S. (1991)- *Meganthropus paleojavanicus* v.K.: its place in human evolution. *Fourth Int. Senckenberg Conf.*, Frankfurt 1991, p.

Sartono, S. (1991)- *Homo (Pithecanthropus) erectus*: le debat sans fin. *L'Anthropologie* 95, 1, p. 123-136.

(*Homo erectus: the debate without end*). On taxonomic status of *Homo (Pithecanthropus) erectus*. Two groups of early men are found in Java: *Homo (H. robustus and H. erectus)* and *Australopithecus (A. (Meganthropus) palaeojavanicus)*. Pleistocene hominids from SE Asia probably subjected to evolution while they migrated from Asia toward Australia. Two migration routes: (1) western (Sunda Shelf) and (2) northern (Philippines), both arriving in Wallacea, possibly also in Sahul (Australia-New Guinea)

Sartono, S. (1993)- Insularity by plate tectonics in Quaternary Indonesia. *Bul. Jurusan Geologi ITB, Bandung*, 23, 2, p. 1-20.

Sartono, S. (1996)- Java: diversity of Upper Pliocene- Pleistocene hominids. Buletin Geologi (ITB) 26, 1, p. 1-12.

(Final paper by Sartono; overview of hominids distribution, evolution, migration on Java)

Sartono, S. & D. Grimaud-Herve (1983)- Les parietaux de l'homme Sangiran 31. L'Anthropologie 87, p. 465-468.

Sartono, S. & S. Hadiwisastra (1983)- Fosil vertebrata Plistosen di Busur Banda: implikasi struktural. Proc. 12th Ann. Conv. Indon. Assoc. Geol. (IAGI), p. 153-161.

('Pliocene fossil vertebrates in the Banda Arc: structural implications')

Sartono, S. & R. Marino (1978)- A mandibula and a maxilla of *Stegodon timorensis*. Modern Quaternary Research in Southeast Asia 4, Balkema, Rotterdam, p. 41-50.

(Additional Pleistocene elephant teeth from Weaiwe region, Atambua, NE part of West Timor)

Sartono, S., D.W. Orchiston, W.G. Siesser & T. Djubiantono (1981)- Upper Pliocene sediments in Sangiran, Central Java (Indonesia). Buletin Geologi (ITB) 5, p. 1-25.

(Base Sangiran Fm between nannofossil zones NN16 and NN18 (1.65- 3.25 Ma); Bettis et al. 2004)

Sartono, S., F. Semah, K.A.S. Astadiredja & T. Djubiantono (1981)- The age of *Homo modjokertensis*. Modern Quaternary Research in Southeast Asia 6, Balkema, Rotterdam, p. 91-102.

(On age of fossil child skull cap originally described by Von Koenigswald in 1936, from locality near Perning, 14 km ENE of Mojokerto. Supposedly from Lower Pleistocene U Pucangan Fm/ volcanic facies, but rocks more likely equivalent of M Pleistocene Kabuh Fm of Sangiran. Underlying clay facies of Lower Pucangan/ Lidah Fm with zone N21 planktonic foraminifera (Globorotalia tosaensis, Globigerinoides obliquus extremus; also Asterorotalia trispinosa). New finds of associated Hippopotamus, Sus, Buffelus bubalus, etc., suggest M-U Pleistocene Trinil or Ngandong fauna)

Satyana, A.H. (2007)- Geological disaster in the demise of Jenggala and Majapahit empires: a hypothesis of historical mud volcanoes eruptions based on historical chronicles of Kitab Pararaton, etc. folklore of Timun Mas; analogue to present LUSI eruption, and geologic analysis of the Kendeng depression- Brantas Delta. Proc. Joint Conv. 36th IAGI, 32nd HAGI, Bali 2007, 38p.

(Jenggala and Majapahit are two empires of 11th to early 16th centuries at Brantas delta, E Java. Rise and fall related to geological processes in Brantas delta. Large mud volcano eruptions may have caused or contributed to demise)

Satyana, A.H. (2008)- Roles of mud volcanoes eruptions in the decline of the Jenggala and Majapahit Empires, East Java, Indonesia: constraints from the historical chronicles, folklore, and geological analysis of the Brantas Delta-Kendeng Depression. Majalah Geologi Indonesia 23, 1-2, p. 1-10.

(Mud volcanoes in Kendeng zone may have lead to demise of 11th- 16th century Jenggala and Majapahit empires)

Satyana, A.H. (2009)- Sangiran dome, Central Java: mud volcanoes eruption, demise of *Homo erectus erectus* and migration of later hominid. Proc. 37th Ann. Conf. Indon. Assoc. Geol. (IAGI), Bandung 2008, 12p.

(Diapryric deformation and eruption of Sangiran Dome between 0.7- 0.5 Ma, possibly also at 0.12 Ma. Homo erectus erectus fossils at Sangiran from 1.3- 0.7 Ma; its demise possibly triggered by mud volcano eruption)

Saurin, E. (1966)- Le Paleolithique du Cambodge oriental. Asian Perspectives 9, 1, p. 96-110.

(online at: <https://scholarspace.manoa.hawaii.edu/bitstream/10125/16759/1/AP-v9n1-96-110.pdf>)

('The Paleolithic of East Cambodia'. Review of crude pebble-culture stone tools in terrace deposits along E bank of Mekong River, over distance of 200km (some made of silicified wood). At Chhep in conglomerates of oldest terrace deposits (40-45m), associated with tektites (tools below tektites; e.g. Sorensen 2001))

Schepartz, L.A., S. Miller-Antonio & D.A. Bakken (2000)- Upland resources and the Early Palaeolithic occupation of Southern China, Vietnam, Laos, Thailand and Burma. *World Archaeology* 32, 1, Archaeology in Southeast Asia, p. 1-13.

(Review of evidence for early human occupations of mainland SE Asia from ~1 Ma to U Pleistocene)

Schutt, G. (1972)- Fossil mammals of Java IV. Zur Kenntnis der pleistozanen Hyänen Javas. *Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam B* 75, p. 261-287.

(On the knowledge of Pleistocene hyenas from Java)

Schutt, G. (1973)- Fossil mammals of Java V. Pleistozane Caniden (Carnivora, mammalia) aus Java. *Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam, B* 76, 5, p. 446-471.

(Pleistocene canids from Java)

Schwartz, J. (2016)- Beyond *Homo erectus*: Sangiran is key to deciphering the Asian human fossil record and re-evaluating *Homo*. In: F. Ribot Trafi (ed.) *Homenaje al Dr. Jose Gibert Clols, una vida dedicada a la ciencia y al conocimiento de los primeros europeos*. Publ. Diputacion de Granada, Granada, p. 93-110.

(Homo erectus widespread and highly variable species from which later hominids emerged. Review of relevant specimens from Sangiran, other Javanese sites and Zhoukoudian Lower Cave (China) shows concept 'erectus' masks evidence of taxic diversity in Asian hominid fossil record and raises questions about non-Asian specimens belonging to single species)

Selenka, M.L. & M. Blanckenhorn (eds.) (1911)- Die *Pithecanthropus*-Schichten auf Java. Geologische und palaontologische Ergebnisse der Trinil-Expedition (1907 und 1908). Verlag W. Engelmann, Leipzig, p. 1-342.

(online at: <http://ia600303.us.archive.org/23/items/diepithecanthrop00sele/diepithecanthrop00sele.pdf>)

(Extensive report of 1907-1908 excavations of Pleistocene beds near Trinil, C Java, by Selenka Trinil Expedition No new hominid fossils found, but extensive documentation of localities and good descriptions of Pleistocene vertebrate and invertebrate faunas and flora)

Semah, A.M. (1982)- Etude palynologique de sites a hominides de l'ile de Java. These 3me cycle, Universite de Provence, Marseille, p. 1-127.

(Palynological study of hominid sites of Java island)

Semah, A.M. (1982)- A preliminary report on a Sangiran pollen diagram. *Modern Quaternary Research in Southeast Asia* 7, Balkema, Rotterdam, p. 165-170.

(Summary of palynology work on U Pliocene- Pliocene of Sangiran Dome, C Java. Rel. common mangrove pollen (Rhizophora, Sonneratia, Nypa) in Upper Kalibeng Fm Blue Clays (absent in Pucangan Black Clay and in younger section). In Pucangan/ Kabuh interval mainly Graminae (grasses))

Semah, A.M. (1984)- Remarks on the pollen analysis of the Sambungmacan section (Central Java). *Modern Quaternary Research in Southeast Asia* 8, Balkema, Rotterdam, p. 29-34.

(Pollen diagram of Pleistocene deposits of Sambungmacan, E of Solo (site of 1973 discovery of Homo erectus skull). <10m thick poorly-dated fluvial, sandy-tuffaceous section, unconformable over Pliocene limestone)

Semah, A.M. (1984)- Palynology and Javanese *Pithecanthropus* environment. In: P. Andrews & J.L. Franzen (eds.) *The early evolution of man with special emphasis on Southeast Asia and Africa*, Courier Forschungsinstitut Senckenberg 69, p. 237-243.

Semah, A.M. (1986)- Le milieu naturel lors du premier peuplement de Java, Resultats de l'analyse pollinique. *Doct. Thesis, Universite de Provence, Marseille*, 3 vols., p. 1-322.

(The natural environment of the first human settlement of Java; results of pollen analysis)

Semah, A.M. & F. Detroit (2006)- Sur les premiers peuplements du Pacifique sud. *Comptes Rendus Palevol* 5, 1, p. 381-393

('About the first human settlements in the South Pacific'. First arrivals of Homo sapiens in Australia >40ka, possibly 50-60 ka. Debate whether these anatomically modern H. sapiens came from recent 'out of Africa' migration (Out-of-Africa hypothesis) or evolved locally from last Indonesian H. erectus (multiregional hypothesis). Morphometric differences between most recent Indonesian H. erectus and 'robust' Australian fossil H. sapiens from Kow Swamp and Cohuna clearly distinct, questioning local direct evolution)

Semah, A.M. & T. Djubiantono (2007)- Outline of climate and vegetation changes in Java during the Quaternary. In: A.M. Semah & K. Setiagama (eds.) First Islanders; human origins patrimony in Southeast Asia, p. 85-91.

(online at: <http://hopsea.mnhn.fr/pc/brochures/2007HOPseaFI.pdf>)

(Brief review of Pleistocene climate trends on Java. Between ~1 and 0.2 Ma climate rel. cooler and drier and yielding majority of hominid fossils)

Semah, A.M. & F. Semah (2001)- La signification paleoecologique des couches a hominides de l'île de Java. In: F. Semah et al. (eds.) Origine des peuplements et chronologie des cultures paleolithiques dans le sud-est asiatique, Semenanjung/Artcom, Paris, p. 251-278.

('The paleoecological significance of the hominid beds of Java island')

Semah, A.M. & F. Semah (2012)- The rain forest in Java through the Quaternary and its relationships with humans (adaptation, exploitation and impact on the forest). Quaternary Int. 249, p. 120-128.

(Landscape change in Java over last 2.5 million years highly complex, with repeated expansion and fragmentation of rain forest. Evidence of intensive human impact on rain forest observed late, ~1500 years ago)

Semah, A.M., F. Semah, T. Djubiantono & B. Brasseur (2010)- Landscapes and hominids' environments: changes between the Lower and the Early Middle Pleistocene in Java (Indonesia). Quaternary Int. 223, p. 451-455.

(Change in paleoenvironments in Lower and early M Pleistocene, based on sediment and pollen records in C Java. Late Lower Pleistocene 'Grenzbank' layer at ~0.9 Ma at Sangiran marks tectonic event (folding of Kendeng zone). Second event is major climate change at E-M Pleistocene boundary, with severe fragmentation of rainforest cover during glacials (~0.8 Ma; close to in-situ 0.793 Ma Australasian tektites and Brunhes-Matuyama boundary in lowermost Kabuh Fm). Faunal turnover in Lower Kabuh Fm tied O-isotope zones MIS19-MIS22 interval. Little detail)

Semah, A.M., F. Semah, A.M. Moigne, T. Ingicco, A. Purnomo, T. Simanjuntak & H. Widianto (2016)- The palaeoenvironmental context of the Palaeolithic of Java: a brief review. Quaternary Int. 416, p. 38-45.

(Earliest Paleolithic implements in Java Island >1 Ma old, postdating oldest Homo erectus fossils. Acheulean-like tools in early M Pleistocene ('Sangiran flakes; 1.0-0.8 Ma), flake tools assemblages in late M/early U Pleistocene sites and development of cave occupations at end Pleistocene and E Holocene. Environment, mostly forested in E Pleistocene, changing climate during M Pleistocene, then at start of Late Pleistocene. Tectonic and volcanic activities affected local climate, paleogeography and floras. Associated vertebrate faunas reflect periods of contact with mainland (increased biodiversity) and periods of isolation (endemism))

Semah, A.M., F. Semah, R. Moudrikah, F. Frohlich & T. Djubiantono (2004)- A Late Pleistocene and Holocene sedimentary record in Central Java and its palaeoclimatic significance. In: S.G. Keates & J. Pasveer (eds.) Quaternary Research in Indonesia, Chapter 5, Modern Quaternary Research in Southeast Asia 18, Balkema, Leiden, p. 63-88.

(40m long cores from Ambarawa Basin (Solo Depression), C Java, provides sedimentary/palynological record of last 21,000 years, from Last Glacial Maximum to present. Pollen from ~21-15 ka reflect cooler conditions and severe dryness, with grassland and lowland forest. From ~15-10.5 ka increased precipitation with swamp conditions. From 10.5 ka onward more forest vegetation. First evidence of human activity at ~1500 yrs BP)

Semah, F. (1982)- Pliocene and Pleistocene geomagnetic reversals recorded in the Gemolong and Sangiran Domes (Central Java). Modern Quaternary Research in Southeast Asia 7, Balkema, Rotterdam, p. 151-164.

(Notopuro and Kabuh Fms of Sangiran and Gemolong all with normal geomagnetic polarity and tied to Brunhes Epoch. Reversal events in underlying Pucangan Fm, tied to Matuyama Event. Top of U Kalibeng Fm normal polarity, probably Olduvai Event (1.67-1.87Ma))

Semah, F. (1984)- The Sangiran Dome in the Javanese Plio-Pleistocene chronology. In: P. Andrews and J.L. Franzen (eds.) The early evolution of man with special emphasis on Southeast Asia and Africa. Courier Forschungsinstitut Senckenberg 69, p. 245-252.

(Review of Late Pliocene- M Pleistocene stratigraphy of Sangiran, C Java (~2.0- 0.5 Ma))

Semah, F. (1986)- Le peuplement ancien de Java: ebauche d'un cadre chronologique. *L'Anthropologie* 90, 3, p. 359-400.

(Chronology of human population of Java)

Semah, F. (1997)- Plio-Pleistocene reference sections in Indonesia. In: J.A. van Couvering (ed.) The Pleistocene boundary and the beginning of the Quaternary, World and Regional Geology 9, Cambridge University Press, p. 264-272.

(Review of Plio-Pleistocene stratigraphy in W and E Central Java areas known for vertebrate fossils (Bumiayu, Sangiran dome. Homo erectus mainly in lower and middle Kabuh Fm of Sangiran Dome. Australasian tektite event, radiometrically dated as 0.7- 0.8 Ma, in middle Kabuh Fm, close to Matuyama-Brunhes paleomagnetic boundary)

Semah, F. (2001)- La position stratigraphique du site de Ngebung 2 (dome de Sangiran, Java Central, Indonesie). In: F. Semah et al. (eds.) Origine des peuplements et chronologie des cultures paleolithiques dans le sud-est asiatique, Paris, p. 299-329.

(The stratigraphic position of Ngebung 2 excavation site, Sangiran Dome)

Semah, F. (2014)- Island Southeast Asia and human evolution heritage. In: N. Sanz (ed.) Human origin sites and the World Heritage convention in Asia, UNESCO World Heritage Papers 39, p. 184-210.

(online at: <http://unesdoc.unesco.org/images/0022/002291/229174e.pdf>)

(Review of 'journey' of Homo erectus and Homo sapiens across Indonesian archipelago since 1.5 Ma)

Semah, F., C. Falgueres, Y. Yokoyama, G. Feraud, H. Saleki & T. Djubiantono (1997)- Arrivee et disparition des *Homo erectus* a Java, les donnees actuelles. Abstracts 3rd Mtg European Assoc. Archaeologists, p. 11-12.

(Abstract)
('Arrival and migration of Homo erectus on Java, the actual data'. Critique of Swisher et al. (1994), suggesting their 1.66 Ma age assigned to H. erectus skulls from Sangiran is based on radiometric age of volcanic tuff that underlies these skulls and is therefore too old)

Semah, F., H. Saleki, C. Falgueres, G. Feraud & T. Djubiantono (2000)- Did early man reach Java during the Late Pliocene? *J. Archaeological Science* 27, 9, p. 763-769.

(Homo erectus (Pithecanthropus) reached Java from Asian continent and became one of oldest islanders in world. Combined ⁴⁰Ar/³⁹Ar and paleomagnetic data of 'Lower lahar' at base of fossil-bearing series of Sangiran dome show that emergence of first dry land at Sangiran, took place at end and just after Olduvai subchron. Therefore ~1.7 Ma is max. age for arrival of first hominids at Sangiran)

Semah, F. & A.M. Semah (2006)- Palaeolithic settlements in the Southeast Asian archipelagos: an Indonesian perspective. In: T. Simanjuntak et al. (eds.) Archaeology: Indonesian perspective, R.P. Soejono's Festschrift, LIPI Press, Jakarta, p. 148-161.

Semah, F. & A.M. Semah (2015)- Pleistocene migrations in the Southeast Asian archipelagos. In: P. Bellwood (ed.) The global prehistory of human migration, Wiley-Blackwell, p. 49-54.

Semah, F., A.M. Semah & T. Djubiantono (1998)- From the shoreline to the slopes of the volcanoes: the long *Pithecanthropus* trek. In: H.T. Simanjuntak et al. (eds.) Sangiran: man, culture and environment in Pleistocene

times, Yayasan Obor Indonesia, Nat. Research Centre of Archaeology and Ecole Francaise de l'Extreme Orient, p. 195-218.

Semah, F., A.M. Semah, T. Djubiantono & H.T. Simanjuntak (1992)- Did they also make stone tools? *J. Human Evolution* 23, p. 439-446.

(Recent excavations at excavation in Ngebung, NW part of Sangiran dome, C Java, found archeological layers in M Pleistocene Kabuh beds with several stone tools (flake artefacts, bolas made of andesite and quartz; older than other stone implements known from Java))

Semah, F., A.M. Semah, C. Falgueres, F. Detroit, X. Gallet, S. Hameau, A.M. Moine & T. Simanjuntak (2004)- The significance of the Punung karstic area (eastern Java) for the chronology of the Javanese Palaeolithic, with special reference to the Song Terus cave. *Modern Quaternary Research in Southeast Asia* 18, p. 45-62.

(Caves in S Mountains (Punung- Wonosari) existed at least since middle M Pleistocene. Human remains, including numerous stone artifacts, date back to ~230 ka)

Semah, F., A.M. Semah & T. Simanjuntak (2002)- More than a million years of human occupation in insular Southeast Asia. In: J. Mercader (ed.) *Under the canopy- The archaeology of tropical rain forests*, Rutgers University Press, New Brunswick, N.J., p. 161-190.

Semah, F., T. Simanjuntak, E. Dizon, C. Gaillard & A.M. Semah (2014)- Insular Southeast Asia in the Lower Palaeolithic. In: C. Smith (ed.) *Encyclopaedia of Global Archaeology*, Springer, NY, p.

Setiyabudi E (2009)- An early Pleistocene giant tortoise (Reptilia; Testudines; Testudinidae) from the Bumiayu area, Central Java, Indonesia. *J. Fossil Research* 42, 1, p. 1-11.

(Well-preserved ~1.75m long extinct testudinid tortoise from E Pleistocene lower Kali Glagah Fm, N of Bumiayu, originally collected by Van der Maarel 1932 and part of Java Satir Fauna of ~1.5Ma. Here identified as Megalochelys cf. sivalensis. Giant tortoise also known from Myanmar, Flores, etc.)

Setiyabudi, E. (2016)- Pleistocene reptiles of the Soa Basin (Flores, Indonesia): adaptation and implication for environment. *J. Geologi Sumberdaya Mineral* 17, 2, p. 107-124.

(online at: <http://jgsm.geologi.esdm.go.id/index.php/JGSM/article/download/23/23>)

(Presence of fossil reptiles from mainland Asia in Pleistocene of Soa Basin, Flores: giant tortoise (Megalochelys sp.), fresh water turtle (Geoemydidae), crocodiles and komodo dragon (Varanus komodoensis). After crossing 'Wallace Line' at ~1 Ma lived in isolated conditions and adapted to savannah environment. Vertebrate faunas of Soe basin dominated by extinct proboscideans (Stegodon))

Setiyabudi, E., I. Kurniawan & G.D. van den Bergh (2012)- Fossils of *Stegodon* and *Varanus komodoensis* Sumba and Flores: a Pleistocene landbridge? *Proc. 41st Ann. Conv. Indon. Assoc. Geol. (IAGI)*, Yogyakarta, 2012-SS-31, 4p.

(Recent field survey in Sumba relocated original locality of Stegodon sumbaensis mandible described by Sartono (1979). At Lewapaku dwarf Stegodon found, with tooth of Varanus komodoensis and giant murine rodent. Lewapaku fauna similar to 900 ka old Tangi Talo fauna from Flores)

Setiyabudi, E., A. Takahashi & Y. Kaifu (2016)- First certain fossil record of *Orlitia borneensis* (Testudines: Geoemydidae) from the Pleistocene of Central Java, Indonesia. *Current Herpetology* 35, 2, p. 75-82.

(Turtle fossil identified as Orlitia borneensis from Solo river bottom in Sambungmacan, eastern C Java, presumably eroded from M Pleistocene fluvial deposits one river bank. O. borneensis had a wider distribution in past, but Java population would have become extinct by the end of M Pleistocene)

Setyanta, B., H.P. Siagian & H. Wahyono (2014)- Penentuan umur fosil manusia purba di Jawa berdasarkan magnetostratigrafi. *J. Geologi Sumberdaya Mineral* 15, 1, p. 11-24.

(online at: <http://jgsm.geologi.esdm.go.id/index.php/JGSM/article/view/67/69>)

('Determination of the ages of the ancient hominid fossils in Java based on magnetostratigraphy'. Review of magnetostratigraphic studies of hominid sites of C Java: Sangiran (hominids between base Jamarillo subchron

and Brunhes-Matuyama chron boundary in Upper Kabuh Fm (0.78- 1.07 Ma), Trinil (near top Jaramillo (0.99 Ma), Kedungbrubus, Mojokerto (near lower limit Jaramillo (1.07 Ma) and Patiyam (hominids in Brunhes or younger (<0.78 Ma))

Shutler, R. & F. Broches (1987)- The paleoanthropology of Pleistocene island Southeast Asia: a review. In: N. Thiramongkol (ed.) Proc. Workshop on Economic geology, tectonics, sedimentary processes and environment of the Quaternary in Southeast Asia, Haid Yai, Thailand 1986, IGCP 218/ Chulalongkorn University, Bangkok, p. 185-191.

(online at: http://library.dmr.go.th/Document/Proceedings-Yearbooks/M_1/1986/5083...)

(Brief review of Pleistocene Java mammal assemblages and issues regarding dating and interpretation)

Shutler, R., J.M. Head, D.J. Donahue, A.J.T. Jull, M.F. Barbetti, S. Matsuura, J. de Vos & P. Storm (2004)- AMS radiocarbon dates on bone from cave sites in Southeast Java, Indonesia, including Wajak. Modern Quaternary Research in SE Asia 18, p. 89-93.

(14C apatite dates for bones from Wajak Cave, SE Java. Wajak fauna calibrated age ~12.1- 12.9 ka, Wajak femur ~7.5 ka (older ages obtained by Storm et al. 2013))

Siesser, W.G. & D.W. Orchiston (1978)- Micropalaeontological re-assessment of the age of *Pithecanthropus* mandible C from Sangiran, Indonesia. Modern Quaternary Research in Southeast Asia 4, p. 25-30.

(*Pithecanthropus* mandible C discovered in 1960 in Pucangan Fm near Mandingan, Sangiran Dome. Sartono (1970) reported 11 planktonic and 15 benthic species of foraminifera in claystone adhered to mandible. Co-occurrence of *Globorotalia crassaformis* and *Globigerinoides obliquus* suggests Late Pliocene age, between 4.2-1.6Ma (N.B.: Sangiran Pleistocene fluvial-lacustrine Pucangan Fm contains locally abundant Pliocene planktonic foraminifera, all reworked from underlying Kalibeng Fm; Van Gorsel and Troelstra 1981))

Sighinolfi, G.P., S. Sartono & G. Artioli (1993)- Chemical and mineralogical studies on hominid remains from Sangiran, Central Java (Indonesia). J. Human Evolution 24, p. 57-68.

Simanjuntak, T. (1995)- Mesolithique de l'Indonesie : une heterogeneite culturelle. L'Anthropologie 99, 4, p. 626-636.

(*'The Mesolithic of Indonesia: a cultural heterogeneity'*)

Simanjuntak, T. (2001)- New light on the prehistory of the Southern Mountains of Java. Bull. Indo-Pacific Prehistory Assoc. (IPPA) 21, p. 152-156.

(online at: <http://ejournal.anu.edu.au/index.php/bippa/article/view/272/262>)

(Many limestone caves in Gunung Sewu, S Java inhabited in Prehistoric times. Excavations revealed chronology from Early Holocene (possibly Late Pleistocene) to 4500 BP. by 'Australomelanesian' people)

Simanjuntak T. (2001)- New insights on the tools of *Pithecanthropus*. In: T. Simanjuntak et al. (eds.) Sangiran: man, culture and environment in Pleistocene times, Yayasan Obor Indonesia, Jakarta, p. 154-170.

Simanjuntak, T. (2002)- Gunung Sewu in prehistoric times. Gajah Mada University Press, Yogyakarta p.

Simanjuntak, T. (2004)- New insight on the prehistoric chronology of Gunung Sewu, Java, Indonesia. In: S.G. Keates & J. Pasveer (eds.) Quaternary Research in Indonesia, Chapter 2, Modern Quaternary Research in Southeast Asia 18, Balkema, Leiden, p. 9-30.

(*C Java Southern Mountains numerous Late Pleistocene- Holocene, Paleolithic- Neolithic prehistoric sites*)

Simanjuntak, T. (2006)- Indonesia-Southeast Asia: climates, settlements, and cultures in Late Pleistocene. Comptes Rendus Palevol 5, p. 371-379.

(*Late Pleistocene period between Paleolithic culture and E Holocene Preneolithic culture, marked by climate and sea level fluctuations and appearance of modern human (oldest Homo sapiens), replacing H. erectus*)

Simanjuntak, T., B. Prasetyo & R. Handini (eds.) (2001)- Sangiran: man, culture and environment in prehistoric times, Yayasan Obor Indonesia, Jakarta, p. 1-443.
(Collection of papers on Sangiran hominid site, C Java, presented at 1st Int. Colloquium on Sangiran, Solo 1998)

Simanjuntak, T. & F. Semah (1996)- A new insight into the Sangiran flake industry. In: The Chiang Mai papers, 1, Indo-Pacific Prehistory Assoc. Bull. 14, p. 22-26.
(online at: <http://journals.lib.washington.edu/index.php/BIPPA/article/view/11584/10215>)
(Flake tools made of chalcedony, jasper, etc., and supposedly made by *Homo erectus*, first discovered by Von Koenigswald in 1936. Flakes can be found throughout Kabuh Fm at Negung, NW Sangiran Dome, C. Java)

Simanjuntak, T., F. Semah & C. Gaillard (2010)- The Palaeolithic in Indonesia: nature and chronology. Quaternary Int. 223-224, p. 418-421.
(Brief review of Indonesian 'older' Paleolithic stone tool assemblages. Human presence on Java dates back to ~1.5 Ma, but no stone tools known older than ~1.0 Ma)

Simanjuntak, T., F. Semah & A.M. Semah (2014)- Tracking evidence for modern human behavior in Paleolithic Indonesia. In: Y. Kaifu et al. (eds.) Emergence and diversity of modern human behavior in Paleolithic Asia, Peopling of the Americas Publications, Texas A&M University Press, p. 158-170.
(*Homo sapiens* may have colonized Indonesian Archipelago in early U Pleistocene. Most reliable evidence only since ~45 ka (Paleolithic sites with artifacts in Gunung Sewu, S Java))

Siswanto & S. Noerwidi (2014)- Fossil Proboscidea fossils dari situs Semedo: hubungannya dengan biostratigrafi dan kehadiran manusia di Jawa. Jurnal Berkala Arkeologi 34, 2, p. 115-130.
(online at: <http://balaiarkeologi.yogya.com/berkalaarkeologi/article/view/20/37>)
(*Proboscidea* fossils from Semedo site: its correlation with biostratigraphy and human arrival in Java'. Semedo site in Tegal district of C Java rich in vertebrate fossils, with high percentage and several species of *Proboscidea* (elephantoids): *Sinomastodon bumiayuensis*, *Stegodon trigonocephalus*, *Stegodon 'pygmy' semedoensis*, *Stegodon hypsilophus*, *Elephas (Archidiskodon) planifrons* and *Elephas hysudrindicus*)

Soares, P., J.A. Trejaut, J.H. Loo, C. Hill, M. Mormina et al. (2008)- Climate change and postglacial human dispersals in Southeast Asia. Molecular Biol. Evol. 25, 6, p. 1209-1218.
(online at: <https://academic.oup.com/mbe/article/25/6/1209/1134230>)
(Modern humans in Island SE Asia since at least 50,000 years, commonly thought to be from Neolithic dispersal from China. Genome sequencing of modern humans suggest migration of humans from Sundaland across region since start of Holocene, at time of Sundaland breaking up into archipelago by rising sea levels)

Soejono, R.P. (1969)- The history of prehistoric research in Indonesia to 1950. Asian Perspectives 12, p. 69-91.
(online at: <http://hl-128-171-57-22.library.manoa.hawaii.edu/bitstream/10125/16796/1/AP-v12n1-69-91.pdf>)
(Review of archeological work in the Indonesian region before 1950, incl. Paleolithic-Neolithic stone tools, bronze drums and other object, megalithic remains, fossilized human remains)

Soejono, R.P. (1982)- New data on the Palaeolithic industry in Indonesia. In: M.A. de Lumley (ed.) Colloque Int. CNRS Le *Homo erectus* et la place de l'Homme de Tautavel parmi les hominides fossiles, Nice p. 578-592.

Soerastopo Hadisoemarno (1972)- Geomorphology of the Sangiran dome, Java, Indonesia. Ilmu Alam, 1, p. 57-65. (in Indonesian)

Soergel, W. (1914)- *Stegodonten* aus den Kendengschichten auf Java. Palaeontographica Suppl. 4, 3, 1, p. 1-24.
(*Stegodont elephants from the Kendeng beds on Java'. On Pleistocene Stegodont elephant teeth collected by Elbert*)

Sondaar, P.Y. (1981)- The *Geochelone* faunas of the Indonesian Archipelago and their paleogeographical and biostratigraphical significance. *Modern Quaternary Research in Southeast Asia* 6, Balkema, Rotterdam, p. 111-120.

(E Pleistocene giant tortoise Geochelone atlas known from Java (Sangiran, Kali Klagah), Sulawesi and Timor. Probably part of island faunas, which became extinct with arrival of Asiatic mammals via land bridge in E Pleistocene. (see also critical discussion by Hooijer 1982))

Sondaar, P.Y. (1984)- Faunal evolution and the mammalian biostratigraphy of Java. In: P. Andrews & J.L. Franzen (eds.) *The early evolution of man with special emphasis on Southeast Asia and Africa*. Courier Forschungsinstitut Senckenberg 69, p. 219-235.

(Re-interpretation of Java fossil mammal successions, linked to changes in paleobiogeography. Seven Late Pliocene- Pleistocene vertebrate faunas, from old to young: Satir (early island fauna), Ci Saat, Trinil HK (with arrival of Homo erectus), Kedung Brubus, Ngandong, Punung and Wajak faunas)

Sondaar, P.Y. (1987)- Pleistocene man and extinctions of islands endemics. *Mem. Soc. Geologique France*, N.S., 150, p. 159-165.

Sondaar, P.Y. (1989)- Did man reach Australia via the giant rat and Dingo route? *Geol. Res. Dev. Centre (GRDC), Bandung, Seri Paleontologi* 5, p. 76-83.

(Discussion of possible routes followed by Pleistocene man from China to Australia)

Sondaar, P. (1994)- De *Homo erectus* fauna's van Java. *Cranium* 11, 2, p. 92-96.

(online at: <http://natuurtijdschriften.nl/download?type=document&docid=523346>)

('The Homo erectus faunas of Java'. Changes in faunal succession in Pleistocene of Java explained by: (1) geographical position of Java at periphery of SE Asia; 2) succession of glacials, causing sealevel lowering, connecting Java, Borneo and Sumatra with continent; 3) reduction of tropical rainforest during glacials (dry periods, favoring migration of mammals living in open habitats). Two major turnovers in faunal succession of Java: (1) ~1.2 Ma change from unbalanced island fauna (Satir fauna) to continental fauna (Ci-Saat fauna; with Homo erectus and disappearance of endemic island forms); (2) Late Pleistocene (~80.000 yrs ago) extinction of M Pleistocene forms (Stegodon, Hexaprotodon, Homo erectus), replaced with new fauna, with extant Elephas maximus and probably Homo sapiens)

Sondaar, P.Y., F. Aziz, G.D. van den Bergh & J. de Vos (1996)- Faunal change and hominid evolution during Quaternary of Jawa. *Geol. Res. Dev. Centre (GRDC), Bandung, Seri Paleontologi* 8, p. 1-10.

(Quaternary vertebrate assemblages, from old to young: Satir (unbalanced island fauna), Cisaat, Trinil, Kedung Brubus, Ngandong, Punung and Wajak. Homo erectus in several different stratigraphic levels)

Sondaar, P.Y., J. de Vos & J.J.M. Leinders (1983)- Reply. Facts and fiction around the fossil mammals of Java. *Geologie en Mijnbouw* 62, p. 339-343.

(Discussion of Bartstra (1983) critique of De Vos, Sartono et al. (1982) reinterpretation of relative ages of mammalian faunas of Trinil and Kedungbrubus of Java. See also Hooijer 1983, Hooijer and Kurten 1984)

Sondaar, P.Y., G.D. van den Bergh, J. de Vos & F. Aziz (1995)- *Homo erectus* in S.E. Asia: time space and migration routes, IV. Overseas traveling of *Homo erectus* and faunal turnovers. In: J. Gibert et al. (eds.) *Proc. Int. Conf. The hominids and their environment during the Lower and Middle Pleistocene of Eurasia, Orce 1995*, p. 383-388.

(Homo sapiens generally believed to be first to cross water barriers. Stone tools of 0.7 Ma age on Flores suggest Homo erectus probably also had this capability)

Sondaar, P.Y., G.D. van den Bergh, J. de Vos & F. Aziz (2001)- The Flores case: the earliest island colonizers. *Geol. Res. Dev. Centre (GRDC), Bandung, Spec. Publ.* 27, p. 15-19.

Sondaar, P.Y., G.D. van den Bergh, B. Mubroto, F. Aziz, J. de Vos & U.L. Batu (1994)- Middle Pleistocene faunal turnover and colonization of Flores (Indonesia) by *Homo erectus*. *Comptes Rendus Academie Sciences*, Paris, II, 319, p. 1255-1262.

(Stone artifacts made of basalt, associated with fossil Stegodon trigonocephalus florensis Hooijer and fresh water molluscs in fluvial sands and tuffs of Ola Bula Fm near Mata Menge, W Central Flores. Tools probably made by Homo erectus and dated as slightly older than 0.73 Ma (based on possibly erroneous Matuyama-Brunhes paleomag interpretation and actually closer to 0.8-0.9 Ma: Morwood et al. 1998). Older endemic island fauna at base Ola Bula Fm at Tangi Talo, with pygmy Stegodon, Geochelone (large tortoise) and Varanus komodoensis)

Sorensen, P. (2001)- A reconsideration of the chronology of the Early Palaeolithic Lannathaiian culture of North Thailand. *Bull. Indo-Pacific Prehistory Assoc. (IPPA)* 21, p. 138-141.

(online at: <https://journals.lib.washington.edu/index.php/BIPPA/article/view/11773/10402>)

(E Paleolithic sites with Lannathaiian flaked pebble tools of Lampang Basin, N Thailand, probably 1.2- 0.8 Ma: in highest (oldest) Terrace 1 deposits, overlain by basalts older than Matuyama- Brunhes magnetic boundary (K-Ar dating of basalts unsuccessful))

Spriggs, M., C. Reepmeyer, Anggraeni, P. Lape, L. Neri, W.P. Ronquillo, T. Simanjuntak et al. (2011)- Obsidian sources and distribution systems in Island Southeast Asia: a review of previous research. *J. Archaeological Science* 38, p. 2873-2881.

(Review of distribution and origin of stone age obsidian artifacts in Philippines, Sulawesi, Flores, W and E Java, S Sumatra, Borneo and E Timor. Many probably sourced from islands on which they were found)

Stehlin, H.G (1925)- Fossile Saugetiere aus der Gegend von Limbangan (Java). *Dienst Mijnbouw Nederlandsch-Indie, Wetenschappelijke Mededeelingen* 3, p. 1-12.

(‘Fossil mammals from the Limbangan area, Java’. Diverse Pleistocene mammal assemblage in conglomeratic sandstone near Limbangan on Pamali River, Brebes District, C Java (16 km W of Tegal). Incl. Stegodon, Elephas, cervids)

Storm, P. (1992)- Two microliths from Javanese Wadjak Man. *J. Anthropological Soc. Nippon* 100, 2, p. 191-203.

(online at: https://www.jstage.jst.go.jp/article/ase1911/100/2/100_2_191/_pdf)

(Two hominid stone tools made from limestone, from rock shelter known as Wajak site on mountain slope in S Java, S of Mt Willis near village of Wajak, site of human skull first found by Van Rietschoten in 1888)

Storm, P. (1994)- De morfologie van *Homo modjokertensis*. *Cranium* 11, 2, p. 97-102.

(online at: <http://natuurtijdschriften.nl/download?type=document&docid=523347>)

(Mojokerto skull from E Java, described by Von Koenigswald (1936) as Pithecanthropus modjokertensis, is juvenile skull, but not possible to determine if early (Homo erectus erectus) or late (Homo erectus soloensis) Javanese form (Dubois 1940 considered this to be rel. young Homo wadjakensis= H. soloensis))

Storm, P. (1995)- The evolutionary significance of the Wajak skulls. *Scripta Geologica* 110, p. 1-247.

(online at: www.repository.naturalis.nl/document/148692)

(Two Late Pleistocene- Holocene robust hominid skulls from Gua Wajak, SE Java, first described by Dubois (1922). Most likely interpretation as Mesolithic robust representatives of present Homo sapiens of Java.)

Storm, P. (2001)- The evolution of humans in Australasia from an environmental perspective. In: R.A.C. Dam & S. van der Kaars (eds.) *Quaternary environmental change in the Indonesian region, Palaeogeogr. Palaeoclim. Palaeoecology* 171, p. 363-383.

(Incl. climatic sequence for Java: before and around 135 ka climate considerably drier and hot; between 126-81 ka mainly humid-warm (with Punung fauna), becoming drier and cooler (with Wajak fauna) before returning to more interglacial conditions in Holocene)

Storm, P. (2012)- A carnivorous niche for Java Man? A preliminary consideration of the abundance of fossils in Middle Pleistocene Java. *Comptes Rendus Palevol* 11, p. 191-202.

(Anatomical and archeological aspects of Homo erectus sites Kedung Brubus and Trinil suggest vertebrates meat was important part of diet)

Storm, P., F. Aziz, J. de Vos, D. Kosasih, S. Baskoro, Ngaliman & L.W. van den Hoek Ostende (2005)- Late Pleistocene *Homo sapiens* in a tropical rainforest fauna in East Java. *J. Human Evolution* 49, 4, p. 536-545.

(Redescription of two original sites of 'Punung fauna', as first described by Von Koenigswald (1939) and Badoux (1959) from karst hills of S Mountains, E Java. Punung and new nearby mammal site Gunung Dawung reflect tropical rainforest environment with common Pongo (orangutan) fossils. Punung fauna younger than Ngandong, possibly around 100 ka)

Storm, P. & J. de Vos (2006)- Rediscovery of the Late Pleistocene Punung hominin sites and the rediscovery of a new site Gunung Dawung in East Java. *Senckenbergiana Lethaea* 86, 2, p. 121-131.

(On re-location of Von Koenigswald's Punung sites where in 1930s he collected hominin remains and mammals indicative of tropical rainforest like orang-utans (Pongo) and gibbons (Hylobates))

Storm, P. & A.J. Nelson (1992)- The many faces of Wajak Man. *Archaeology in Oceania* 27, p. 37-46.

(online at: www.oermens.nl/many_faces_wadjak.pdf)

('Wadjak Man' first fossil hominid found in SE Asia (S Java in 1888 by Dubois). Initially believed to be ancestral to Australian Aborigines, but material sub-recent and first occupation of Australia well into Pleistocene (50ka?))

Storm, P., R. Wood, C. Stringer, A. Bartsiokas, J. de Vos, M. Aubert, L. Kinsley & R. Grun (2013)- U-series and radiocarbon analyses of human and faunal remains from Wajak, Indonesia. *J. Human Evolution* 64, p. 356-365.

(Radiometric dating of human and faunal bone fragments from Wajak, Java, indicate minimum age of 37.4-28.5 ka, older than previously published radiocarbon estimates, probably due to secondary carbonatisation. Requires reassessment of evolutionary relationships of human remains in SE Asia- Oceania)

Stremme, H. (1911)- Die Säugetiere mit Ausnahme der Proboscidiere. In: M.L. Selenka & M. Blanckenhorn (eds.) *Die Pithecanthropus-Schichten auf Java, geologische und paläontologische Ergebnisse der Trinil Expedition (1907 und 1908)*, W. Engelmann, Leipzig, p. 82-150.

(The mammals, not including elephants', from Pleistocene of Trinil, from material collected by Selenka expedition, 1907-1908. Descriptions of rodents, Rhinoceros, Sus brachygnathus, Hippopotamus, Cervus (Axis) lydekkeri, Duboisia, Buffelus, Bibos spp., etc.)

Sudijono, K. Mano & R. Wikarno (eds.) (1995)- *Geology of the Quaternary environment of the Solo-Madiun area, Central-East Java*. Geol. Res. Dev. Centre (GRDC), Bandung, Spec. Publ. 17, p. 1-128.

Suminto, J. Kimura & T. Hirayama (1995)- *Subsurface geology in Sangiran, Kedungbrubus and Ponorogo area*. In: Sudijono et al. (eds.) *Geology of Quaternary environment of the Solo-Madiun area, Central-East Java*, Geol. Res. Dev. Centre, Spec. Publ. 17, p. 81-86.

Suminto, M.J. Morwood, I. Kurniawan, F. Aziz, G.D. van den Bergh & D.R. Hobbs (2009)- *Geology and fossil sites of the Soa Basin, Flores, Indonesia*. In: F. Aziz et al. (eds.) *Geology, palaeontology and archaeology of the Pleistocene Soa Basin, Central Flores, Indonesia*, Chapter 2, Pusat Survei Geologi, Bandung, Spec. Publ. 36, p. 19-40.

(Flores classic Mata Menge site age: tuff sealing top of fossil layer (with Stegodon florensis and in-situ stone artefacts) with fission track age of 800 ± 70 Ma, while pink tuffaceous silt immediately below main fossil deposit dated as 880 ± 70 ka. Tangi Talo site with pygmy Stegodon sondaari and giant tortoise and FT age 900 ± 70 ka. Around 680 ka lake increased in size one leading to deposition of thin-bedded freshwater limestones of Upper limestone. Tektite at surface of Dozu Dhalu site with in-situ artefact and Stegodon florensis)

Suminto, G.D. van den Bergh, I. Saefudin & K. Mano (1996)- The stratigraphy and sedimentology of the hominid skull find site, Grogolan Wetan, Sangiran area, Central Jawa. Geol. Res. Dev. Centre (GRDC), Bandung, Seri Paleontologi 8, p. 51-57.

(New H. erectus skull from upper Bapang Fm, between Upper Tuff and Uppermost Lahar. This is youngest level of hominid fossil occurrence in Sangiran)

Sunardi, E. (2010)- Penelitian magnetostratigrafi dan penerapan satuan stratigrafi polaritas magnet sebagai satuan kronostratigrafi: studi kasus di cekungan Bandung serta daerah Mojokerto dan Sangiran, Jawa. J. Geologi Indonesia 5, 2, p. 137-150.

(online at: <http://ijog.bgl.esdm.go.id/index.php/IJOG/article/view/99/99>)

('Magnetostratigraphy study and application of magnetic polarity stratigraphy units as chronostratigraphy units: a case study in the Bandung Basin and the Mojokerto and Sangiran regions, Java'. Magnetic polarity reversals of rocks in Sangiran Area (C Java), Mojokerto (E Java; 3 Ma) and Bandung Basin (W Java; 4 Ma) correlated to magnetostratigraphy of Pleistocene formations at Mojokerto)

Suraprasit, K., Y. Chaimanee, H. Bocherens, O. Chavasseau & J.J. Jaeger (2013)- Systematics and phylogeny of middle Miocene Cervidae (Mammalia) from Mae Moh Basin (Thailand) and a paleoenvironmental estimate using enamel isotopy of sympatric herbivore species. J. Vertebrate Paleontology 34, 1, p. 179-194.

(New species of primitive deer Lagomeryx and Stephanocemas from late M Miocene (13.4-13.2 Ma) coal layers of Mae Moh Basin, N Thailand. Paleoenvironmental studies of Mae Moh mammalian taxa (cervid, bovid, suid, rhinoceros and proboscidean indicate range of habitats from woodlands to grasslands in a C3-plant-dominated environment. Isotopic samples support herbivores lived in a low-seasonal climate)

Suraprasit, K., Y. Chaimanee, T. Martin & J.J. Jaeger (2011)- First castorid (Mammalia, Rodentia) from the Middle Miocene of Southeast Asia. Naturwissenschaften 98, 4, p. 315-328

(late M Miocene age Steneofiber fossils from coal mines in Mae Moh and Chiang Muan, N Thailand)

Suraprasit, K., Y. Chaimanee, O. Chavasseau & J.J. Jaeger (2015)-Middle Miocene bovids from Mae Moh Basin, Northern Thailand: The first record of the genus Eotragus from Southeast Asia. Acta Palaeontologica Polonica 60, 1, p. 67-78.

(online at: <https://www.app.pan.pl/archive/published/app60/app20120061.pdf>)

(Bovid fossils from late M Miocene (~13.3 Ma) of Mae Moh Basin of NW Thailand, assigned to new species Eotragus lampangensis n.sp.. First report of Eotragus from SE Asia. Foraged mainly between grassland and forest)

Suraprasit, K., J.J. Jaeger, Y. Chaimanee, O. Chavasseau, C. Yamee, P. Tian & S. Panha (2016)- The Middle Pleistocene vertebrate fauna from Khok Sung (Nakhon Ratchasima, Thailand): biochronological and paleobiogeographical implications. ZooKeys 613, p. 16157.

(online at: <http://zookeys.pensoft.net/articles.php?id=8309>)

(Rich late M Pleistocene vertebrate fauna with 15 mammal and 10 reptile species in fluvial terrace deposits of Khok Sung, NE Thailand. No Ailuropoda, but with Gavialis bengawanicus. Fauna comparable to three other late M Pleistocene faunas, one with age >169 ka. In M Pleistocene of SE Asia two faunal associations: Java and mainland SE Asia. Thailand pathway for Sino-Malayan migration event from S China to Java)

Sutikna, T., M.W. Tocheri, M.J. Morwood, E.W. Saptomo, Jatmiko, R.D. Awe, Sri Wasisto, K.E. Westaway, M. Aubert et al. (2016)- Revised stratigraphy and chronology for *Homo floresiensis* at Liang Bua in Indonesia. Nature 532, 7599, p. 366-369.

(Skeletal remains of H. floresiensis and deposits containing them dated as 100- 60 ka; stone artefacts range from ~190-50 ka. Not clear if H. floresiensis survived after 50 ka and potentially encountered modern humans on Flores or other hominins dispersing through SE Asia)

Suyono (2009)- The study of fossil faunas in the Walanae Basin, Indonesia. Ph.D. Thesis University of Wollongong, p. 1-115.

(online at: <http://ro.uow.edu.au/theses/3058/>)

(Mainly on morphology and phylogenetic history of *Celebochoerus heekereni*, an endemic pig species from Pliocene in Walanae Basin, SW Sulawesi)

Suzuki, M., Wikarno, Budisantoso, I. Saefudin & M. Itihara (1985)- Fission track ages of pumice tuff, tuff layers, and javites of fossil hominid fossil-bearing formations in Java. In: N. Watanabe & D. Kadar (eds.) Quaternary geology of the hominid fossil bearing formations in Java, Geol. Res. Dev. Centre, Spec. Publ. 4, p. 309-357.

(Eight radiometric ages from 21 pumice tuff layers and 2 javites of Pleistocene of Sangiran. Tuffs from Pucangan Fm 1.16 Ma and Kabuh Fm 0.71- 0.78 Ma). Javites(tektites) 0.71 Ma)

Swisher, C.C., G.H. Curtis, T. Jacob, A.G. Getty, A. Suprijo & Widiasmoro (1994)- Age of the earliest known hominids in Java, Indonesia. Science 263, p. 1118-1121.

($^{40}\text{Ar}/^{39}\text{Ar}$ ages from pumice from Mojokerto hominid sites 1.81 and 1.66 Ma, 0.6 million years older than *Homo erectus* fossils from Olduvai Gorge, and comparable to age of *H. cf. erectus* (*H. ergaster*) in Kenya. Ages would suggest *Homo erectus* may have evolved in Asia instead of Africa (NB: these Java age dating results widely disputed in subsequent literature due to erroneous locality information (Huffman et al. 2006, etc.))

Swisher, C.C., G.H. Curtis & R. Lewin (2000)- Java Man- how two geologists' dramatic discoveries changed our understanding of the evolutionary path to modern humans. Scribner, New York, p. 1-244.

(Popular account of events leading to new conclusions on human evolution. (This 'dramatic discovery' is highly controversial; the unusually old age date of Mojokerto hominids probably based on erroneous location information; JTvG)

Swisher, C.C., W.J. Rink, S.C. Anton, H.P. Schwartz, G.H. Curtis & A. Suprijo (1996)- Latest *Homo erectus* of Java; potential contemporaneity with *Homo sapiens* in Southeast Asia. Science 274, p. 1870-1874.

(Hominid fossils from Ngandong and Sambungmacan considered the most morphologically advanced *Homo erectus*. Dating of fossil bovid teeth collected from hominid-bearing levels gave mean ages of 27 to 53 ka, much younger than previous age estimates for these hominids (results unrealistically young?; see also Grun and Thorne 1997, Indriati et al. 2011))

Tassy, P., P. Anupandhanant, L. Ginsburg, P. Mein, B. Ratanasthien & V. Suteethorn (1992)- A new *Stegolophodon* (Proboscidea, Mammalia) from the Early Miocene of northern Thailand. Geobios 25, 4, p. 511-523.

Tattersall, I. & J.H. Schwartz (2009)- Evolution of the genus *Homo*. Annual Review Earth Planetary Sci. 37, p. 67-92.

(General review of hominid evolution in last ~2 Myrs. Heterogeneity among 'early African *Homo erectus*' and no clear link to Asian *Homo erectus* group. *Pithecanthropus* (now *Homo*) *erectus* now reckoned to be ~0.7- 1.5 Myr old. First truly cosmopolitan *Homo* is *H. heidelbergensis*, known from Africa, Europe and China 600 kyr ago. *Homo sapiens* originated in Africa)

Ter Haar, C. (1934)- *Homo-soloensis*. De Ingenieur in Nederlandsch-Indie, 1, 4, p. 52-60.

(Discussion of geological setting of *Homo soloensis* discovery in Solo River terrace deposits at Ngandong, Kendeng Hills, C Java)

Thein, Z.M.M., T. Htike, A.N. Soe, C. Sein, M. Maung & M. Takai (2017)- A review of the investigation of primate fossils in Myanmar. In: A.J. Barber et al. (eds.) Myanmar: geology, resources and tectonics, Geol. Soc., London, Memoir 48, Chapter 9, p. 185-206.

(Fossil primates in latest Middle Eocene Pondaung Fm in C Myanmar. Two large-bodied primates, *Pondaungia cotteri* and *Amphipithecus mogaungensis*. Some authorities believed they are primitive anthropoids, others regarded them as adapiforms or non-primate. Also rare primate fossils from Late Neogene Upper Irrawaddy Beds, dominated by proboscideans and bovids)

- Theunissen, B. (1989)- Eugene Dubois and the ape-man from Java; The history of the first missing link and its discoverer. Kluwer Acad. Publ., Dordrecht, p. 1-293.
(*Study of the life and scientific contributions of Eugene Dubois, discoverer of 'Java Man' in 1891*)
- Theunissen, B., J. de Vos, P.Y. Sondaar & F. Aziz (1990)- The establishment of a chronological framework for the hominid-bearing deposits of Java: a historical survey. In: L.F. La Porte (ed.) Establishment of a geologic framework for paleoanthropology, Geol. Soc. America (GSA), Spec. Paper 242, p. 39-53.
(*Brief historical survey of discovery of Pleistocene mammals and hominid-bearing deposits in Java since mid-1850's, and of attempts to establish chronological framework for Javanese hominids*)
- Thorne, A. & M.H. Wolpoff (1981)- Regional continuity in Australasian Pleistocene hominid evolution. American J. Physical Anthropology 55, 3, p. 337-349.
(*Study of Sangiran 17 Homo erectus skull, interpreted to show similarities with Late Pleistocene Australian hominid*)
- Tiauzon, A. (2011)- Lithic technology in Song Terus during the late Middle Pleistocene and the early Upper Pleistocene. M.Sc. Thesis, Museum Nat. Histoire Naturelle, Paris, p. 1-96.
(*online at: http://hopsea.mnhn.fr/pc/thesis/M2%20Archie_TIAUZON.pdf*)
- Tjia, H.D. (2006)- Geological evidence for Quaternary land bridges in insular Southeast Asia. In: T. Simanjuntak et al. (eds.) Archaeology: Indonesian perspective, R.P. Soejono's Festschrift, LIPI Press, Jakarta, p. 71-78.
(*During most of Quaternary (<1.8 Ma) four major land bridges provided access from SE Asia into Wallacea (= mobile region between Sundaland and Sahul-land): (1) Sabah/ Borneo via Palawan-Mindoro (Philippines), (2) Sabah/ Borneo via Sulu Archipelago to Mindanao (Philippines), (3) Kangean Gp via Paternoster platform to S Sulawesi, (4) Java/S Kalimantan via Banda Arc to Alor- Timor or via Sumba- Savu-Rote to Timor. Today these land bridges contain passages >200m deep, but are probably result of recent tectonic subsidence, not older than 100 ka when modern humans began to populate region*)
- Tobias, P. (1966)- A re-examination of the Kedung Brubus mandible. Zoologische Mededelingen, Leiden, 41, p. 307-320.
(*online at: <http://dare.uva.nl/cgi/arno/show.cgi?fid=150000>*)
(*Description of fragment of Pithecanthropus erectus jawbone collected by Dubois at Kedung Brubus in 1890 and described in 1924. Probably from juvenile individual*)
- Tobias, P.V. & G.H.R. von Koenigswald (1964)- A comparison between the Olduvai hominines and those of Java and some implications for hominid phylogeny. Nature 204, 4958, p. 515-518.
- Tokunaga, S., H. Oshima, A.A. Polhaupessy & Y. Ito (1985)- A palynological study of the Pucangan and Kabuh Formations in the Sangiran area. In: N. Watanabe & D. Kadar (eds.) Quaternary geology of the hominid fossil bearing formations in Java. Geol. Res. Dev. Centre (GRDC), Bandung, Spec. Publ. 4, p. 199-217.
(*Preliminary palynological study of Pleistocene of Sangiran, C Java. Rel. common grass pollen from M-U Pucangan and Lower Kabuh Fms*)
- Tougaard, C. (1998)- Les faunes de grands mammifères du Pleistocene moyen terminal de Thaïlande dans leur cadre phylogénétique, paléocologique et biochronologique. Doct. Thesis Montpellier, p. 1-170. (*Unpublished*)
(*The large mammal faunas of late Middle Pleistocene from Thailand in a phylogenetic, paleocological and biochronological framework'. Late M Pleistocene (~170 ka) large mammal fauna with giant panda, Ailuropoda Hyena, Crocuta, Orang-utang, Pongo pygmaeus Sus barbatus, etc.*)
- Tougaard, C. (2001)- Biogeography and migration routes of large mammal faunas in South-East Asia during the Late Middle Pleistocene: focus on fossil and extant faunas from Thailand. Palaeogeogr. Palaeoclim. Palaeoecology 168, p. 337-358.

(Thailand at boundary of Indochinese and Sundaic faunal provinces and in continental migration route of mammals migrating to SE Asia in M Pleistocene. Emergence of Sundaland during glacial periods allowed faunal exchanges from continental SE Asia to Indonesian islands in late M Pleistocene and Late Pleistocene)

Tougaard, C., Y. Chaimanee, V. Suteethorn, S. Triamwichanon & J.J. Jaeger (1996)- Extension of the geographic distribution of the giant panda (Ailuropoda) and search for the reasons for its progressive disappearance in Southeast Asia during the latest Middle Pleistocene. *Comptes Rendus Academie Sciences, Paris, Ser. IIA, 323, p. 973-979.*

(Giant panda in latest M Pleistocene of N Thailand. Progressively disappears in SE Asia related to increase in temperature and rainfall)

Tougaard, C. & S. Montuire (2006)- Pleistocene paleoenvironmental reconstructions and mammalian evolution in South-East Asia: focus on fossil faunas from Thailand. *Quaternary Science Reviews 25, p. 126-141.*

(Until 1980's no Pleistocene large mammal faunas known from Thailand. During M-L Pleistocene faunal exchanges between Thailand (Indochinese Province) and W Indonesia (Sundaic Province) via Sundaland continental shelf during glacial periods of low sea level)

Turvey, S.T., J.J. Crees, J. Hansford, T.E. Jeffree, N. Crumpton, I. Kurniawan, E. Setiyabudi et al. (2017)- Quaternary vertebrate faunas from Sumba, Indonesia: implications for Wallacean biogeography and evolution. *Proc. Royal Society (London), B, 284, 20171278, p. 1-10.*

(online at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5577490/pdf/rspb20171278.pdf>)

(New vertebrate fossil deposits on Sumba. Pleistocene deposit at Lewapaku in interior highlands may be close to 1 Ma old, with small Stegodon sumbaensis Sartono, tooth of Varanus komodoensis and fragments of giant murids. Holocene cave deposits at Mahaniwa (~2000-3500 BP) with large rats and extinct frugivorous Varanus hooijeri. Sumba Quaternary vertebrate fauna comparable fauna of Flores)

Tyler, D.E. (1991)- A taxonomy of Javan hominid mandibles. *J. Human Evolution 6, p. 401-420.*

(Seven human mandibular remains from Java (Kedung Brubus, Sangiran 1, 5, 6, 8, 9, and 22) are single species, Homo erectus)

Tyler, D.E. (1995)- The current picture of hominid evolution in Java. *Acta Anthropol. Sinica 14, p. 285-299.*

Tyler, D.E. (1997)- New and significant fossil finds from Sangiran, Central Java. In: N.G. Jablonski. (ed.) *The changing face of East Asia during the Tertiary and Quaternary*, University of Hong Kong Press, p. 498-517.

Tyler, D.E. (2001)- *δMeganthropus* cranial fossils from Java. *J. Human Evolution 16, 2, p. 81-101.*

(3 of 12 Homo erectus skulls from E-M Pleistocene of Sangiran may represent 'Meganthropus'. Meganthropus I, II, and III more massive than any known H. erectus specimens, also higher vaulted, smaller brained, and have thick lower occipital planes. May represent species that separated from H. erectus upon its arrival to Java)

Tyler, D.E. (2001)- Three new *Homo erectus* mandibles from Java. *J. Human Evolution 16, 2, p. 103-115.*

(Eleven known Homo erectus mandibular pieces from E-M Pleistocene of Java, all from Sangiran, one from Kedung Brubus. Sangiran 21 (E), Sangiran 22 (F), and Sangiran 37 (G) first described here. Sangiran 21, 22, and 27 from U Pucangan Fm and dated as ~1.2 Ma)

Tyler, D.E. (2001)- Two new *δMeganthropus* mandibles from Java. *J. Human Evolution 16, p. 151-158.*

(Two new mandibles from U Pucangan Fm of Sangiran, C Java. Dated as ~1.2- 1.4 Ma. Morphologically compatible with other "Meganthropus" mandibles described from Java)

Tyler, D.E. (2003)- Sangiran 5 (*δPithecanthropus dubius*), *Homo erectus*, *δMeganthropus* or *Pongo*? *J. Human Evolution 18, 3-4, p. 229-241.*

(Eleven E-M Pleistocene jaw fragments now known from Java, all but one from Sangiran. Morphologically, they are a mixture of undoubted H. erectus, 'H. megarthropus' and possibly a pongid. 'Pithecanthropus dubius' (Sangiran 5) may not be hominid, but if it is, must be placed with 'H. megarthropus', not H. erectus)

- Tyler, D.E. (2004)- An examination of the taxonomic status of the fragmentary mandible Sangiran 5, (*Pithecanthropus dubius*), *Homo erectus*, "*Meganthropus*", or *Pongo*? *Quaternary Int.* 117, p. 125-130.
(*Morphology of Sangiran 5 mandible fossil, initially named Sangiran 1939 and recovered by Von Koenigswald, beyond known range of any H. erectus and must be pongid ape*)
- Tyler, D.E., N. Jablonski & S. Sartono (1995)- Earliest known monkey fossil from the Indonesian Archipelago: an announcement. In: J.R.F. Bower & S. Sartono (eds.) *Palaeo-anthropology: evolution and ecology of Homo erectus, Pithecanthropus Centennial Foundation, Leiden University*, p. 213-216.
(*Monkey fossil from Sangiran. See also Jablonski & Tyler 1999 and Larick et al. 2000: not as old as assumed?*)
- Tyler, D.E., G.S. Krantz & S. Sartono (1995)- The taxonomic status of the '*Meganthropus*' cranial (Sangiran 31) and the '*Meganthropus*' occipital fragment III. In: J.R.F. Bower & S. Sartono (eds.) *Palaeo-anthropology: evolution and ecology of Homo erectus, Pithecanthropus Centennial Foundation, Leiden*, 1, p. 189-202.
- Tyler, D.E. & S. Sartono (2001)- A new *Homo erectus* cranium from Sangiran, Java. *Human Evolution* 16, 1, p. 13-25.
(*New H. erectus cranium found in 1993 at Sangiran M Pucangan Fm, ~1.6-1.8 Ma in age. Braincase and most of face. Skull longer and narrower than Trinil, possibly female counterpart to Sangiran 17*)
- Van Baren, F.A. (1948)- On the petrology of the volcanic area of the Goenoeng Moeria (Java). *Meded. Alg. Proefstation Landbouw Buitenzorg, Java*, 60, p. 1-69.
(*Petrographic descriptions of volcanic rocks of Muria volcano, incl. leucite bearing series*)
- Van den Bergh, G.D. (1999)- The Late Neogene elephantoid-bearing faunas of Indonesia and their paleozoogeographic implications. A study of the terrestrial faunal succession of Sulawesi, Flores and Java, including evidence for early hominid dispersal east of Wallace's Line. *Scripta Geologica* 117, Leiden, p. 1-419.
(*online at: www.repository.naturalis.nl/document/45937*)
- Van den Bergh, G.D. & F. Aziz (1991)- Fossil vertebrates from the Walanae Formation and younger Pleistocene deposits, South Sulawesi. *J. Geologi Sumberdaya Mineral* 1, 3, p. 8-11.
(*>1500 Late Pleistocene vertebrate fossils recovered from Walanae Fm grey clay layer, deposited on floodplain of N-flowing Walanae River, S Sulawesi. Most abundant is large pig Celebochoerus heekereni, also dwarf Stegodon, giant tortoise Geochelone atlas and large crocodile. Endemic species show S Sulawesi was isolated from SE Asian mainland*)
- Van den Bergh, G.D., F. Aziz, P.Y. Sondaar & S.T. Hussain (1992)- Taxonomy, stratigraphy, and paleozoogeography of Plio-Pleistocene Proboscideans from the Indonesian islands. *Bull. Geol. Res. Dev. Centre (GRDC), Bandung, Seri Paleontologi* 7, p. 28-58.
(*Taxonomic revision of Plio-Pleistocene proboscideans (elephants) from Indonesian region (Java, Sulawesi, Flores, Timor, Sumba, Sangihe, Sumatra)*)
- Van den Bergh, G.D., F. Aziz, P.Y. Sondaar & J. de Vos (1994)- The first *Stegodon* fossils from Central Sulawesi and a new advanced *Elephas* species from South Sulawesi. *Geol. Res. Dev. Centre (GRDC), Bandung, Bull.* 17, p. 22-39.
(*First Stegodon from M-L Pleistocene Napu Fm near Betue, Poso District, C Sulawesi Very similar to S. trigonocephalus from Java. Also new Elephas species from M-L Pleistocene Tanrung Fm of S Sulawesi*)
- Van den Bergh, G.D., J. de Vos, F. Aziz & M.J. Morwood (2001)- Elephantoida in the Indonesian region: new *Stegodon* findings from Flores. In: *Proc. Conf. The world of elephants, CNRS Rome*, p. 623-627.
(*Recent discoveries of fossil Stegodon remains from Flores confirm earlier discoveries. E Pleistocene island assemblage, dated at 0.9 Ma, with dwarf Stegodon sondaari, Varanus komodoensis and giant tortoise remains. M Pleistocene assemblages from numerous localities dated as 0.85- 0.7 Ma, contain intermediate- large Stegodon florensis, giant Hooijeromys nusatenggara and V. komodoensis, associated with human stone tools*)

Van den Bergh, G.D., J. de Vos & P.Y. Sondaar (2001)- The Late Quaternary palaeogeography of mammal evolution in the Indonesian Archipelago. *Palaeogeogr. Palaeoclim. Palaeoecology* 171, p. 385-408.

Van den Bergh, G.D., J. de Vos, P.Y. Sondaar & F. Aziz (1995)- *Homo erectus* in S.E. Asia: time space and migration routes, I. The Flores case. In: J. Gibert et al. (eds.) *Proc. Int. Conf. The hominids and their environment during the Lower and Middle Pleistocene of Eurasia*, Orce 1995, p. 353-362.

Van den Bergh, G.D., J. de Vos, P.Y. Sondaar & F. Aziz (1996)- Pleistocene zoogeographic evolution of Java (Indonesia) and glacio-eustatic sea-level fluctuations: a background for the presence of *Homo*. *Indo-Pacific Prehistory Assoc. Bull.* 14 (Chiang Mai Papers, 1), p. 7-21.

(online at: <http://ejournal.anu.edu.au/index.php/bippa/article/view/425/414>)

(Relation of Java mammal faunal changes in last 2.5 My to global sea level changes not clear. No proof for presence of mammals on Java during first marked glacio-eustatic sea level lowering at 2.4 Ma. Oldest recognizable fauna is Satir fauna, age between 2- 1.5 Ma and indicates island conditions. Isolated conditions continue until ~0.8 Ma, suggested by unbalanced Ci Saat (1.2 Ma) and Trinil faunas (0.9 Ma), when *Homo erectus* arrived. Major faunal immigration at 0.8 Ma with Kedung Brubus fauna, corresponding with marked lowering of glacio-eustatic sea level)

Van Den Bergh, G.D., R. Due Awe, M.J. Morwood, T. Sutikna, Jatmiko & E.W. Saptomo (2008)- The youngest *Stegodon* remains in Southeast Asia from the Late Pleistocene archaeological site Liang Bua, Flores, Indonesia. *Quaternary Int.* 182, p. 16-48.

(*Stegodon* remains from Late Pleistocene of Liang Bua cave described as new endemic dwarf subspecies: *Stegodon florensis insularis*. Hominin activities likely played role in *Stegodon* bone accumulation at cave)

Van Den Bergh, G.D., Y. Kaifu, I. Kurniawan, R.T. Kono, A. Brumm, E. Setiyabudi, F. Aziz & M.J. Morwood (2016)- *Homo floresiensis*-like fossils from the early Middle Pleistocene of Flores. *Nature* 534, 7606, p. 245-248.

(online at: <http://udel.edu/~mcdonald/vandenbergh2016.pdf>)

(Hominin fossils excavated in 2014 from early M Pleistocene Mata Menge site, Soa Basin, C Flores, include mandible fragment and isolated teeth, similar to Late Pleistocene *H. floresiensis* of Liang Bua. Dated as ~0.7Ma, oldest known hominin remains from Flores. Mata Menge fossils tend to support view that *H. floresiensis* is dwarfed descendent of early Asian *Homo erectus*)

Van Den Bergh, G.D., I. Kurniawan, M.J. Morwood, C.J. Lentfer, Suyono, R. Setiawan & F. Aziz (2009)- Environmental reconstruction of the Middle Pleistocene archaeological/ palaeontological site Mata Menge, Central Flores, Indonesia. In: F. Aziz et al. (eds.) *Geology, palaeontology and archaeology of the Pleistocene Soa Basin, Central Flores, Indonesia*, Chapter 4, Pusat Survei Geologi, Bandung, Spec. Publ. 36, p. 59-94.

(*M Pleistocene paleontological- archeological Mata Menge site in Soa basin represents lake shore deposits, aged ~0.80- 0.88 Ma. Common Stegodon florensis bones from aged animals that probably died natural death. Despite abundance of stone artefacts in same layers no evidence for butchering. FT age of overlying white tuff 0.75 ± 0.07 Ma (Morwood et al. 1998). Fossils all in 0.5- 1.3m thick 'Unit B'; overlying Unit C tuffaceous siltstone and sand unfossiliferous*)

Van den Bergh, G.D., Bo Li, A. Brumm, R. Grun, D. Yurnaldi, M.W. Moore, I. Kurniawan, R. Setiawan, F. Aziz, R.G. Roberts, Suyono, M. Storey, E. Setiabudi & M.J. Morwood (2016)- Earliest hominin occupation of Sulawesi, Indonesia. *Nature* 529, 7585, p. 208-211.

(*New excavations at Talepu in Walanae Basin NE of Maros with stone artefacts and fossil megafauna (Bubalus, Stegodon, Celebochoerus) from stratified deposits that accumulated from before 200 ka until ~100ka*)

Van den Bergh, G.D., H.J.M. Meijer, R.A. Due, M.J. Morwood, K. Szabo, L.W. van den Hoek Ostende, T. Sutikna, E.W. Saptomo, P.J. Piper & K.M. Dobney (2009)- The Liang Bua faunal remains: a 95 k.yr. sequence from Flores, East Indonesia. *J. Human Evolution* 57, 5, p. 527-537.

(Excavations at Liang Bua limestone cave on Flores faunal sequence spanning the last 95 ky. Major climatic fluctuations, and two human species: H. floresiensis from 95- 17 ka, and modern humans from 11 ka- Present. Faunal assemblage comprises island gigantism in small mammals and dwarfing of large taxa. Confirms long-term isolation, impoverishment, and phylogenetic continuity of Flores faunal community)

Van den Bergh, G.D., B. Mubroto, F. Aziz, P.Y. Sondaar & J. de Vos (1996)- Did *Homo erectus* reach the island of Flores? In: P. Belwood (ed.) Indo-Pacific Prehistory Assoc. Bull. 14 (Chiang Mai Papers, 1), p. 27-34. *(Flores E- M Pleistocene stone artifacts too old for Homo sapiens, probably made by Homo erectus)*

Van den Bergh, G.D., P.Y. Sondaar, J. de Vos. & F. Aziz(1996)- The Proboscideans of the South-East Asian islands. In: J. Shoshani. & P. Tassy (eds.) The Proboscidea; evolution and palaeoecology of elephants and their relatives, Oxford University Press, p. 240-248.

Van den Brink, L.M. (1982)- On the mammal fauna of the Wajak Cave, Java (Indonesia). Modern Quaternary Research in Southeast Asia 7, Balkema, Rotterdam, p. 177-193.
(On Late Pleistocene mammal and hominid fossils from Wajak cave, Lawah Hill, S of Kediri, Java. Rel. modern fauna with Rusa timorensis, Muntiacus muntjac, Sus scrofa, Tapirus indicus, Rhinoceros sondaicus, Hystrix javanica, Panthera tigris, Homo sapiens and Presbytis cristatus)

Van der Geer, A., G. Lyras, J. de Vos & M. Dermitzakis (2010)- Evolution of island mammals: adaptation and extinction of placental mammals on islands. Wiley and Sons, p. 1-461.
(With reviews of Pleistocene mammal localities and biozones of Java (Ch. 12, p. 172-189), Flores (Ch. 13, p. 190-205), Sulawesi (Ch. 14, p. 206-215), The Philippines (Ch. 15, p. 216-227))

Van der Geer, A.A.E., G.D. van den Bergh, G.A. Lyras, U.W. Prasetyo, R. Awe Due, E. Setiyabudi & H. Drinia (2016)- The effect of area and isolation on insular dwarf proboscideans. J. Biogeography 43, 8, p. 1656-1666.

Van der Kaars, W.A. & M.A.C. Dam (1995)- A 135,000-year record of vegetational and climatic change from the Bandung area, West-Java, Indonesia. Palaeogeogr. Palaeoclim., Palaeoecology 117, p. 55-72.
(Sediment cores from Bandung intramontane basin provide paleoclimatic record for Java for last 135,000 years. Anomalously dry conditions in penultimate glacial period, around 135 ka, and very warm and humid interglacial conditions from 126- 81 ka. Reduction in Asplenium ferns from 81- 74 ka suggests drier conditions, while increased numbers indicate slightly wetter climate from 74- 47 ka. Distinctly cooler and possibly drier climate from 47- 20 ka. For Last Glacial Maximum 4-7 °C lower temperatures recorded)

Van der Maarel, F.H. (1931)- Mammalia. In: B.G. Escher et al. (eds.) De palaeontologie en stratigraphie van Nederlandsch Oost-Indie ('Feestbundel K. Martin'), Leidsche Geol. Mededelingen 5, p. 471-484.
(online at: www.repository.naturalis.nl/document/549246)
(Listings of Pleistocene mammal species as known from Indonesia in 1931 and bibliography)

Van der Maarel, F.H. (1932)- Contributions to the knowledge of the fossil mammalian fauna of Java. Wetenschappelijke Mededeelingen Dienst Mijnbouw Nederlandsch-Indie 15, p. 1-208.
(Descriptions of vertebrate fossils collected by geological survey in 1925/26 in residencies of Pekalongan, Bojonegoro, Rembang, Madiun and Solo. First description of E Pleistocene island fauna from Bumiayu with Tetralophodon, deer and giant tortoise Geochelone)

Van der Plas, M. (2007)- A new model for the evolution of *Homo sapiens* from the Wallacean islands. PalArch J. Vertebrate Paleontology 1, 1, p. 1-121.

Van Es, L.J.C. (1929)- Trinil. Fourth Pacific Science Congress, Batavia/Bandung 1929, Excursion E5, p. 1-14.
(Field guide to Trinil hominid site, C Java)

Van Es, L.J.C. (1931)- The age of *Pithecanthropus*. Ph.D. Thesis, Technische Hogeschool Delft, Martinus Nijhoff, The Hague, p. 1-142. *(Unpublished)*

(online at: [http://repository.tudelft.nl/..](http://repository.tudelft.nl/))

(Review of age of Trinil Beds of C Java, distribution of fossil vertebrates in Java, geology of Kendeng zone, etc.)

Van Heekeren, H.R. (1957)- The stone age of Indonesia. *Verhandelingen Kon. Inst. Taal Land Volkenkunde* 21, p. 1-141. see (also 1972 second edition)

(online at: www.oxis.org/books/verhandelingen/heekeren-1957.pdf)

(Review of Pleistocene faunas, hominids and Paleolithic, Mesolithic and Neolithic stone tool industries in Indonesia)

Van Heekeren, H.R. (1958)- The bronze-iron age of Indonesia. *Verhandelingen Kon. Inst. Taal Land Volkenkunde* 22, p. 1-158.

(online at: www.oxis.org/books/verhandelingen/heekeren-1958.pdf)

(Review of numerous archeological objects from 'Bronze-Iron Age' period, which follows Neolithic in Indonesia)

Van Heekeren, H.R. (1958)- The Tjabenge flake industry from South Celebes. *Asian Perspectives* 2, p. 77-81.

Van Heekeren, H.R. (1972)- The stone age of Indonesia, 2nd Ed.. *Verhandelingen Kon. Inst. Taal Land Volkenkunde* 61, The Hague, p. 1-247.

(online at: <http://booksandjournals.brillonline.com/content/books/9789004286917>)

Van Heekeren, H.R. (1975)- Chronology of the Indonesian prehistory. In: G.J. Bartstra & W. Arnold (eds.) *Modern Quaternary Research in Southeast Asia*, Balkema, Rotterdam, p. 47-53.

Van Heteren, A.H. & J. de Vos (2012)- Stone implements from Java and Flores: a history of the discoveries. *Comptes Rendus Palevol* 11, p. 181-189.

(Stone implements found on Flores similar to those found in Sangiran, C Java, by Von Koenigswald and Ghosh (1973), confirming crossing to Flores by *Homo erectus*. Primitive stone artefacts at Mata Menge and Boa Leza associated with *Stegodon florensis*)

Van Stein Callenfels, P.V. (1936)- L'industrie osseuse de Ngandong. *L'Anthropologie* 46, p. 359-362.

(*The bone tools industry of Ngandong', C Java*)

Van Weers, D.J. (1985)- *Hystrix gigantea*, a new fossil porcupine species from Java (Rodentia: Hystricidae). *Senckenbergiana Lethaea* 66, p. 111-119.

(Fossil porcupine molars from Sangiran (C Java), collected by Von Koenigswald. Three assigned to new species (*Hystrix gigantea* n. sp.), one may belong to *Hystrix brachyura* Linnaeus)

Van Weers, D.J. (1992)- *Hystrix vanbreei* n. sp., a new fossil porcupine from the Pleistocene of Java, with notes on the extant species of the Indonesian Archipelago. *Senckenbergiana Lethaea* 72, p. 189-197.

(Isolated porcupine teeth and two mandible fragments collected by Van Koenigswald from M Pleistocene of Sangiran, C Java, represent new species *Hystrix vanbreei*. Also present at Trinil)

Van Weers, D.J. (2003)- The porcupine *Hystrix (Acanthion) brachyura punungensis* subsp. nov. from Late Pleistocene fissure deposits near Punung, Java. *Scripta Geol.* 126, p. 217-225.

(online at: <http://repository.naturalis.nl/document/46244>)

(Cheek teeth and mandibular fragment of porcupines from Late Pleistocene fissure deposits near Punung considered new subspecies, *Hystrix brachyura punungensis* subsp. nov. M Pleistocene specimens allocated to *Hystrix brachyura* subsp.; those from the Holocene to *Hystrix javanica*)

Verhoeven, T. (1953)- Eine Mikrolithenkultur in Mittel- und West-Flores. *Anthropos* 48, p. 597-612.

(First paper on Pleistocene hominid artifacts from Flores (mainly surface scatters); see also Bednarik 2000)

Verhoeven, T. (1958)- Proto-Negrito in den Grotten auf Flores (Indonesie). *Anthropos* 53, 1-2, p. 229-232.
(*'Proto-Negrito in the caves of Flores'. Late Pleistocene or E Holocene hominid remains*)

Verhoeven, T. (1958)- Pleistozane Funde in Flores. *Anthropos* 53, p. 264-265.
(*'First report of E Pleistocene Stegodon fossils associated with hominid stone tools in Flores*)

Verhoeven, T. (1964)- *Stegodon*-fossilien auf der Insel Timor. *Anthropos* 54, p. 970-972.
(*'Stegodon fossils on the island of Timor'. Pleistocene elephantoids first discovered near Atambua in 1964*)

Verhoeven, T. (1968)- Vorgeschichtliche Forschungen auf Flores, Timor und Sumba. In: Gedenkschrift P.W. Schmidt, *Anthropica, Studia Instituti Anthropos* 21, 3/4, p. 393-403.
(*'Prehistoric investigations on Flores, Timor and Sumba'*)

Volmer, R., C. Hertler & A. van der Geer (2015)- Niche overlap and competition potential among tigers (*Panthera tigris*), sabertoothed cats (*Homotherium ultimum*, *Hemimachairodus zwierzyckii*) and Merriam's Dog (*Megacyon merriami*) in the Pleistocene of Java. *Palaeogeogr. Palaeoclim. Palaeoecology* 441, 4, p. 901-911.
(*'M Pleistocene site of Sangiran where tigers co-occurred with machairodonts (Hemimachairodus zwierzyckii and Homotherium ultimum) and large Merriam's Dog (Megacyon merriami). Tigers did not increase body mass before Ngandong faunal level*)

Volz, W. (1907)- Das geologische Alter der *Pithecanthropus*-Schichten bei Trinil, Ost-Java. *Neues Jahrbuch Mineral. Geol. Palaontologie, Festband* 1907, p. 256-271.
(*'The geological age of the Pithecanthropus Beds near Trinil. East Java'. Age of Pithecanthropus beds probably Middle Diluvium (=M Pleistocene). Interprets rel. massive, volcanics-rich Pleistocene hominid-bearing Trinil sands as lahar-style mudflow deposits from Lawu volcano*)

Von Koenigswald, G.H.R. (1933)- Beitrag zur Kenntnis der fossilen Wirbeltiere Javas I. *Wetenschappelijke Mededeelingen Dienst Mijnbouw Nederlandsch-Indie* 23, p. 1-127.
(*'Contribution to the knowledge of the fossil vertebrate faunas of Java, part 1'. Studies of Pleistocene vertebrate faunas of Java, mainly collected during geological survey Java mapping*)

Von Koenigswald, G.H.R. (1933)- Ein neuer Urmensch aus dem Diluvium Javas. *Centralblatt Mineralogie Geologie Palaont.* 1933, B, 1, p. 29-42.
(*'On new Pleistocene hominid Homo (Javanthropus) soloensis, discovered recently by Oppenoorth*)

Von Koenigswald, G.H.R. (1934)- Zur Stratigraphie des javanischen Pleistocan. *De Ingenieur in Nederlandsch-Indie (IV)* 1, 11, p. 185-201.
(*'On the stratigraphy of the Pleistocene of Java'. On characteristics and stratigraphic position of Pleistocene Djetis, Trinil, Ngandong mammal faunas*)

Von Koenigswald, G.H.R. (1934)- Die Spezialisierung des Incisivengebisses bei den javanischen Hippopotamidae. *Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam*, 37, 9, p. 653-659.
(*online at: www.dwc.knaw.nl/DL/publications/PU00016621.pdf*)
(*'The specialization of the incisors of Javanese Hippopotamidae'. Several species of Pleistocene hippopotamids with reduced incisor teeth*)

Von Koenigswald, G.H.R. (1935)- Die fossilen Säugetierfaunen Javas. *Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam*, 38, 2, p. 188-198.
(*online at: www.dwc.knaw.nl/DL/publications/PU00016677.pdf*)
(*'The fossil mammal faunas of Java'. Pliocene-Pleistocene mammals grouped into 7 faunas, from young to old: 1. Sampoeng, 2. Ngandong, 3. Trinil, 4. Djetis/ Jetis, 5. Kali Glagah (Late Pliocene), 6. Tji Djoelang (S of Cirebon; M Pliocene; with anthracotheriid Merycopotamus) and 7. Tji Sande (3 km NW of Loerahgoeng; S of Cirebon; with *Aceratherium boschi rhinoceros molar*= latest Miocene- earliest Pliocene and oldest mammal fossil from Java). No figures*)

Von Koenigswald, G.H.R. (1935)- Bemerkungen zur fossilen Saugetierfauna Javas, I. Über das Vorkommen von *Nestotherium* und *Hyaena* in der Djetis-Fauna Mittel-Javas. De Ingenieur in Nederlandsch- Indie (IV), 2, 7, p. 67-70.

(Remarks on the fossil mammal faunas of Java, I'. On the occurrence of Nestoritherium and Hyena in Jetis fauna of Sangiran, C Java)

Von Koenigswald, G.H.R. (1935)- Bemerkungen zur fossilen Saugetierfauna Javas, II. Eine Djetis-Fauna aus den Tambakan-Schichten der Gegend von Soeband, West-Java. De Ingenieur in Nederlandsch-Indie (IV), 2, 10, p. 85-88.

(Remarks on the fossil mammal faunas of Java, II'. On a Jetis fauna from the Tambakan beds SE of Subang, C. Java, collected by Harloff)

Von Koenigswald, G.H.R. (1935)- Over enkele fossiele zoogdieren van Java. Tijdschrift Kon. Nederlands Aardrijkskundig Genootschap, 2, 52, 4, p. 539-543.

(On some fossil mammals of Java'. Popular review of skeletons of mammals from Java in various museums)

Von Koenigswald, G.H.R. (1935)- Das Neolithicum der Umgebung von Bandoeng. Tijdschrift Indische Taal-, Land- en Volkenkunde 75, p. 394-419.

(The Neolithic in the area of Bandung')

Von Koenigswald, G.H.R. (1936)- Ein fossiler Hominide aus dem Altpleistocan Ostjavas. De Ingenieur in Nederlandsch-Indie IV, 3, 8, p. 149-157.

(A fossil hominid from the Early Pleistocene of East Java'. Small hominid skull from Upper Pucangan beds near Mojokerto area, named Homo modjokertensis)

Von Koenigswald, G.H.R. (1936)- Erste Mitteilung über einen fossilen Hominiden aus dem Altpleistocan Ostjavas. Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam, 39, 8, p. 1000-1009.

(online at: www.dwc.knaw.nl/DL/publications/PU00016947.pdf)

(First communication on a fossil hominid from the Early Pleistocene of East Java'. Same paper as above on discovery of child skull in U Pucangan beds at N flank Kedung-Waru anticline near Mojokerto, named Homo modjokertensis)

Von Koenigswald, G.H.R. (1936)- Early Palaeolithic stone implements from Java. Bull. Raffles Museum, Singapore, B1, p. 52-60.

(Discoveries of small stone flake tools in fluvial M Pleistocene Kabuh Fm deposits of Ngebung Hills, NW Sangiran Dome, presumably made by Pithecanthropus. Also Paleolithic stone implements from Solo River High Terrace gravels at Ngandong, C Java. 'Early Acheulian' lithic tools from Baksoka River Valley near Pacitan)

Von Koenigswald, G.H.R. (1937)- Ein Unterkieferfragment des *Pithecanthropus* aus den Trinilschichten Mitteljvas. Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam, 40, 10, p. 883-893.

(online at: www.dwc.knaw.nl/DL/publications/PU00017126.pdf)

(On new lower jaw fragment of Pithecanthropus from Trinil Beds at Sangiran Dome, C Java)

Von Koenigswald, G.H.R. (1938)- Ein neuer *Pithecanthropus* Schadel. Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam 41, 2, p. 185-192.

(online at: www.dwc.knaw.nl/DL/publications/PU00017154.pdf)

(A new Pithecanthropus skull'. New hominid skull from basal Trinil Beds at Sangiran Dome, C. Java)

Von Koenigswald, G.H.R. (1938)- Nieuwe *Pithecanthropus*-vondsten uit Midden-Java. Natuurkundig Tijdschrift Nederlandsch-Indie 98, p. 195-207.

(New Pithecanthropus finds from Central Java'. Review of known hominid fossils from Java)

- Von Koenigswald, G.H.R. (1939)- Das Pleistozan Javas. In: R. Grahmann & L.F. Zotz (eds.) Quartar- Jahrbuch Erforschung des Eiszeitalters u. seiner Kulturen, De Gruyter, Berlin, 2, p. 26-53.
(online at: www.quartaer.eu/pdfs/1939/1939_03_koenigswald.pdf)
(*'The Pleistocene of Java'. Overview of Java Pleistocene stratigraphy and vertebrate/ hominid finds, including 'Punung Fauna not described elsewhere'*)
- Von Koenigswald, G.H.R. (1940)- Neue *Pithecanthropus*-Funde 1936-1938, ein Beitrag zur Kenntnis der Praehominiden. Wetenschappelijke Mededeelingen Dienst Mijnbouw Nederlandsch-Indie 28, p. 1-233.
(*'New Pithecanthropus finds 1936-1938; a contribution to the knowledge of the pre-hominids'*)
- Von Koenigswald, G.H.R. (1949)- The fossil hominids of Java. In: R.W. van Bemmelen, The geology of Indonesia and adjacent archipelagos, Nijhoff, The Hague, 1, p. 106-107.
- Von Koenigswald, G.H.R. (1949)- Vertebrate stratigraphy of the Neogene and Quaternary. In: R.W. van Bemmelen, The geology of Indonesia and adjacent archipelagos, Nijhoff, The Hague, 1, p. 91-94.
- Von Koenigswald, G.H.R. (1950)- Ein Elephant der planifrons Gruppe aus dem Pliocaen West-Javas. Eclogae Geol. Helvetiae 43, 2, p. 268-274.
(online at: <https://www.e-periodica.ch/digbib/view?pid=egh-001:1950:43#322>)
(*'An elephant of the planifrons group from the Pliocene of W Java'. Late Pliocene elephant teeth Kali Glagah Fm beds in 'Tji Djulang' (Tji Djoelang, Cijulang) river, collected in 1935, in Bumiayu area, S of Tegal. Rel. small and more primitive representative of 'A. planifrons' group from India, described as Archidiskodon praeplanifrons n. sp. Associated with Pliocene 'Cheribonian' mollusc assemblage*)
- Von Koenigswald, G.H.R. (1952)- Fossil Sirenians from Java. Proc. Kon. Nederl. Akademie Wetenschappen B 55, p. 610-613.
(*On fossil sea cows ('dugong') from Java, incl. molar of new species Indosiren javanense from U Miocene at Tji Paringan, Nyalindung, W Java. Also Eocene rib from U Eocene of Nanggulan?*)
- Von Koenigswald, G.H.R. (1952)- Evidence of a prehistoric Australo-melanesoid population in Malaya and Indonesia. Southwestern J. of Anthropology 8, 1, p. 92-96.
(*Comment on Hooijer (1950) paper of same title, who suggested presence of big-teeth people resembling Australian aboriginals and Melanesians may once lived in Malaya-Indonesian region (VonK disputes this)*)
- Von Koenigswald, G.H.R. (1954)- Fossil hominids from Java. Indonesian J. Natural Science (Majalah Ilmu Alam untuk Indonesia) 110, p. 194-199.
(*Listing of known hominid discoveries on Java, reprinted from Catalog of hominid fossils published at 19th Int. Geological Congress, Alger 1952. Localities include Kedung Brubus, Mojokerto, Ngandong, Sonde, Trinil and Wajak*)
- Von Koenigswald, G.H.R. (1956)- Remarks on the correlation of mammalian faunas of Java and India and the Plio-Pleistocene boundary. Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam, B 59, p. 204-210.
- Von Koenigswald, G.H.R. (1956)- The geological age of Wadjak man from Java. Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam, B 59, p. 455-457.
- Von Koenigswald, G.H.R. (1956)- Der Solo-Mensch von Java: ein tropischer Neanderthaler. In G.H.R. Von Koenigswald (ed.) Hundert Jahre Neanderthaler, Bohlau, Koln, p. 21-26.
(*'Solo Man from Java: a tropical Neanderthaler'*)
- Von Koenigswald, G.H.R. (1956)- Meeting prehistoric man. Thames and Hudson, London, p. 1-208.
(*Popular book on discovery of early hominids, particularly on Java*)

- Von Koenigswald, G.H.R. (1956)- Fossil mammals from the Philippines. In: Proc. 4th Far-Eastern Prehistoric Congress, Natl. Research Council Philippines, Quezon City, 1, Paper 22, p. 339-369.
(online at: www.rhinosourcecenter.com/pdf_files/124/1248937364.pdf)
(Mainly description of material collected by O. Beyer. With first descriptions of *Rhinoceros philippinensis*, *Stegodon luzonensis*, *Elephas beyeri*. Also present *Stegodon cf. trigonocephalus*, *S. mindanensis*, etc.. Incl. probable M Pleistocene association of *Stegodon*, pre-Neolithic stone implements and tektites on Luzon, off Manila- Ipo road)
- Von Koenigswald, G.H.R. (1959)- A mastodon and other fossil mammals from Thailand. Rept. Invest. No. 2, Royal Dept. Mines, Bangkok, p. 25-34.
- Von Koenigswald, G.H.R. (1962)- Das absolute Alter des *Pithecanthropus erectus* Dubois. In: G.Kurth (ed.) Evolution und hominisation (Festschrift G. Heberer), Fischer, Stuttgart, p. 112-119.
(*'The absolute age of Pithecanthropus erectus Dubois'*)
- Von Koenigswald, G.H.R. (1963)- Fossil pygmy Suidae from Java and China. Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam, B 66, p. 192-197.
- Von Koenigswald, G.H.R. (1964)- Potassium-Argon dates and early man: Trinil. Repts. 6th. Int. Congress Quaternary, Warsaw 1961, 4, p. 325-327.
- Von Koenigswald, G.H.R. (1968)- Observations upon two *Pithecanthropus* mandibles from Sangiran, Central Java. Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam, B 71, 2, p. 99-107.
- Von Koenigswald, G.H.R. (1968)- The real date of Java Man. In: G. Kurth (ed.) Evolution und hominisation, 2nd ed., G. Fischer, Stuttgart, p. 117-125.
(Incl. 710,000 yr radiometric age of tektites from hominid-bearing Trinil Beds (Kabuh Fm) in Sangiran, C Java)
- Von Koenigswald, G.H.R. (1974)- Fossil mammals of Java. VI, Machairodontinae from the Lower Pleistocene of Java. Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam, B 77, p. 267-273.
(Description of jaw and teeth of two genera of Pleistocene sabre tooth cat from Jetis Fauna, Sangiran, C. Java)
- Von Koenigswald, G.H.R. (1975)- Early Man in Java: catalogue and problems. In: R.H. Tuttle (ed.) Paleanthropology, Mouton Publ., The Hague, p. 303-309.
(Ngandong fauna with *Homo soloensis* ('Solo Man') is Java representative of Neanderthal Man. Associated with bird fossils suggesting colder climate than today, and water buffaloes with horn spreads >2m, indicating more open country, not typical rainforest conditions. Advanced bone culture and completely rounded stone balls also point to younger hominid population than Sangiran/ Trinil *Homo erectus*)
- Von Koenigswald, G.H.R. (1976)- Climatic changes in Java and Sumatra during the Upper Pleistocene. Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam, 79, p. 232-234.
(Mammal fauna of U Pleistocene of Java (Ngandong) not typical of tropical forest, but more open country. Also crane birds on Java and mountain goat on Sumatra suggest 6-9° C temperature drop during last glaciation)
- Von Koenigswald, G.H.R. (1976)- Evolution of man. University of Michigan Press, Ann Arbor, Revised edition, p. 1-158.
- Von Koenigswald, G.H.R. (1976)- The importance of Java for the early history of man. J. Medical Sciences 8, 3, p. 87-90.
(Brief review of five different types of early hominids known from Java. Summary of lecture given after receiving Dr. h.c. degree from Gadjah Mada University, Yogyakarta. Oldest mammalian fossils on Java in West Java (Cijulang, Kali Glagah). Two main episodes of mammalian migration: (1) Sivamalayan migration, from India region; (2) Sinomalayan migration, from China region via Philippines, Kalimantan)

Von Koenigswald, G.H.R. (1978)- Selachia (Pisces) from the black clay of Sangiran, Central Java. Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam, B 81, 3, p. 364-369.

(Lower Pleistocene 'black clay' of Sangiran deposited in fresh water lake according to mollusc fauna. Presence of marine fish Pristiopsis cf P. microdon and Eulamia gangetica that can enter and live in fresh water indicates outlet of lake into open sea)

Von Koenigswald, G.H.R. (1978)- Lithic industries of *Pithecanthropus erectus* of Java. In: F. Ikawa-Smith (ed.) Early Palaeolithic in South and East Asia, Mouton Publ., The Hague, p. 23-27.

(Sangiran area of C Java yielded five skulls of Pithecanthropus erectus since 1937, with average K-Ar ages of 830,000 years. Stone implements known from M Pleistocene fluviatile part of Sangiran section (most not found in-situ). Flakes rarely larger than 5-6 cm)

Von Koenigswald, G.H.R. & A.K. Ghosh (1973)- Stone implements from the Trinil Beds of Sangiran, Central Java. Proc. Kon. Nederl. Akademie Wetenschappen, Amsterdam, B76, 1, p. 1-34.

(Crude stone tools from Trinil Beds at Sangiran believed to be of human origin (Pithecanthropus erectus; first discovered by vK in 1936, but these finds were initially dismissed until similar tools of similar age found in Flores in 1970 and 1990's; JTvG))

Von Koenigswald, G.H.R. & F. Weidenreich (1938)- Discovery of an additional *Pithecanthropus* skull. Nature 142, 3598, p. 715.

(Discovery of almost complete brain case of Pithecanthropus in 1937, in Trinil Fm of Sangiran, C Java)

Vu The Long, J. de Vos & R.L. Ciochon (1996)- The fossil mammal fauna of the Lang Trang Caves, Vietnam, compared with Southeast Asian fossil and recent mammal faunas: the geographical implications. Indo-Pacific Prehistory Assoc. Bull. 14, p. 101-109.

(Pleistocene Stegodon fauna from Lang Trang caves, 120 km SW of Hanoi, Vietnam, and comparison to similar faunas in S China, Indonesia and Malaysia. Similar to Late Pleistocene cave faunas from Padang (Sumatra), Punung (Java) and Niah (Sarawak))

Wang, W., C.J. Bae, S. Huang, X. Huang, F. Tian, J. Mo, Z. Huang, C. Huang, S. Xief & D. Li (2014)- Middle Pleistocene bifaces from Fengshudao (Bose Basin, Guangxi, China). J. Human Evolution 69, p. 110-122.

(Paleolithic handaxes dated at 803 ka based on association of Australasian tektites. Tektites all from between mottled sandy red clay in upper Terrace 4 at 185.95-187.06m asl. Tektites fresh, with sharp edges do not look redeposited (but in-situ nature of tektites questioned by Langbroek 2015))

Wang, W. & C.J. Bae (2015)- How old are the Bose (Baise) Basin (Guangxi, southern China) bifaces? The Australasian tektites question revisited. J. Human Evolution 80, p. 171-174.

(Disagree with Langbroek (2015) comments on Wang et al. (2014). The 275 tektites from stone artifact-bearing laterite of upper Terrace 4 show no signs of abrasion and are in-situ, while tektites from younger gravel bed in T3 do show rounding)

Wang, W., S.J. Lycett, N. von Cramon-Taubadel, J.J.H. Jin & C.J. Bae (2012)- Comparison of handaxes from Bose Basin (China) and the Western Acheulean indicates convergence of form, not cognitive differences. PlosOne 7, 4, e35804, p. 1-7.

(In Bose Basin stone artefacts, including handaxes, limited to middle and upper units of 4th terrace, associated with tektites dated by 40AR/39AR to 803 ± 3 ka old and also limited to 4th terrace. Rel. relatively high levels of shape variability in Bose handaxes)

Wang, W., J.Y. Mo & Z.T. Huang (2008)- Recent discovery of handaxes associated with tektites in the Nanbanshan locality of the Damei site, Bose basin, Guangxi, South China. Chinese Science Bull. 53, 6, p. 878-883.

(176 stone artifacts in laterized sediments of top of Terrace 4 of Youjiang River at Nanbanshan, Bose basin, S China. Two handaxes associated with 155 fresh, unabraded and sharp-edged tektite pieces (average length 29

mm) in 60cm thick horizon, suggesting tektites buried immediately after airfall event, and artifacts and tektites deposited simultaneously 803 ka. More stone artifacts unearthed above tektite layer, indicating early humans survived event)

Wang, W., R. Potts, B.Y. Yuan, W.W. Huang, C. Hai, R.L. Edwards & P. Ditchfield (2007)- Sequence of mammalian fossils, including hominid teeth, from the Bubing Basin caves, south China. *J. Human Evolution* 52, 4, p. 370-379.

Watanabe, N. & D. Kadar (eds.) (1985)- Quaternary geology of the hominid fossil bearing formations in Java. *Geol. Res. Dev. Centre (GRDC), Bandung, Spec. Publ. 4*, p. 1-378.
(*Extensive report of multi-year Indonesian- Japanese Research Project 1976-1979, mainly on Pleistocene of Sangiran area, C Java. Project did not find new hominid fossils, but good documentation of Sangiran stratigraphy, faunas, radiometric and paleomagnetic studies, etc.*)

Weesie, P.D.M. (1982)- The fossil bird remains in the Dubois collection. *Modern Quaternary Research in Southeast Asia* 7, Balkema, Rotterdam, p. 87-90.
(*Pleistocene bird fossils from Trinil, C Java, incl. Branta, Ephippiorhynchus, Leptoptilos, Pavo, Tadorna. Assemblage include species now restricted to more northern regions, suggests cooler climate than present-day during deposition of Trinil beds*)

Weidenreich, F. (1942)- Early man in Indonesia. *The Far Eastern Quarterly* 2, 1, p. 58-65.
(*Early review of Pleistocene hominids in Indonesia*)

Weidenreich, F. (1945)- The puzzle of *Pithecanthropus*. In: P. Honig & F. Verdoorn (eds.) *Science and scientists in the Netherlands Indies, Board for the Netherlands Indies, Surinam and Curacao*, New York, p. 380-390.

Weidenreich, F. (1945)- Giant early man from Java and South China. *American Museum Natural History Anthropological Papers* 40, 1, p. 5-134.

Weidenreich, F. (1951)- Morphology of Solo man. *Anthropological Papers American Museum Natural History* 43, 3, p. 203-288.
(*online at: <http://digitallibrary.amnh.org/handle/2246/297>*)
(*Description of 11 skulls of Homo soloensis, collected between 1931 and 1941 from Late Pleistocene Solo river 20m terrace at Ngandong, left bank of Solo River, 6 miles N of Ngawi, C Java. Associated with rich mammalian fauna (Sus terhaari, Cervus javanicus) and possible bone tools and stone balls. Hominins believed to be younger than those from other parts of Java (Sangiran, Mojokerto, Trinil). Remarkable absence of other hominin body parts. With introduction by Von Koenigswald on geology and associated fauna (NB: unfinished study due to Weidenreich's death in 1948; see also Santa Luca 1980)*)

Westaway, K.E. (2002)- Preliminary observations on the taphonomic processes at Ngandong and some implications for a late *Homo erectus* survivor model. *Tempus* 7, p. 189-193.
(*At Late Pleistocene Ngandong site different taphonomic alterations between human and non-human skeletal elements. Homo erectus remains may be older than many non-hominin fossils*)

Westaway, K.E. (2006)- Reconstructing the Quaternary landscape evolution of Western Flores: an environmental and chronological context for an archaeological site. Ph.D. Thesis University of Wollongong, p. 1-411.
(*online at: <http://ro.uow.edu.au/theses/562/>*)
(*Age range for occupation of Liang Bua cave by Homo floresiensis 95-11 ka, most intensive phases of occupation 74-61 and 17-11 ka, depositional age of holotype skeleton 36-14 ka, and age of oldest human skeletal remains found on Flores 95-74 ka*)

Westaway, K.E. & C.P. Groves (2009)- The mark of ancient Java is on none of them. *Archaeology in Oceania* 44, 2, p. 84-95.

(Suggested links between Javanese E Pleistocene Homo erectus and Australian Late Pleistocene Homo sapiens crania (Thorne, etc.) questionable. Hybridization of two species unlikely: no chronological overlap and phylogenetic analysis indicate no close genetic relationship between Ngandong-like population from Java and late Pleistocene Australian fossils from Willandra Lakes)

Westaway, K.E., J.M. Morwood, R.G. Roberts, A.D. Rokus, J.X. Zhao, P. Storm, F. Aziz, G. van den Bergh, P. Hadi, Jatmiko & J. de Vos (2007)- Age and biostratigraphic significance of the Punung rainforest fauna, East Java, Indonesia, and implications for *Pongo* and *Homo*. *J. Human Evolution* 53, p. 709-717.

(Punung Fauna of Java represents faunal turnover when Stegodon and other archaic mammal species were replaced by modern fauna, including rainforest-dependent species such as Pongo pygmaeus (orangutan). Dated as early Last Interglacial age (between 128±15 and 118±3 ka))

Westaway, K.E., M.J. Morwood, R.G. Roberts, J.X. Zhao, T. Sutikna et al. (2007)- Establishing the time of initial human occupation of Liang Bua, western Flores, Indonesia. In: R. Grun & R.G. Roberts (eds.) LED 2005, 11th Int. Conf. Luminescence and electron spin resonance dating, *Quaternary Geochron.* 2, p. 337-343.

Westaway, K.E., M.J. Morwood, T. Sutikna, M.W. Moore, A.D. Rokus, G.D. van den Bergh, R.G. Roberts & E.W. Saptomo (2009)- *Homo floresiensis* and the late Pleistocene environments of eastern Indonesia: defining the nature of the relationship. *Quaternary Science Reviews* 28, p. 2897-2912.

(Occupation deposits in Liang Bua limestone cave on Flores span ~95 kyrs and contain abundant stone artefacts, well preserved faunal remains and evidence for endemic hominin Homo floresiensis. H. floresiensis endured rapidly fluctuating environmental conditions over last ~100 ka. Peaks in occupation at 100-95, 74-61 and 18-17 ka correlate with episodes of channel formation and erosion in cave, which in turn correspond with high rainfall, thick soils and high bio-productivity outside)

Westaway, K.E., J.X. Zhao, R.G. Roberts, A.R. Chivas, M.J. Morwood & T. Sutikna (2007)- Initial speleothem results from western Flores and eastern Java, Indonesia: were climate changes from 47 to 5 ka responsible for the extinction of *Homo floresiensis*? *J. Quaternary Science* 22, 5, p. 429-438.

(O and C isotopic shifts in stalagmites from W Flores and E Java suggest rapid increase in rainfall around 13 ka or 17–16.5 ka, and may be related to abrupt disappearance of Stegodon and Homo floresiensis in W Flores)

Westaway, M.C., A.C. Durband, C.P. Groves & M. Collard (2015)- Mandibular evidence supports *Homo floresiensis* as a distinct species. *Proc. National Academy Sciences USA* 112, 7, p. E604-E605.

(online at: www.pnas.org/content/112/7/E604.full.pdf)

(Mandibular characteristics of Homo floresiensis from Liang Bua, Flores, close to early hominins, and not pathological H. sapiens as suggested in Henneberg et al. and Eckhardt et al. 2014 papers)

Westaway, M.C., A. Durband & D. Lambert (2015)- Human evolution in Sunda and Sahul and the continuing contributions of Professor Colin Groves. In: A.M. Berle & M.F. Oxenham (eds.) *Taxonomic tapestries: the threads of evolutionary, behavioural and conservation research*, ANU Press, p. 249-276.

(online at: www.jstor.org/stable/pdf/j.ctt169wd9c.16.pdf)

(‘Late’ Homo erectus from sites like Ngandong/ Sambungmacan/ Ngawi, Java, often viewed as advanced H. erectus or sometimes as ‘archaic’ H. sapiens, but may be separate species Homo soloensis. Etc.)

Weston, E.M. & A.M. Lister (2009)- Insular dwarfism in hippos and a model for brain size reduction in *Homo floresiensis*. *Nature* 459, 7243, p. 85-88.

Wetmore, A. (1940)- Avian remains from the Pleistocene of Central Java. *J. Paleontology* 14, p. 447-450.

(Pleistocene bird remains from Ngandong Terrace of Solo River at Watoealang, 5km W of Ngawi, incl. Leptoptilos titan (marabou stork) and humerus of crane (Grus grus), indicating rel. cool temperatures in U Pleistocene (cranes today not found S of China))

Wibowo, U.P., E. Setiyabudi & I. Kurniawan (2018)- A *Stegodon* mandible from Cipanaruban, Subang, West Java; description and its position in the Java vertebrate biostratigraphy. *J. Geologi Sumberdaya Mineral* 19, 1, p. 9-14.

(online at: <http://jgsm.geologi.esdm.go.id/index.php/JGSM/article/view/126/333>)

(Mandible of *Stegodon trigonocephalus* at Cipanaruban River near Pasir Cabe paleontological site (Von Koenigswald 1935), ~6 km E of Subang. Presumably part of Cisaat Fauna, E Pleistocene)

Wibowo, U.P., E. Setiyabudi, I. Kurniawan & H. Insani (2015)- Indonesian Archipelago paleogeography as the natural laboratory of the Proboscidean migration and adaptation pattern. *Proc. Joint Conv. HAGI-IAGI-IAFMI-IATMI*, Balikpapan, JCB2015-355, 4p.

(History of migration elephantoids (*Sinomastodon*, *Stegoloxodon*, *Stegodon*, *Elephas*) in Pleistocene- Holocene in Indonesian Archipelago)

Wibowo, U.P., I.Y.P. Suharyogi & E. Setiyabudi (2017)- The enigma of the existence of vertebrate fossils in the Flores Island. *Proc. Joint Conv. HAGI-IAGI-IAFMI-IATMI*, Malang 2017, 3p. (Extended Abstract)

(Fossil analyses indicate Pleistocene vertebrate faunas on Flores fauna most likely from Java, not Sulawesi (characteristics of *Stegodon*, giant tortoise and hominids that look like descendants of *Homo erectus*)

Widianto, H. (1993)- Unite et diversite des hominides fossils de Java: presentation de restes humains fossils inedits. *Doct. Thesis, Museum Nat. Histoire Naturelle, Inst. Paleontologie Humaine, Paris*, p. 1-277.

(Unpublished)

Widianto H. (2001)- Searching for *Homo erectus* artifacts. In: E. Indriati (ed.) *A scientific life: papers in honor of Prof. Dr. T. Jacob*, Bigraf Publishing, Yogyakarta, p. 75-89.

Widianto, H. (2001)- The perspective on the evolution of Javanese *Homo erectus* based on morphological and stratigraphic characteristics. In: H.T. Simanjuntak et al. (eds.) *Proc. Int. Colloquium on Sangiran: man, culture and environment in Pleistocene times*, Solo 1998, p. 24-45.

Widianto, H. & D. Grimaud-Herve (2000)- Un nouveau crane humain fossile dans le dome de Sangiran (Java, Indonesie). *Comptes Rendus Academie Sciences, Paris, Ser. IIA*, 330, 12, p. 883-888.

(A recently discovered fossil human skull near Grogol Wetan village in Kabuh Fm of in Sangiran dome, Java'. New human remains from Kabuh Fm at Grogol Wetan, Sangiran dome, with morphological characters very similar to other hominids of same horizon. Part of homogeneous population of asiatic *Homo erectus*)

Widianto, H., D. Grimaud & S. Sartono (2001)- The evolutionary position of the Ngawi calvaria. *Bull. Indo-Pacific Prehistory Assoc.* 21, p. 162-169.

(online at: <https://journals.lib.washington.edu/index.php/BIPPA/article/view/11778/10407>)

(Ngawi 1 hominid skull originally described by Sartono 1991 from left bank Solo River near Selopuro, possibly derived from fluvial Pitu terraces, 5 km W of Ngawi. Probably member of Ngandong and Sambungmacan group of M-U Pleistocene *Homo erectus*)

Widianto, H., B. Toha & T. Simanjuntak (2001)- The discovery of stone implements in the Grenzbank: new insights into the chronology of the Sangiran flake industry. *Bull. Indo-Pacific Prehistory Assoc.* 21, p. 157-169.

(online at: <http://ejournal.anu.edu.au/index.php/bippa/article/view/273/263>)

(Sangiran flake industry stone tools made from chalcedony and silicified tuff found in situ in 'Grenzbank' layer between Kabuh and Pucangan Fms. Age at least 800,000 years ago)

Widianto, H. & V. Zeitoun (2003)- Morphological description, biometry and phylogenetic position of the skull of Ngawi 1 (East Java, Indonesia). *Int. J. Osteoarchaeology* 13, 6, p. 339-351.

(Rel. complete and well-preserved human skull of Ngawi 1, Solo River near Selopuro village (Sartono 1991) Morphologically closer to Ngandong-Sambungmacan (40,000 yrs) than to Trinil-Sangiran series. Question is whether skull belongs to subspecies of *H. sapiens*, or to *H. soloensis*. After local volcano-tectonic events at 71

ka and catastrophic events at 780 ka, first inhabitants of Java may have disappeared and Ngawi 1 may be new invader from Asia. Indonesian human group may have evolved at same time as Neandertals in Europe)

Widiasmoro (1998)- Late Tertiary- Early Quaternary magmatic arc and its relationship to the sedimentation processes in Sangiran, Central Java. In: H.T. Simanjuntak (ed.) Proc. Int. Colloquium on Sangiran: man, culture and environment in Pleistocene times, Solo 1998, Japan Found. and Nat. Res. Center Archaeology, Jakarta, p. 45-46.

Willemsen, G.F. (1986)- *Lutrogale palaeoleptonyx* (Dubois, 1908), a fossil otter from Java in the Dubois collection. Proc. Kon. Nederl. Akademie Wetenschappen B 89, 2, p. 195-200.
(*M Pleistocene otter fossil from fluvial deposits Kedung Brubus, C Java*)

Wolpoff, M.H. (1984)- Evolution in *Homo erectus*: the question of stasis. Paleobiology 10, 4, p. 389-406.
(*Analyses of Homo erectus fossils, incl. Indonesian material. Shows evolutionary changes in increased cranial capacity and mandibular and dental features. Late end of H. erectus range difficult to define, as evidenced by difficulty in agreeing on whether Ngandong (C Java) samples are H. erectus or H. soloensis or H. sapiens*)

Wolpoff, M.H., A.G. Thome, J. Jelinek & Y. Zhang (1984)- The case for sinking *Homo erectus*. 100 years of *Pithecanthropus* is enough! In: J.L. Franzen (ed) 100 years of *Pithecanthropus*, the *Homo erectus* problem. Courier Forschungsinst. Senckenberg, Frankfurt, 171, p. 341-361.
(*Homo erectus and Homo sapiens part of single evolving lineage in past two million years*)

Wurster, C.M. & M.I. Bird (2015)- Barriers and bridges: early human dispersals in equatorial SE Asia. In: J. Harff et al. (eds.) Geology and archaeology: submerged landscapes of the continental shelf, Geol. Soc., London, Spec. Publ. 411, p. 235-250.
(*Review of paleogeography of W Indonesian region during Last Glacial Period. Hominin fossil sites generally associated with areas of open vegetation. N-S savannah corridor probably existed on Sunda Shelf, facilitating rapid dispersal of early humans in SE Asia*)

Yabuki, H. & M. Shima (1981)- Fission track age and chemical composition of tektite from the remain of *Pithecanthropus erectus*. Scientific Papers Inst. Physical Chemical Research 75, 2, p. 102-104.
(*M Pleistocene age determination of tektite from Sangiran, C. Java*)

Yokoyama, Y., C. Falgueres, F. Semah, T. Jacob & R. Grun (2008)- Gamma-ray spectrometric dating of late *Homo erectus* skulls from Ngandong and Sambungmacan, Central Java, Indonesia. J. Human Evolution 55, p. 274-277.
(*Hominid fossils from Ngandong and Sambungmacan, C Java, Indonesia considered youngest representatives of Homo erectus (but much younger than and different from typical Sangiran H. erectus; JTvG). Dating of three skulls established minimum age of ~40 ka, with upper age limit ~60-70 ka. Homo erectus of Java possibly contemporaneous with earliest Homo sapiens in SE Asia*)

Yokoyama, T., S. Hadiwisastra, W. Hantoro, T. Matsuda & S. Nishimura (1980)- K-Ar age of the 'Lahar Tuff' lowest part of the Pucangan formation, Pleistocene of Sangiran, Central Java, Indonesia. J. Riset Geologi Pertambangan (LIPI) 3, 1, p. 1-7.
(*K-Ar age of 2.06 ± 0.6 Ma from andesite from 'Lahar Tuff' of base of Pucangan Fm in W Sangiran Dome. Layer has normal magnetic polarity, maybe correlated with Olduvai Event (1.67-1.87 Ma)*)

Yokoyama, T. & I. Koizumi (1989)- Marine transgressions on the Pleistocene Pecangan Formation in the Sangiran area, central Java, Indonesia. Palaeogeogr. Palaeoclim. Palaeoecology 72, p. 177-193.
(*Diatoms and electric conductivity suggest four marine transgressions in Pleistocene Pucangan Fm between 1.8- 0.73 Ma, reflecting glacial eustasy. First transgression at ~1.5 Ma*)

Yudha, D.S. (2008)- Reevaluation du crane Ngawi 1 (*Homo erectus*, Java, Indonesie), apports de l'imagerie 3D et des analyses multivariées. Master Thesis Quaternaire et Préhistoire, Museum Nat. Histoire Naturelle, Paris, p. 1-55.

(online at: http://hopsea.mnhn.fr/pc/thesis/M2_DONAN_S_Y.pdf)

('Reevaluation of the Ngawi 1 skull (*Homo erectus*, Java, Indonesia); 3D imaging and multivariate analyses'. M-L Pleistocene Ngawi 1 skull found in 1987 morphologically close to 'late *Homo erectus*' Ngandong and Sambungmacan hominids. Morphological characteristics of Ngawi skull not directly comparable to Chinese (*Sinanthropus*) and African *Homo erectus* (*H. ergaster*), but one African individual (*Olduvai 9*) fits well in Ngandong-Ngawi group)

Yuwono, J.S.E. (2009)- Late Pleistocene to Mid-Holocene coastal and inland interaction in the Gunung Sewu karst area, Yogyakarta. Bull. Indo-Pacific Prehistory Assoc. (IPPA) 29, p. 33-44.

(On Java Southern Mountains karst and prehistoric settlement)

Zaim, Y. (1981)- Revisi umur dan stratigrafi Formasi Pucangan di daerah Pening, Mojokerto, Jawa Timur. Proc. 10th Ann. Conv. Indon. Assoc. Geol. (IAGI), Bandung, p. 230-237.

('Revision of age and stratigraphy of the Pucangan Fm in the Pening area, Mojokerto, E Java'. Top Pucangan Fm below mammal-bearing Kabuh Fm with Late Pliocene *Globorotalia tosaensis* (N21))

Zaim, Y. (1989)- Les formations volcano-sédimentaires quaternaires de la région de Patiayam (Central Java, Indonesie). Milieu de sédimentation et minéralogie. Doct. Thesis Museum Nat. Histoire Naturelle, Université de Paris, p. 1-260. (Unpublished)

('The Quaternary 'volcano-sedimentary' formations of the Patiayam region (C Java, Indonesia); depositional environment and mineralogy')

Zaim, Y. (1996)- The age of Pitu Terrace of Watualang region, Ngawi (East Java), Indonesia. Buletin Geologi (ITB) 26, p. 31-36.

(Six Solo River terraces in area of Watualang (Ngawi). New vertebrate fossils in Pitu Terrace include *Buffalus bubalus* var *sondaicus* fossilis, suggesting age not older than Late Pleistocene, equivalent of Ngandong fauna).

Zaim, Y. (2004)- A new discovery of *Stegodon* in Early Pleistocene sediments from the Sumedang area (West Jawa, Indonesia). 18th. Int. Senckenberg Conf., Weimar 2004, 1p. (Abstract only)

(online at: www.senckenberg.de/fis/sngconf18/doc/abstracts/115_Zaim.pdf)

(Summary of Zaim 2002 paper. Dwarf *Stegodon* tooth from E Pleistocene of W Java, probably of *Satir* or *Ci Saat* fauna indicates E Pleistocene island in this part of W Java)

Zaim, Y. (2010)- Geological evidence for the earliest appearance of hominins in Indonesia. In: J.G. Fleagle et al. (eds.) Out of Africa 1, The first hominin colonization of Eurasia, Vertebrate Paleobiology and Paleoanthropology 2, Springer Science, p. 97-110.

(Until end Tertiary most Indonesian regions still in marine environment. Tectonics and glacioeustatic changes during Pleistocene formed Indonesian Archipelago. Sunda Land acted as land bridge and migration route for *Homo erectus* and vertebrate faunas from Asia mainland to Java. First arrival of vertebrate faunas from Asia to Indonesia through Sunda Land at end of Late Pliocene, followed by arrival of early hominin (*Homo erectus* paleojavanicus (= *Meganthropus paleojavanicus*)) to Java in Early Pleistocene (1.6-1.0 Ma))

Zaim, Y. & R. Ardan (1998)- A premolar of *Homo erectus* from Patiayam region, Central Java. Buletin Geologi (ITB) 28, p. 31-36.

(First lower permanent premolar of *Homo erectus*, in fluvial sandstones of E-M Pleistocene Slumprit Fm)

Zaim, Y., R.L. Ciochon, J. Polanski, F.E. Grine, E.A. Bettis, Y. Rizal, R. Larick, M. Heizler, Aswan et al. (2011)- New 1.5 million-year-old *Homo erectus* maxilla from Sangiran (Central Java, Indonesia). J. Human Evolution 61, 4, p. 363-376.

(online at: <https://pdfs.semanticscholar.org/50d0/b3d0046bb13698fa66f430d7e9799274640e.pdf>)

(New *H. erectus* left maxilla fragment from base Grenzbank Zone cemented gravelly sands at Bapang, Sangiran. Pumice hornblende 2m above locality with $40Ar/39Ar$ age of 1.51 Ma (ages interpreted here for Sangiran section older than most other workers and not in agreement with paleomag, tektites, etc.?; JTvG)

Zaim, Y. & M. Delaune (1990)- Nouvelles donnees sur la stratigraphie et le milieu de sedimentation des formations volcano-sedimentaires quaternaires de la region de Patiayam (Java- Indonesie). *Geodynamique* 5, 2, p. 135-150.

(*New data on the stratigraphy and depositional environment of the volcano-sedimentary formations of the Patiayam region (Java, Indonesia)*). *Shoshonitic volcanic activity of Patiayam Dome, S of Muria Volcano in N Java, initiated ~2 Ma ago. During Lower Pleistocene (0.9 Ma) still active and contemporaneous with beginning of activity at Muria 1)*

Zaim, Y., J. de Vos, O.F. Huffman, F. Aziz, J. Kappelman & Y. Rizal (2003)- A new antler specimen from the 1936 Perring hominid site, East Jawa, Indonesia, attributable to *Axis lydekkeri* (Martin, 1886). *Jurnal Teknologi Mineral, Bandung*, 10, 2, p. 45-52.

(*Nearly complete left antler, attributed to Axis lydekkeri, found in 2001 in excavation E of relocated site that produced Homo modjokertensis in 1936. Not reported previously from hominid-bearing bed*)

Zaim, Y., R. Larick, R.L. Ciochon, Suminto, Y. Rizal & Sujatmiko (1999)- Karakteristik satuan Lahar Bawah dari formasi Pucangan di Sangiran, Jawa Tengah. *Buletin Geologi. (ITB)* 31, p. 67-84.

(*Characteristics of the lower lahar unit in the Pucangan Fm in Sangiran*'. See also Bettis et al. 2004)

Zaim, Y. & R. Marino (2002)- Pygmy *Stegodon* dari Desa Cariang, Kecamatan Tomo, Kab. Sumedang, Jawa Barat. *Buletin Geologi (ITB)* 34, 1, p. 45-52.

(*Pygmy Stegodon from Cariang Village, Tomo District, Sumedang, West Java*'. *New species of small elephantoid Stegodon cariangensis in E Pleistocene lacustrine black clay in Majalengka, W Java (deposits unconformable above Late Pliocene marine clays of Kaliwangu Fm)*)

Zaim, Y., Y. Rizal & Aswan (2007)- The geological background of hominid colonization of Java. In: A.M. Semah & K. Setiagama (eds.) *Proc. Int. Conf. First islanders- human origins patrimony in Southeast Asia, AsiaLink-HOPSea Programme, Paris*, p. 92-98.

(*online at: <http://hopsea.mnhn.fr/pc/brochures/2007HOPseaFI.pdf>*)

?Zaim, Y., Y. Rizal, Suminto, A. Bettis, R.L. Ciochon & R. Larick (2002)- Vertebrate fossils from the Lower Lahar, Sangiran Formation, Central Java, Indonesia. *Buletin Geologi* ?

Zanolli, A. (2013)- Additional evidence for morpho-dimensional tooth crown variation in a new Indonesian *H. erectus* sample from the Sangiran Dome (Central Java). *PlosOne* 8, 7, e67233, p. 1-15.

(*online at: <http://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0067233&type=printable>*)
(*Fifteen new Homo erectus fossil dental remains found in last two decades in Kabuh Fm of Sangiran Dome area, some from excavation of human occupation floors in basal Kabuh Fm*)

Zanolli, A. (2014)- Molar crown inner structural organization in Javanese *Homo erectus*. *American J. Phys. Anthropology* 156, 1, p. 148-157.

(*Study of 7 Homo erectus permanent molar crowns from late E- early M Pleistocene Kabuh Fm of Sangiran, C Java. Features differ from penecontemporaneous African H. erectus/ergaster and H. heidelbergensis, as well as in Neanderthals, but occur in recent human populations*)

Zeitoun, V. (2000)- Revision de l'espece *Homo erectus* (Dubois, 1893). *Bull Memoires Soc. Anthropologie de Paris, N.S.*, 12, 1-2, p. 1-200.

(*Reappraisal of the species Homo erectus*'. *Mainly on details of skull morphology*)

Zeitoun, V., V. Barriel & H. Widiyanto (2016)- Phylogenetic analysis of the calvaria of *Homo floresiensis*. *Comptes Rendus Palevol* 15, 5, p. 555-568.

(online at: www.sciencedirect.com/science/article/pii/S1631068316000130)

(Metrics of calvariae of human fossils from Liang Bua, Flores, indicate LBI is included in *Homo erectus* clade, and less similar to Sambungmacan-Ngandong-Ngawi group. *H. floresiensis* not pathological modern human)

Zeitoun, V., W. Chinnawut, R. Debruyne & P. Auetrakulvit (2015)- Assessing the occurrence of *Stegodon* and *Elephas* in China and Southeast Asia during the Early Pleistocene. *Bull. Soc. Geologique France* 186, 6, p. 413-427.

(Critical review of validity of associations of *Stegodon* and *Elephas* in E Pleistocene of China and SE Asia)

Zeitoun, V., W. Chinnawut, R. Debruyne, S. Frere & P. Auetrakulvit (2016)- A sustainable review of the Middle Pleistocene benchmark sites including the *Ailuropoda-Stegodon* faunal complex: The Proboscidean point of view. *Quaternary Int.* 416, p. 12-26.

(Age and ecological significance of M Pleistocene *Ailuropoda-Stegodon* mammal assemblages still debated)

Zeitoun, V., F. Detroit, D. Grimaud-Herve & H. Widiyanto (2010)- Solo man in question: convergent views to split Indonesian *Homo erectus* in two categories. *Quaternary Int.* 223-224, p. 281-292.

(*Homo (Javanthropus) soloensis* Oppenoorth 1932 from Solo River bank terraces thought to belong to either archaic *Homo sapiens*, or (most paleoanthropologists) evolved *Homo erectus*. Chronological gap splits two categories, posing question of possibly two separate species. Catastrophic event around Brunhes/Matuyama geomagnetic reversal (Australasian tektite strewn field 770,000 or 803 ka) must have triggered shifting among Asian populations and environments. Toba eruption of 17 ka probably also had drastic global consequences on human ecology and evolution)

Zeitoun, V., H. Forestier & S. Nakbunlung (2008)- Prehistoires au sud du Triangle d'Or. IRD Editions, Paris, p. 1-252.

(online at: http://horizon.documentation.ird.fr/exl-doc/pleins_textes/divers16-07/010045202.pdf)

(Prehistory in the south of the Golden Triangle'. Prehistory/ archeology of N Thailand, with reviews of hominid and mammal occurrences in SE Asia)

Zeitoun, V., A. Lenoble, F. Laudet, J. Thompson, W.J. Rink & T.D. Asa (2008)- Taphonomy and paleoecological significance of the *Ailuropoda-Stegodon* complex of Ban Fa Suai (Northern Thailand). In: J.P. Pautreau et al. (eds.) 11th Int. Conf. Eurasea (EurASEAA 2006), Bougon 2006, Chiang Mai, p. 51-57.

(online at: <https://halshs.archives-ouvertes.fr/halshs-00423522/document>)

(Sino-malayan fauna of Von Koenigswald (1938), more commonly termed *Ailuropoda* (giant panda) - *Stegodon* fauna complex viewed as indicator of tropical upper M Pleistocene in SE Asia. Also contains primates *Gigantopithecus* and *Pongo*, *Sus*, *Bos*, *Cervus*, *Hylobates*, *Tapirus*, etc.. Cave of the Monk mixed assemblage?)

Zeitoun, V., H. Widiyanto & T. Djubiantono (2007)- The phylogeny of the Flores Man: the cladistic answer. In E. Indriati (ed.) Proc. Int. Seminar Southeast Asian paleoanthropology: Recent advances on Southeast Asian paleoanthropology and archaeology, Gadjah Mada University, Yogyakarta, p. 54-60.

Zhang, P., W. Huang & W. Wang (2010)- Acheulean handaxes from Fengshudao, Bose sites of South China. *Quaternary Int.* 223-224, p. 440-443.

(Acheulian lithic assemblage rich in handaxes from Fengshudao (Guangxi province, S China), adjacent to N Bose basin. Age from tektite dating ~800 ka. Artifacts manufactured from quartzite, sandstone, volcanic rocks, chert and quartz)

Zin-Maung-Maung-Thein, Thaug-Htike, T. Tsubamoto, M. Takai, N. Egi & Maung-Maung (2006)- Early Pleistocene Javan rhinoceros from the Irrawaddy Formation, Myanmar. *Asian Paleoprimateology* 4, p. 197-204

(online at: <http://repository.kulib.kyoto-u.ac.jp/dspace/handle/2433/199762>)

(*Rhinoceros sondaicus* (Java rhino) discovered in upper part of E Pleistocene Irrawaddy Fm. Species widespread in upper M Pleistocene- U Pleistocene of Laos, Vietnam, Cambodia, Thailand, Java, Sumatra, and Borneo, and probably originated in E Pleistocene in continental Asia)

Zin-Maung-Maung-Thein, M. Takai, T. Tsubamoto, Thaug-Htike, N. Egi & Maung-Maung (2008)- A new species of *Dicerorhinus* (Rhinocerotidae) from the Plio-Pleistocene of Myanmar. *Palaeontology* 51, 6, p. 1419-1433.

(online at: <http://onlinelibrary.wiley.com/doi/10.1111/j.1475-4983.2008.00813.x/epdf>)

(Skull and mandible of *Dicerorhinus gwebinensis* n.sp. from upper Irrawaddy sediments (Plio-Pleistocene) in C Myanmar. More similar to extant species *D. sumatrensis* (Sumatran rhinoceros) than to other species of genus)

Zin-Maung-Maung-Thein, M. Takai, T. Tsubamoto, N. Egi, Thaug-Htike, T. Nishimura, Maung-Maung & Zaw-Win (2010)- A review of fossil rhinoceroses from the Neogene of Myanmar with description of new specimens from the Irrawaddy sediments. *J. Asian Earth Sciences* 37, p. 154-165.

(8 species of fossil rhinoceros in Neogene of C Myanmar: M-L Miocene '*Diceratherium*' *naricum*, *Brachypotherium* spp., etc. Latest Miocene -Pleistocene onset of extant genera *Rhinoceros* and *Dicerorhinus*. Dispersed to island SE Asia from continental Asia during E-M Pleistocene periods of low eustatic sea level)

Zwierzycki, J. (1926)- De beteekenis van nieuwe fossiele werveldiervondsten bij Boemiajoe. *De Mijningenieur* 7, 12, p. 229-234.

(*The significance of new fossil mammal discoveries near Bumiayu*'. Localities in river valleys of Kali Glagah and Ci Saat, 'West Kendeng Zone', C Java. Ongoing excavations of mammal bones in several horizons in ~1200m thick series of coarse sandstones, conglomerates and clays with fresh-water molluscs. Fossil elephants (incl. *Stegodon*, *Elephas*), hippopotamus, etc., described by Stehlin (1925). Age believed to be Late Pliocene, possibly E Pleistocene like Trinil (lecture summary; no figures) (more Bumiayu locality info see Semah 1997))