

EVOLUSI STRATIGRAFI DAN PALEOGEOGRAFI
ENDAPAN PALEOGEN
DAERAH BUKIT GARBA DAN BUKIT TIGA PULUH
CEKUNGAN SUMATRA SELATAN

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S a r i

Selama Periode Paleogen, *Sundaland* diketahui merupakan suatu daratan. Berbeda dengan sedimen laut dan transisi, endapan darat lebih sukar diidentifikasi penyebaran dan umurnya. Bukit Garba (Palembang Utara-Selatan) dan Bukit Tiga Puluh (Tanjung Jabung Barat-Jambi Barat), Cekungan Sumatra Selatan dipilih sebagai obyek penelitian karena endapan darat Paleogen berkembang cukup baik dan dibatasi oleh batuan dasar pra-Paleogen dan sedimen laut Neogen. Pemetaan geologi permukaan dilakukan dengan mengambil 16 lintasan stratigrafi terukur, serta 350 sampel batuan untuk analisis petrografi, provenan dan palinologi.

Berdasarkan palinostratigrafi, di Bukit Garba telah ditemu-kenali Zona *Proxapertites operculatus-Meyeripollis naharkotensis* (Eosen-Oligosen), sedangkan di Bukit Tiga Puluh Zona *Meyeripollis naharkotensis* (Oligosen). Paleoiklim Palembang Utara (Formasi Kikim), dimulai dengan iklim dingin-kering dan luasan hutan kecil kemudian berubah menjadi lebih hangat (Oligosen). Di Palembang Selatan (Formasi Cawang) iklim lebih hangat dan berubah lebih dingin/kering pada Oligosen Akhir. Selama Oligosen, daerah Bukit Tiga Puluh (Formasi Lemat), pada mulanya beriklim panas-basah dan berubah menjadi iklim lebih dingin. Paleogeografi Formasi Kikim *alluvial fans-delta front*, sedangkan Formasi Cawang dan Lemat *alluvial plain-delta front*. Asal batuan Formasi Kikim adalah *continental block-plutonic provenance*, sedangkan Formasi Cawang dan Lemat *volcanic-plutonic provenance*. Secara keseluruhan evolusi stratigrafi berlangsung transgresif menerus, dan antar formasi berhubungan saling menjari.

Kata kunci: palinostratigrafi, paleoiklim, paleogeografi, evolusi stratigrafi.

EVOLUTIONARY STRATIGRAPHY AND PALEO GEOGRAPHY OF
PALEOGENE DEPOSITS
IN BUKIT GARBA AND BUKIT TIGA PULUH
SOUTH SUMATRA BASIN

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Abstract

During the Paleogene period, Sundaland was known as the mainland. In contrast to marine and transitional sediments, terrestrial sediments are more difficult to identify their distribution and age. Bukit Garba (North Palembang and South Palembang) and Bukit Tiga Puluh (Tanjung Jabung Barat and Jambi Barat), South Sumatra Basin were chosen as research objects because Paleogene land deposits are quite well developed and are bracketed by pre-Paleogene bedrock and Neogene marine sediments. Surface geological mapping was carried out by taking 16 measured stratigraphic sections, and 350 rock samples for petrographic, provenance and palinological analysis.

Based on palinostratigraphy, in Bukit Garba, the Zone of *Proxapertites operculatus-Meyeripollis naharkotensis* (Eocene-Oligocene) has been identified, while in Bukit Tiga Puluh, the Zone of *Meyeripollis naharkotensis* (Oligocene). The Paleoclimate of North Palembang (Kikim Formation), was began with a cold-dry climate and small forest area then changes to a warmer one (Oligocene). In South Palembang (Cawang Formation) the climate is warmer and turns colder/drier in the Late Oligocene. During the Oligocene, the Bukit Tiga Puluh (Lemat Formation) area was initially hot-wet and changed to a cooler climate. Paleogeography of the Kikim Formation was alluvial fans to delta front, while the Cawang and Lemat Formation were alluvial plain to delta front. The rock origin of the Kikim Formation was continental block-plutonic provenance, while the Cawang and Lemat Formation were volcanic-plutonic provenance. Overall stratigraphic evolution is continuous transgressive, and the formations are interfingering with each other.

Keywords: palinostratigraphy, paleoclimate, paleogeography, stratigraphic evolution