

## SARI

Penelitian fokus pada Formasi Halang atas di Sungai Cisanggarung, Kecamatan Luragung, Kabupaten Kuningan, Provinsi Jawa Barat yang secara Geografis terletak pada 108° 38'59.4" BT dan 7°01'11.2" LS. Tujuan penelitian untuk merekonstruksi zona biostratigrafi berdasarkan kandungan nannofossil dengan objek penelitian yang terdiri dari 40 sampel. Metode penelitian yang digunakan adalah observasi lapangan menggunakan metode *measured section* dan preparasi nannofossil menggunakan metode *smear slide* serta analisis data secara kualitatif dan kuantitatif. Litologi di lapisan umur paling tua yaitu batupasir dan memiliki struktur sedimen *graded bedding*. Litologi pada lapisan umur yang paling muda berupa batulempung karbonatan, dengan karakteristik struktur sedimen berupa *trace fossil*. Berdasarkan litologi dan struktur sedimen, daerah penelitian dapat diklasifikasikan terdapat pada lingkungan laut dalam atau turbidit klastik. Hasil observasi distribusi nannofossil menunjukkan terdapat 50 spesies dengan sembilan *datum marker* nannofossil yaitu FO *Sphenolithus heteromorphus* (NN5-NN6), FO *Catinaster calyculus* & *Catinaster coalithus* (NN7-NN8), FO *Discoaster hamatus* (NN8-NN9), LO *Catinaster calyculus* & *Catinaster coalithus* (NN9), LO *Discoaster hamatus* (NN9-NN10), FO *Amaurolithus* spp. (NN11) dan kemunculan akhir Top of small *Reticulofenestra* interval (NN11). Dari kemunculan *datum marker nannofossil* tersebut zona biostratigrafi Sungai Cisanggarung dapat dibagi menjadi tujuh zona yaitu: Zona NN5/CN4, Zona NN6/CN5a, Zona NN7/CN5b, Zona NN8/CN6, Zona NN9/CN7, Zona NN10/CN8, Zona NN11/CN9a dan CN9b. Berdasarkan kemunculan *datum marker* dan distribusi dari 50 spesies nannofossil yang telah dianalisis, penulis menyimpulkan Formasi Halang atas daerah penelitian diendapkan pada NN5-NN11 yaitu pada umur Miosen tengah hingga Miosen akhir. Perubahan *paleoenvironment* muka air laut dicirikan oleh kelimpahan *Discoaster* dan perubahan *size Reticulofenestra* pada NN9-NN10 sebagai peristiwa *stratification* menjadi *mixing*.

*Kata Kunci* : Sungai Cisanggarung, Biostratigrafi, Formasi Halang atas, Nannofossil, Datum marker, Miosen, Discoaster, Reticulofenestra

## **ABSTRACT**

*The research focuses on the Upper Halang Formation in the Cisanggarung River, Luragung District, Kuningan Regency, West Java Province which is geographically located at 108° 38'59.4" E and 7° 01'11.2" S. The research aimed to reconstruct biostratigraphic zones based on nannofossil content with 40 research objects. The research method used was field observation using the measured section method and nannofossil preparation using the smear slide method as well as qualitative and quantitative data analysis. The lithology in the oldest age layer is sandstone and has a graded bedding sedimentary structure. The lithology in the youngest age layer is carbonate claystone, with characteristic sedimentary structures in the form of trace fossils. Based on the lithology and sedimentary structure, the study area can be classified as deposited in a deep sea or clastic turbidite environment. Observations on the distribution of nannofossils showed that there were 50 species with nine datum markers of nannofossils, namely FO *Sphenolithus heteromorphus* (NN5-NN6), FO *Catinaster calyculus* & *Catinaster coalithus* (NN7-NN8), FO *Discoaster hamatus* (NN8-NN9), LO *Catinaster calyculus* & *Catinaster coalithus* (NN9), LO *Discoaster hamatus* (NN9-NN10), FO *Amaurolithus* spp. (NN11) and the final appearance of the Top of small *Reticulofenestra* interval (NN11). From the appearance of the nannofossil datum marker, the Cisanggarung River biostratigraphic zone can be divided into seven zones, namely: NN5/CN4 Zone, NN6/CN5a Zone, NN7/CN5b Zone, NN8/CN6 Zone, NN9/CN7 Zone, NN10/CN8 Zone, NN11/ CN9a and CN9b. Based on the appearance of datum markers and the distribution of the 50 nannofossil species that have been analyzed, the authors conclude that the Halang Formation in the study area was deposited in NN5-NN11, namely in the middle Miocene to late Miocene. Changes in the sea level paleoenvironment are characterized by the abundance of *Discoaster* and changes in the size of *Reticulofenestra* at NN9-NN10 as a stratification event into mixing.*

*Keywords: Cisanggarung River, Biostratigraphy, Upper Halang Formation, Nannofossil, Datum marker, Miocene, Discoaster, Reticulofenestra.*