

Studi endapan gambut dilakukan berdasar maseral yang berasal dari komponen tumbuhan, studi ini dipelajari dalam petrologi organik. Maseral dibagi menjadi tiga grup yaitu *vitrinite/huminite*, *inertinite*, dan *liptinite*. Penelitian ini bertujuan untuk mengetahui komponen tumbuhan penyusun tipe gambut dan mengetahui genesis *inertinite* di lokasi penelitian. Sampel gambut diambil dari lahan gambut di daerah Muara Siran, Kalimantan Timur yang berada diantara dua sungai yaitu Sungai Kedang Kepala dan Sungai Belayan. Sampel gambut yang diambil berjumlah 19 titik dan dilakukan analisis petrografi terhadap 49 sampel sayatan poles. Analisis yang dilakukan meliputi penentuan kelimpahan pre-maseral, kesebandingan arang dan kesebandingan jamur, dan penentuan genesis pre-maseral *inertinite* di lokasi penelitian. Pre-maseral terbagi menjadi tiga pre-maseral *inertinite* yaitu *oxidised tissue*, *inertodetrinite*, dan *sclerotinite*. Pre-maseral dengan kelimpahan tertinggi adalah *inertodetrinite* (54,46%) yang banyak tersebar pada tiap sampel sayatan poles dan pada tipe gambut *fibric*, *sapric*, maupun *hemic*. Tertinggi kedua yaitu *oxidised tissue* (37,44%) dan kelimpahan terendah adalah *sclerotinite* (8,10%). *Oxidised tissue* dijumpai banyak menyusun *woody sapric* dan *hemic*. Kelimpahan *sclerotinite* yang rendah menunjukkan rendahnya tumbuhan jamur yang menyusun gambut di daerah penelitian. Hal ini berbeda dari hasil penelitian terdahulu yang menjumpai *sclerotinite* sebagai maseral grup *inertinite* dengan kelimpahan terbanyak di lahan gambut tropis Sungai Baram, Serawak, Malaysia. Temuan yang berbeda ini mendukung hasil studi pustaka bahwa lahan gambut di lokasi penelitian telah mengalami beberapa kali peristiwa kebakaran yang ditandai dengan lebih dominannya *oxidised tissue* sebagai pre-maseral *inertinite*.

Kata kunci: pre-maseral, *inertinite*, gambut tropis, genesis, kesebandingan

The study of peat deposits was carried out based on maceral derived from plant components, this topic was studied in organic petrology. Macerals are divided into three groups, it is vitrinite/huminite, inertinite, and liptinite. This study aims to determine the components of peat-type plants and to determine the genesis of inertinite in the research area. Peat samples were taken from a peatland in the Muara Siran area, East Kalimantan which is located between two rivers, namely the Kedang Kepala River and the Belayan River. The peat samples taken were 19 points and petrographic analysis was carried out on 49 samples of polishing incisions. The analyzes carried out included determining the abundance of pre-maceral, the ratio of charcoal and the ratio of fungi, and determining the genesis of inertinite pre-maceral at the study site. Pre-maceral is divided into three inertinite pre-macerals namely oxidized tissue, inertodetrinite, and sclerotinite. The pre-maceral with the highest abundance was inertodetrinite (54.46%) which was widely distributed in each polished incision sample and on fibric, sapric, and hemic peat types. The second highest was oxidized tissue (37.44%) and the lowest abundance was sclerotinite (8.10%). Oxidised tissue is found in many woody sapric and hemic compositions. The low abundance of sclerotinite indicates the low number of fungal plants that make up the peat in the study area. This is different from the results of previous studies which found sclerotinite as an inertinite group maceral with the highest abundance in the tropical peatlands of Sungai Baram, Sarawak, Malaysia. These different findings support the results of the literature study that the peatlands in the research location have experienced several fires which are characterized by the dominance of oxidized tissue as pre-maceral inertinite.

Keywords: pre-maceral, inertinite, tropical peat, genesis, comparability