KERAGAMAN POLEN DAN SPORA DI SEDIMEN SUNGAI KAYANGAN DAN KALISONGGO, KULON PROGO, DAERAH ISTIMEWA YOGYAKARTA

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INTISARI

Polen merupakan gametofit jantan pada tumbuhan Gymnospermae dan Angiospermae, sedangkan spora dihasilkan oleh tumbuhan non vaskuler seperti alga, jamur, lumut serta tumbuhan vaskuler tingkat rendah yaitu paku-pakuan. Polen dan spora dapat digunakan sebagai salah satu cara inventarisasi keragaman flora dengan dilakukannya identifikasi morfologi polen dan spora yang ditemukan dalam sedimen. Penelitian ini dilakukan dengan tujuan untuk mengetahui keragaman polen dan spora pada sedimen di Sungai Kayangan dan Kalisonggo, Kulon Progo. Penelitian ini dilakukan dalam tiga tahap, yaitu penelitian di lapangan untuk mendapatkan sampel sedimen, preparasi sampel dengan metode asetolisis, dan pengamatan serta identifikasi polen dan spora. Pada Sungai Kayangan didapatkan keragaman polen dan spora yang lebih tinggi dibandingkan Kalisonggo. Sebanyak 35 jenis polen dan spora ditemukan di hulu dan 77 jenis di bagian hilir Sungai Kayangan. Polen dengan keragaman tertinggi dari hulu Sungai Kayangan yaitu famili Euphorbiaceae. Pada hilir Sungai Kayangan, polen dengan keragaman tertinggi yaitu famili Fabaceae. Pada Kalisonggo, ditemukan sebanyak 35 jenis di bagian hulu dan 50 jenis di bagian hilir Kalisonggo. Sedangkan polen dengan keragaman tertinggi yang ditemukan pada hulu Kalisonggo yaitu famili Cyperaceae. Pada hilir Kalisonggo, ditemukan polen dengan keragaman tertinggi yaitu famili Fabaceae. Adapun faktor-faktor yang mempengaruhi dispersal polen dan spora seperti angin, air, berat polen, dsb.

Kata kunci : polen, spora, Sungai Kayangan, Kalisonggo, palinologi

THE DIVERSITY OF POLLEN AND SPORE IN SEDIMENT OF KAYANGAN RIVER AND KALISONGGO, KULON PROGO, SPECIAL REGION OF YOGYAKARTA

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ABSTRACT

Pollen is male gametophyte produced by gymnospermae and angiospermae, while spore produced by non vascular plants including algae, fungi, bryophytes and vascular plants pteridophytes. Pollen and spore can be used as one of the inventory method of flora diversity. This method can be done with identification of pollen and spore morphology in sediment. The aim of this study is to examine diversity of pollen and spore in sediment section of Kayangan and Kalisonggo river, Kulon Progo. This study was done in 3 stages: field exploration to collect data and the sediment, sample preparation using asetolisis method, and pollen and spore identification. The diversity of pollen and spore in Kayangan river is higher than Kalisonggo. 35 species of pollen and spore were found in upstream and 77 species were found in downstream of Kayangan river. The highest pollen that was found in upstream of Kayangan river is Euphorbiaceae. Meanwhile pollen in downstream of Kayangan river is dominated by Fabaceae. In the section of Kalisonggo, 35 species of pollen and spore were found in upstream and 50 species were found in downstream. Pollen that has the richness diversity in upstream of Kalisonggo is Cyperaceae, while in downstream is Fabaceae. Factors that affected the diversity of pollen and spore are wind, water, pollen weight, and many else.

Keywords: Pollen, spore, Kayangan River, Kalisonggo, palynology