



Annual Pollen and Spore Sedimentation Record off South Java in Indian Ocean

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Marine sediments are excellent archives recording environmental changes in the ocean as well as on land. In particular pollen and spores preserved in marine sediments could provide crucial information on land use and climate changes in the past. However, in order to better understand and interpret sedimentary records studies on modern pollen and spore transportation and sedimentation is needed. Therefore a sediment trap was deployed for about one year (December 2001 – November 2002) off South Java in the Indian Ocean at a water-depth of about 2000 m. Abundance and taxa composition of pollen and spores collected by the sediment trap reflect climatic (monsoon conditions and ocean currents) as well as biological (flowering periods, migration ability of pollen) factors controlling their sedimentation. Pollen and, at a lower rate, pteridophyta spore concentration tends to increase during non-monsoon period.