

areas. The interpreted sedimentary evolution in the two areas is also remarkably analogous. Broadly speaking, it includes sea level rise accompanied by deposition of proglacial marine debris. These were subsequently subject to re-sedimentation triggered mostly by instability due to overloading at Rio do Sul, or seismic activity on King George Island. As the ice receded, both sequences were covered by rained-out proglacial muds containing clasts rafted by icebergs released from the calving glacier front. Continuous retreat of ice led to initial glacial isostatic uplift and relative drop in sea level. This low stand phase is documented by deposition of sand turbidities on King George Island and subtidal interlaminated silt-mud in the Rio do Sul area. Marine progradation of fluvial deltaic/deltaic sands or conglomerates accompany the last stage of glacial isostatic rebound respectively in each site studied.

The two sequences differ with respect to thickness and depositional rate, lithologic composition, sedimentary texture and dimensions of lithofacies bodies. Most of these distinctive features were influenced by the local tectonic setting of the deposits. Some equivalent facies in terms of environmental evolution are also different in the two areas. Active tectonism movements during deposition of the Polonez Cove Formation, for instance, supplied greater volumes of sediments from the surrounding mountainous areas that resulted in faster deposition of coarse sediments with a strong contribution of volcanic debris. Absence of a broad shelf area prevented ice from advancing far offshore and a relatively compact sediment pile then formed in front of the marine glacier terminus close to the coast. These features can possibly be used to distinguish sequences generated under similar conditions in the geological record. — (5 de dezembro de 1996).

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SOBRE A MICROFLORA FÚNGICA TERCIÁRIA DA FORMAÇÃO ITATIAIA (BACIA DE RESENDE), ESTADO DO RIO DE JANEIRO

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A palinoflora aqui representada provém de sedimentos rudáceos da Bacia de Resende, junto à ferrovia (antiga EFCB) na área urbana de Itatiaia.

Estudos palinológicos efetuados por Lima & Melo (1994, *Geonomos*, 2(1): 12-21) atribuíram aos depósitos da Formação Itatiaia a idade oligocena. Anteriormente, tais sedimentos eram denominados de fácies rudácea da Formação Resende (Amador 1975, *An. Acad. Bras. Ci.*, 47 (supl.): 181-225; Melo *et al.* 1985, *An. Acad. Bras. Ci.*, 57: 467-479; Riccomini 1989, Tese de Doutorado, IGc-USP, 256p.). Na fácies fluvial, a palinologia indicou a idade eocena (Lima & Amador 1985, *Coletânea de Trabalhos Paleontológicos*, DNPM, Série Geologia 2, Seção Paleontologia e Estratigrafia, 27: 371-378).

A microflora fúngica analisada neste trabalho mostra a presença dos gêneros: *Exesisporites*, *Lacrimasporonites*, *Monoporosporites*, *Diporisporites*, *Hyoxylonites*, *Dicellaesporites*, *Fusiformisporites*, *Dyadosporonites*, *Multicellaesporites*, *Diporicellaesporites*, entre muitos outros.

A abundância e a excepcional diversidade de fungos na Formação Itatiaia, talvez a maior registrada no Terciário brasileiro, sugere ambiente de águas estagnadas, provavelmente restrito e efêmero, no sistema de leques aluviais, sob clima quente e úmido. — (5 de dezembro de 1996).

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PRELIMINARY CLADISTIC ANALYSIS OF THE BIVALVE FAMILY MEGADESMIDAE VOKES, 1967

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Phylogenetic relationships within the bivalve Family Megadesmidae Vokes, have been examined by cladistic analysis (*e.g.*, MacClade/Hennig-86) to determine the status of genera erected by previous authors and propose a preliminary phylogenetic hypothesis for the family. Traditionally, this family includes the genera *Megadesmus*, *Astartila*, *Pyramus*, *Myonia*, *Pleurikodonta*, *Vacunella*, *Australomyia*, *Plesiocyprinella*, *Casterella*, *Ferrazia*, *Jacquesia*. Based on the analyses of 26 shell (external, internal) characters two monophyletic clades can be recognised, which are