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# Modern pollen distribution in the Adriatic Sea reflecting river discharge provenance.

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It is well known that the pollen/spores observed in marine sediments can have an alluvial or fluviatile origin. However, to date detailed information about the transport and settlement processes in marine environments in the vicinity of river mouths is relatively limited. Here we present information about these transport and settling processes along the western Adriatic Sea margin. In this region numerous rivers drain into the Adriatic Sea, though the water discharge varies depending on the season. Due to the local ocean current system these discharge waters are pressed against the eastern Italian coast resulting in the presence of a band of southward flowing discharge waters that mix slowly with Mediterranean Sea waters on their way south.
We provide information about the pollen/spore association in surface sediments from marine sediments and selected river. We compare the association of river sediments previous to entering the marine realm and to associations at locations in the marine extension of the discharge waters. We discuss transport, mixing and settling processes and provide information about to what extent the pollen/spore association reflect the vegetation in the catchment of the studied region.