

# Upper Albian carbonate facies and diagenesis in the Western Istrian Anticline (WIA), Croatia

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*Dufrenoyia*. The very poor ammonite record and the apparent total absence of age-diagnostic ammonites during the lowermost to middle Lower Aptian make developing an ammonite zonation for this interval in America completely non-viable.

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## UPPER ALBIAN CARBONATE FACIES AND DIAGENESIS IN THE WESTERN ISTRIAN ANTICLINE (WIA), CROATIA

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Regional unconformities and events in the shallow-marine carbonate successions of the Western Istrian Anticline (WIA) in the north-western part of the Adriatic Carbonate Platform (AdCP) (Vlahović et al. 2005) were studied within the WIA nLab project. Although shallow-marine carbonate deposits predominated on the AdCP during the Albian, as it did most of the time during the Mesozoic when the AdCP migrated and developed in the Tethyan Ocean, occasional emergences occurred (Durn et al. 2003). Upper Albian deposits document a facies shift from shallow-marine limestone with predominant benthic foraminiferal communities (including *Pseudonummoloculina heimi*, *Nezzazata* sp. and *Cuneolina* sp.) to nearly terrestrial and lagoonal environments (with charophytes and ostracods). Their characteristics and facies architecture indicate the influence of processes that occurred in variable depositional and diagenetic environments. Silicified limestones and diagenetic quartz-rich sediments accompanied by dolomites and clays have been documented. Global data on silicification of continental and near-terrestrial carbonates are generally sparser

than in marine environments (Bustillo 2010). Important clues to the Late Albian palaeoenvironment, palaeoclimate and provenance have been obtained from these deposits associated with the WIA, an ideal natural laboratory for studying regional unconformities in carbonate rocks.

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## ALBIAN–CENOMANIAN FAUNAL DIVERSITY OF THE EL MIZAB FORMATION (TALERHZA BASIN, NORTH-WESTERN MOROCCO)

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The Talerhza Basin is a small Cretaceous basin located in the eastern part of the South Riffian Ridges. Its stratigraphical sequence (Albian–Paleogene,