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Unravelling "Falaise De Blanche"

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"Falaise de Blanche" forms a limestone cliff that runs throughout the mountain chains of Mount Lebanon, Anti-Lebanon, and passes into the Southern Alawite Mountains (Syria) and in Galilee. This geomorphologic unit spans several facies-driven lithostratigraphic units, namely the Abeih and Mdeirij formations in Lebanon, Palmyra and Zbeideh formations in Syria, and Ein-El-Assad and Nabi Said formations in Galilee, which are diachronous per definition. It required a full, modern, holostratigraphic re-evaluation as, for instance, Dubertret (1947) stated it consists of a "calcaire récifal blanc" [a white reefal limestone], an assumption which is not consistent with our field observations: the whitish facies correspond mostly to lagoonal facies and corals, which are found in the its uppermost strata, are rather scarce. Furthermore, until recently (Maksoud et al., in press), it was lacking a type-locality and clear definitions for its lower and upper boundaries. Jezzine, where "Falaise de Blanche" has a notable exposure (70 m), was selected as the type-locality (Maksoud et al., in press). On the base of litho- and bio-stratigraphic distinctiveness and because it is bounded by unconformities; we redefined it as the Jezzine Unconformity Bounded Unit (UBU), the Jezzine Alloformation or the Jezzinean Regional Stage (we favour the latter though all these
labellings are almost equivalent). Its lower boundary corresponds to the sequence boundary at the top of the siliciclastic coastal and estuarine deposits of the "Grès de Base"; its upper boundary corresponds to another sequence boundary at the top of the muddy facies (at the base of the Cardium Beds): "Locally this upper surface is encrusted by oysters and bored by worms and pholadids, indicative of an early lithification of the muddy sediment." (Maksoud et al., in press). There were also several interpretations regarding its dating: Dubertret (1963) ascribes a late Aptian (Gargasian or Aptian sensu stricto) age to the cliff limestones and an early Aptian (Bedoulian) age to the calcareous fossiliferous strata below; Saint-Marc (1978) claims it is mainly early Aptian (Bedoulian) in age but he does not exclude a late Aptian (Aptian sensu stricto) age for the uppermost strata. Our micropaleontological, faciological and strato-sequential analyses point to a new dating: a latest Barremian - early Bedoulian age, for this (?) single sequence. The lower boundary of the Jezizen Regional Stage is intra-(Late) Barremian. As a side result, "Grès de Base" are Barremian or older, not Bedoulian nor Aptian. Consequently, the Lebanese Cretaceous amber with biological inclusions, mostly insects, is also slightly older than previously thought. The upper discontinuity corresponds to a significative intra-Bedoulian hiatus. Forthcoming investigations in this stratigraphic unit, in both its overburden and its underburden (respectively the Cardium Beds and the "Grès de base") will probably help to refine these results.