

The Sinemurian ammonite genus *Dudresnayiceras* in the Moroccan High-Atlas.

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Dudresnayiceras is a characteristic – though quite rare – ammonite genus of the Tethyan Oxynotum zone (Upper Sinemurian). We could only count approximately 30 distinct specimens cited in the literature. Four named taxa were attributed to this very peculiar genus with asymmetric ceratitiform suture lines:

- *D. subcostulatum* Schafhäütl, 1854 : 1 specimen from the “Alpine Oolith” of the Bavarian Prealps
- *D. suessi* Hauer, 1854 (type species of the genus) : approximately 20 specimens from the Austrian Hierlatzschichten (“Oxynotum horizon”), from the Apennines and from Tunisia
- *D. suessiforme* Rakus, 1994 : 8 specimens from the Oxynotum zone of Morocco and Tunisia
- *D. tuberculatum* Rakus, 1999 : 1 specimen from the Austrian Hierlatzschichten

In this study, more than 80 *Dudresnayiceras* specimens were collected during a bed by bed profiling of two Upper Sinemurian sections from the Moroccan High-Atlas. In both the Bou Hamid [Rakus, 1994; Lachkar et al., 1998] and Kadoussa sections, *Dudresnayiceras* occurs throughout the Oxynotum zone. This prompted us to investigate possible changes through time in sutural asymmetry, ornamentation and/or morphology of this genus.

Although the shift of the external lobe (and of the siphuncle) principally occurs towards the left flank (56% of investigated specimens), subsymmetrical (19%) and right-sided deviations (25%) are also present. Fluctuations between left- and right-handed deviations in successive samples do not show any consistent trend. The comparison of this material with data from the literature, particularly the type specimens of the few named taxa, confirms the homogeneity of this “anomalous” ammonite group, as well as its important role for correlation purposes. Nevertheless, ontogenetic and intraspecific variability is quite large, mainly affecting whorl section and ornamentation respectively.

It is still difficult to assess the phylogenetic affinities of *Dudresnayiceras*. The simplification of the suture line, as well as its asymmetric configuration, may indicate that this genus suffered stressful conditions. The very evolute coiling, the quite simple ornamentation and the absence of a keel are other hints to an atavistic morphology.

REFERENCES :

Rakus, 1994 : “Les ammonites lotharingiennes du Jebel Bou Hamid (Haut-Atlas de Rich, Maroc).” Paleopelagos Special Publication, vol.1, pp.299-316

Lachkar et al., 1998 : “Les ammonites du Sinémurien supérieur du Jebel-Bou-Hamid (Haut-Atlas central, Rich, Maroc).” *Geobios*, vol.31/5, pp.587-619