Rudist Bivalves from the Lower Cretaceous of Trinidad

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Abstract

Rudist bivalves were first noted (but note recognised) in the Wall and Sawkins survey of Trinidad in the 1850s, but were first described in the classic work of Harris and Hodson in 1922. Subsequently much revision has been undertaken, with some forms being referred to new or different genera. This work presents a revision of the whole fauna based on a revision of museum specimens together with the collection (or photography) of extensive new material, and a comparison with the succession elsewhere in the Central American region. In Trinidad, rudists occur in two areas: the Central Range and the Northern Range. In the Central Range they occur as isolated individuals or specimens in isolated blocks within both Cretaceous and Cenozoic successions. Here three horizons are recognised. A late Barremian assemblage is characterised by the "Stack Rock", which yields two species: *Pantajaloria pennyi* (Harris & Hodson) and *Amphitriscoelus primaevus* Pantoja-Alor, Skelton & Masse. Similar assemblages have been reported from Benbow in Jamaica and San Lucas in Mexico. The second assemblage occurs in blocks of Lower Aptian limestones at Plum Road and includes the species *Amphitriscoelus waringi* Harris & Hodson, *Pseudocaprina plumensis* (Harris & Hodson) and *P. andersoni* (Harris & Hodson). The Barremian and Aptian assemblages are interesting as they only yield caprinoids. This suggests that they are most likely platform edge assemblages in which monopleurids and requieniids were not represented. The Lower Aptian rudist assemblage also occurs in the Northern Range of Trinidad (as first reported by Trechmann in 1945). Albian rudists occur as isolated specimens at Pointe-a-Pierre and include the species *Texicaprina kugleri* (Bouwman). Coogan in his description of *Texicaprina* gave the type species as a Mexican species, but clearly based his description on the Trinidad species. *Texicaprina kugleri* is best ascribed a mid late Albian age. The requieniid rudist *Kuglieri* also occurs in erratic blocks at Point-a-Pierre. Trinidad, therefore, has typical representatives of the Central American-Caribbean rudists that characterized the lower Cretaceous.