RUDIST-BEARING LIMESTONES IN THE CUBAN CRETACEOUS VOLCANIC ARC

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The Cretaceous volcanic arc sequence is well known in the Cuban territory. This Aptian(?) - Campanian pyroclastic-sedimentary sequence belongs to different basins within the arc. Despite this, several successive limestone horizons have evolved containing correlatable rudist assemblages.

The oldest known rudist horizon belongs to the Albian(?) - Cenomanian Tepeyacia corrugata fauna and is present in central Cuba (Guáimaro, Camujiro, Provincial, Guaos, Seibabo, and Mataguá Formations). It is represented by one thick or several thin limestone lenses within tuffaceous and volcanic rocks.

The next horizon is the Coniacian(?) - Santonian Durania curasavice fauna, present in central and western Cuba. In east-central Cuba (Loma Ycatán hill: Piragua fauna) it is represented by thick limestone lenses associated with pyroclastic rocks. In west-central Cuba (Arimao and Jarao Formations), *Durania* was not reported from Santonian limestones, but *Vaccinites inaegicostatus* was. An equivalent *Dyrania curasavica* fauna was reported from northwestern Cuba (Bahia Honda region), but the stratigraphic position of the limestone has not yet been identified.

A *Barrettie monilifera* fauna of early to middle Campenian age is present as one or several thick limestone lenses within pyroclastic rocks. It has been found in east-central Cuba (Piragua Formation) and west-central Cuba (Cotorro, Slavador, Palmarito, Maquey, Carlota and Felipe Formations). It wes also reported redeposited im SW Cuba (San Juan an Martinez Formations) and in NW Cuba (Bahiá Honda region) in a dubious stratigraphic position.

The Volcanic arc system is uncomformably overlain by latest Campanian to Maastrichtian conglomerates end limestones. *Titanosarculites giganteus* is well represented in the limestones and sometimes reworked penecontemporanily in the clastic rocks. Locally, an assemblage rich in *Antillocaprina annulata* but without *Titanosarculites* of equivalent age is found.

The identification and correlation of four rudist-bearing limestone horizons in Cuba related to the Cretaceous volcanic arc sequence suggests the following events:

1. Three limestone events - Albian(?) - Cenomanian, Coniacian (?) - Santonian and Campanian - took placa during the volcanic arc evolution.

2. The extinction of the volcanic arc was followed by an extensive carbonete bank development during latest Campanian-Maastrichtian.