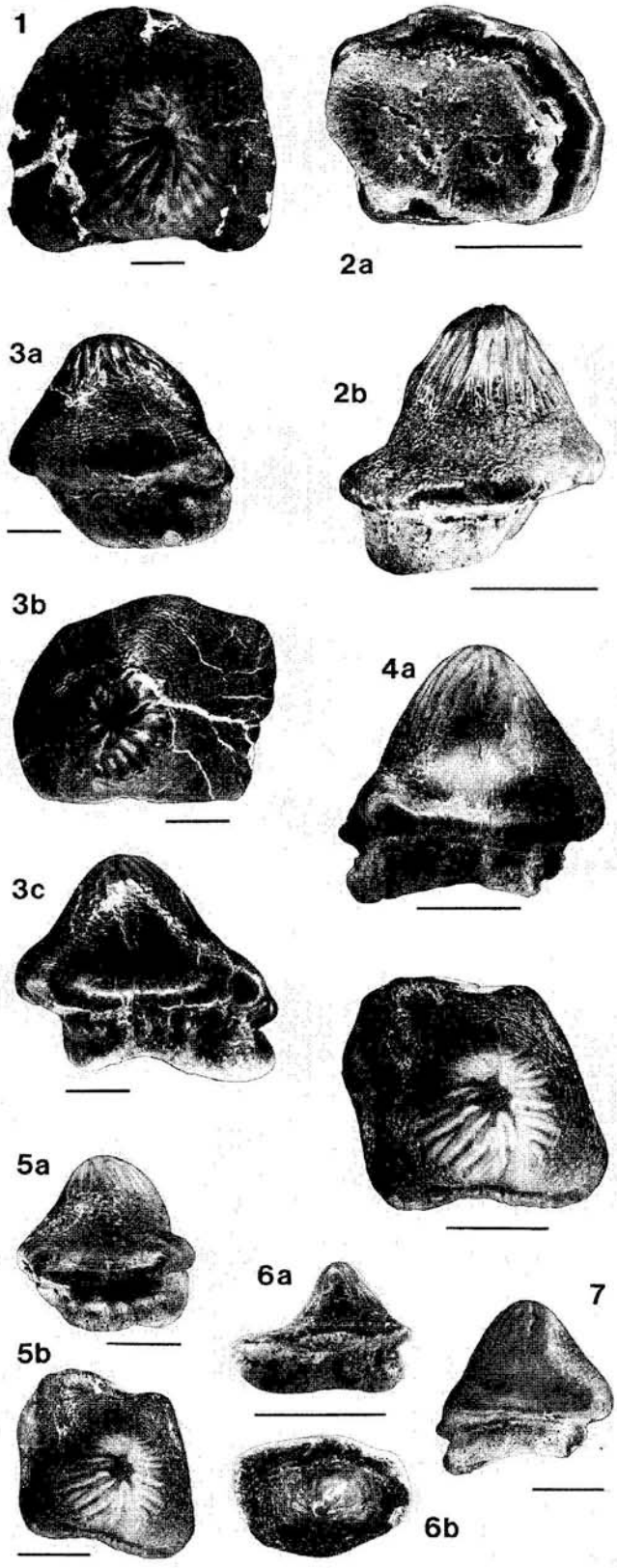
PTYCHODUS MORTONI

Superfamily HYBODONTOIDEA Zangerl 1981
Family PTYCHODONTIDAE Jaekel 1898

Maximum Size: **26 mm** Occurrence: **Rare** Chronologic Range: **Coniacian-Santonian**



Genus ***Ptychodus*** Agassiz 1835
Ptychodus mortoni Mantell 1839

DESCRIPTION: Teeth with a high conical cusp having a sharp apex; crown ridges strong, radiating in all directions from the apex and terminating basally just above or at the intersection with the marginal area; cusp-crown intersection subangular to subrounded; marginal area wide, finely granular with a concentric pattern around cusp; root anaulacorhizous; histology osteodont.

HETERODONTY: *Ptychodus mortoni* has a rowgroup pattern typical for the genus with upper and lower medial, anterolateral and posterior rowgroups. This interpretation is based on observation of associated dentitions from the Austin Group in Texas and comparison with complete dentitions from the Cretaceous Niobrara Chalk of Kansas.

DISTINGUISHING CHARACTERISTICS: The teeth of *Ptychodus mortoni* are easily distinguished from all other Texas species of *Ptychodus* by the presence of high conical cusp with radiating occlusal ridges.

STRATIGRAPHIC OCCURRENCE IN TEXAS: Austin Group (Coniacian-Santonian) throughout Texas.

COMMENTS: Isolated teeth of *Ptychodus mortoni* occur most commonly in the basal Atco Formation (contact horizon) of the Austin Group. Associated dentitions, like the one figured on the next page, have been collected higher in the formation.

REFERENCES: Williston (1900).

***Ptychodus mortoni* Mantell 1839: Contact horizon of the Atco Formation (Coniacian), Austin Group, Travis County; (1-5, 7) anterolateral teeth; (6) posterior tooth. Tooth orientation: (2a) basal view; (3c, 4a, 7) lingual view; (1, 3b, 4b, 5b, 6b) occlusal view; (3a, 5a) mesial views; (2b, 6a) distal views. Scale lines = 5 mm.**