

July 12, 2011

New 80-Million-Year-Old Marine Predator Discovered

Royal Tyrrell Museum researcher names a new genus of a mosasaur *Latoplatecarpus*

Drumheller... After five years of research, Dr. Takuya Konishi of the Royal Tyrrell Museum of Palaeontology and colleague Dr. Michael Caldwell from the University of Alberta concluded that the mosasaurs they were studying – a group of large marine lizards that dominated the waters 90 - 65 million years ago – conformed to none of the previously known kinds. Instead, they determined these mosasaurs belonged to an entirely new genus.

“By carefully comparing the specimens of the new mosasaur *Latoplatecarpus* with those of a previously known genus, *Platecarpus*, it became clear that *Latoplatecarpus* represents a geologically younger and slightly more advanced animal,” explains Dr. Konishi. “Looking down on the skull, for example, it has a pair of anteriorly diverging processes past the eye sockets, a unique feature shared among all the advanced members of the lineage that includes both the new mosasaur and *Platecarpus*, but the feature is absent from the latter.”

Its name, *Latoplatecarpus willistoni*, was derived from “*lato*”, Latin for “broad” to indicate the anteriorly widely separated nature of the aforementioned processes, and “*willistoni*”, in honour of an American palaeontologist Samuel W. Williston, whose work on mosasaurs over a century ago founded the basis for the way researchers classify these marine reptiles today.

Currently, there are over sixty species of mosasaurs known. This new discovery will add to the growing diversity of this uniquely aquatic group of lizards, and will likely help researchers understand the mechanisms behind the evolutionary and ecological success of mosasaurs. This is the first time since 2005 that a new genus has been established in mosasaurs worldwide.

The paper has been published on July 12th in the Journal of Vertebrate Paleontology.

Operated by the Government of Alberta, the Royal Tyrrell Museum is located six kilometres northwest of Drumheller on Highway 838. For more information visit www.tyrrellmuseum.com or call 403-823-7707 (dial 310-0000 for toll-free access in Alberta).

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