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Cranial anatomy and stratigraphy of a new specimen of the tyrannosaurine dinosaur *Daspletosaurus* from the Judith River Formation of Central Montana, USA

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The tyrannosaurine *Daspletosaurus* contains three recognized species from the Campanian of Montana and Alberta: *Daspletosaurus torosus, Daspletosaurus wilsoni,* and *Daspletosaurus horneri*. The recently named *D. wilsoni* has been proposed to represent a transitional anagenetic form between *D. torosus* and *D. horneri*, a hypothesis contingent on both the stratigraphic succession of these three taxa and the presence of an intermediate morphology in *D. wilsoni* . Adequate testing of this hypothesis is hampered by limited knowledge of the morphological variation and stratigraphic ranges of both *D. wilsoni* and *D. torosus*. We introduce a new, ontogenetically mature specimen of *Daspletosaurus* from the upper Campanian Coal Ridge Member of the Judith River Formation of central Montana that is well constrained to ~76.3–75.8 Ma. This specimen has a combination of features not yet reported in *Daspletosaurus*, increasing the known range of morphological disparity within this genus. The cranial morphology and stratigraphic position of this specimen precludes its referral to *D. horneri*. Although stratigraphically equivalent to *D. wilsoni*, this specimen lacks one of the three characters purported to distinguish that taxon from *D. torosus* (dorsal quadrate process of quadratojugal broadly visible laterally). We propose that this character is intraspecifically variable within *Daspletosaurus* and therefore not diagnostic, thus weakening the case that *D. wilsoni* is distinct from *D. torosus*. Additional specimens with stratigraphic controls are necessary to determine if *D. wilsoni* is a valid taxon.

Key words: Dinosauria, Theropoda, Tyrannosauridae, *Daspletosaurus* , anagenesis, Late Cretaceous, Campanian, Laramidia, Judith River Formation.

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