

Figure S9. Diluvicursor pickeringi in strict consensus trees derived from the matrix published by Han et al. (2017), showing: (A) strict consensus of all OTUs in Han et al. (2017) + Diluvicursor pickeringi; and (B) strict consensus of all OTUs in Han et al. (2017) + Diluvicursor pickeringi, after eight OTUs were pruned a posteriori (see Han et al. 2017, caption for fig. 16). Numbers reported at selected nodes are bootstrap resampling percentages.

In accordance with the original Traditional Search parameters of Han et al. (2017), the search (yielding both A+B) was re-run with 1,000 replications (100 trees held per replicate) under the TBR branch-swapping algorithm. As per Han et al. (2017) all characters were unordered except for 21 characters: "2, 23, 31, 39, 125, 163, 196, 203, 204, 222, 227, 238, 243, 247, 268, 292, 296, 302, 306, 320, 361". Bootstrap support was calculated for both consensus trees using 100 pseudoreplications (as per Han et al., 2017). The analysis yielding the consensus that is shown in A is derived from 30100 most parsimonious trees with lengths of 1215 steps. This un-pruned consensus shows that the Han et al. (2017) dataset could resolve Diluvicursor pickeringi only within Ornithischia as part of a polytomy with basal ornithischians, Heterodontosauridae, Thyreophora and neornithischians, with the ornithischian node being weakly supported by bootstrap resampling. The pruned consensus tree (**B**) also shows resolution of *Diluvicursor pickeringi* within Ornithischia as part of a polytomy, with the ornithischian node again being weakly supported by bootstrap resampling.

Reference:

Goloboff PA, Farris JS, Källersjö M, Oxelman B, Ramirez MI, Szumik CA. 2003. Improvements to resampling measures of group support. Cladistics 19:324-332.

Han F, Forster CA, Xu X, Clark JM. In Press, 2017. Postcranial anatomy of Yinlong downsi (Dinosauria: Ceratopsia) from the Upper Jurassic Shishugou Formation of China and the phylogeny of basal ornithischians. Journal of Systematic Palaeontology 29 pp., doi.org/10.1080/14772019.2017.1369185

Marasuchus lilloensis Silesaurus_opolensis Herrerasaurus_ischiugualasten Eoraptor_lunensis Scelidosaurus harrisor Emausaurus_ernsti_ Minmi_paravertebra Gargoyleosaurus_parkpinorum Pinacosaurus_granger Euoplocephalus_tutus Huayangosaurus_taibai Isaberrysaura_mollensis Hesperosaurus mjosi Stegosaurus_stenops_ Scutellosaurus lawleri Orodromeus_ makela Haya_griva Changchunsaurus_parvus Jeholosaurus_shangyua Hypsilophodon foxii Gasparinisaura cincos Ouranosaurus_nigeriensis_ Probactrosaurus_gobiensis_ Iguanodon atherfieldensis Camptosaurus_dispar Dryosaurus_altus_ Tenontosaurus_tilletti_ Zalmoxes robustus Gideonmantellia amosaniuana Thescelosaurus_neglectus_ Parksosaurus_warreni Koreanosaurus boseonge Stenopelix_valdensis_ Yinlong_downsi Chaoyangsaurus_youngi Hualianceratops_wucaiwanensis Xuanhuaceratops nie Psittacosaurus_mongoliensi Psittacosaurus_lujiatunensis Aquilops americanus Archaeoceratops_oshima Bagaceratops_rozhdestvensky Protoceratops_andrewsi Leptoceratops_gracilis_ Mosaiceratops_azuma Auroraceratops_rugosus Yamaceratops dorngobiensis Liaoceratops yanzigouensis Prenocephale_prenes Stegoceras_validum Homalocephale calathocercos Goyocephale lattimorei Wannanosaurus_yansier Hexinlusaurus_multidens Agilisaurus louderbacki Manidens_condorensis Heterodontosaurus_tucki Pegomastax_africanus Echinodon_becklesii Tianyulong_confuciusi Fruitadens_haagarorum Abrictosaurus_consors Diluvicursor pickering Lesothosaurus_diagnosticus Eocursor_parvus_