Yuhania: A Unique Angiosperm from the Middle Jurassic of Inner Mongolia, China

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Figure S1 The outcrop yielding the specimens of Yuhania daohugouensis gen. et sp. nov.

A. The landscape near Daohugou Village, Ningcheng, Inner Mongolia, China. Arrow marks the fossil locality.B. The pit (arrow) yielding the specimens. C. The fossil-bearing slab (right) has sediment context similar to the rock debris left on the ground (left).



Figure S2 Holotype (left) and isotype of Yuhania daohugouensis gen. et sp. nov.



Figure S3 Lateral bud and leaves of Yuhania daohugouensis gen. et sp. nov. Light microscopy.

A. A lateral bud (b) with scales plunging into the sediment and in close association with a leaf (l). Bar = 1 mm. **B**. Detailed view of the region marked as 9 in Fig. 2a, showing leaf base (l) clasping the stem (s). Bar = 1 mm. **C**. Detailed view of the leaf marked as 10 in Fig. 2a, showing parallel veins (1-4) joining the margin (arrow). Bar = 0.5 mm. **D**. A leaf preserved as compression (lower half) and impression (upper half). Bar = 1 mm.



Figure S4 Stem, leaves, and infructescences of *Yuhania daohugouensis* gen. et sp. nov. Light microscopy. Bars are 1 mm long except otherwise annotated.

A. A portion of stem with longitudinal ridges and hairs. Bar = 0.5 mm. **B**. Leaf (1) with longitudinal texture and its stem (s) with horizontal wrinkles. **C**. The infructescence (arrow) marked as 4 in Fig. 2a in a leaf (1) axil. Note the longitudinal ridges on the stem (s). **D**. The immature flower marked as 14 in Fig. 2a. Note its spatial relationship with the adjacent leaf (1) and stem (s). **E**. Detailed view of the region marked as 2 in Fig. 2a. Note the spatial relationship between the infructescence (arrow) and leaves (1). Bar = 2 mm. **F**. Detailed view of the infructescence in Fig. S4e. Note the scales (arrow) at the top covering the fruits. Detailed in Figs. 4i-m. **G**. Detailed view of region marked as 9 in Fig. 2a. Note the spatial relationship among the leaves (1), infructescences (white arrows), and immature flower (black arrow). Bar = 2 mm. **H**. The infructescence (arrow) marked as 13 in Fig. 2a in leaf axil. **I**. Detailed view of one of two infructescences in Fig. S4g. **J**. Detailed view of the other infructescence in Fig. S4g. Note its spatial relationship with leaves (1).



Figure S5 Immature flower and leaves of Yuhania daohugouensis gen. et sp. nov. SEM.

A. Bottom portion of the immature flower shown in Figs. 2g and 4a, showing stout pedicel (outlined by white lines) with longitudinal striations. Bar = 1 mm. **B**. Detailed view of a stem (s) and an attached leaf (l), both of which have horizontal wrinkles. The texture in the upper portion of the leaf gradually changes into longitudinal. Bar = 0.5 mm. **C**. Detailed view showing how the leaf (l) diverges from the stem (s). The leaf fuses with the stem below the arrow. Bar = 0.1 mm. **D**. Longitudinal striations on the adaxial leaf surface. Bar = 0.2 mm. **E**. A broken leaf showing adaxial surface and internal aerenchyma. Bar = 0.1 mm. **F**. Close-up of Fig. S5e, showing the parenchymatous tissue (mesophyll) in the leaf. Bar = 0.1 mm. **G**-H. Two stomata on the abaxial surface of a leaf, showing protrusions around the stomata pits. Bar = 50 μ m. **I**. Longitudinal adaxial epidermal details. Bar = 0.1 mm. **J**. Two stomata side by side, one with protrusions covering the pit, the other without such coverage. Bar = 0.1 mm.