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**A NEW SAWFLY FROM THE TRIASSIC OF QUEENSLAND (HYMENOPTERA: XYELIDAE).**

*Memoirs of the Queensland Museum* 51(2): 558. 2005.—The earliest records of the Hymenoptera are a handful of Late Triassic sawflies from Central Asia, South Africa, and Australia (Riek, 1955; Rasnitsyn, 1964, 1969; Schlüter, 2000). These species belong to the basal Xyelidae (Archihymenoptera *sensu* Grimaldi & Engel, 2005). The first of these early xyelids to be discovered were two specimens from the Late Triassic Mt. Crosby Formation near Ipswich, Queensland for which Riek (1955) proposed *Archexyela* to accommodate *A. crosbyi*. Herein I provide the description of a second species (based on a third specimen: Fig. 1) of *Archexyela* from the same formation. The new species exhibits a number of significant differences from the type species but is placed in the same genus based on the shared combination of pterostigma sclerotized only at extreme base, otherwise membranous; 1r-rs meeting base of pterostigma; 2r-rs meeting Rs1 (rather than stem of Rs); Sc free to base of wing.

Family XYELIDAE Newman, 1835

*Archexyela ipswichensis* sp. nov. (Figs 1–2)

*Archexyela* sp., Jell, 2004: 106.

*Archexyela* sp., Grimaldi & Engel, 2005: 410.

**Diagnosis.** The new species can be distinguished from *A. crosbyi* by the evanescent vein (sclerotized only at its base) basad Sc-R loop (Fig. 2); Sc and R running alongside each other from base and briefly arching apart (to form small subcostal cell: here termed the Sc-R loop) before termination of Sc into Rs just before separation of Rs; second free abscissa of Rs nearly twice as long as 1r-rs (approximately equal in length in *A. crosbyi*); 2r-rs about as long as first free abscissa of Rs1 (2r-rs nearly twice as long as first free abscissa Rs1 in *A. crosbyi*); first free abscissa of Cu distinctly arched anteriorly; and first medial cell elongate.

**Description.** Forewing 10 mm long (as preserved); Sc free from base to slightly more than half distance to pterostigmal base, running abruptly alongside R (i.e., without subcostal cell between veins for most of their length), terminating into R just basad Rs separation; Rs arching posteriorly slightly before Sc termination to form a small subcostal cell for a short length (here termed the Sc-R loop: Fig. 2). Rs separating slightly distad termination of Sc into R and well proximad pterostigmal base (Fig. 2); first free abscissa of Rs only slightly angled toward wing apex; second free abscissa of Rs nearly twice as long as 1r-rs; 1r-rs meeting base of pterostigma; third free abscissa of Rs strongly arched posteriorly; 2r-rs meeting Rs1, about as long as first free abscissa of Rs1; M+Cu weakly arching anteriorly proximad separation of Cu; first free abscissa of M nearly twice as long as first free abscissa of Rs; Cu separating from M+Cu proximad level of Sc termination; Cu arching gently posteriorly; first medial cell elongate; 1cu-a relatively long, nearly three-quarters length second free abscissa Cu; 1A straight; crossvein a elongate, oblique; 2A+3A with typical proximal arch. Pterostigma elongate, narrowed (about as wide as costal cell), only sclerotized at extreme base, otherwise membranous (similar to *A. crosbyi*, *Asioxyela smilodon* Rasnitsyn, 1964, as well as various Cretaceous genera).

**Holotype.** Queensland Museum Fossil Collection 44154 (Fig. 1), Late Triassic, Carnian. Mt. Crosby Formation, Ipswich Coal Measures, from North of Ipswich, Queensland, Australia.

**Etymology.** From near Ipswich.

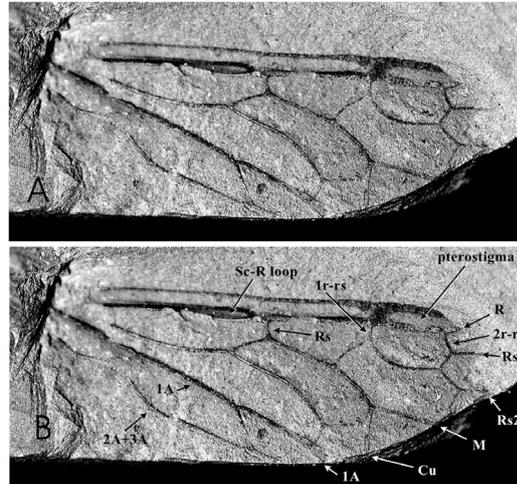


Fig. 1. Holotype of *Archexyela ipswichensis* sp. nov. (QMF44154). A. Forewing as preserved. B. Forewing with labels for particular venational elements overlaid.

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