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A NEW LATE DEVONIAN BRACHIOPOD FAUNA FROM NEW SOUTH WALES

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Late Devonian strata of the Lachlan Fold Belt of New South Wales belong almost exclusively to the widespread Lambie Facies, which typically consists of a molasse-like association dominated by sandstone, shale and conglomerate and was deposited mainly in an array of near-shore marine to fluvial environments. The Lambie facies marine strata normally yield a low-diversity invertebrate fauna dominated by brachiopods commonly referred in the past to '*Cyrtospirifer*' and '*Rhynchonella*', with few other taxa having been recorded. Not only has their often indifferent preservation in coarse, sandy, sometimes highly deformed rocks retarded and discouraged their study, but the domination of these faunas by such relatively difficult types of brachiopods has resulted in a marked, possibly justified, lack of enthusiasm for faunal studies. Most taxonomic identifications were considered suspect by Roberts et al. (1972).

A few species of strophomenate brachiopods, including a single chonetid, and perhaps two productids, are here recorded from the Late Devonian Lambie Facies of central western New South Wales. *Cyrtospirifer* and rhynchonellid brachiopods occur as well but have not been studied.

The occurrence of these strophomenates in both the Gibbons Creek Sandstone of the Ilford-Running Stream district and the Bumberra Formation of the Mudgee-Cudgegong district suggests that the formations are correlatives. The presence of an atrypid brachiopod in the Lawsons Creek Shale, which overlies the Bumberra Formation east of Mudgee, indicates a Frasnian (early Late Devonian) age for the lower formations. This strophomenate fauna represents a new biofacies for the Lambie Group sediments, and a pteriomorph appears to be a common member of the biofacies. These faunas will be illustrated, and correlations of the fossiliferous units will be suggested.

No conodont data are available as limestone is not known from the Lambie Facies in the area. The two known occurrences of Late Devonian conodonts from limestones in the Lachlan Fold Belt in N.S.W. are Frasnian (Ettrema Limestone), and Famennian (Coffee Creek Member).

Roberts, J., Jones, P.J., Jell, J.S., Jenkins, M.A., Marsden, M.A.H., McKellar, R.G., McKelvey, B.C. & Seddon, G., 1972. Correlation of the Upper Devonian rocks of Australia. *Journal of the Geological Society of Australia* 18(4), 467-490.