

Early Carboniferous Gastropoda from the Tamworth Belt, New South Wales, Australia

E.K. Yoo

New South Wales Department of Mineral Resources,
PO Box 536, St Leonards, NSW 2065, Australia

ABSTRACT. Rich faunas of minute, Early Carboniferous gastropods, elegantly preserved as chloritic replacements, are documented from the Rangari Limestone Member of the Tulcumba Sandstone (early to middle Tournaisian), the Namoi Formation (middle to late Tournaisian), the Dangarfield Formation (late Tournaisian) and the uppermost part of the Kyndalyn Mudstone Member of the Merlewood Formation (middle or late Viséan) of eastern New South Wales. Seven new genera *Campbellospira*, *Globobulimorpha*, *Microcochlis*, *Kyndalynia*, *Palaeoalvania*, *Kimina* and *Pseudoaclisina* are proposed. Of the 79 gastropod species (referable to 47 genera and subgenera), 40 are described as new: *Euphemites pustula*, *Cymbularia carinata*, *Bellerophon (Bellerophon) kyndalynensis*, *Bellerophon (B.) swainsensis*, *Knightites (Retispira) multilirata*, *Knightites (R.) triangularis*, *Straparollus brevis*, *Serpulospira scalariformis*, *Platyschisma lingua*, *Platyschisma vitrea*, *Angyomphalus radianodosa*, *Eotomaria umbilicata*, *Campbellospira conica*, *Glabrocingulum pustulum*, *Hesperiella elongata*, *Hesperiella planorbis*, *Agnesia reticulata*, *Worthenia crenilunula*, *Gyronema nacreformis*, *Rhabdotocochlis turgida*, *Naticopsis (Naticopsis) minuta*, *Palaeozygopleura obesa*, *Pseudozygopleura gracilis*, *Leptozyga costata*, *Ceraunocochlis australis*, *Ceraunocochlis tenuis*, *Strobeus ovalis*, *Girtyspira inflata*, *Globobulimorpha costata*, *Microcochlis parva*, *Eucochlis depressa*, *Eucochlis umbiliparva*, *Kyndalynia inflata*, *Kimina australis*, *Kimina minor*, *Kimina globosa*, *Pseudoaclisina microspirulata*, *Palaeoalvania talenti*, *Donaldina minutissima*, *Streptacis gundyensis*. Seventeen additional forms are discriminated but because of bad preservation or dearth of material they are not named. *Campbellospira*, characterised by a planktotrophic protoconch with a selenizone and long slit is assigned to Pleurotomarioidea. *Globobulimorpha*, an unusual globular fusiform shell with a columellar fold and deviated protoconch is tentatively assigned to Subulitoidea. *Kimina* and *Palaeoalvania* are placed in Order Heterogastropoda. *Aclisina turgida* Yoo is made the basis of a new genus *Pseudoaclisina* and transferred from Murchisonioidea to Order Heterogastropoda. *Stegocoelia* is transferred from Murchisonioidea to Loxonematoidea. It is not possible at present to place three genera, *Microcochlis*, *Kyndalynia* and *Eucochlis* in any existing Order.