

MULTIELEMENT CLOTHING FOR NEOGONDOLELLA  
(CONODONTA, TRIASSIC)

ORCHARD\*, M.J., Geological Survey of Canada, 100 West Pender, Vancouver, V6B 1R8; RIEBER, H., Paläontologisches Institut und Museum der Universität Zürich, Karl Schmid-Strasse 4, CH-8006 ZÜRICH, Switzerland.

New natural assemblages of *Neogondolella* from the Middle Triassic of Switzerland show that this genus, and by inference other Gondolellidae, bore a multielement assemblage consisting of paired segminiplanate Pa and angulate Pb elements associated with, but separated from, a variety of ramiform M and S elements. None of the assemblages clearly show the full complement of elements within the ramiform array, but collectively they reveal several bipennate Sc elements, a pair of breviform digyrate (enantiognathiform) Sb elements, and one or two pairs of M elements.

With these natural assemblages as a template, collections of disjunct elements from the latest Permian and Triassic of Eurasia and North America have been used to reconstruct several allied multi-element taxa. In these collections, two M elements and five S elements are identified as components of *Neogondolella*, making a total of nine different element-types for the multielement genus. Fewer S elements appear to be present in *Neospathodus*.

Two types of Sa elements occur in the Gondolellidae. In Changshingian 'Clarkina', Scythian to Middle Anisian 'Neogondolella', Middle Triassic *Gladigondolella*, and Carnian *Metapolygnathus* the cusp occurs at the junction of the three processes (as in 'Xaniognathus' sensu Sweet). In contrast, the largest denticle of the Sa element occurs posteriorly of that junction (as in *Cypridodella* sensu Sweet) in Spathian 'Neospathodus', Middle Anisian- Norian *Neogondolella*, and Norian *Epigondolella*.

Multielement conodont studies should improve our understanding of Triassic conodont phylogeny, and help stabilize nomenclature.