

## Post-extinction brachiopod faunas from the Late Permian Wuchiapingian coal series of South China

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This paper describes fourteen brachiopod species in eleven genera from the Late Permian Wuchiapingian Coal Series (Lungtan Formation) of South China. Of these, the shell bed fauna from the basal Lungtan Formation is interpreted to represent the onset of the recovery of shelly faunas in the aftermath of the Guadalupian/Lopingian (G/L) mass extinction in South China. The post-extinction brachiopod faunas in the Wuchiapingian are characterized by the presence of numerous Lazarus taxa, survivors, and newly originating taxa. These elements capable of adapting their life habits were relatively more resistant to the G/L crisis. The post-extinction faunas, including survivors and the elements originating in the recovery period, have no life habit preference, but they were all adapted to a variety of newly vacated niches in the Late Permian oceans. Two new species, *Meekella beipeiensis* and *Niutoushania chongqingensis*, are described, and two Chinese genera, *Niutoushania* and *Chengxianoproductus*, are emended based on re-examination of the type specimens and new topotype materials from the Lungtan Formation.

**Key words:** Brachiopoda, mass extinction, faunal recovery, Permian, Wuchiapingian, Guadalupian, Lopingian, South China.

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