

The last Frasnian Atrypida (Brachiopoda) in southern Belgium

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The last representatives of the order Atrypida on the southern flank of the Dinant Synclinorium (Vaulx-Nismes area) in Belgium belong to *Costatrypa*, *Spinatrypa*, *Spinatrypina* (?*Spinatrypina*), *Spinatrypina* (*Exatrypa*), *Iowatrypa*, ?*Waiotrypa*, *Desquamatia* (*Desquamatia*) and *Desquamatia* (?*Seratrypa*). Among the thirteen described taxa, five are new: *Spinatrypa tumuli* sp. n., *Iowatrypa circuitiois* sp. n., ?*Waiotrypa pluvia* sp. n., *Desquamatia* (*Desquamatia*) *quieta* sp. n. and *Desquamatia* (?*Seratrypa*) *derelicta* sp. n. Supposed lissatrypid *Glassia drevermanni* Maillieux, 1936 from the late Frasnian Matagne shales is assigned to the Rhynchonellida. On the southern flank of the Dinant Synclinorium and in the Philippeville Massif, the Atrypida become extinct in the *Palmatolepis rhenana* Zone, significantly below the Frasnian-Famennian (F-F) boundary. Their extinction coincides with the first appearance of the green and black shales of the late Frasnian Matagne Formation, recording a transgressive-hypoxic event. Based on conodont data, this event takes place earlier on the southern flank of the Dinant Synclinorium than in the Philippeville Massif.

Key words: Brachiopoda, Atrypida, taxonomy, biostratigraphy, mass extinction, Kellwasser Crisis, Frasnian, Devonian, Belgium.

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