Lower Paleozoic

Commission members
Proposals and discussion
Lithostratigraphy
Chronostratigraphy

2.1.1 Blanmont Formation - BLM

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Authors: Malaise, 1873: "Assise de Blanmont ou des quartzites inférieurs"; modified by Herbosch et al., 2008; Herbosch et al., Jodoigne-Jauche map, submitted; Herbosch, 2009 (herein).

Description: mostly light-coloured whitish, bluish or greenish, massive, medium-grained quartzite. Granulometry and sorting are very variable (Nijs & Logier, 1990). Stratification is generally not visible or difficult to observe (Dongelberg, Alvaux) or exceptionally well marked (Opprebais). At Opprebais, well stratified quartzite, greenish sandstone and decimetric to metric intercalations of grey siltstone and slate with biotite are observed (de Magnée, 1977; Herbosch et al., submitted). Frequent pseudo-nodules and scarce plane-parallel and oblique laminations are observed at Dongelberg (Herbosch et al., submitted). The earlier descriptions (Malaise, 1873, Stainier, 1890; Fourmarier, 1920; de la Vallée Poussin, 1931; Raynaud, 1952) stress the massive appearance of these quartzites, but also the presence of interstratified slate levels. These levels seem to be more frequent than one can observe nowadays. Finally these authors describe different facies that are coarser, more arkosic and conglomeratic, with oblique stratification in area of Jodoigne (Gette river) and of Mont-St-Guibert (Orne river).

The upper boundary with the Tubize Formation is nowhere observed and it is the oldest formation cropping out in the Brabant Massif (Herbosch et al., 2008).

Stratotype: not yet defined, the type area is situated in old quarries in the vicinity of Blanmont in the Orne valley: Alvaux, 150 m south of the Tour des Sarrasins (x 168,76 y 146,65), see also Delcambre & Pingot (2002, fig. 3, 4). But the better sections are at present in the Jodoigne area: Dongelberg (x 181,80 y 154,01) and Opprebais (x 181,00 y 153,15) quarries.

Area: outcrop area of the Brabant Massif: Senne, Dyle and Gette basins and many boreholes in the subsurface central part of the Brabant Massif.

Thickness: estimated at more than 1,5 km in the Jodoigne area (Herbosch et al., 2008).

Age: no macro- or microfossils have been mentioned except by Malaise (1900, p. 190; 1901, p. 4) who described the ichnofossil *Oldhamia* in interstratified slates in between quartzites of the Blanmont area (Orne river). One can tentatively attribute an age by comparison with the upper part of the Deville Group in the Ardennes inliers. Indeed, the occurrence of *Oldhamia* in the Rocroi inlier (lower part of the 4 Fils Aymon Formation) and in the Stavelot inlier (middle part of the Bellevaux Formation) were dated by acritarchs (Vanguestaine, 1992, fig. 2 & 4, zone 0) from the interval between the middle part of the Lower Cambrian and the lower part of the Middle Cambrian. In age this corresponds to the trilobite biozones in Baltica ranging from the *Holmia* Zone to the *Paradoxides oelandicus* Zone. In the new global Cambrian stratigraphy (Peng & Babcock in Gradstein et al., 2008) this interval is situated between the upper part of Stage 3 (Series 2) to about the 3/4 of Stage 5 (Series 3) (base of the *P. gibbus* Zone).

Remarks: synonyms: Assise de Dongelberg (Legrand, 1968).