Montfort Formation - MFT

Authors: Davreux, 1833; Mourlon, 1875; Thorez et al., 1977.

Description: The Monfort Fm (former names: Montfort assise, Montfort "psammites" or paving sandstone of Monfort) is made up of micaceous, dark grey bluish, sometimes nearly black by weathering, thick (up to 5 m) sandstone beds, practically without any shaly intercalations. Locally, at the top, the rocks take a maroon ("lie de vin" in french) color, especially in the Vesdre Nappe. Plant debris are abundant. The Monfort Fm represents a sand barrier complex. It was subdived by Thorez et al. (1977) into three members, respectively from bottom to top:

- 1. the Bon-Mariage Mbr: forebarrier environment, with rhythmic deposits of a typical tidal-flat environment, with subtidal, intertidal and occasionally supratidal environments;
- 2. the La Gombe Mbr: sand barrier environment itself, virtually barren of limestone or calcareous sediment; the rocks are higly sandy, arkosic, and organized in at least one meter thick beds, exhibiting a systematic reverse grading; clay material occurs occasionnaly interlayered within the sandy beds;
- 3. and the Barse Member: back-barrier environment with typical lagoon-evaporitic (sabkha) sedimentary deposits. The carbonate material is always a "primary" dolomite, without any fossil content.

Stratotype: Ourthe valley, railway trench, 1700 m south of the Esneux railway station.

Area: Part of the Namur Synclinorium, Dinant Synclinorium, Vesdre Nappe, Theux Window.

Thickness: 170 m in the Dinant Synclinorium of which 150 m in the Ourthe valley; ±350 m for both the Monfort and Evieux Fm in the Vesdre Nappe.

Age: Middle (Fa2b) to Upper (Fa2c) Famennian. Late *Sc. velifer*, *Polygnathus styriacus*, *Palmatolepis perlobata postera*, early *Palmatolepis gracilis expansa* conodont zones.