

Mortinsart Formation - MOR

Authors: Dumont, 1842; Boulvain et al. (2001).

Description: Alternation of grey to greenish sandstone, sand, silt and black or greenish clay.

Locally, some gravelly beds, bone-beds and lignite. This unit is capped in the east of Belgian Lorraine by wine-colour clays ("Argiles de Levallois") and in the western part of the area by a pebbly horizon.

Stratotype: Small stream close to Grendel (see Monteyne, 1969).

Area and thickness: North of Belgian Lorraine. The formation is a dozen m thick near Habay and Attert (central area). In the western area, west of Rossignol, it is transgressive on the Palaeozoic basement and is characterized by a reduced thickness. Thickness does not increase strongly towards the south since, close to the French border, in the Latour borehole, it remains less than 20 m. The Argiles de Levallois disappear westwards of a NNE-SSW line passing through Lischert.

Age: The formation is dated from Rhaetian sensu lato, on the basis of the presence of pelecypod *Rhaetavicula contorta*, a characteristic fossil of the Mortinsart Formation. Rhaetian sensu lato on the basis of palynomorphs (Schurmann, 1977; Adloff & Doubinger, 1982; Roche, 1994; Rauscher et al., 1995) and of vertebrates. The marine components of the vertebrate assemblage discovered in the Mortinsart Formation at Habay-la-Vieille (Duffin et al., 1983) and Attert (Duffin & Delsate, 1993) closely resemble the typical Rhaetian vertebrate fauna from Holwell (Duffin, 1980) and Aust (Storrs, 1994) in England.