Summarised description

Unit name

Le Roux Formation

Code

ROU

Status

Formal Formation

Parent unit

none

Child units

none

Characteristic description

Bedded brownish dolostone, dolomitic limestone, dolomitic shale, more less sandy.

Age

Givetian

Thickness

30 m in the type section.

Area of occurrence

Northern limb of the Dinant Synclinorium, from the Eau d'Heure River valley to the Ourthe River valley, Haine-Sambre-Meuse overturned thrusted sheets and Vesdre area.

Type locality

The original stratotype (Moreau quarry, Aisemont) is nowadays partly infilled, the road between Le Roux and Falisolle acts as neostratotype.

Alternative names

Macigno de Roux

Authors

Dorlodot (1893)

Modified after

Denayer, J., Coen-Aubert, M., Marion, J.-M. & Mottequin, B., 2024. Middle Devonian lithostratigraphy of Belgium. Geologica Belgica, 27/3-4, 155–192.

Date

23/09/2025

Cite as

Denayer, J., Coen-Aubert, M., Marion, J.-M. & Mottequin, B., 2025. The Le Roux Formation, 23/09/2025. National Commission for Stratigraphy Belgium. https://ncs.naturalscienes.be/lithostratigraphy/Le-Roux-Formation

Full description

Unit name

Le Roux Formation

Code

ROU

Status

Formal Formation

Parent unit

none

Child units

none

Origin of the name

After the village of Le Roux near Aisemont.

Alternative names

Macigno de Roux

Authors

Dorlodot (1893, p. 420): *Macigno de Roux*

Modified after

Denayer, J., Coen-Aubert, M., Marion, J.-M. & Mottequin, B., 2024. Middle Devonian lithostratigraphy of Belgium. Geologica Belgica, 27/3-4, 155–192.

Date

23/09/2025

Cite as

Denayer, J., Coen-Aubert, M., Marion, J.-M. & Mottequin, B., 2025. The Le Roux Formation, 23/09/2025. National Commission for Stratigraphy Belgium. https://ncs.naturalscienes.be/lithostratigraphy/Le-Roux-Formation

Characteristic description

The formation starts with a unit dominated by siliciclastics: calcareous siltstone and sandstone, calcshale, shale with carbonate nodules, with some argillaceous limestone beds and lenses. Locally, micaceous sandstone beds are present. The colour is typically brownish. Upwards, the shale becomes dolomitic and passes to dolostone or dolomitic limestone, often argillaceous or sandy. The dolostone is greenish-grey and becomes brownish or rust-coloured where weathered. The upper part of the formation is made of light-coloured micritic and bioclastic limestone with local accumulations of stromatoporoids. The last (dolomitic) limestone bed defines the top of the Le Roux Formation.

Area of occurrence

The formation is known along the northern limb of the Dinant Synclinorium from the Eau d'Heure River to the Ourthe River valleys (Coen-Aubert & Coen, 1975). The formation is also known in the Haine–Sambre–Meuse Overturned Thrust sheets, from the Biesme River to the Samson River valleys where it disappears (Coen-Aubert & Lacroix, 1979). In the Ourthe River valley (Hony, Tilff), the Le Roux

Formation is similar to the succession known in the type section of Aisemont (Coen & Coen-Aubert, 1971; Coen-Aubert, 1974). In the Vesdre River valley, the evolution of the facies between Trooz and Membach has been followed by Coen & Coen-Aubert (1971). Eastwards, however, the limestone is progressively more developed in the upper part of the unit (Coen-Aubert, 2004) whereas only the basal part remains dolomitic and sandy (Laloux et al., 1996).

Type locality

The original stratotype defined in the access trench of the Moreau quarry (Aisemont; Coen-Aubert, 1991a) is nowadays partly infilled. A good section exists nearby along the road between Le Roux and Falisolle (Delcambre & Pingot, 2014b).

Age

The Le Roux Formation is poor in conodonts. Its basal part yielded some conodonts, including *Icriodus latecarinatus* and *Polygnathus denisbriceae* (Gouwy & Bultynck, 2003b; Coen-Aubert et al., 1986), characterising the middle/upper *varcus* interval suggesting a middle to late Givetian age. Hence the Le Roux Formation is considered as a lateral equivalent of the Fromelennes Formation. Both lithostratigraphic units display, above the basal siliciclastic facies, some limestone beds rich in stringocephalid brachiopods associated with stromatoporoids and corals. Among them, *Wapitiphyllum laxum* is frequent (Coen-Aubert, 2004, 2019).

Thickness

The formation is c. 30 m thick in its stratotype and reaches c. 40 m in the Meuse River valley (Delcambre & Pingot, 2017), then its thickness decreases eastwards, and the formation disappears in the Samson River valley (Coen-Aubert & Lacroix, 1979) and re-appears in the Hoyoux River valley (c. 10 m, Coen-Aubert, 1973; Mottequin et al., 2021). In the Ourthe River valley, it is locally absent (e.g. Colonster, Coen-Aubert, 1974) but its thickness reaches 47 m south of Verviers in the Vesdre River valley (Laloux et al., 1996; Coen-Aubert, 2004).

Lower boundary

First dolomitic bed overlying the nodular limestone of the Névremont Formation.

Upper boundary

Below the first shale bed of the overlying Nismes Formation (Presles Facies).

Regional correlations

in the Gerpinnes vicinity, it rapidly passes to the Fromelennes Formation (Delcambre & Pingot, 2000, 2004). The same transition is documented along the north-eastern limb of the Dinant Synclinorium in the Amblève River valley (Marion et al., in press). In Germany, south of Aachen, the equivalent unit is the *Obere Stringocephalen-Schichten* (Kasig & Reissner, 2008).

References

Coen, M. & Coen-Aubert M., 1971. L'assise de Fromelennes aux bords sud et est du bassin de Dinant et dans le massif de la Vesdre. Annales de la Société géologique de Belgique, 94/1, 5–20.

Coen Aubert, M., 1973. Le Givetien et le Frasnien de la vallée du Hoyoux. Service géologique de Belgique, Professional Papers, 1973/6, 1–12.

Coen-Aubert, M., 1974. Le Givetien et le Frasnien du massif de la Vesdre. Stratigraphie et Paléogéographie. Académie royale de Belgique, Mémoires de la Classe des Sciences, in-4°, 2e série, 18/2, 1–146.

Coen-Aubert, M., 1991a. ROU Formation du Roux. In Bultynck, P. et al., Les formations du Dévonien moyen de la Belgique. Mémoires pour servir à l'Explication des Cartes géologiques et minières de la Belgique, 30, 77–79.

Coen-Aubert, M., 2004. Two new species of Temnophyllids (Rugosa) from the Upper Givetian of Belgium. Bulletin de l'Institut royal des Sciences naturelles de Belgique, Sciences de la Terre, 74, 19–34.

Coen-Aubert, M., 2019. Investigation of some Givetian rugose corals from the Mont d'Haurs Formation in southern Belgium. Geologica Belgica, 22/3-4, 121–138.

Coen-Aubert, M. & Coen, M., 1975. Le Givetien et le Frasnien dans la vallée de la Meuse de Tailfer à Yvoir (bord nord du Bassin de Dinant). Annales de la Société géologique de Belgique, 97 (pro 1974), 499–524.

Coen-Aubert, M. & Lacroix, D., 1979. Le Frasnien dans la partie orientale du bord sud du Synclinorium de Namur. Annales de la Société géologique de Belgique, 101 (pro 1978), 269–279.

Coen-Aubert, M., Préat, A. & Tourneur, F., 1986. Compte rendu de l'excursion de la Société belge de Géologie du 6 novembre 1985 consacrée à l'étude du sommet du Couvinien et du Givétien au bord sud du bassin de Dinant, de Resteigne à Beauraing. Bulletin de la Société belge de Géologie, 95/4, 247–256.

de Dorlodot, H., 1893. Recherches sur le prolongement occidental du Silurien de Sambre-et-Meuse et sur la terminaison orientale de la faille du Midi. Annales de la Société géologique de Belgique, 20, Mémoires, 289–424.

Delcambre, B. & Pingot, J.-L., 2000. Carte géologique de Wallonie : Gozée – Nalinnes 52/3-4. 1/25 000. Ministère de la Région wallonne, Direction générale de l'Agriculture, des Ressources naturelles et de l'Environnement, Namur, and its explanatory booklet, 105 p.

Delcambre, B. & Pingot, J.-L., 2004. Carte géologique de Wallonie : Biesme – Mettet 53/1-2. 1/25 000. Ministère de la Région wallonne, Direction générale de l'Agriculture, des Ressources naturelles et de l'Environnement, Namur, and its explanatory booklet, 82 p.

Delcambre, B. & Pingot, J.-L., 2014b. Carte géologique de Wallonie : Tamines – Fosses-la-Ville 47/5-6. 1/25 000. Service public de Wallonie, Agriculture, Ressources naturelles et Environnement, Namur, and its explanatory booklet, 106 p.

Delcambre, B. & Pingot, J.-L., 2017. Carte géologique de Wallonie : Malonne – Naninne 47/7-8. 1/25 000. Service public de Wallonie, Agriculture, Ressources naturelles et Environnement, Namur, and its explanatory booklet, 130 p.

Gouwy, S. & Bultynck, P., 2003b. Conodont data across the Eifelian-Givetian boundary at Aisemont, southern Namur Synclinorium, Belgium: correlation and implications. Courier Forschungsinstitut Senckenberg, 242, 239–256.

Kasig, W. & Reissner, B., 2008. Aachen–Hohes Venn. In Deutsche Stratigraphische Kommission (Ed.), Stratigraphie von Deutschland VIII. Devon. Schriftenreihe der Deutschen Gesellschaft für Geowissenschaften, 52, 267–286.

Laloux, M., Dejonghe, L., Ghysel, P. & Hance, L., 1996. Carte géologique de Wallonie : Fléron – Verviers 42/7-8. 1/25 000. Ministère de la Région wallonne, Direction générale de l'Agriculture, des Ressources naturelles et de l'Environnement, Namur, and its explanatory booklet, 150 p.

Mottequin, B., Marion, J.-M. & Delcambre, B., 2021. Carte géologique de Wallonie : Huy – Nandrin 48/3-4. 1/25 000. Service public de Wallonie, Agriculture, Ressources naturelles et Environnement, Namur, and its explanatory booklet, 84 p.