

Devonian corals of the Vosges Mountains, France

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The Saxo-Thuringian Zone of western Europe is a tectonostratigraphic unit that includes Devonian sediments. Usually, the sediments are deep-water siliciclastics and variously affected by regional metamorphism. In some points, however, shallow-water carbonates are preserved. Besides Ossa Morena in Spain, the Northern Vosges in Eastern France is one of these rare points. In the Bruche river valley, fossiliferous sediments are known to crop out and fossil invertebrates were first described in the 19th century from the Russ Conglomerate and Russ Marble. The Russ Conglomerate of the Bruche Unit is an olistostrome containing limestone olistoliths. Some of these limestones yielded a fossil coral fauna, though rather poorly preserved. In Russ and Barembach, the olistoliths display reefal facies with stromatoporoids and corals in a sandy carbonate matrix. The rugose coral assemblage in these localities is dominated by "Fasicphyllum" varium, "Fasicphyllum" sp., Grypophyllum spp., and Acanthophyllum sp., and is of supposed Eifelian age. In Russ, the limestone was quarried in the 19th century as an ornamental stone known as Russ Marble. Near the Schirmeck town, several outcrops of limestone in non reefal facies yield a more diverse coral fauna with genera Dohmophyllum, Stringophyllum, Breviphyllum, Zonophyllum, Mesophyllum, Tryplasma, Moravophyllum, and Spasskyella, the latter reported for the first time in Western Europe. This assemblage is possibly younger than the previous one, i.e., Givetian in age.

Key words: Anthozoa, Rugosa, stratigraphy, Eifelian, Givetian, palaeogeography, Saxo-Thuringian Zone

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