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Wenlock strata in the Rinero 2 section

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Locality - Along the forest trail between the Rinero and Robiella mountain streams.
Lithostratigraphic unit - Schist and calcschist with few limestone beds.
Age - Sheinwoodian (Wenlock graptolite Zone 30; Silurian).
What to see - Part of the characteristic Silurian succession in the Sierra Negra area with graptolites.

How to get there

The locality (Fig. 1) is accessible from the regional road A-139 Benasque-Francia. On the right side of the San Chaime Bridge a forest track coinciding with GR-11 crosses the Rinero stream. After crossing the creek, turn right upstream and cross again southwards the creek, which left bank meets the north end of the forest trail between the Rinero and Robiella brooks. The section starts a few meters to the south along the forest track.



Figure 1. Parcial view of the Rinero 2 section; basal and middle graptolite shales with carbonates in between.

Historical outline

Degardin (1977) studied several sections in the area. His section q-q' (Degardin 1977: 54, 75) partially contains Rinero 2 section. Valenzuela-Ríos (1994) measured and sampled the section for conodonts, but all the conodont samples were sterile.

Lithology and fossil content

The section has a thickness of about 30 m and exposes a succession of graptolitic black and grey shale/schists with a few limestones with orthoceratids interbedded (Fig. 2).

Palaeoenvironment

According to García-López et al. (1996),

the Silurian carbonate-silicicalstic sequences in the Pyrenees were deposited in a deep carbonate ramp with low sedimentation rate; the detritic input increases the thickness of the succession and dilutes the calcareous levels, which become more spaced.

Fossil content

Degardin (1977) identified graptolites in three sites. We have also collected graptolites from three different places; the precise correlation of the sites is, unfortunately, not possible, but according to his cross section (fig. 30) at least the two sites on the south part are not related to ours. The recorded graptolites are *Monograptus lamarmorae*, *M. flemingii flemingii*, *M. latus*, *M. uncinatus* var. *tariccoi*, *M. mutuliferus* var. *strigosus*. Four conodont samples from different limestone beds were sterile.

Biostratigraphy

After Degardin (1977) the graptolite association correlates the schist with the Zone 30 of Elles & Wood, in the upper Sheinwoodian, upper Wenlock.

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Figure 2. Stratigraphic column of the Rinero 2 section with location of conodont samples and graptolites records.

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