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## Lochkovian strata in the Rinero 3 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** - Lochkovian? (Lower Devonian).

**What to see** - The characteristic Lochkovian succession in the Sierra Negra area (Rueda Fm.).

### How to get there

The locality 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 of section Rinero 2, along the forest track.



**Figure 1.** General view of the main carbonate packet of Rueda Fm. in Rinero 3 Section, from Bed 5.



**Figure 2.** Section Rinero 3, view of carbonate packet between Beds 16-20. Rueda Fm.

### Historical outline

Degardin (1977) studied several sections in the area. His section q-q' (Degardin 1977: 54, 75) shall contain Rinero 3 section; however, his documentation of Lower Devonian strata is restricted to outcrops close to the Robiella creek. This is a far south position regarding the location of Rinero 3. Valenzuela-Ríos (1994) measured and sampled the section for conodonts, but all the conodont samples were sterile.

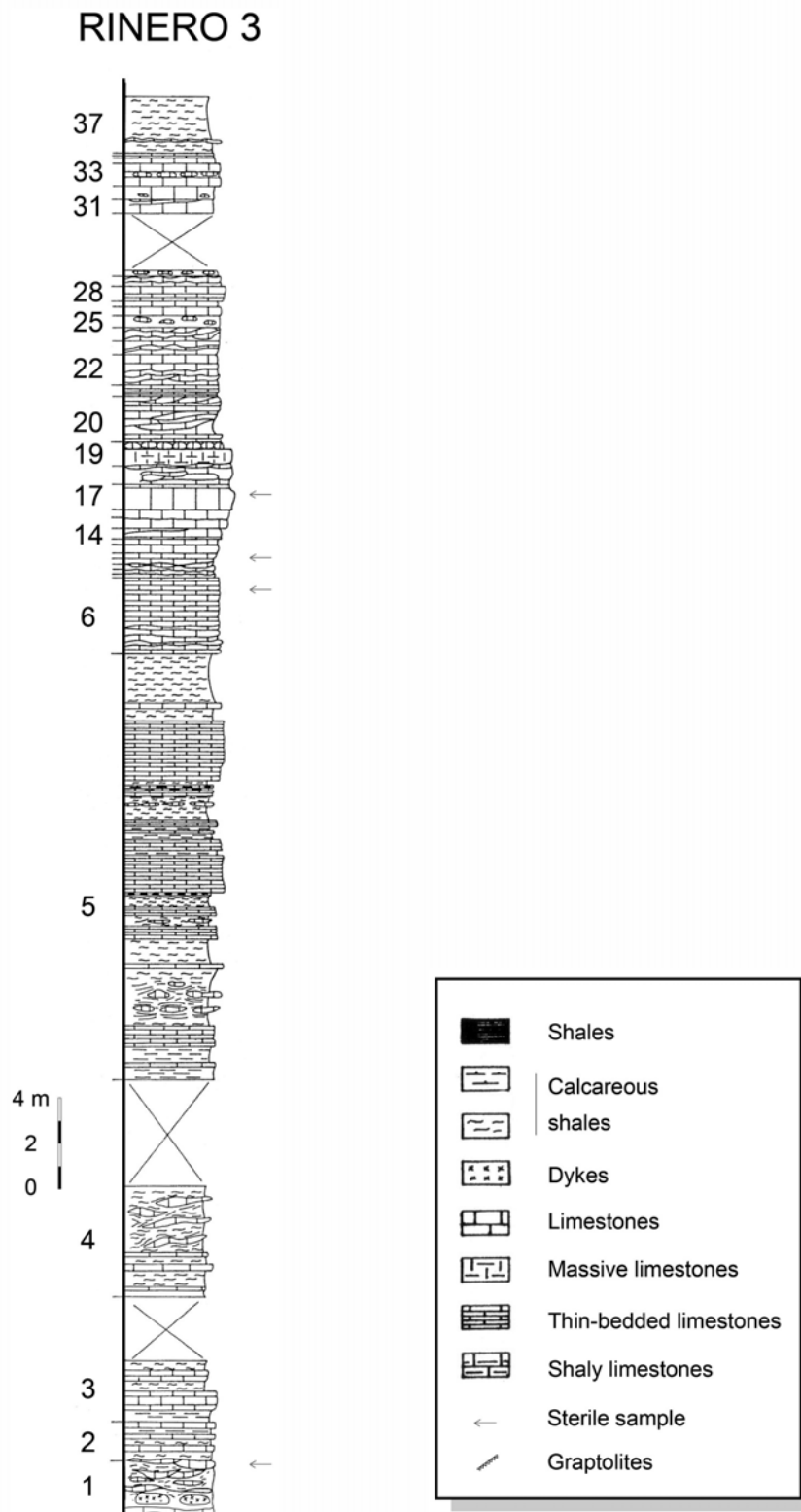
### Lithology and fossil content

The section has a thickness of about 60 m and comprises an alternating sequence of dominant grey limestone with irregular surfaces and grey

shale. This sequence is attributed to the Rueda Fm. (Figs. 1, 2).

### Fossil content

Several conodont samples from different limestone beds were sterile.



**Figure 3.** Stratigraphic column of the Rinero 3 section with location of conodont samples and graptolites records.

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### **Biostratigraphy**

No data available. The assignation to Lochkovian is based on lithological content, which is different from the Silurian dominant black shale and limestone, and in mapping correlation with similar sequences of the Rueda Fm. in the nearby mountain. (Fig. 3).

### **References**

DEGARDIN, J.M. (1977): Contribution à l'étude géologique du Silurien de la région de Benasque (province de Huesca, Espagne). - Thèse 3<sup>e</sup> Cycle, Lille, 355p.

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