

THE GRANOPHYRE OF CUASSO AL MONTE

You are on the path to reach Cavagnano from Cuasso. Cuasso al Monte is literally the translation of “Cuasso village located in the mountains” to indicate a very different condition from that one of Cuasso al Piano, a hamlet located in the plain. The mountain named Piambello – to indicate that is located in a nice plain - stands for 1125 m of altitude, dominating the landscape between the Lugano Lake and the small Ghirla Lake.

Looking at the rock walls around, or also at some buildings, you can note a particular salmon-pink coloured rock, massive and with sharp edges: it is the so-called granophyre, a sort of granitic rock, which have been quarried here since the XIX century, and which is now required and exported all over the world for its peculiar colour and aspect.

The largest part of Monte Piambello is made of granophyre; on the flanks of the mount, around Cuasso and also in the nearby area of Cavagnano, it outcrops as wide vertical cliffs of an intense red hue, which stands on the green of the trees: they are the signs of the oldest abandoned quarries.

Granophyre origins as a magma rich in quartz, orthoclase and sometimes plagioclase, put in place at a low depth under the surface, about 275 million of years ago, in the Permian period of Palaeozoic Era. It cooled down quite slowly, because it was protected by the thick rock cover, so some minerals could crystallize, becoming recognizable into a homogeneous amorphous matrix: this is the texture of a porphyry.

The intrusion of granophyre took place into a thick sequence of volcanic rocks, into an older volcanic caldera; all this area, in fact, is characterized by Palaeozoic magmatic rocks, while, to the east, mountains are moulded on a thick sequence of younger, Mesozoic sedimentary rocks, lying on this crystalline basement.

Cuasso and its granophyre are famous also for the wide variety of rare, well shaped minerals that have been found in the so called miarolitic cavities contained into the rock: they are small, centimetric voids originated while the magma was cooling, and partially filled of well-shaped crystals of pink orthoclase. Later, the hydrothermal fluids rich in rare elements which circulated in the fractures, gave origin into them to many other minerals, sometimes very peculiar and rare.

They can be found also rummaging into the detritic mounds produced by centuries of quarrying activity, widespread in the woods around.