

THE FOSSIL FOREST OF VAL SANAGRA

Now you are in the hamlet of Codogna, at the mouth of Val Sanagra. Despite its ordinary aspect of a wooded gorge with a quite small catchment basin, this latter is famous among palaeontologists for its unique fossil flora, belonging to the so called Carboniferous period, in the Palaeozoic Era.

A lens of sediments of this age, in fact, is exceptionally preserved here, in a little lateral groove coming down from Logone Alp; it is pinched along the great fault known as Gropa Line, which divides metamorphic basement to the north from mainly Jurassic carbonatic rocks to the south.

Here, grey to red sandstones bear an about ten meters thick black layer, rich of organic matter and also anthracite-type coal, which in the past centuries has been exploited by two little, now ruined, mines.

From mining debris and neighbouring outcrops, in the last century more than 2000 leaf impressions were collected, belonging to 75 different species of plants which flourished about 310 millions of years ago, in the great, undivided continent of Pangea. In that time, while amphibious are the dominant vertebrates on emerged lands, and the ancestors of dinosaurs are starting their evolution, the lowland areas of Euramerica and China were covered by extensive wetland forests, dominated by now extinct plants, such as arborescent lycopsids and tree ferns.

You can discover this extraordinary ancient world visiting the nearby Naturalistic-ethnographic Museum: large slabs of coal slates will show to you well preserved, perfectly recognizable tree branches, leaves, chequered-diamond patterned bark imprints, being the adequate framework to the real jewel of the exhibition: the perfectly three-dimensionally preserved remains of a plant seed, named *Trigonocarpus*, one of the oldest representative of seed plants or *Phanerogams*, which in that period are at the dawn of their evolution!

Fossil invertebrates and also fish, coming from younger rocks in the neighbouring valleys, complete the panorama on the ancient times offered by the Museum, and focused on the exceptionally rare plant fossils of palaeozoic strata of Val Sanagra.