Abstract

This study deals with the collections of fossil plants which belong to the paleontological museum of APAT (Agency for Environmental Protection and Technical Services). Three collections of particular historical-scientific importance were analysed and their fossils date back to the Carboniferous and Permian periods (Palaeozoic Era). The methodologies of this work are based on bibliographic and internet researches.

In the first part the evolution of vascular plants through the Palaeozoic Era is illustrated and there is a reference to the forests of the Carboniferous period and to the most important taxa and genera of plants which formed these communities.

After this introduction, the collections are illustrated one by one. They are the collection "Località straniere (vegetali)" from Germany and Poland, the collection "Flora di Monte Jano (Lotti)" from Tuscany and the collection "Flora paleozoica della Sardegna" from Sardinia. There is a description of the geographical and geological features of the deposits where the fossils were found. Each fossil is described through a scheme which is drown up with data about classification, revisions and integrations of original data, geographical localization, cronology and bibliography.

The last part of the work deals with the revision and the integration of the original inventory data of each collection of fossil plants.