



## **Teaching climate effects on plant growth in primary schools of rural areas**

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Since 2009 CNR-Ibimet has developed activities on climate effects on plant growth as curricula activities for primary schools in rural areas, whose principal aim was approaching the pupils to the concepts of environmental and climatic factors that are necessary and influence plant growth. The activities were structured following the approach designed and promoted by Carboschools, an European project where scientists met school teachers and pupils to introduce and experiment carbon cycle and local and global impacts of climate change on the environment. Tools and instruments were provided to perform experiments and hands-on activities on the base of the major teaching in Carboschools experience: students' interest in science can be fostered by the application of experiments in school science. The aim of this work is to present the organization and structure of the activities performed in primary schools and the main outcomes. In the first part of the school year, traditional frontal lessons on meteorology and climatology, factors affecting plant growth and plant observation methods were performed with an extensive support of experiments and practical activities.

In the second part, pupils monitored the growth and health of some plants to observe the reaction to meteorological conditions and particularly to temperature. Each classroom was provided by a maximum-minimum thermometer and phenological paper forms to describe plants according to a reference guide provided by the scientists. Finally they produced a diary where they described their work and their observations. In conclusion, the results of these activities showed that learning through observation and inquiry stimulates pupils' interest in Science and is an effective method to approach pupils to phytoclimatology and phenology.