PLants Employed As SEnsing Devices

PLEASED

http://pleased-fp7.eu

Plants are able of amazing sensing capabilities
... they sense the environment and when subject to stimuli they generate electrical signals

The PLEASED project is developing a technology to collect and analyze such signals
We aim at using plant communities as

DISTRIBUTED
ECO-COMPATIBLE
SELF-SUSTAINABLE
COST-EFFECTIVE

SENSING INFRASTRUCTURE

A common Experimental Set-up to collect data

When “moving” from the first electrode to the second one the signal is attenuated ... variation potentials at work

A first prototype of a tiny cost effective data acquisition system compliant with the TelosB family and

ARDUINO

ROME Maker Faire
THE EUROPEAN EDITION

An open dataset on the signals generated by plants in reaction to a number of stimuli such as:

Acids, Cuts
Electricity
Flames, Lights
NaCl, Ozone

First results on a classification algorithm capable to extract from the signal the fingerprint of the stimulus that generated it

Music and images from the signals generated by plants inspire the movements of a dancer