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CILIA

Customized Intelligent Life-Inspired Arrays

Integrated Project

Information Society Technologies
Future & Emerging Technologies
Proactive Initiative BIO-I3

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**CHOICE OF TECHNOLOGY OF VISUALISATION OF
AIR FLOW IN LEAF LITTER IN THE FIELD**

Actual submission date:	September 18, 2007	
Start day of project:	September 1st, 2005	Duration: 48 months

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CONTENT

After a thorough literature search, we decided to use hot-wire anemometry, complemented by smoke visualisation, for the analysis of turbulence in the boundary layer above leaf litter. The system we bought is from the well known company DANTEC, has 4 channels, is totally transportable and can be connected to a portable PC.

The large band-width (from 0.1Hz to several kHz) and the large measurement bracket (from 1 mm/s to 30 m/s) provided by the hot-wire measurement techniques is very adapted to the study of wind and turbulence phenomena in the field.

It can also be used for the same purpose in the wind tunnel (see Figure below). Its interface is user friendly.

