



France: Studying Crop Yields

The PhénoField Project



PhénoField® is a unique, open-field research tool in Europe that allows researchers to understand how yield is determined in maize, wheat, and other major crops under water stress. This platform, managed by ARVALIS - Institut du végétal, the agricultural institute that pools research and development funds from French cereal producers, will make it possible to acquire millions of data points, ultimately leading to the identification of genes that contribute to drought tolerance in maize and wheat and the development of new varieties.

This system consists of eight mobile roofs, covering a total area of 5,000 m², which automatically protect the experiments from rain and also allow for controlled irrigation. The system can, therefore, control the duration and intensity of water deficits, and even provide larger quantities of water through irrigation.

This project is made possible by a suite of Campbell Scientific equipment: SKP215, LP02 pyranometer, HC2S3, and wireless sensors (CWS220E). The data are transmitted to CR1000 dataloggers via Wi-Fi and radio. Measurements of environmental conditions, as well as plant growth and development, are taken continuously.

Case Study Summary

Application

Studying drought tolerance

Location

Beauce-la-Romaine, France

Products Used

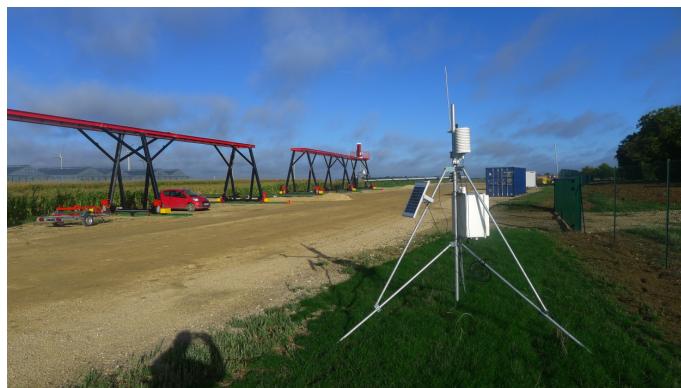
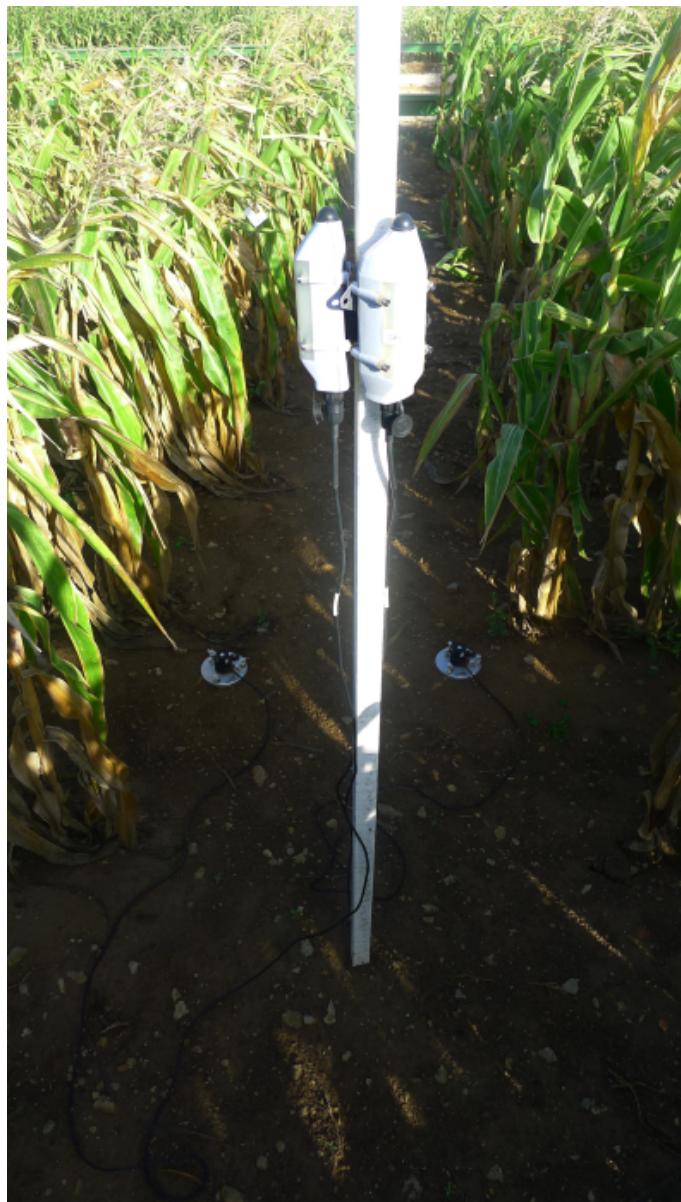
HC2S3-L, CWS220E, CWS900E, CR1000

Participating Organizations

ARVALIS - Institut du végétal

Related Website

[ARVALIS website](#)



View online at: www.campbellsci.com/france-crop-yields 