Case Study: Birds Eye Pea Harvest

A grower in Hull (UK) has been successfully using the Skye MiniMet Weather Station to aid them in the production and harvesting of peas. The operation, which is the largest of its kind in the world, co-ordinates a sowing and harvesting operation of vining peas across 9,600 hectares of East Yorkshire and North Lincolnshire. The aim is to produce the best quality Garden Peas and Petits Pois for the Birds Eye Brand.

The Pea crop is only at peak quality for a very short period of time, so the planning and control of the operation is critical to ensure the crops present themselves for harvest in sequence.

This is achieved using a heat units system to space the sowing of the crops. The accumulation of heat units between an average harvest day is considered when planning the sowing of two separate crops. The varying rate of maturity in different soil types and varieties of peas add complications to this, as of course does the weather.

Unilever have traditionally calculated the heat unit using daily mercury maximum and minimum readings. They are now using the Skye MiniMet to see if they can improve the accuracy of the heat unit recording even further.

A PAR Special light sensor has recently been added to the system to help understand the rate of crop growth that just temperature alone can't account for. The research is being carried out with Unilever Research, Colworth House.

Equipment used

The work is being carried out with the modular MiniMet weather station. In this case measuring relative humidity, air temperature, PAR Special, radiation, rain fall and soil temperature. A GSM modem system is also being used to aid in remote download and communication.

Further information on the MiniMet can be obtained from Skye or by visiting our website www.skyeinstruments.com

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