

Scientists' weather predictions stop farmers losing crop

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Pest infestations and extreme weather could be predicted months ahead thanks to a new business launched in conjunction with The Hive at Nottingham Trent University.

[Climate-Smart Crop](#) is an application that aims to transform the way the agricultural industry grows crops, in a bid to help tackle a future global food shortage.

Developer Dr Christopher Nankervis uses an innovative algorithm to predict changes in [weather](#) conditions on seasonal timetables and provides efficient forecasts that are accurate to within a few kilometres.

Using satellites and historical data ranging from the 1960s to present day, his company's software can alert farmers of impending pest infestations, as well as calculate the length of growing season they can expect for their crop.

Working alongside leading academics in meteorology, the application will help farmers pinpoint their farm sites and gain insights into the type of crops that will grow best on their land.

The 35-year-old says the software could also be developed to inform the public of heat waves, warn shops of shortages of winter vegetables like Brussels sprouts, as well as alert energy suppliers of temperature changes to allow time to buy extra fuel to meet high demands.

The entrepreneur, who has experience working with NASA satellite measurements, founded his company Weather Logistics after approaching The Hive, Nottingham Trent University's centre for enterprise and entrepreneurship.

Dr Nankervis said: "As the population grows, the demand for food will also increase. This combined with [extreme weather](#) could lead to [food shortages](#) during some growing seasons. With this application farmers can predict how weather patterns will affect their crop, allowing them time to plan ahead in order to mitigate any adverse conditions.

"A major problem in farming is the over-application of fertilisers. Their excessive use significantly contributes to the UK's [greenhouse gas emissions](#). By allowing farmers to understand the impacts and when they should be spreading on their crop, we can reduce the amount of environmental harm."

Weather Logistics was recently shortlisted in a competition which could see them receive a \$100,000 (£80,000) grant to continue their work on location-data based products.

He added: "As a scientist, I didn't know a lot about running a [business](#), but the advisors at The Hive provided me with professional and tailored feedback to place my business on the right track."

Chris Hall, Business Manager at The Hive said: "Dr Nankervis came to The Hive with exciting ideas about launching his weather-based product but needed help in setting up a business. We supported him with business basics such as finance, resources and HR, allowing him to develop the foundations of his ideas into a viable business."

More information: More information can be found at www.weatherlogistics.com/

Provided by Nottingham Trent University

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