**Innovation fund grant to develop next generation microbial solutions for agriculture**

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**The Danish Innovation Fund has awarded a grant to Chr. Hansen, University of Copenhagen and the Danish Technological Institute (DTI) who will join forces to develop natural solutions for sustainable agricultural production**

As global food demand increases, the agricultural sector is faced with the dual challenge of increasing productivity while reducing the sector’s environmental impact.

“Beneficial bacteria is a natural way to protect plants and crops, and can contribute to improved crop yield, as well as yield stability within agriculture. With this grant, we join forces with Copenhagen University and DTI, to develop cost effective, beneficial bacteria for agricultural production that can spur the conversion away from classical pesticides and fertilizers,” explains Henrik Joerck Nielsen, vice president, Plant Health at Chr. Hansen.

**Joining forces**

The 3.9 million Euro project – called ‘Bac4CroP’ – has just kicked off and will run for 4 years.

“The combination of the University of Copenhagen’s world class research with Chr. Hansen’s technical know-how and deep microbial knowledge and DTI’s field trial capabilities creates a compelling platform to address this important challenge. The end goal is to increase yield for farmers’ globally and to provide consumers with crops exposed to fewer chemicals,” adds Peter Høngaard Andersen, Managing Director of Innovation Fund Denmark.

The steps in the project include screening of new microbials based on Plant and Microbiome ‘predictors’; integration and prediction of data by advanced machine learning; engineering of more efficient and robust products by making bacterial consortia and/or strain ‘breeding’; with final yield improvement tested in global field trials.

“Today, there is very little science applied in understanding the mode of action when it comes to microbial solutions in agriculture, which leads to inefficient product development and insufficient products. The Bac4CroP project will increase the success rate and decrease the development cost of launching new plant beneficial bacteria as robust products for use in sustainable agricultural production,” adds Joerck Nielsen.

**A natural alternative and supplement to chemical pesticides**

According to the American Academy of Microbiology, microbial solutions to improve plant health have the potential to increase crop productivity by 20% and reduce fertilizer and pesticide requirements by 20% within 20 years1.

“Chr. Hansen has already had great success within Plant Health during the last 5 years. Leveraging on expertise built up over 140 years of developing microbial solutions within food, it is our ambition to expand our global leadership to provide a sustainable alternative to farmers world-wide,” concludes Joerck Nielsen.