

5.7 AGATA KACZMAREK, MARK STEVENS

University of Nottingham, Loughborough, Leics, UK – LE12 5RD

SPOREID – INNOVATIVE DISEASE MONITORING AND DIAGNOSTICS FOR IMPROVED EFFICIENCY OF CROP PRODUCTION

ABSTRACT

SporeID is a new project designed to minimise the impact of powdery mildew, rust and other potential foliar disease threats on the yield of the UK sugar beet crop. Foliar diseases have the potential to reduce yield by 12, 20 or 50% for rust, mildew or cercospora respectively and, whilst current practices prevent losses of this magnitude, it is estimated that up to 10% of yield in the UK is lost each season to foliar diseases. Climate change may lead to increasing pressure, both from existing and 'new' emerging diseases, which will require increased crop protection. Improved knowledge and decision making will optimise chemical input and offer environmental benefits through improved resistance management in future climates.

The project is bringing together novel diagnostic tools, crop disease modelling and yield forecasting to underpin grower decision making, and will investigate the potential impact of emerging disease on the crop. The three-year project is led by the BBRO; it also involves British Sugar plc, AB Sugar, the University of Nottingham, Rothamsted Research, Burkard Manufacturing Company Ltd and Crop Performance Ltd. This poster will highlight the latest developments from this collaborative project to date.
