O.21 - Arable decision support systems – the future of integrated pest management?

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This paper reviews the current state of the art concerning Decision Support Systems (DSS) developed and in use, specifically for diseases of arable crops in Europe. It aims to provide a critical analysis of what constitutes a successful and/or beneficial system. We also consider how the use of DSS's will benefit from incorporation in Farm Management Systems and the use of geographical information, which is currently added to the FMS's in several European countries. They provide easy and cost reducing solutions with respect to integrated pest management in the future. We consider what features and attributes are necessary for DSS's to provide functional benefit to growers and other end-users and highlight examples of systems that have made a significant mark in the field with respect to improved disease control, reduced pesticide usage, increased cost benefit and integration. In the final section of the paper, we consider the possibilities of the development of a Europe-wide scheme for some disease control systems to utilise common DSS's across different regions and discuss the implications that this may have with regard to the necessary development of a common platform for different arable crop diseases.