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INTRODUCTION

This international conference marks the centenary of East Malling Research (EMR) and is an opportunity to celebrate what has been achieved in the last 100 years and look forward to the multiple challenges ahead. Throughout its existence, EMR has focussed on the needs of the fruit industry, especially fruits from perennial woody plants, although it has also embraced other elements of horticulture such as ornamental shrubs and bulbs and, more recently, mushrooms.

EMR is widely known for its classification and subsequent development of tree fruits, but it has also been the home of many other firsts including controlled atmosphere storage of fruits, the use of auxins to control tree growth, the characterisation of incompatibility in cherry and pear and, most recently, the identification and deployment of pheromones from major non-lepidopteran pests as part of integrated pest and disease management. In this conference, to be attended by over one hundred delegates from many countries, we shall focus on four main themes: advanced breeding strategies for improved fruit crops; root-shoot communication and rootstock improvement; pests and pathogens of perennial crops; and fruit production and quality. We are delighted that each theme will be introduced by a leading authority from either New Zealand or the USA.

Our conference also incorporates the Bewley Lecture to be given by Professor Graham Seymour of the University of Nottingham on the genetic basis of fruit ripening towards commercial practice.

EMR and its partners relish the opportunities being offered by modern advances in genetics and phenotyping, that will contribute to the increased production required to meet the aims of food security and healthy diets. This meeting will assist us to deliver innovations to achieve this increased production sustainably while coping with the challenges of a more variable and changing climate, using resources more efficiently, reducing waste and greenhouse gas emissions and enhancing biodiversity.

I am most grateful for the time devoted to organising this conference by EMR's scientists Gerard Bishop (Chairman), Michelle Fountain, Richard Harrison, Robert Saville and the organisation team at AAB, and welcome you to EMR.

Peter Gregory Chief Executive East Malling Research

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