



# Developing a research framework to support the Scottish Cherry Industry

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# Background to interest in cherry: SSCR funded desk study

- Pressure to diversify from challenges in growing soft fruit crops eg. lack of actives, resistant high quality varieties, raspberry root rot
- Potential for soft fruit growers to utilise innovation and expertise: state-of-the-art polythene tunnels, irrigation regimes and frost protection regimes
- Develop cherry as a high value crop for the Scottish industry.



# Blueberry model: steps for cherry

- Identification cherry germplasm for Scotland.
- Identify barriers to profitability.
- Identify technology to overcome barriers.



S. McCallum  
blueberry  
breeding  
programme



# June Drop

- June Drop is an environmentally controlled phenotypic disorder that can lead to  $>50\%$  fruit loss in a poor season.
- Climate change is increasingly influencing crop production leading to such phenotypic instability hampering investment.



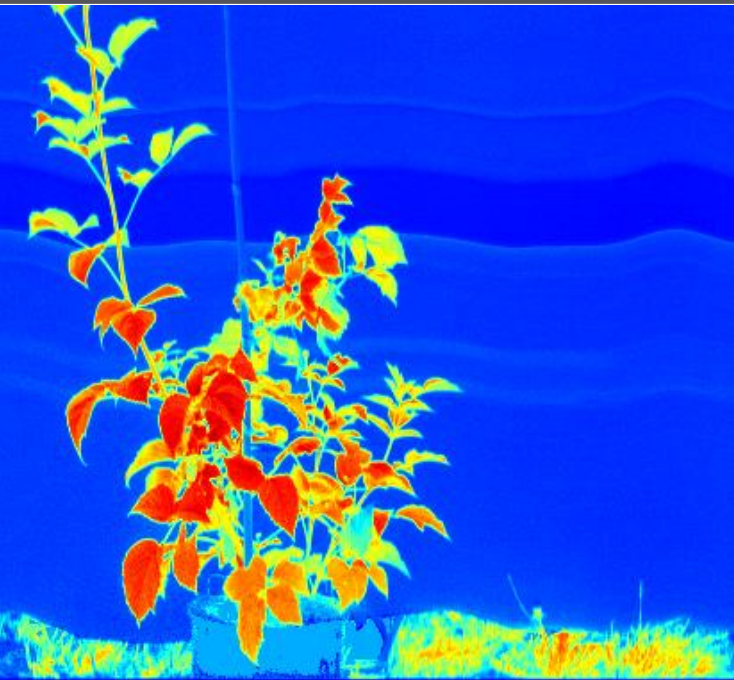


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# Technological developments: June Drop

## Plant stress imaging

- Identify environmental factors which impact on phenotype prior to their effect on yield and quality being realised.
- Field imaging using range of cameras and sensors
- Algorithms will allow growers to predict environmental impact on phenotype, facilitating crop management to optimise yield and predict profit.





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## SSCR funded Desk study

Calum MacDonald, Kay Smith, Linzi Jorgensen, Susan McCallum  
Peter Thomson



### Way forward

Some preliminary work under  
RESAS novel crops

Funding

Cherry images  
Peter Thomson



Scottish Government  
Riaghaltas na h-Alba  
gov.scot