Phenotypical and Pomological Evaluation
of the Variation Present in a Sweet Cherry
Mapping Population.

E. S. Skipper¹, G. Lopez-Ortega², A. Bayo-Canha², and F. Fernández-Fernández¹

¹East Malling Research, New Road, East Malling ME19 6BJ UK
²IMIDA, C/ Mayor, Murcia 30150 Spain
gregorio.lopez2@carm.es

Introduction:
A group of 125 individuals of the F1 progeny Cherry (Colney x C210-7 [Lapins x Sweet September]) has been evaluated at East Malling Research (EMR). This contribution shows the natural variation in flowering, harvest date and fruit quality traits.

Harvesting date:
- Harvesting date records: Estimate ripening date each two-three days.

Quality assessments:
- Standard quality assessments: good, rots, cracks, soluble solids, acidity, colour, fruit size, firmness, weight.

Aims:
Characterise phenotypical variation in the progeny to enable QTL analysis. Identify individuals with extreme phenotypes with a potential to extend harvest season due to delayed ripening/maturity.

Results:
The harvest period was between 16th of July and 21st of August. Half of the population had white flesh while the other half had black flesh. The average weight of the fruits were between 6-10 grams. There were only three hybrids with an average weight higher than ten. The 80% of the progeny had sugar content between 19-25 ºbrix and a 60% of the hybrids firmness was among 350-450 (g/mm).

Future Work
- Develop a linkage map using the Illumina 6K SNP chip in collaboration with IASMA
- Record phenotype data over subsequent years and in different environments for the mapping of QTLs relating to flowering characteristics and quality traits.