



CAPITALISE and our Stakeholder Strategy Following-on from CropBooster-P

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We aim to





Experimental focus

The MoVaPs	Target sub-traits associated with each MoVaP in CAPITALISE
1: Tuning the Calvin Cycle	 Rubisco activity and activation state Activity of the RuBP regeneration phase of the Calvin cycle
2: The kinetics of photosynthetic responses to changes in irradiance	 Kinetics of build-up of Calvin cycle after an irradiance increase Activation of rubisco after an irradiance increase De-activation of the qE component of non-photochemical quenching after an irradiance decrease
3: Tuning leaf chlorophyll content	PSII antenna sizePhotosystems density
	✓ Faster recovery from photoprotection
CropBooster-P	 Faster light induction of CBC
	\checkmark Tuning antenna pigment composition
	✓ Photorespiration





WP1 Germplasm resource management, curation and sequence data production



WP8 Communication, Dissemination, Exploitation and Road Map development

WP9 Project Management

WP6 Stakeholder engagement, environmental and socioeconomic impact of MoVaPs



OTHER CROP FACTORS

- Water use Efficiency
- Heat stress
- N/P use efficiency
- Plant quality criteria



Photosynthesis – worth breeding for



to support EC decisions

• Engage interest and potential.

Evidence of % increase

Evidence of other benefits

Challenges to be solved -

- Food security
 - (sustainability = GD@2030)
- Climate resilience
 - > Temperature
 - Water Use Efficiency
 - Lower inputs (N/P)
 - > Water logging
 - (biotic out of scope?)
- Public acceptance



- Elite lines
- Descriptors
- > What change is desirable
- What change can be tolerated
- What is realistic
- Breeding technologies, genomic selection /GE/GM/MAS?
- Challenge areas market
- > Breeding
- Growing
- Harvesting
- Post-Processing handling
- > Consumer acceptance



Roadmap and Lobbying 2.0





FUTURE PLANT SCIENCE STRATEGY

FUTURE-PROOF CROPS

TRANSLATE!!

MISSION or Partnership Key Issues

- Vision for Future Proofed crops
- Strong *industry voice* collaborating with academic base
 - (Future proofed crops WG ?)
- Actions to translate research to crop (pre) breeding (>TRLs)
- Strategies to address bottle necks & knowledge gaps
- Align messages and language







Call to joint action!





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