

P008 Calmodulin and photoperiodism: a novel approach using an inducible CaM sponge.

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Calmodulin (CaM), is a highly conserved, eukaryotic calcium sensor.

CaM acts as a transducer of Ca^{2+} signatures and is essential for many aspects of plant growth and development including polarity, root development and osmotic stress tolerance.

We have generated and expressed in bacteria a novel Calspermin-GFP fusion protein, which we will use as a CaM sponge to investigate the various roles of CaM in developmental signalling, in the model dicot *Arabidopsis thaliana*.

We have purified and characterised the Calspermin-GFP fusion *in vitro*, to define its functional characteristics. We have also cloned the sequence encoding the Calspermin-GFP cDNA downstream of the glucocorticoid-inducible UAS promoter, and engineered this transgene into *A. thaliana*. Transformants are currently under selection, and updated information will be presented at this conference.