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accumulation

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**When are foliar anthocyanins useful to plants? Re-evaluation of the photoprotection hypothesis using *Arabidopsis thaliana* mutants that differ in anthocyanin accumulation**

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## Highlights

- Anthocyanins can assist in the photoprotection of *Arabidopsis* leaves.
- The extent of photoprotection depends strongly on the environmental conditions.
- Acylated anthocyanins, induced by high light exposures, are apposite light filters.
- Photoabatement by anthocyanins provides a functional advantage in the longer term.

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