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Authors: Kevin S. Gould, Christian Jay-Allemand, Barry A. Logan, Yves Baissac, Luc P.R. Bidel

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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

Kevin S. Gould[1,*], Christian Jay-Allemand[2], Barry A. Logan[3], Yves Baissac[2], Luc P. R. Bidel[4]

[1]School of Biological Sciences, Victoria University of Wellington, PO Box 600, Wellington, New Zealand.

[2]UMR IATE 1208, University of Montpellier CC 024, Place Eugène Bataillon, Montpellier 34095, France.

[3]Biology Department, Bowdoin College, Brunswick, Maine 04011, U.S.A.

[4]INRA, UMR AGAP, Centre de Recherche de Montpellier, Place Pierre Viala, Montpellier F-34060, France.

*Corresponding author. Email: kevin.gould@vuw.ac.nz

Co-authors' email addresses: christian.jay-allemand@umontpellier.fr, blogan@bowdoin.edu, yves.baissac@gmail.com, luc.bidel@univ-montp2.fr

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.