Accepted Manuscript

Title: Responses of phenolic acid and flavonoid synthesis to blue and blue-violet light depends on plant species

Authors: K. Taulavuori, A. Pyysalo, E. Taulavuori, R. Julkunen-Tiitto

PII: S0098-8472(18)30020-0

DOI: https://doi.org/10.1016/j.envexpbot.2018.03.016

Reference: EEB 3414

To appear in: Environmental and Experimental Botany

Received date: 9-1-2018 Revised date: 1-3-2018 Accepted date: 13-3-2018

Please cite this article as: Taulavuori, K., Pyysalo, A., Taulavuori, E., Julkunen-Tiitto, R., Responses of phenolic acid and flavonoid synthesis to blue and blue-violet light depends on plant species. Environmental and Experimental Botany https://doi.org/10.1016/j.envexpbot.2018.03.016

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



ACCEPTED MANUSCRIPT

Responses of phenolic acid and flavonoid synthesis to blue and blueviolet light depends on plant species

Taulavuori Ka*, Pyysalo Aa, Taulavuori Ea, Julkunen-Tiitto Rb

^aDepartment of Ecology and Genetics, University of Oulu, PO Box 8000, FIN 90014, Oulu, Finland

^bDepartment of Biology, University of Eastern Finland, PO Box 111, FIN 80101, Joensuu, Finland

Graphical abstract

Plant Species	Importance of Supplemental Light	Response
	+B +BV	
А		n/a
В	+ + +	Phenolic Acids 1
С		Flavonoids 1

Highlights

- Phenolic acid and flavonoid production of three common culinary herbs show different responses to supplemental blue (+B) and blue-violet (+BV) lights.
- No responses were observed in *Rumex sanguineus*.
- Enhanced production of phenolic acids in *Ocimum basilicum* occurred in response to both light supplements.
- Enhanced production of flavonoids in *Eruca sativa* occurred in response to both light supplements, but strongly under +BV.

Download English Version:

https://daneshyari.com/en/article/8887008

Download Persian Version:

https://daneshyari.com/article/8887008

<u>Daneshyari.com</u>