

Accepted Manuscript

Chemical priming of seed alters cotton floral bud differentiation by inducing changes in hormones, metabolites and gene expression

Sheng Fang, Kai Gao, Wei Hu, John L. Snider, Shanshan Wang, Binglin Chen, Zhiguo Zhou



PII: S0981-9428(18)30348-6

DOI: [10.1016/j.plaphy.2018.08.010](https://doi.org/10.1016/j.plaphy.2018.08.010)

Reference: PLAPHY 5371

To appear in: *Plant Physiology and Biochemistry*

Received Date: 22 June 2018

Revised Date: 6 August 2018

Accepted Date: 7 August 2018

Please cite this article as: S. Fang, K. Gao, W. Hu, J.L. Snider, S. Wang, B. Chen, Z. Zhou, Chemical priming of seed alters cotton floral bud differentiation by inducing changes in hormones, metabolites and gene expression, *Plant Physiology et Biochemistry* (2018), doi: 10.1016/j.plaphy.2018.08.010.

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.

1 **Title:** Chemical priming of seed alters cotton floral bud differentiation by inducing changes in
2 hormones, metabolites and gene expression

3 **Authors:** Sheng Fang^a, Kai Gao^a, Wei Hu^{a,b}, John L. Snider^b, Shanshan Wang^a, Binglin Chen^a, Zhiguo
4 Zhou^{a,*}

5 **Affiliation:** ^aCollege of Agriculture, Nanjing Agricultural University, Nanjing, 210095, PR China

6 ^bDepartment of Crop and Soil Science, University of Georgia, Tifton, GA 31794, USA

7 ***Correspondence author:** Zhiguo Zhou

8 ***Correspondence address:** College of Agriculture, Nanjing Agricultural University, Nanjing,
9 E-mail: giscott@njau.edu.cn, Tel / Fax: 86-25-84396813

10 **E-mail address:** Sheng Fang: 2016201018@njau.edu.cn;

11 Kai Gao: 2014101058@njau.edu.cn;

12 Wei Hu: 2012201026@njau.edu.cn;

13 John L. Snider: jlsnider@uga.edu

14 Shanshan Wang: yjshanshan@njau.edu.cn;

15 Binglin Chen: blchen@njau.edu.cn;

16 Zhiguo Zhou: giscott@njau.edu.cn

17 **Declarations of interest:** none

18 ¹

19

20

21

22

Abbreviations: ABA, abscisic acid; 6-BA, N6-benzyladenine; CTKs, cytokinins; DPC, dimethyl piperidinium chloride; DW, dry weight; ES, early stage of floral bud differentiation; GA₃, gibberellic acid; FW, fresh weight; IAA, indole 3-acetic acid; LS, late stage of floral bud differentiation; MS, middle stage of floral bud differentiation; PGRs, plant growth regulators; SAM, shoot apical meristem; ZT, trans-zeatin.

Download English Version:

<https://daneshyari.com/en/article/8352666>

Download Persian Version:

<https://daneshyari.com/article/8352666>

[Daneshyari.com](https://daneshyari.com)