Accepted Manuscript

Determination of quality constituents in the young leaves of albino tea cultivars

Lin Feng, Ming-Jun Gao, Ru-Yan Hou, Xiao-Yi Hu, Liang Zhang, Xiao-Chun Wan, Shu Wei

PII:	S0308-8146(14)00065-X
DOI:	http://dx.doi.org/10.1016/j.foodchem.2014.01.044
Reference:	FOCH 15269
To appear in:	Food Chemistry
Received Date:	23 August 2013
Revised Date:	15 December 2013
Accepted Date:	15 January 2014



Please cite this article as: Feng, L., Gao, M-J., Hou, R-Y., Hu, X-Y., Zhang, L., Wan, X-C., Wei, S., Determination of quality constituents in the young leaves of albino tea cultivars, *Food Chemistry* (2014), doi: http://dx.doi.org/ 10.1016/j.foodchem.2014.01.044

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

1 Determination of quality constituents in the young leaves of albino tea

- 2 cultivars
- Lin Feng^a, Ming-Jun Gao^{b*}, Ru-Yan Hou^a, Xiao-Yi Hu^c, Liang Zhang^a, Xiao-Chun
- 4 Wan^a, and Shu Wei^{a,*}
- ⁵ ^a, Key Laboratory of Tea Biochemistry and Biotechnology, Anhui Agricultural
- 6 University, 130 Changjiang Blvd West, Hefei, Anhui, 230036, China;
- ^b, Agriculture and Agri-Food Canada, Saskatoon Research Centre, 107 Science
- 8 Place, Saskatoon, SK S7N 0X2, Canada;
- ⁹ ^c,College of Forestry and Landscape Architecture, Anhui Agricultural University,
- 10 130 Changjiang Blvd West, Hefei, Anhui, 230036, China.
- 11 Corresponding authors: weishu@ahau.edu.cn, Tel & Fax: +86-551-65783941;
- 12 ming-jun.gao@agr.gc.ca, Tel: +1-306-956-7671, Fax: +1-306-956-7247

13 ABSTRACT

14 Albino tea has received increased attention due to its brisk flavour. To identify changes in the key chemical constituents conveying important qualities to albino 15 tea, the metabolite profiles of four albino cultivars and one green tea cultivar were 16 analyzed. Compared to the green tea control, significantly decreased contents of 17 chlorophyll (Chl) (p<0.01), total carotenoids (p<0.05), caffeine (p<0.01), and total 18 catechins (p<0.05) were found in albino tea leaves with a few exceptions, 19 whereas increases were noted in the Chl a/b ratio and the contents of both 20 zeaxanthin and free amino acids, including theanine. Multivariate analysis 21 identified catechins and carotenoids as the most important contributors the 22

Download English Version:

https://daneshyari.com/en/article/7598026

Download Persian Version:

https://daneshyari.com/article/7598026

Daneshyari.com