Digital Receipt

This receipt acknowledges that Turnitin received your paper. Below you will find the receipt information regarding your submission.

The first page of your submissions is displayed below.

Submission author:	Heriyanto Heriyanto
Assignment title:	Evaluasi Jurnal
Submission title:	Karakterisasi Antosianin Buah Mur…
File name:	2016-Sitepu_et_al.pdf
File size:	610.12K
Page count:	14
Word count:	4,446
Character count:	26,212
Submission date:	19-Mar-2018 11:01AM (UTC+0700)
Submission ID:	932400195

Online Journal of Natural Science Vol 5(2) :158-171 ISSN: 2338-0950
Agustus 2016

Karakterisasi Antosianin Buah Murbei Spesies *Morus alba* dan *Morus cathayana* di Indonesia

(Anthocyanin Characterization of *Morus alba* and *Morus cathayana* in Indonesia)

Rehmadanta Sitepu[1*]; Heryanto[2], Tatas H.P. Brotosudarmo[2], Leenawaty Limantara[2,3]

[1]Program Studi Farmasi Fakultas Sains dan Teknologi Universitas Ma Chung Malang
[2]Ma Chung Research Center for Photosynthetic Pigmen (MRCPP)
Villa Puncak Tidar N-01 Malang, Jawa Timur-Indonesia
[3]Universitas Pembangunan Jaya
Jl. Cendrawasih, Kel. Sawah Baru, Kec. Ciputat Tangerang Selatan, Banten, Indonesia.

ABSTRACT

Mulberry fruit has been known to be rich in antioxidants due to its anthocyanin contents. Unfortunately, the utilization of mulberry fruits as a source of antioxidants and therapy is rare in Indonesia. Mulberry plants are only used for feeding domesticated animal or making tea from its leafs. This study aims to characterize anthocyanin of *Morus alba* and *Morus cathayana*. Characterization of anthocyanin exctracts from *Morus alba and Morus cathayana* were performed using solvent 0.1% hydrochloric acid (HCl) in methanol, and then analized by UV-Vis spectrophotometer and High Performance Liquid Chromatography (HPLC). The results of UV-visible absorption spectra obtained from the crude extract shows that absorption spectra of mulberry extract *M. cathayana* provide higher absorbance ± 1.3 a.u. compared to absorbance which was obtained from the crude extract of mulberry *M. alba* are on ± 0.4 a.u. The total anthocyanin obtained from extract of *M. cathayana*, is 40,39 ± 7,64 mg/g dry weight compared with *M. alba* which has a value 11,57 ± 3,02 mg/g dry weight. Results of chromatogram of HPLC using XR-ODS column with elution A was 0.1% formic acid in acetonitrile and elution B was 0.1% formic acid in water shows both *M. cathayana* and *M. alba* have two dominant pigments of anthocyanin. However, the intensity of chromatograms obtained from *M. cathayana* is higher than the intensity of chromatograms of *M. alba*. The intensity of chromatogram of *M. cathayana* is 50 mAU on retention time 7.86 minutes and 15 mAU on retention time 8.38 minutes. The intensity of chromatogram of *M. alba* is 10 mAU on retention time 7.35 minutes and 3 mAU on retention time 7.76 minutes. The two dominant anthocyanins are predicted as cyanidin-3-O-glucoside and cyanidin-3-rutinoside.

Key words: Anthocyanin, *Morus alba*, *Morus cathayana*

ABSTRAK

Buah murbei kaya antioksidan karena kandungan antosianin yang banyak. Sayangnya, pemanfaatannya sebagai sumber antioksidan di Indonesia masih minim. Pemanfaatan tanaman murbei hanya sebatas daun yang dijadikan pakan ternak dan teh. Penelitian ini bertujuan untuk melakukan karakterisasi antosianin buah murbei spesies *Morus alba* dan

Corresponding author: rehmadanta.sitepu@machung.ac.id

Karakterisasi Antosianin Buah Murbei Spesies Morus alba dan Morus cathayana di Indonesia

by Heriyanto Heriyanto

Karakterisasi Antosianin Buah Murbei Spesies Morus alba dan Morus cathayana di Indonesia

ORIGINALITY REPORT

11%	8%	7%	5%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	Zhen Wang. "Empirical Study of Gender Occupational Segregation of Rural-Urban Migrant Workers in China", Emerald, 2012 Publication	2%
2	www.slideshare.net Internet Source	1%
3	run.unl.pt Internet Source	1%
4	Submitted to UCSI University Student Paper	1%
5	Submitted to University of South Alabama Student Paper	<1%
6	revistas.uptc.edu.co Internet Source	<1%
7	Submitted to The Robert Gordon University Student Paper	<1%
8	ejournal.unsrat.ac.id Internet Source	<1%