

[Available Issues](#) | [Japanese](#)
[>> Publisher Site](#)

 Author:  [ADVANCED](#) | Volume  Page   
 Keyword:   |   

[TOP](#) > [Available Issues](#) > [Table of Contents](#) > Abstract

ONLINE ISSN : 1881-3984

PRINT ISSN : 1344-6606

**Food Science and Technology Research**

Vol. 7 (2001) , No. 3 pp.224-230


[\[PDF \(136K\)\]](#) [\[References\]](#)
**Protective Effects of Hot Water Extract of Safflower Leaves and Its Component Luteolin-7-O-Glucoside on Paraquat-Induced Oxidative Stress in Rats**
[Kiharu IGARASHI<sup>1\)</sup>](#), [Akiko DEMACHI<sup>1\)</sup>](#) and [Asako TAKENAKA<sup>1\)</sup>](#)
*1) Department of Bioresource Engineering, Faculty of Agriculture, Yamagata University*

(Received: January 10, 2001)

(Accepted: April 24, 2001)

Suppressive effects of hot water extract of safflower leaves (Ex) and its major component luteolin-7-O-glucoside (LuGlc) on oxidative stress were determined in rats in which oxidative stress had been induced by paraquat (PQ). Both Ex and LuGlc suppressed lowering of food intake, and body weight gain, increases in lung weight, liver thiobarbituric acid reactive substances (TBARS), and a decrease in the liver triacylglycerol concentration were all induced by PQ-feeding. Rises in the liver total glutathione and oxidized glutathione concentrations in the PQ-fed rats were suppressed by adding Ex and LuGlc to the PQ diet. Moreover, Ex and LuGlc tended to suppress decreases in catalase activity in the liver mitochondrial fraction and liver  $\alpha$ -tocopherol concentration which were induced by PQ-feeding. These results showed that both Ex and LuGlc, which is a major component of Ex, may be available to suppress oxidative stress *in vivo*.

**Keywords:** [safflower leaves](#), [luteolin-7-O-glucoside](#), [paraquat](#), [oxidative stress](#)

[\[PDF \(136K\)\]](#) [\[References\]](#)
Download Meta of Article [\[Help\]](#)

To cite this article:

**Protective Effects of Hot Water Extract of Safflower Leaves and Its Component Luteolin-7-O-Glucoside on Paraquat-Induced Oxidative Stress in Rats** Kiharu IGARASHI, Akiko DEMACHI and Asako TAKENAKA, *FSTR*. Vol. 7, 224-230. (2001) .

---

doi:10.3136/fstr.7.224

JOI JST.JSTAGE/fstr/7.224

*Copyright (c) 2007 by Japanese Society for Food Science and Technology*

---



---

[Japan Science and Technology Information Aggregator, Electronic](#)

