

Close

Print

◀ [1] ▶

Record 1 of 1

Title: Effect of Tea (*Camellia sinensis*) and Olive (*Olea europaea* L.) Leaves Extracts on Male Mice Exposed to Diazinon

Author(s): Al-Attar, AM (Al-Attar, Atef M.); Abu Zeid, IM (Abu Zeid, Isam M.)

Source: BIOMED RESEARCH INTERNATIONAL **Article Number:** 461415 **DOI:** 10.1155/2013/461415 **Published:** 2013

Times Cited in Web of Science Core Collection: 7

Total Times Cited: 7

Usage Count (Last 180 days): 1

Usage Count (Since 2013): 6

Cited Reference Count: 40

Abstract: The present study was aimed to evaluate the effects of tea and olive leaves extracts and their combination in male mice intoxicated with a sublethal concentration of diazinon. Exposure of mice to 6.5 mg/kg body weight of diazinon for seven weeks resulted in statistical increases of serum alanine aminotransferase, aspartate aminotransferase, gamma glutamyl transferase, alkaline phosphatase, creatine kinase, creatinine, glucose, triglycerides, and cholesterol, while the value of serum total protein was declined. Treating diazinon-intoxicated mice with tea and olive leaves extracts or their combination significantly attenuated the severe alterations in these hematobiochemical parameters. Moreover, the results indicated that the supplementation with combination of tea and olive leaves extracts led to more attenuation effect against diazinon toxicity. Additionally, these new findings suggest that the effect of tea and olive leaves extracts and their combination against toxicity of diazinon may be due to antioxidant properties of their chemical constituents. Finally, the present study indicated that the extracts of tea and olive leaves and their combination can be considered as promising therapeutic agents against hepatotoxicity, cardiotoxicity, nephrotoxicity, and metabolic disorders induced by diazinon and maybe by other toxicants and pathogenic factors.

Accession Number: WOS:000318144400001

Language: English

Document Type: Article

KeyWords Plus: ORGANOPHOSPHATE INSECTICIDE; LIPID-PEROXIDATION; PESTICIDE DIAZINON; GREEN TEA; RATS; POLYPHENOLS; TESTIS; DAMAGE; CELLS; LEAF

Addresses: [Al-Attar, Atef M.; Abu Zeid, Isam M.] King Abdulaziz Univ, Fac Sci, Dept Biol Sci, Jeddah 21323, Saudi Arabia.

Reprint Address: Al-Attar, AM (reprint author), King Abdulaziz Univ, Fac Sci, Dept Biol Sci, POB 139109, Jeddah 21323, Saudi Arabia.

E-mail Addresses: atef_a_2000@yahoo.com

Author Identifiers:

Author	ResearcherID Number	ORCID Number
Fac Sci, KAU, Biol Sci Dept	L-4228-2013	
Faculty of, Sciences, KAU	E-7305-2017	

Publisher: HINDAWI PUBLISHING CORPORATION

Publisher Address: 410 PARK AVENUE, 15TH FLOOR, #287 PMB, NEW YORK, NY 10022 USA

Web of Science Categories: Biotechnology & Applied Microbiology; Medicine, Research & Experimental

Research Areas: Biotechnology & Applied Microbiology; Research & Experimental Medicine

IDS Number: 133NF

ISSN: 2314-6133

29-char Source Abbrev.: BIOMED RES INT

ISO Source Abbrev.: Biomed Res. Int.

Source Item Page Count: 6

Open Access: gold

Output Date: 2017-07-23

Close

Print

◀ [1] ▶