

REFERENCES

- Abdollahi M, Ranjbar A, Shadnia S, Nikfar S, Rezaie A. Pesticides and oxidative stress: a review. *Med. Sci. Monit.* 2004;10(6):RA141-7.
- Agrahari S, Pandey KC, Gopal K. Biochemical alteration induced by monocrotophos in the blood plasma of fish, *Channa punctatus* (Bloch). *Pest. Biochem. Physiol.* 2007; 88(3):268-72. [DOI: 10.1016/j.pestbp.2007.01.001]
- Akhgari M, Abdollahi M, Kebryaezadeh A, Hosseini R, Sabzevari O. Biochemical evidence for free radical-induced lipid peroxidation as a mechanism for subchronic toxicity of malathion in blood and liver of rats. *Human Exp. Toxicol.* 2003; 22(4):205-11. [DOI: 10.1191/0960327103ht346oa]
- Aygun D. Diagnosis in an acute organophosphate poisoning: report of three interesting cases and review of the literature. *Eur. J. Emerg. Med.* 2004;11(1):55-8.
- Azmi MA, Naqvi SN, Azmi MA, Aslam M. Effect of pesticide residues on health and different enzyme levels in the blood of farm workers from Gadap (rural area) Karachi-Pakistan. *Chemosphere* 2006;64(10):1739-44. [DOI: 10.1016/j.chemosphere.2006.01.016]
- Bagchi D, Bagchi M, Hassoun EA, Stohs SJ. In vitro and in vivo generation of reactive oxygen species, DNA damage and lactate dehydrogenase leakage by selected pesticides. *Toxicology* 1995;104(1-3):129-40. [DOI: 10.1016/0300-483X(95)03156-A]
- Banerjee BD, Seth V, Ahmed RS. Pesticide-induced oxidative stress: perspectives and trends. *Rev. Environ. Health* 2001; 16(1):1-40.
- Chitra GA, Muraleedharan VR, Swaminathan T, Veerarghavan D. Use of pesticides and its impact on health of farmers in South India. *Int. J. Occup. Environ. Health* 2006;12(3):228-33. [DOI: 10.1179/oe.2006.12.3.228]
- Dawson AH, Eddleston M, Senarathna L, Mohamed F, Gawarammana I, Bowe SJ, Manuweera G, Buckley NA. Acute human lethal toxicity of agricultural pesticides: a prospective cohort study. *PLoS Med.* 2010;7(10): e1000357 [DOI: 10.1371/journal.pmed.1000357]
- Delescluse C, Ledirac N, Li R, Piechocki MP, Hines RN, Gidrol X, Rahmani R. Induction of cytochrome P450 1A1 gene expression, oxidative stress, and genotoxicity by carbaryl and thiabendazole in transfected human HepG2 and lymphoblastoid cells. *Biochem. Pharmacol.* 2001;61(4):399-407. [DOI: 10.1016/S0006-2952(00)00562-1]
- Dwivedi N, Bhutia YD, Kumar V, Yadav P, Kushwaha P, Swarnkar H, Flora SJ. Effects of combined exposure to dichlorvos and monocrotophos on blood and brain biochemical variables in rats. *Human Exp. Toxicol.* 2010;29(2):121-9. [DOI: 10.1177/0960327109357212]
- Dwivedi N, Flora SJ. Concomitant exposure to arsenic and organophosphates on tissue oxidative stress in rats. *Food Chem. Toxicol.* 2011;49(5):1152-9. [DOI: 10.1016/j.fct.2011.02.007]
- Eddleston M. The pathophysiology of organophosphorus pesticide self-poisoning is not so simple. *Neth. J. Med.* 2008;66(4):146-8.
- Elia AC, Galarini R, Dorr AJM, Taticchi MI. Bioaccumulation of heavy metals, organochlorine pesticides, and detoxication biochemical indexes in tissues of *Ictalurus melas* of Lake Trasimeno. *Bull. Environ. Contam. Toxicol.* 2006;76(1):132-9. [DOI: 10.1007/s00128-005-0899-1]
- Environmental Protection Agency US. Health and environmental effects profile for dichlorvos. 2000; 11-5.
- Ewing RD. Diminishing returns: Salmon decline and pesticides. Funded by the Oregon Pesticide Education Network, Biotech Research and Consulting, Inc., Corvallis. 1999; 55.
- Flessel P, Quintana PJE, Hooper K. Genetic toxicity of malathion: a review. *Environ. Mol. Mutagen.* 1993;22(1):7-17. [DOI: 10.1002/em.2850220104]
- Folmar LC. Effects of chemical contaminants on blood chemistry of teleost fish: a bibliography and synopsis of selected effects. *Environ. Toxicol. Chem.* 1993;12(2):337-75. [DOI: 10.1002/etc.5620120216]
- Gultekin F, Ozturk M, Akdogan M. The effect of organophosphate insecticide chlorpyrifos-ethyl on lipid peroxidation and antioxidant enzymes (in vitro). *Arch. Toxicol.* 2000;74(9):533-8. [DOI: 10.1007/s002040000167]
- Gupta PK. Pesticide exposure-Indian scene. *Toxicology* 2004;198(1-3):83-90. [DOI: 10.1016/j.tox.2004.01.021]
- Hai DQ, Varga SI, Matkovic B. Organophosphate effects on antioxidant system of carp (*Cyprinus carpio*) and catfish (*Ictalurus nebulosus*). *Comp. Biochem. Physiol. C Pharmacol. Toxicol. Endocrinol.* 1997;117(1):83-8. [DOI: 10.1016/S0742-8413(96)00234-4]
- Halliwell B, Whiteman M. Measuring reactive species and oxidative damage in vivo and in cell culture: how should you do it and what do the results mean? *Br. J. Pharmacol.* 2004;142(2):231-55. [DOI: 10.1038/sj.bjp.0705776]
- Hettwer H. Histochemical investigations on liver and kidney of the rat after intoxication with organophosphates. *Acta Histochem.* 1975;52(2):239-52.
- Hissin PJ, Hilf R. A fluorometric method for determination of oxidized and reduced glutathione in tissues. *Anal. Biochem.* 1976;74(1):214-26. [DOI: 10.1016/0003-2697(76)90326-2]
- Horrigan L, Lawrence RS, Walker P. How sustainable agriculture can address environmental and human health harms of industrial agriculture. *Environ. Health Perspect.* 2002;110(5):445-56.
- Julka D, Pal R, Gill KD. Neurotoxicity of dichlorvos: effect on antioxidant defense system in the rat central nervous system. *Exp. Mol. Pathol.* 1992;56(2):144-52. [DOI: 10.1016/0014-4800(92)90031-6]
- Kakkar P, Das B, Viswanathan PN. A modified spectrophotometric assay of superoxide dismutase. *Indian J. Biochem. Biophys.* 1984;21(2):130-2.
- Kalender S, Ogutcu A, Uzunhisarcikli M, Acikgoz F, Durak D, Ulusoy Y, Kalender Y. Diazinon-induced hepatotoxicity and protective effect of vitamin E on some biochemical indices and ultrastructural changes. *Toxicology* 2005; 211(3):197-206. [DOI: 10.1016/j.tox.2005.03.007]
- Lowry OH, Rosebrough NJ, Farr AL, Randall RJ. Protein measurement with the Folin phenol reagent. *J. Biol. Chem.* 1951;193(1):265-75.
- Milatovic D, Gupta RC, Aschner M. Anticholinesterase toxicity and oxidative stress. *ScientificWorldJournal* 2006;6:295-310. [DOI: 10.1100/tsw.2006.38]
- Mittal M, Flora SJ. Effects of individual and combined exposure to sodium arsenite and sodium fluoride on tissue oxidative stress, arsenic and fluoride levels in male mice. *Chem. Biol. Interact.* 2006;162(2):128-39. [DOI: 10.1016/j.cbi.2006.05.018]
- Naqvi SM, Hasan M. Acetylhomocysteine thiolactone protection against phosphamidon-induced alteration of regional superoxide dismutase activity in central nervous system and its correlation with altered lipid peroxidation. *Indian J. Exp. Biol.* 1992;30(9):850-2.
- Nemcsok J, Orban L, Asztalos B, Vig E. Accumulation of pesticides in the organs of carp, *Cyprinus carpio* L., at 4 degrees and 20 degrees C. *Bull. Environ. Contam. Toxicol.* 1987;39(3):370-8.
- Nishikimi M, Appaji N, Yagi K. The occurrence of superoxide anion in the reaction of reduced phenazine methosulfate

- and molecular oxygen. *Biochem. Biophys. Res. Commun.* 1972;46(2):849-54. [DOI: 10.1016/S0006-291X(72)80218-3]
- Ohkawa H, Ohishi N, Yagi K. Assay for lipid peroxides in animal tissues by thiobarbituric acid reaction. *Anal. Biochem.* 1979;95(2):351-8. [DOI: 10.1016/0003-2697(79)90738-3]
- Oncu M, Gultekin F, Karaoz E, Altuntas I, Delibas N. Nephrotoxicity in rats induced by chlorpyrifos-ethyl and ameliorating effects of antioxidants. *Human Exp. Toxicol.* 2002;21(4):223-30. [DOI: 10.1191/0960327102ht225oa]
- Pimentel D. Effect of pesticides on the environment. In: 10th International Congress on Plant Protection. Crydon: UK, 1983; pp. 685-91.
- Ramaneswari K, Rao LM. Influence of endosulfan and monocrotophos exposure on the activity of NADPH cytochrome c reductase (NCCR) of *Labeo rohita* (Ham). *J. Environ. Biol.* 2008; 29(2):183-5.
- Reichling JJ, Kaplan MM. Clinical use of serum enzymes in liver disease. *Dig. Dis. Sci.* 1988;33(12):1601-14.
- Reitman S, Frankel S. A colorimetric method for the determination of serum glutamic oxaloacetic and glutamic pyruvic transaminases. *Am. J. Clin. Pathol.* 1957;28(1):56-63.
- Ryhanen R, Herranen J, Korhonen K, Penttila I, Polvilampi M, Puhakainen E. Relationship between serum lipids, lipoproteins and pseudocholinesterase during organophosphate poisoning in rabbits. *Int. J. Biochem.* 1984; 16(6):687-90. [DOI: 10.1016/0020-711X(84)90039-9]
- Saxena G, Flora SJ. Lead-induced oxidative stress and hematological alterations and their response to combined administration of calcium disodium EDTA with a thiol chelator in rats. *J. Biochem. Mol. Toxicol.* 2004;18(4):221-33. [DOI: 10.1002/jbt.20027]
- Shugart LR, McCarthy JF, Halbrook RS. Biological markers of environmental and ecological contamination: a review. *Risk Anal.* 1992;12(3):353-60. [DOI: 10.1111/j.1539-6924.1992.tb00687.x]
- Sinha AK. Colorimetric assay of catalase. *Anal. Biochem.* 1972;47(2):389-94. [DOI: 10.1016/0003-2697(72)90132-7]
- Socci DJ, Bjugstad KB, Jones HC, Pattisapu JV, Arendash GW. Evidence that oxidative stress is associated with the pathophysiology of inherited hydrocephalus in the H-Tx rat model. *Exp. Neurol.* 1999;155(1):109-17. [DOI: 10.1006/exnr.1998.6969]
- Sultatos LG. Mammalian toxicology of organophosphorus pesticides. *J. Toxicol. Environ. Health* 1994;43(3):271-89. [DOI: 10.1080/15287399409531921]
- Taylor P. Anticholinesterase Agents. In: The Pharmacological Basis of Therapeutics, 9th edition, Hardman JG, Limbird LE (eds). McGraw Hill, New York: USA, 1996; pp. 161-76.
- Tyler CR, Jobling S, Sumpter JP. Endocrine disruption in wildlife: a critical review of the evidence. *Crit. Rev. Toxicol.* 1998;28(4):319-61.
- Waite DT, Sommerstad H, Grover R, Kerr L, Westcott ND. Pesticides in ground water, surface water and spring runoff in a small Saskatchewan watershed. *Environ. Toxicol. Chem.* 1992;11(6):741-8. [DOI: 10.1002/etc.5620110603]
- Yamano T, Morita S. Hepatotoxicity of trichlorfon and dichlorvos in isolated rat hepatocytes. *Toxicology* 1992;76(1):69-77. [DOI: 10.1016/0300-483X(92)90019-B]
- Yang W, Sun AY. Paraquat-induced free radical reaction in mouse brain microsomes. *Neurochem. Res.* 1998;23(1):47-53. [DOI: 10.1023/A:1022497319548]
