

ເອກສາຮອ້າງອີງ

- Abu-Tarboush HM and Ahmed SAB. 1996. Studies on karkade (*Hibiscus sabdariffa*): protease inhibitors, phytate, in vitro protein digestibility and gossypol content. *Food Chem.* 56:15-9.
- Adegunloye BJ, Omoniyi JO, Owolabi OA, Ajagbonna OP, Sofola OA and Coker HA. 1996. Mechanisms of the blood pressure lowering effect of the calyx extract of *Hibiscus sabdariffa* in rats. *Afr J Med Med Sci.* 25:235-8.
- Adetutu A, Odunola OA, Owoade OA, Adeleke OA and Amuda OS. 2004. Anticlastogenic effects of *Hibiscus sabdariffa* fruits against sodium arsenite-induced micronuclei formation in erythrocytes in mouse bone marrow. *Phytother Res.* 18:862-4.
- Agarwal, A., Balla, J., Alam, J., Croatt, A.J., Nath, K.A., 1995. Induction of heme oxygenase in toxic renal injury: a protective role in cisplatin nephrotoxicity in the rat. *Kidney Int.* 48(4), 1298-307.
- Ajay M, Chai HJ, Mustafa AM, Gilani AH and Mustafa MR. 2007. Mechanisms of the anti-hypertensive effect of *Hibiscus sabdariffa* L. calyces. *J Ethnopharmacol.* 109:388-93.
- al-Harbi MM, Osman AM, al-Gharably NM, al-Bekairi AM, al-Shabanah OA, Sabah DM and Raza M. 1995. Effect of desferrioxamine on cisplatin-induced nephrotoxicity in normal rats. *Cancer Chemotherapy.* 41:448-54.
- Ali BH, Mousa HM and El-Mougy S. 2003. The effect of a water extract and anthocyanins of *Hibiscus sabdariffa* L on paracetamol-induced hepatotoxicity in rats. *Phytother Res.* 17:56-9.
- Ali MB, Salih WM, Mohamed AH and Homeida AM. 1991. Investigation of the antispasmodic potential of *Hibiscus sabdariffa* calyces. *J Ethnopharmacol.* 31:249-57.
- Amin A and Hamza AA. 2005. Hepatoprotective effects of Hibiscus, Rosmarinus and Salvia on azathioprine-induced toxicity in rats. *Life Sci.* 77:266-78.
- Amin A and Hamza AA. 2006. Effects of Roselle and Ginger on cisplatin-induced reproductive toxicity in rats. *Asian J Androl.* 8:607-612.
- Antunes, LMG, Darin, JDC, Bianchi, MDLP, 2000. Protective effects of Vitamin C against cisplatin-induced nephrotoxicity and lipid peroxidation in adult rats: a dose-dependent study. *Pharmacol. Res.* 41:405-411.
- Appenroth D, Frob S, Kersten L, Splinter FK and Winnefeld K. 1997. Protective effects of vitamin E and C on cisplatin nephrotoxicity in developing rats. *Arch Toxicol.* 71:677-83.
- Atessahin A, Yilmaz S, Karahan I, Ceribasi AO and Karaoglu A. 2005. Effects of lycopene against cisplatin-induced nephrotoxicity and oxidative stress in rats. *Toxicology.* 212:116-23.
- Badary OA, Abdel-Maksoud S, Ahmed WA and Owieda GH. 2005. Naringenin attenuates cisplatin

- nephrotoxicity in rats. *Life Sci.* 76:2125-35.
- Baek SM, Kwon CH, Kim JH, Woo JS, Jung JS and Kim YK. 2003. Differential roles of hydrogen peroxide and hydroxyl radical in cisplatin-induced cell death in renal proximal tubular epithelial cells. *J Lab Clin Med.* 142:178-86.
- Baliga R, Zhang Z, Baliga M, Ueda N and Shah SV. 1998. *In vitro* and *in vivo* evidence suggesting a role for iron in cisplatin-induced nephrotoxicity. *Kidney Int.* 53:394-401.
- Blachley JD and Hill JB. 1981. Renal and electrolyte disturbances associated with cisplatin. *Ann Intern Med.* 95(5): 628-32.
- Boulikas T and Vougiouka M. 2003. Cisplatin and Platinum drugs at the molecular level (Review). *Oncol. Rep.* 10:1663-1682.
- Brennan RJ. 1996. Cadmium is an inducer of oxidative stress in yeast. *Mutat. Res.* 356:171-8.
- Brunold C, Deters A, Knoepfel-Sidler F, Hafner J, Muller B and Hensel A. 2004. Polysaccharides from *Hibiscus sabdariffa* flowers stimulate proliferation and differentiation of human keratinocytes. *Planta Med.* 70:370-3.
- Burger AM, Double JA, Newell DR. 1997. Inhibition of telomerase activity by cisplatin in human testicular cancer cells. *Eur J Cancer.* 33: 638-644.
- Cao G and Cutler RG. 1993. High concentrations of antioxidants may not improve defense against oxidative stress. *Arch Gerontol Geriatr.* 17:189-201.
- Cao G, Sofic E and Prior RL. 1997. Antioxidant and prooxidant behavior of flavonoids: structure-activity relationships. *Free Radic Biol Med.* 22:749-60.
- Chang YC, Huang HP, Hsu JD, Yang SF and Wang CJ. 2005. Hibiscus anthocyanins rich extract-induced apoptotic cell death in human promyelocytic leukemia cells. *Toxicol Appl Pharmacol.* 205:201-12.
- Chen CC, Hsu JD, Wang SF, Chiang HC, Yang MY, Kao ES, Ho YC and Wang CJ. 2003. *Hibiscus sabdariffa* extract inhibits the development of atherosclerosis in cholesterol-fed rabbits. *J Agric Food Chem.* 51:5472-7.
- Chewonarin T, Kinouchi T, Kataoka K, Arimochi H, Kuwahara T, Vinitkelkumnuen U and Ohnishi Y. 1999. Effects of roselle (*Hibiscus sabdariffa* Linn.), a Thai medicinal plant, on the mutagenicity of various known mutagens in *Salmonella typhimurium* and on formation of aberrant crypt foci induced by the colon carcinogens azoxymethane and 2-amino-1-methyl-6-phenylimidazo[4,5-b]pyridine in F344 rats. *Food Chem Toxicol.* 37:591-601.
- Choie DD, Longnecker DS and del Campo AA. 1981. Acute and chronic cisplatin nephropathy in rats. *Lab Invest.* 44:397-402.
- Chu G. 1994. Cellular responses to cisplatin. The roles of DNA-binding proteins and DNA repair. *J*

- Biol Chem.* 269:787-90.
- Cluzel J, Abbas A, Plazonnet B, Aiache J-M and Doly M. 2002. Investigation of ocular healing and anti-inflammatory activities of *Hibiscus sabdariffa* in rabbits. *Invest Ophthalmol Vis Sci.* 43:4220.
- Dafallah AA and al-Mustafa Z. 1996. Investigation of the anti-inflammatory activity of *Acacia nilotica* and *Hibiscus sabdariffa*. *Am J Chin Med.* 24:263-9.
- Davidson WD and Sackner MA. 1963. Simplification of the Anthrone Method for the Determination of Inulin in Clearance Studies. *J Lab Clin Med.* 62:351-6.
- Dobyan DC, Levi J, Jacobs C, Kosek J and Weiner MW. 1980. Mechanism of cis-platinum nephrotoxicity: II. Morphologic observations. *J Pharmacol Exp Ther.* 213:551-6.
- Dotan Y, Lichtenberg D and Pinchuk I. 2004. Lipid peroxidation cannot be used as a universal criterion of oxidative stress. *Prog Lipid Res.* 43:200-27.
- Duh P-D and Yen G-C. 1997. Antioxidative activity of three herbal water extracts. *Food Chem.* 60:639-45.
- el-Saadany SS, Sitohy MZ, Labib SM and el-Massry RA. 1991. Biochemical dynamics and hypocholesterolemic action of *Hibiscus sabdariffa* (Karkade). *Nahrung.* 35:567-76.
- Falade OS, Otemuyiwa IO, Oladipo A, Oyedapo OO, Akinpelu BA and Adewusi SR. 2005. The chemical composition and membrane stability activity of some herbs used in local therapy for anemia. *J Ethnopharmacol.* 102:15-22.
- Farombi EO and Fakoya A. 2005. Free radical scavenging and antigenotoxic activities of natural phenolic compounds in dried flowers of *Hibiscus sabdariffa* L. *Mol Nutr Food Res.* 49:1120-8.
- Field MJ, Bostrom TE, Seow F, Gyory AZ and Cockayne DJ. 1989. Acute cisplatin nephrotoxicity in the rat. Evidence for impaired entry of sodium into proximal tubule cells. *Pflugers Arch.* 414:647-50.
- Francescato HD, Costa RS, Rodrigues Camargo SM, Zanetti MA, Lavrador MA and Bianchi MD. 2001. Effect of oral selenium administration on cisplatin-induced nephrotoxicity in rats. *Pharmacol Res.* 43:77-82.
- Frank T, Janssen M, Netzel M, Strass G, Kler A, Kriesl E and Bitch I. 2005. Pharmacokinetics of anthocyanidin-3-glycosides following consumption of *Hibiscus sabdariffa* L. extract. *J Clin Pharmacol.* 45:203-10.
- Gonzalez VM, Fuertes MA, Alonso C and Perez JM. 2001. Is cisplatin-induced cell death always produced by apoptosis? *Mol Pharmacol.* 59:657-63.
- Greggi Antunes LM, D'Arc C, Darin J and Bianchi MDLP. 2000. Protective effects of vitamin C against cisplatin-induced nephrotoxicity and lipid peroxidation in adult rats: a dose-dependent

- study. *Pharmacol Res.* 41:405-11.
- Greggi Antunes LM, Darin JDAC and Bianchi MDLP. 2001. Effects of the antioxidants curcumin or selenium on cisplatin-induced nephrotoxicity and lipid peroxidation in rats. *Pharmacol Res.* 43:145-50.
- Haji Faraji M and Haji Tarkhani A. 1999. The effect of sour tea (*Hibiscus sabdariffa*) on essential hypertension. *J Ethnopharmacol.* 65:231-6.
- Hansawasdi C, Kawabata J and Kasai T. 2000. Alpha-amylase inhibitors from roselle (*Hibiscus sabdariffa* Linn.) tea. *Biosci Biotechnol Biochem.* 64:1041-3.
- Hansawasdi C, Kawabata J and Kasai T. 2001. Hibiscus acid as an inhibitor of starch digestion in the caco-2 cell model system. *Biosci Biotechnol Biochem.* 65:2087-9.
- Heitzer T, Wenzel U, Hink U, Krollner D, Skatchkov M, Stahl RA, MacHarzina R, Brasen JH, Meinertz T and Munzel T. 1999. Increased NAD(P)H oxidase-mediated superoxide production in renovascular hypertension: evidence for an involvement of protein kinase C. *Kidney Int.* 55:252-60.
- Herrera-Arellano A, Flores-Romero S, Chavez-Soto MA and Tortoriello J. 2004. Effectiveness and tolerability of a standardized extract from *Hibiscus sabdariffa* in patients with mild to moderate hypertension: a controlled and randomized clinical trial. *Phytomedicine.* 11:375-82.
- Hirunpanich V, Utaipat A, Morales NP, Bunyapraphatsara N, Sato H, Herunsalee A and Suthisisang C. 2006. Hypocholesterolemic and antioxidant effects of aqueous extracts from the dried calyx of *Hibiscus sabdariffa* L. in hypercholesterolemic rats. *J Ethnopharmacol.* 103:252-60.
- Hirunpanich V, Utaipat A, Morales NP, Bunyapraphatsara N, Sato H, Herunsalee A and Suthisisang C. 2005. Antioxidant effects of aqueous extracts from dried calyx of *Hibiscus sabdariffa* Linn. (Roselle) in vitro using rat low-density lipoprotein (LDL). *Biol Pharm Bull.* 28:481-4.
- Hou DX, Tong X, Terahara N, Luo D and Fujii M. 2005. Delphinidin 3-sambubioside, a Hibiscus anthocyanin, induces apoptosis in human leukemia cells through reactive oxygen species-mediated mitochondrial pathway. *Arch Biochem Biophys.* 440:101-9.
- <http://www.chemcases.com/cisplat/cisplat12.htm>
- <http://www.raise.com>
- <http://www.wikipedia.org>
- Hussaini D, Orisakwe O, Akunyili D, Njan A, Akumka D and Udemezue O. 2004. Subchronic administration of nigerian species of aqueous extract of *Hibiscus sabdariffa* calyx in rats did not produce cardiotoxicity. *Eur Bull Drug Res.* 12:1-5.
- Hutchison FN, Perez EA, Gandara DR, Lawrence HJ and Kaysen GA. 1988. Renal salt wasting in patients treated with cisplatin. *Ann Intern Med.* 108(1):21-5.

- Jacoby H, Wnorowski G, Sakata K and Maeda H. 2000. The effect of MGN3 on cisplatin and adriamycin induce toxicity in the rat. [cited; Available from:
<http://www.publishedresearch.com/MGN3?THE%20RAT.htm>]
- Jeong JC, Hwang WM, Yoon CH and Kim YK. 2001. Salviae radix extract prevents cisplatin-induced acute renal failure in rabbits. *Nephron*. 88:241-6.
- Jo, S.K., Cho, W.Y., Sung, S.A., Kim, H.K., Won, N.H., 2005. MEK inhibitor, U0126, attenuates cisplatin-induced renal injury by decreasing inflammation and apoptosis. *Kidney Int.* 67, 458-466.
- Jonadet M, Bastide J, Bastide P, Boyer B, Carnat AP and Lamaison JL. 1990. *In vitro* enzyme inhibitory and *in vivo* cardioprotective activities of hibiscus (*Hibiscus sabdariffa* L.). *J Pharm Belg.* 45:120-4.
- Jones MM, Basinger MA and Holscher MA. 1991. Relative effectiveness of some compounds for the control of cisplatin-induced nephrotoxicity. *Toxicology*. 68(3):227-47.
- Jones TW, Chopra S, Kaufman JS, Flamenbaum W and Trump BF. 1985. Cis-diamminedichloroplatinum (II)-induced acute renal failure in the rat. Correlation of structural and functional alterations. *Lab Invest.* 52:363-74.
- Kalender S, Kalender Y, Durak D, O gutcu A, Uzunhisarcikli M, Cevrimli BS and Yildirim M. 2007. Methyl parathion induced nephrotoxicity in male rats and protective role of vitamins C and E. *Pestic Biochem Phys.* 88 :213-8.
- Kim MS, Kim JK, Kim HJ, Moon SR, Shin BC, Park KW, Yang HO, Kim SM and Park R. 2003. Hibiscus extract inhibits the lipid droplet accumulation and adipogenic transcription factors expression of 3T3-L1 preadipocytes. *J Altern Complement Med.* 9:499-504.
- Kim YK, Byun HS, Kim YH, Woo JS and Lee SH. 1995. Effect of Cisplatin on Renal-Function in Rabbits: Mechanism of Reduced Glucose Reabsorption. *Toxicol Appl Pharmacol.* 130:19-26.
- Kim YK, Jung JS, Lee SH and Kim YW. 1997. Effects of antioxidants and Ca²⁺ in cisplatin-induced cell injury in rabbit renal cortical slices. *Toxicol Appl Pharmacol.* 146:261-9.
- Kirdpon S, Nakorn SN and Kirdpon W. 1994. Changes in urinary chemical composition in healthy volunteers after consuming roselle (*Hibiscus sabdariffa* Linn.) juice. *J Med Assoc Thai.* 77:314-21.
- Kong, C., Zhu, Y., Sun, C., Li, Z., Sun, Z., Zhang, X., 2005. Inhibition of tumor angiogenesis during cisplatin chemotherapy for bladder cancer improves treatment outcome. *Urology®*. 65, 395-399.
- Kruizinga M, Van de Water B, de Heer E, Mulder GJ and Nagelkerke JF. 1997. Cisplatin-induced nephrotoxicity in porcine proximal tubular cells: mitochondrial dysfunction by inhibition of

- complexes I to IV of the respiratory chain. *J Pharmacol Exp Ther.* 280:638-49.
- Lee MJ, Chou FP, Tseng TH, Hsieh MH, Lin MC and Wang CJ. 2002. Hibiscus protocatechuic acid or esculetin can inhibit oxidative LDL induced by either copper ion or nitric oxide donor. *J Agric Food Chem.* 50:2130-6.
- Lin HH, Huang HP, Huang CC, Chen JH and Wang CJ. 2005. Hibiscus polyphenol-rich extract induces apoptosis in human gastric carcinoma cells via p53 phosphorylation and p38 MAPK/FasL cascade pathway. *Mol Carcinog.* 43:86-99.
- Lin LT, Liu LT, Chiang LC and Lin CC. 2002. *In vitro* anti-hepatoma activity of fifteen natural medicines from Canada. *Phytother Res.* 16:440-4.
- Lin WL, Hsieh YJ, Chou FP, Wang CJ, Cheng MT and Tseng TH. 2003. Hibiscus protocatechuic acid inhibits lipopolysaccharide-induced rat hepatic damage. *Arch Toxicol.* 77:42-7.
- Liu JY, Chen CC, Wang WH, Hsu JD, Yang-MY and Wang CJ. 2006. The protective effects of *Hibiscus sabdariffa* extract on CCl₄-induced liver fibrosis in rats. *Food Chem Toxicol.* 44:336-43.
- Liu KS, Tsao SM and Yin MC. 2005. *In vitro* antibacterial activity of reselle calyx and protocatechuic acid. *Phytother Res.* 19:942-5.
- Liu H, Li J, Li Q, Ai Y and Zhang L. 2008. Protective effects of ligustrazine on cisplatin-induced oxidative stress, apoptosis and nephrotoxicity in rats. *Environ Toxicol Pharmacol.* In Press.
- Mansour MA, Mostafa AM, Nagi MN, Khattab MM and Al-Shabanah OA. 2002. Protective effect of aminoguanidine against nephrotoxicity induced by cisplatin in normal rats. *Comp Biochem Physiol.* 132:123-8.
- Masuda H, Tanaka T and Takahama U. 1994. Cisplatin generates superoxide anion by interaction with DNA in a cell-free system. *Biochem Biophys Res Commun.* 203:1175-80.
- Matsushima H, Yonemura K, Ohishi K and Hishida A. 1998. The role of oxygen free radicals in cisplatin-induced acute renal failure in rats. *J Lab Clin Med.* 131(6):518-26.
- Megyesi J, Safirstein RL and Price PM. 1998. Induction of p21WAF1/CIP1/SDI1 in kidney tubule cells affects the course of cisplatin-induced acute renal failure. *J Clin Invest.* 101:777-82.
- Mishima K, Baba A, Matsuo M, Itoh Y and Oishi R. 2006. Protective effect of cyclic AMP against cisplatin-induced nephrotoxicity. *Free Radic Biol Med.* 40:1564-77
- Mojiminiyi FBO, Dikko M, Muhammad BY, Ojobor PD, Ajagbonna OP, Okolo RU, Igobokwe UV, Mojiminiyi UE, Fagbemi MA, Bello SO and Anga TJ. 2007. Antihypertensive effect of an aqueous extract of the calyx of *Hibiscus sabdariffa*. *Fitoterapia.* 78:292-7.
- Mora LO, Antunes LM, Francescato HD and Bianchi ML. 2003. The effects of oral glutamine on cisplatin-induced nephrotoxicity in rats. *Pharmacol Res.* 47:517-22.

- Naziroglu M, Karaoglu A and Aksoy AO. 2004. Selenium and high dose vitamin E administration protects cisplatin-induced oxidative damage to renal, liver and lens tissues in rats. *Toxicology*. 195:221-30.
- Nualplub S and Hiranyachattada S. 2000-2001. Dose-response study of cisplatin on rat renal functions. *Thai Cancer J.* 26-27:15-22.
- Oboh G and Elusikan CA. 2004. Nutrient composition and antimicrobial activity of sorrel drinks (soborodo). *J Med Food.* 7:340-2.
- Odigie IP, Ettarh RR and Adigun SA. 2003. Chronic administration of aqueous extract of *Hibiscus sabdariffa* attenuates hypertension and reverses cardiac hypertrophy in 2K-1C hypertensive rats. *J Ethnopharmacol.* 86:181-5.
- Ohkawa H, Ohishi N and Yagi K. 1979. Assay for lipid peroxides in animal tissues by thiobarbituric acid reaction. *Anal Biochem.* 95:351-8.
- Onyenekwe PC, Ajani EO, Ameh DA and Gamaniel KS. 1999. Antihypertensive effect of roselle (*Hibiscus sabdariffa*) calyx infusion in spontaneously hypertensive rats and a comparison of its toxicity with that in Wistar rats. *Cell Biochem Funct.* 17:199-206.
- Orisakwe O, Hussaini D, Orish V, Obi E and Udemezue O. 2003. Nephrotoxic effects of *Hibiscus sabdariffa* calyx in rats. *Eur Bull Drug Res.* 11:99-103.
- Owulade M, Eghianruwa K and Daramola F. 2004. Effects of aqueous extracts of *Hibiscus sabdariffa* calyces and *Ocimum gratissimum* leaves on intestinal transit in rats. *AJBR.* 7:31-3.
- Paolini M, Pozzetti L, Pedulli GF, Marchesi E and Cantelli-Forti G. 1999. The nature of prooxidant activity of vitamin C. *Life Sci.* 64:PL 273-8.
- Perry JM. 1980. *Medicinal plants of East and Southeast Asia attributed properties and uses.* 1st edition, MIT Press, Cambridge.
- Podmore ID, Griffiths HR, Herbert KE, Mistry N, Mistry P and Lunec J. 1998. Vitamin C exhibits pro-oxidant properties. *Nature.* 392:559.
- Rabik CA and Dolan ME. 2007. Molecular mechanisms of resistance and toxicity associated with platinating agents. *Cancer Treat Res* 33:9-23.
- Rao M, Kumar MM and Rao MA. 1999. *In vitro* and *in vivo* effects of phenolic antioxidants against cisplatin-induced nephrotoxicity. *J Biochem (Tokyo).* 125:383-90.
- Rosell R, Lord RVN, Taron M and Reguart N. 2002. DNA repair and cisplatin resistance in non-small-cell lung cancer. *Lung cancer.* 38:217-27.
- Said Ahmad M, Fazal F, Rahman A, Hadi SM and Parish JH. 1992. Activities of flavonoids for the cleavage of DNA in the presence of Cu(II): correlation with generation of active oxygen species. *Carcinogenesis.* 13:605-8.

- Sakagami H and Satoh K. 1997. Modulating factors of radical intensity and cytotoxic activity of ascorbate (review). *Anticancer Res.* 17:3513-20.
- Salah AM, Gathumbi J and Vierling W. 2002. Inhibition of intestinal motility by methanol extracts of *Hibiscus sabdariffa* L. (Malvaceae) in rats. *Phytother Res.* 16:283-5.
- Satoh M, Naganuma A and Imura N. 1992. Effect of coadministration of selenite on the toxicity and antitumor activity of cis-diamminedichloroplatinum (II) given repeatedly to mice. *Cancer Chemother Pharmacol.* 30:439-43.
- Sergediene E, Jonsson K, Szymusiak H, Tyrakowska B, Rietjens IM and Cenas N. 1999. Prooxidant toxicity of polyphenolic antioxidants to HL-60 cells: description of quantitative structure-activity relationships. *FEBS Lett.* 462:392-6.
- Sherman-Baust CA, Weeraratna AT, Rangel LBA, Pizer ES, Cho KR, Schwartz DR, Shock T and Morin PJ. 2003. Remodeling of the extracellular matrix through overexpression of collagen VI contributes to cisplatin resistance in ovarian cancer cells. *Cancer cell.* 3: 377-386.
- Shiraishi F, Curtis LM, Truong L, Poss K, Visner GA, Madsen K, Nick HS and Agarwal A. 2000(a). Heme oxygenase-1 gene ablation or expression modulates cisplatin-induced renal tubular apoptosis. *Am J Physiol Renal Physiol.* 278:F726-36.
- Shiraishi Y, Nagai J, Murakami T, and Takano M. 2000(b). Effect of cisplatin on H⁺ transport by H⁺-ATPase and Na⁺/H⁺ exchanger in rat renal brush-border membrane. *Life Sci.* 67:1047-58.
- Shirwaikar A, Issac D and Malini S. 2004. Effect of *Aerva lanata* on cisplatin and gentamicin models of acute renal failure. *J Ethnopharmacol.* 90:81-6.
- Silva CR, Greggi Antunes LM and Bianchi ML. 2001. Antioxidant action of bixin against cisplatin-induced chromosome aberrations and lipid peroxidation in rats. *Pharmacol Res.* 43(6):561-6.
- Smith H, Finkelstein N and Aliminosa L. 1945. The renal clearances of substituted hippuric acid derivatives and other aromatic acids in dogs and man. *J Clin Invest.* 42:388-404.
- Suboh SM, Bilton YY and Aburjai TA. 2004. Protective effects of selected medicinal plants against protein degradation, lipid peroxidation and deformability loss of oxidatively stressed human erythrocytes. *Phytother Res.* 18:280-4.
- Sueishi K, Mishima K, Makino K, Itoh Y, Tsuruya K, Hirakata H and Oishi R. 2002. Protection by a radical scavenger edaravone against cisplatin-induced nephrotoxicity in rats. *Eur J Pharmacol.* 451:203-8.
- Thevenod, F., 2003. Nephrotoxicity and the proximal tubule. Insights from cadmium. *Nephron. Physiol.* 93, 87-93.
- Tsai PJ, McIntosh J, Pearce P, Camden B and Jordan BR. 2002. Anthocyanin and antioxidant capacity in Roselle (*Hibiscus Sabdariffa* L.) extract. *Food Res Intern.* 35:351-6.

- Tseng TH, Hsu JD, Lo MH, Chu CY, Chou FP, Huang CL and Wang CJ. 1998. Inhibitory effect of Hibiscus protocatechuic acid on tumor promotion in mouse skin. *Cancer Lett.* 126:199-207.
- Tseng TH, Kao ES, Chu CY, Chou FP, Lin Wu HW and Wang CJ. 1997. Protective effects of dried flower extracts of *Hibiscus sabdariffa* L. against oxidative stress in rat primary hepatocytes. *Food Chem Toxicol.* 35:1159-64.
- Tseng T-H, Wang C-J, Kao E-S and Chu H-Y. 1996. Hibiscus protocatechuic acid protects against oxidative damage induced by tert-butylhydroperoxide in rat primary hepatocytes. *Chemico-Biological Interactions.* 101:137-48.
- Wang CJ, Wang JM, Lin WL, Chu CY, Chou FP and Tseng TH. 2000. Protective effect of Hibiscus anthocyanins against tert-butyl hydroperoxide-induced hepatic toxicity in rats. *Food Chem Toxicol.* 38:411-6.
- Weijl NI, Hopman GD, Wipkink-Bakker A, Lentjes EG, Berger HM, Cleton FJ and Osanto S. 1998. Cisplatin combination chemotherapy induces a fall in plasma antioxidants of cancer patients. *Ann Oncol.* 9:1331-7.
- Winston JA and Safirstein R. 1985. Reduced renal blood flow in early cisplatin-induced acute renal failure in the rat. *Am J Physiol.* 249:F490-6.
- Wrobel K, Wrobel K and Urbina EM. 2000. Determination of total aluminum, copper, iron, manganese, and nickel and their fractions leached to the infusions of black tea, green tea, *Hibiscus sabdariffa*, and *Ilex paraguariensis* (mate) by ETA-AAS. *Biol Trace Elem Res.* 78:271-80.
- Yildirim Z, Sogut S, Odaci E, Iraz M, Ozyurt H, Kotuk M and Akyol O. 2003. Oral erdosteine administration attenuates cisplatin-induced renal tubular damage in rats. *Pharmacol Res.* 47(2):149-56.
- Zhang JG and Lindup WE. 1993. Role of mitochondria in cisplatin-induced oxidative damage exhibited by rat renal cortical slices. *Biochem Pharmacol.* 45:2215-22.
- Zhang JG and Lindup WE. 1997. Cisplatin-induced changes in adenine nucleotides in rat kidney slices: amelioration by tiopronin and procaine. *J Pharm Pharmacol.* 49:1136-40.
- นิติศรี เรืองรังษี และ พยยอม ตันติวัฒน์. 2534. พิชสมุนไพร. หน้า 102 และ 172. กรุงเทพฯ : สำนักพิมพ์โภเดียนสโตร์.
- พเยาร์ เนม่อนวงศ์ญาติ. 2534. คู่มือการใช้สมุนไพร. หน้า 116, 150, 152, 176 และ 288. กรุงเทพฯ : สำนักพิมพ์เมดิคัล มีเดีย.
- วันดี กฤชณพันธ์. 2539. สมุนไพรนำรู้. หน้า 53-56. กรุงเทพฯ : สำนักพิมพ์จุฬาลงกรณ์มหาวิทยาลัย.