Bibliography

Abu-Sinna, G., Esmat, A.M., Al-Zahaby, N.A, Soliman, T.M.I. (2003), Fractionation and characterization of Cerastes snake venom and the antitumor action of its lethal and non lethal fraction, Toxicon, 37: 1509-1524.

Adefa, M. and Abraha, B. (2011). Ethnobotanical survey of traditional medicinal plants in Tehuledere District, South Wollo, Ethiopia. Journal of Medicinal Plants Research, 5(26) : 6233-6242.

Afshari, J.T., Rakhshandeh, H., Zamani, A.R., Shahri, N.M., Ghazezadeh, L., Norozi, M. and Vahedi, F. (2005), Cytotoxicity effects of *Citrullus colocynthis* on Hep2 and L929 cell lines, Hakim, 8(2) : 47-54.

Agar, N.S., Sadrzadeh, S.M., Hallay, P.E. and Eaton, J.W. (1986), Erythrocyte catalase. A somatic oxidant defense, Journal of Clinical Investigation, 77 : 319-321.

Agarwal, S. and Pandey V. (2004), Antioxidant enzyme response to NaCl stress in *Cassia angustifolia*, Biologia Plantarum, 48 : 555-560.

Agarwal, S.S. and Paridhavi, M. (2005), Clinically useful herbal drugs, Ahuja Publishing House, 281-282.

Agnes-Lima, L., Melo, J.T.A., Silva, A.E., Oliveira, A.H., Timoteo, A.R.S., Lima-Bessa, K.M., Martinez, G.R., Medeiros, M.H.G., Mascio, P.D., Galhardo, R.S. and Menck, C.F.M. (2012), DNA damage by superoxide and cellular protective mechanisms, Mutation Research, 751 : 15-28.

Aguilar, M.I. (2003) HPLC of peptides and proteins: basic theory and methodology, Springer Protocols, 251, 3-8.

Akinmoladun, A.C., Ibukun, E.O., Afor, E., Obuotor, EM. and Farombi, E.O. (2007), Phytochemical constituent and antioxidant activity of extract from the leaves of *Ocimum gratissimum*, Scientific Research and Essays, 2 : 163-166.

Akond, A.S.M.G.M., Laila, Khandaker., Khwaja, G., Hossain and Furuta Y., (2010), Total polyphenol, polyphenol oxidase, antioxidant activity and color profiles of some wheat varieties from Bangladesh, Research Journal of Agriculture and Biological Sciences, 6(2) : 186-190.

Alberts, B., Johnson, A., Lewis, J., Raff, M., Roberts, K. and Walter, P. (2002), Molecular Biology of the Cell, 4th edition, New York : Garland Science, 712.

Ali, S. S., Kasoju, N., Luthra, A., Singh, A., Sharanabasava, H., Sahu, A., and Bora, U. (2008). Indian medicinal herbs as sources of antioxidants. Food Research International, 41(1) : 1-15.

Aliyu, A.B., Ibrahim, M.A., Musa, A.M., Musa, A.O., Kiplimo, J.J. and Oyewale, A.O. (2013), Free radical scavenging and total antioxidant capacity of root extracts of *Anchomanes difformis* Engl. (Araceae), Acta Poloniae Pharmaceutica and Drug Research, 70(1) : 115-121.

Allain, C.C., Poon, L.S., Chan, C.S., Richmond, W. and Fu, P.C. (1974), Enzymatic determination of total serum cholesterol, Clinical Chemistry, 20 : 470-475.

Alzoghaibi M.A. (2013), Concepts of oxidative stress and antioxidant defense in Crohn's disease, World Journal of Gastroenterology,19(39) : 6540-6547.

Amarowicz, R., Pegg, R.B., Rahimi-Moghaddam, P., Barl, B. and Weil, J.A. (2004), Free-radical scavenging capacity and antioxidant activity of selected plant species from the Canadian prairies, Food Chemistry, 84 : 551–562.

Ameyaw, Y. and Duker-Eshunm, G. (2009) The alkaloid contents of the ethno-plant organs of three antimalarial medicinal plant Species in the eastern region of Ghana, International Journal of Chemical Sciences, 7(1) : 48-58.

Anandan, A., Eswaran, R., Doss, A., Sangeetha, G. and Anand S. P. (2011), Chemical compounds investigation of *Cassia auriculata* leaves – a potential folklore medicinal plant Bulletin of Environment, Pharmacology and Life Sciences, 1(1) : 20-23.

Angaji, S.A., Mousavi, S.F. and Babapour, E. (2012), Antioxidants: A few key points, Annals of Biological Research, 3(8) : 3968-3977.

Apak, R., Guclu, K., Demirata B., Ozyurek, M., Celik E., Bektasoglu, B., Berker, K.I. and Ozyurt, D. (2007), Comparative evaluation of various total antioxidant capacity assays applied to phenolic compounds with the CUPRAC assay, Molecules, 12 : 1496-1547.

Archana, P., Samatha, T., Mahitha, B., Chamundeswari, and RamaSwamy, N. (2012), Preliminary phytochemical screening from leaf and seed extracts of *Senna alata* L. Roxb-an ethnomedicinal plant, International Journal of Biological and Pharmaceutical Research, 3(3): 82-89.

Arya, V. and Yadav, J. P. (2010), Antioxidant activity and total phenolics in leaves extracts of *Cassia tora* L., Pharmacologyonline, 2 : 1030-1036.

Arya, V. and Yadav, J.P. (2011), Comparative assessment of relative antioxidant activity of sequential leaf extracts of *Cassia occidentalis* L. and *Cassia tora* L., Pharmacologyonline, 1 : 529-543.

Ashwini, P. and Krishnamoorthy, M. (2011), Antioxidant activity of ethanolic extract of *Cassia tora* L, International Journal of Research and Pharmacy, 2(1) : 250-252.

Asirvatham, R. and Christina, A.J.M. (2012), *Drosera indica* L: potential effect on liver enzyme, lipid profile and hormone change in Dalton's lymphoma ascites (DLA) bearing mice, Journal of Intercultural Ethnopharmacology, 1(2) : 69-73.

Assanga, S.B.I., Gil-Salido, A.A., Lujan, L.M.L, Rosas-Durazo, A., Acosta-Silva, A.L., Rivera-Castaneda, E.G. and Rubio-Pino, J.L. (2013), Cell growth curves for different cell lines and their relationship with biological activities, International Journal for Biotechnology and Molecular Biology Research, 4(4) : 60-70.

Aviello, G., Rowland, I., Gill, C.I., Acquaviva, A.M., Capasso, F., McCann, M., Capasso, R., Izzo, A.A. and Borrelli, F. (2010), Anti-proliferative effect of rhein, an anthraquinone isolated from *Cassia* species, on Caco-2 human adenocarcinoma cells, Journal of Cellular and Molecular Medicine**,** 14(7) : 2006-2014.

Ayo, R.G. (2010), Phytochemical constituents and bioactivities of the extracts of *Cassia nigricans* Vahl, A review, Journal of Medicinal Plants Research*,* 4(14) : 1339-1348.

Basavarajappa, B.S., Cooper, T.B. and Hungund, B.L. (1998), Effect of chronic ethanol exposure on mouse brain arachidonic acid specific phospholipase A, Biochemical Pharmacology, 55 : 515-521.

Baskar, R., Lee, K.A., Yeo, R. and Yeoh, K.W. (2012), Cancer and radiation therapy: current advances and future directions, International Journal of Medical Sciences, 9 : 193-199.

Basset J, Deny J, Jeffery JH, and Mendham J. (1985), Vogel's Text Book of quantitative Inorganis analysis, 4th Edition, ELBS – Lonhman, Essex, UK, 196.

Bast, A., Haenen, G.R. and Doelman, C.J. (1991), Oxidants and antioxidants: State of the art. Am J Med, 91: S2-13.

Becker, W.M. and Deamer, D.W. (1991), The world of the cell, 2nd Ed., The Benjamin / Cummings Publishing company, 719.

Bergmeyer, H.W., Scheibe, P. and Wahlefeld, A.W. (1978), Optimization of methods for aspartate aminotransferase and alanine aminotransferase, Clinical Chemistry, 24 : 58-73.

Bhakta, T., Banerjee, S., Mandal, S.C., Maity, T.K., Saha, B.P. and Pal, M. (2001), Hepatoprotective activity of Cassia fistula leaf extract, Phytomedicine, 8(3) : 220-224.

Bhalodia, N.R. (2011), Antifungal and antibacterial activity from the leaf extracts of *Cassia fistula*, Journal of Advanced Pharmaceutical Technology and Research, (2)2 : 104-109.

Bhatt, P. and Negi, P.S. (2012), Antioxidant and antibacterial activities in the leaf extracts of Indian borage(*Plectranthus amboinicus*), Food and Nutrition Sciences, 3 : 146-152.

Bhattacharya, S., Prasanna, A. and Haldar, P.K. (2011), Evaluation of antiproliferative activity of *Trichosanthes dioica* root against Ehrlich ascites carcinoma cells, Academic Journal of Cancer Research, 4(2) : 38-42.

Bhattacharyya, D., Mukherjee, R., Pandit, S., Das, N. and Sur, T.K. (2003), Prevention of carbon tetrachloride induced hepatotoxicity in rats by Himoliv. A polyherbal formulation, Indian Journal of Pharmacology, 35 : 183-5.

Block, G. and Mankes, M. (1989), Ascorbic acid in cancer prevention. In: Moon, T. E. and Micozzins (eds.). Nutrition and Cancer Prevention. New York, Marcer Dekker; 341-388.

Boakye-Yiadom K. (1979), Antimicrbial Properties of *Cryptolepis*, Journal of Pharmaceutical Sciences, 68 : 435 – 447.

Boggards, J.J.P., Ommen, B.V., Falke, H.E., Willems, M.I. and Bladeren, P.J.V. (1990), Glutathion *S*-transferase subunit induction patterns of Brussel's sprouts, allyl isothiocyanate and goitrin in rat liver and small intestinal mucosa: a new approach for the identification of inducing xenobiotics, Food and Chemical Toxicology, 28 : 81-88.

Bohm, F., Edge, R. and Truscott, T.G. (2012), Interactions of dietary carotenoids with singlet oxygen and free radicals: potential effects for human health, Acta Biochimica Polanica, 59 : 27-30.

Bretagnol, F. *et al.*, (2008), The effect of sterilization processes on the bioadhesive properties and surface chemistry of a plasma-polymerized polyethylene glycol film: XPS characterization and L929 cell proliferation tests, Acta Biomater, 4 : 1745-1751.

Bucolo, G. and David, H. (1973), Quantitative determination of serum triglycerides by the use of enzymes, Clin. Chem., 19 : 476-482.

Burda, S. and Oleszek, W. (2001), Antioxidant and antiradical activities of flavonoids, Journal of Agricultural and Food Chemistry, 49 : 2774-2779.

Bushra, S., Farooq, A. and Muhammad, A. (2009), Effect of extraction solvent/technique on the antioxidant activity of selected medicinal plant extracts, Molecules, 14 : 2167-2180.

Cameron, G.R., Mitton, R.F. and Allan, J.W. (1943), Measurement of flavonoids in plant sample, Lancet, 179.

Cardellina, J.H., Fuller, R.W., Gamble, W.R., Westergaard, C., Boswell, J. and Munro, M.H.G. (1999), Evolving strategies for the selection dereplication and prioritization of antitumor and HIV inhibitory natural products extracts. In: Bohlin L, Bruhn JG, editors, Bioassay methods in natural product research and development. Dordrecht: Kluwer Academic Publishers, 25-36.

Carla, B., Patrizia, F., Sergio, A.T., Carla, V., Francesco, R. and Antonia, F. (2000), Vitamin E serum levels and gastric cancer: results from a cohort of patients in Tuscany, Italy, Cancer Letters, 151 : 15–18.

Chalasani, N., Aljadhey, H., Kesterson, J., Murray, M.D. and Hall, S.D. (2004), Patients with elevated liver enzymes are not act high risk for station hepatotoxicity, Gastroenterology, 126, 1287-1292.

Chan, S.W., Nguyen, P.N., Ayele, D., Chevalies, S., Aprilcian, A. and Chen, J.Z. (2011), Mitochondrial DNA damage is sensitive to exogenous H_2O_2 but independent of cellular ROS production in prostate cancer cells, Mut. Res., 716, 40-50.

Chanda S. and Dave R. (2009), *In vitro* models for antioxidant activity evaluation and some medicinal plants possessing antioxidant properties: An overview, African Journal of Microbiology Research, 3(13) : 981-996.

Chanda, S., Kaneria, M. and Baravalia, Y. (2012), Antioxidant and antimicrobial properties of various polar solvent extracts of stem and leaves of four *Cassia* species, African Journal of Biotechnology, 11(10) : 2490-2503.

Chandler, S.F. and Dodds, J.H. (1993), The effect of phosphate, nitrogen and sucrose on the production of phenolics and solasidine in callus cultures of *Solanum laciniatum*, Plant Cell Reports, 2 : 105-110.

Chandra, P., Pandey, R., Kumar, B., Srivastva, M., Pandey, P., Sarkar, J. and Singh, B.P. (2015), Quantification of multianalyte by UPLC–QqQ_{LIT}–MS/MS and *in vitro* anti-proliferative screening in *Cassia* species, Industrial Crops and Products, 76 : 1133-1141.

Chanwitheesuk, A., Teerawutgulrag, A. and Rakariyatham, N. (2005), Screening of antioxidant activity and antioxidant compounds of some edible plants of Thailand, 92(3) : 491–497.

Charu, A.C., Sanjeev, M., Heena, D., (2012), Phytochemical screening and evaluation of biological activities of some medicinal plants of phagwara, Punjab, Asian Journal of Chemistry, 24(12) : 5903-5905.

Chatterjea, M.N. and Shinde, R. (2005), Text book of Medical Biochemistry, 6th Ed., Jitender P vij, Jaypee brothers Publishers(P) Ltd., 714-718.

Chavan, R.T., Kadam, A.S. and Kote, J.R. (2016), HPTLC fingerprint analysis and antimicrobial activity of leaf extracts of *Cassia fistula* L, Der Pharmacia Lettre, 8(3) : 100-104.

Cherng, J., Chiang, W., Wang, J., Lin, C., Lee, C., Shih, C. and Chiang, L. (2008), Anthraquinones of edible wild vegetable *Cassia tora* stimulate proliferation of human CD4+ T lymphocytes and secretion of interferon-gamma or interleukin 10, Food Chemistry, 107 : 1576-1580.

Chetan, C., Dheeraj, N., Sachin. T., Durgacharan, B. and Kishore, S. (2011), Pharmacognostical and preliminary phytochemical studies of *Cassia sophera* Linn., International journal of Research in Ayurveda and Pharmacy, 2(2) : 615-620.

Christofidis, I., Welter, A. and Jadot, J. (1997) Spectalinine and iso-6-carnavaline, two unprecedented piperidine alkaloids from the seeds of *Cassia spectabilis*. Tetrahedron, 33 : 3005–3006.

Clemens, M.R. and Walker, H.D. (1987), Lipid peroxidation in erythrocytes, Chemistry and Physics of Lipids, 45 : 251-268.

Cobbs, C.S., Brenman, J.E., Aldape, K.D., Bredt, D.S. and Israel, M.A. (1995), Expression of nitric oxide synthase in human central nervous system tumours, Cancer Research., 55 : 727–730.

Cong, Q., Shang, M., Dong, Q., Liao, W., Xiao, F. and Ding, K. (2014), Structure and activities of a novel heteroxylan from *Cassia obtusifolia* seeds and its sulfated derivative, Carbohydrate Research, 393 : 43-50.

Cooper, A.J.L., Pinto, J.T. and Callery, P.S. (2011), Reversible and irreversible protein glutathionylation: biological and chemical aspects, Expert Opinion on Drug Metabolism and Toxicology, 7 : 891-910.

Corti, A, Duarte, T.L., Giommarelli, C., De Tata, V., Paolicchi, A., Jones, G.D. and Pompella, A. (2009), Membrane gamma-glutamyl transferase activity promotes iron-dependent oxidative DNA damage in melanoma cells, 669(1–2) : 112–121.

Cowan, M.M. (1999), Plant products as antimicrobial agents. Clinical microbiology reviews; 12(4) : 564-582.

Cragg, G.M. and Newman, D.J. (2005), Plant as source of anticancer agents, Journal of Ethnopharmacology, 100 : 72-9.

Culling, C.F.A. (1974), Handbook of histophatology and histochemistry techniques, 3rd Edition, Butterworths and Co (Publishers) Ltd., London, 115-117.

Curtis, S.J., Moritz, M. and Snodgrass, P.J. (1972), Serum enzymes derived from liver cell fractions and the response to carbon tetrachloride intoxication in rats, Gastroenterology, 62 : 84-92.

Dai, J. and Mumper, R.J. (2010), Plant phenolics: extraction, analysis and their antioxidant and anticancer properties, Molecules, 15(10) : 7313-7352.

Damen, J., Ramshorst, J.V. and Hoeven R.P.V. (1984), Alterations in plasma lipoproteins and heparin-releasable lipase activities in mice bearing the GRSl ascites tumour, Biochem Biophys Acta, 793 : 287-96.

Danish, M., Singh, P., Mishra, G., Srivastava, S., Jha, K.K. and Khosa R.L. (2011), *Cassia fistula* Linn. (Amulthus)- An Important Medicinal Plant: AReview of Its Traditional Uses, Phytochemistry and Pharmacological Properties, Journal of Natural Product and Plant Resources, 1(1) : 101-118.

Das, K., Tiwari, R.K.S. and Shrivastava, D.K. (2010), Techniques for evaluation of medicinal plant products as antimicrobial agent: current methods and future trends, Journal of Medicinal Plants Research, 4(2) : 104-111.

Dasgupta, N. and De, B. (2004), Antioxidant activity of *Piper betle* L. leaf extract *in vitro*, Food Chemistry, 88 : 219–224.

De Bleser P.J., Xu, G., Romboust, K., Rogiers, V. and Geerts, A. (1999), Glutathione levels discriminate between oxidative stress and transforming growth factor-β signaling in activated rat hepatic stellate cells, Journal of Biological Chemistry, 274 : 33881.

Deshpande, H. A. and Bhalsing, S.R. (2011), Phytochemical analysis of *Cassia obtusifolia*, *Cassia auriculata*, *Tephrosia purpurea*, *helictres isora* and *centella asiatica*, International Journal of Pharma and Biosciences, 2(3) : 363-367.

Deshpande, H.A. and Bhalsing, S.R. (2013), Recent advances in the phytochemistry of some medicinally important *Cassia* species: a review, International Journal of Pharma Medicine and Biological Sciences, 2(3) : 363-367.

Dessi, S., Batetta, B., Anchisi, C., Pani, P., Costelli, P. and Tessitore, L. *et al.* (1992), Cholesterol metabolism during the growth of a rat ascites hepatoma (Yoshida AH-130), Breast Cancer Journal, 66 : 187-193.

Devereux, D.F. and Hollander, D.M. (1987), Effects of tumor bearing and removal on blood levels of lipids, lipolytic activity and glycerol on carcass weights in the rat, Surgery, 101 : 228-233.

Dhanamani, M., Devi, S.L. and Kannan, S. (2011), Ethnomedicinal plants for cancer therapy – a review, Hygeia Journal For Drugs And Medicines, 3(1) : 1-10.

Dhandapani, A. and Kadarkarai, M. (2011), HPTLC quantification of flavonoids, larvicidal and smoke repellent activities of *Cassia occidentalis* l. (caesalpiniaceae) against malarial vectore *anopheles stephensi* lis (diptera: Culicidae), Journal of Phytology, 3(2) : 60-72.

Doss, A. (2009), Preliminary phytochemical screening of some Indian medicinal plants, Ancient Science of Life, 29 : 12-16.

Drotman, R.B. and Lowhorn, G.T. (1978), Serum enzyme as indicators of chemical induced liver damage, Drug and Chemical Toxicology, 1 : 163-171.

Dubey, N.K., Kedia, A., Prakash, B. and Kishore, N. (2015), Plants as a source of natural antioxidants, CABI ebook, 1-14.

Eberhardt, M.V., Lee, C.Y. and Liu, R.H. (2000), Antioxidant activity of fresh apples, Nature, 405 : 903-904.

Edwards, B.K., Noone, A., Mariotto, A.B., Simard, E.P., Boscoe, F.P., Henley, S.J., Jemal, A., Cho, H., Anderson, R.N., Kohler, B.A., Eheman, C.R. and Elizabeth, M.W. (2013), Featuring Prevalence of Comorbidity and Impact on Survival Among Persons With Lung, Colorectal, Breast or Prostate Cancer, Annual Report to the Nation on the Status of Cancer, Wiley Online Library, 2014 : 1290-1314.

Egharevba, Omoregie, H., Anselem, C.O., Abdullahi, Sabo, M., Okwute, Koma, S., Okogun and Ibumeh, J. (2010), Phytochemical analysis and broad spectrum antimicrobial activity of *Cassia occidentalis* L. (whole plant), New York Science Journal, 3(10) : 74-81.

Ekman, L., Karlberg, T., Edstrom, S., Lindmark, L., Schersten, T. and Lundholm, K. (1982), Metabolic alterations in liver, skeletal muscle and fat tissue in response to different tumor burdens in growing sarcoma-bearing rats, The Journal of *Surgical Research,* 33 : 23-31.

El-Bahr, S.M. (2013) Biochemistry of free radicals and oxidative stress, Science International, 1 : 111-117.

El‐Beshbishy. (2005), The effect of dimethyl dimethoxy biphenyl dicarboxylate (DDB) against tamoxifen‐induced liver injury in rats: DDB use is curative or protective. J. Biochem. Mol. Biol., 38 **:** 300‐306.

El-Toumy, S.A., El Souda, S.S., Mohamed, T.K., Brouard, I. and Bermejo, J. (2012), Anthraquinone glycosides from *Cassia roxburghii* and evaluation of its free radical scavenging activity, Carbohydrate Research, 360 : 47-51.

Ercan, B., Ekeem, K., Ilhami, G., Godhan, B. and Ahmet, C.G. (2013), Antioxidant activity and polyphenol content of cherry stem (*Cerasus avium* L.) determined by LC-MS/MS, Food Research International, 51(1) : 66-74.

Esterbauer, H., Schwartz, Z. and Hayan, M. (1977), A rapid assay for catechol oxidase and laccase using 2-nitro-5 thio benzoic acid, Analytical Biochemistry, 4 : 489-494.

Falholt, K., Falholt, W. and Lund, B. (1973), An easy colorimetric method for routine determination of free fatty acids in plasma, Clinica Chimica Acta, 46 : 105-111.

Farber, E. (1984), The multistep nature of cancer development, Cancer Research, 44(10) : 4217-4223.

Faria, G. Cardoso, C.R., Larson, R.E., Silva, J.S. and Rossi, M.A. (2009), Chlorhexidine-induced apoptosis or necrosis in L929 fibroblasts: a role for endoplasmic reticulum stress, Toxicology and Applied Pharmacology, 234(2) : 256-265.

Farswan, M., Mazumder, P.M. and Percha, V. (2009), Protective effect of *Cassia glauca* Linn. on the serum glucose and hepatic enzymes level in streptozotocin induced NIDDM in rats, Indian Journal of Pharmacology, 41(1) : 19-22.

Ferlay, J., Soerjomataram, I., Ervik, M., Dikshit, R. and Eser, S. (2012), Cancer incidence and mortality worldwide, Globocan, International Agency for Research on Cancer, 1 : 11.

Fernand, V.E., Dinh, D.T., Washington, S.J., Fakayode, S.O., Losso, J.N., Ravenswaay, R.O.V. and Warner, I.M. (2008), Determination of pharmacologically active compounds in root extracts of *Cassia alata* L. by use of High performance liquid chromatography, Talanta, 74(4) : 896-902.

Fiske, C.H. and Subbarow, Y. (1925), The colorimetric determination of phosphate, The Journal of Biological Chemistry, 66 : 375-400.

Folch, J., Lees, M. and Stanley, G.H.S. (1970), A simple method for isolation and purification of total lipids from animal tissues, The Journal of Biological Chemistry, 226 : 497-509.

Foster, L.B. and Dunn, R.T. (1973), Stable reagents for the determination of serum triglycerides by a colorimetric Hantzch codensation method, Journal Clinical Chemistry, 19 : 338-340.

Foster, M.W., Hess, D.T. and Stamler, J.S. (2009), Protein S-nitrosylation in health and disease: a current perspective, Trends in Molecular Medicine, 15 : 391-404.

Fotis, T., Pepper, M.S., Aktas, E., Breit, S., Rasku, S. and Adlercreutz, H. (1997), Flavonoids, dietary-derived inhibitors of cell proliferation and *in vitro* angiogenesis, Cancer Research, 57 : 2916-2921.

Galeotti, F., Barile, E., Curir, P., Dolci, M. and Lanzotti, V. (2008), Flavonoids from carnation (*Dianthus caryophyllus*) and their antifungal. Phytochemistry Letters, 1 : 44-50.

Gao, X., Shen, Y., Huang, X., Yang, L., Shu, L., Hu, Q. and Li, G. (2013), 2"-Ethyl-furanoflavone derivatives from the stems of *Cassia fistul*a and their cytotoxicity, Journal of the Brazilian Chemical Society, 24(4) : 685-689.

Gennari, C., Castoldi, D. and Sharon, O. (2007), Natural products with taxol-like anti-tumor activity: synthetic approaches to eleutherobin and dictyostatin, Pure Applied Chemistry, 79 : 173-180.

Ghanta, S., Banerjee, A., Poddar, A. and Chattopadhyay, S. (2007), Oxidative DNA damage preventive activity and antiioxidant potential of *Stevia rebaudiana* Bertoni, a natural sweetener, Journal of Agricultural and Food Chemistry, 55 : 10962-10967.

Govind, P. (2011), Active principles and median lethal dose of *Curcuma longa* Linn, International Research Journal of Pharmacy, 2(5) : 239-241.

Gowda, J.S. and Veerabhadrappa, S.B. (2013), Study of *in vitro* antioxidant activity and HPTLC fingerprint of quercetin in *Cassia auriculata* L., Asian Journal of plant Sciences and Research, 3(4) : 162-169.

Graidist, P., Martla, M. and Sukpondma, Y. (2015), Cytotoxic activity of *Piper cubeba* extract in breast cancer cell lines, Nutrients, 7 : 2707-2718;

Green, L.C., Wagner, D.A., Glogowski, J., Skipper, P.L., Wishnok, J.S. and Tannenbaum, S.R. (1982), Analysis of nitrate, nitrite and [15N] nitrate in biological fluids. Analytical Biochemistry, 126 : 131-138.

Green, M.J. and Hill, H.A.O. (1984), Chemistry of dioxygen Methods, Enzymology, 3 : 105.

Gupta, D., Mann, S., Jain, I. and Gupta, R.K. (2011), Phytochemical, nutritional and antioxidant activity evaluation of fruits of *Ziziphus nummularia* Burm.F., International Journal of Pharma and Biosciences, 2(4) : 629-638.

Gupta, M., Mazumder, U.K., Rath, N. and Mukhopadhyay, D.K. (2000), Antitumor activity of methanolic extract of *Cassia fistula* L. seed against Ehrlich ascites carcinoma, Journal of Ethnopharmacology, 72(1-2) : 151-156.

Gupta, P.B., Fillmore, C.M., Jiang, G., Shapira, S.D., Tao, K., Kuperwasser, C. and Lander, E.S. (2011), Stochastic state transitions give rise to phenotypic equilibrium in populations of cancer cells, Cell, 146(4) : 633-644.

Gupta, S. and Prakash, J. (2009), Studies on Indian green leafy vegetables for their antioxidant activity, Plant Food for Human Nutrition, 64(1) : 39- 45.

Gurunagarajan, S. and Pemaiah, B. (2011), Comparative studies on cytotoxic effect of *Hyptis suaveolens* Poit. and *Leonotis nepeatefolia*R.Br. against EAC cell lines, Journal of Pharmacy Research, 4(4) : 1222-1224.

Guruvayoorappan, C. and Kuttan, G. (2007), Immunomodulatory and antitumour activity of *Biophytum senstivium* extract, Asian Pacific journal of cancer prevention, 8(1) : 27-32.

Gutteridge, T.M. and Halliwell, B. (2010), Antioxidants: molecules, medicines and myths, Biochemical and Biophysical Research Communications, 393 : 561-564.

Habig, W.H., Pabst, M.J. and Jokoby, W.B. (1974), Glutathione transferase: A first enzymatic step in mercapturic acid III formation, Journal of Biological Chemistry, 249, 7130-7139.

Halliwell, B. (1990), How to characterize a biological antioxidant, Free radical Res. Commun., 9 : 1-32.

Halliwell, B. (2015), Free Radicals and Other Reactive Species in Disease, Citable Reviews in Life Sciences, DOI: 10.1002/9780470015902.a0002269.pub3.

Halliwell, B., Murcia, M.A., Chirico, S. and Aruoma, O.I. (1995), Free radicals and antioxidants in food and *in vivo*: what they do and how they work, Critical Reviews in Food Science and Nutrition, 35 : 7-20.

Harborne, J.B. (1984), Phytochemical Methods: A Guide to Modern Techniques of Plant Analysis, 2nd Edition, Ghapman and hall; London, 4-120.

Harun-ur-Rashid, M.D., Gafur, M.A., Sadik, M.G., Rahman, M.A.A. (2002), Biological activities of a new acrylamide derivative from *Ipomoea turpethum*, Pakistan Journal of Biological Sciences, 5: 968-969.

He, C., Ji, X., Pan, Y., Wang, H., Wang, K., Liang, M. and Yang, L. (2010), Antioxidant activity of alcoholic extract of *Agrimonia pilosa* Ledeb., Medical Chemistry Research, 19 : 448-461.

Hertog, M.G.L., Hollmann, P.C.H. and Katan, M.B. (1992), Content of potentially anticarcinogenic flavonoids of 28 vegetables and 9 fruits commonly consumed in the Netherlands. Journal of Agricultural and Food Chemistry, 40 : 2379-2383.

Hong, C.H., Hur, S.K., Oh, O.J., Kim, S.S., Nam, K. and Lee, S.K. (2002), Evaluation of natural products on inhibition of inducible cyclooxygenase (COX-2) and nitric oxide synthase (iNOS) in cultured mouse macrophage cells, Journal of Ethnopharmacology, 83 : 153- 59.

Horwitt, M.K. (1976), Vitamin E: a re-examination, The American Journal of Clinical Nutrition, 29 : 569–578.

Hossain, H., Amzad, M. and Rahman, S.M.M. (2011), Total phenolics, flavonoids and antioxidant activity of tropical fruit pineapple, Food Research International, 44(3) : 672-676.

Hossain, I.A., Shah, M.M.R., Rahman, M.K. and Ali, L. (2016), Gamma glutamyl transferase is an independent determinant for the association of insulin resistance with nonalcoholic fatty liver disease in Bangladeshi adults: Association of GGT and HOMA-IR with NAFLD. Diabetes and Metabolic Syndrome, 1(1) : 25-29.

Hossain, M.D.K., Hassan, M.D.M., Parvin, M.N., Hasan, M.D.M, Islam, M.D.S. and Haque, M.D.A. (2012), Antimicrobial, cytotoxic and thrombolytic activity of *Cassia senna* leaves, Journal of Applied Pharmaceutical Sciences, 2(6) : 186-190.

http://www.oxidativestresssource.org/img/oxidative_stressoval.jpg

Hudaib, M., Mohammad, M., Bustanji, Y., Tayyem, R., Yousef, M., Abuirjeie, M. and Aburjai, T. (2008), Ethnopharmacological survey of medicinal plants in Jordan, Mujib nature reserve and surrounding area, Journal of Ethnopharmacology, 120(1) : 63-71.

Ilavarasan, R., Mallika, M. and Venkataraman, S. (2005), Anti-inflammatory and antioxidant activities of *Cassia fistula* Linn bark extracts, African Journal of Traditional, Complementary and Alternative Medicines, 2(1) : 70-85.

Imam, H., Alla, A.H.A. and Yagi, S.M. (2013), Evaluation of the larvicidal, antiplasmodial and cytotoxicity properties of *Cassia arereh* Del. stem bark, European Journal of Medicinal Plants, 3(1) : 78-87.

Irshad, M., Shreaz, S., Manzoor, N., Khan, L.A. and Rizvi, M.M.A. (2011), Anticandidal activity of *Cassia fistula* and its effect on ergosterol biosynthesis, Pharmaceutical Biology, 49(7) : 727–733.

Irshad, M., Zafaryab, M., Singh, M. and Rizvi, M.M.A. (2012) Comparative analysis of the antioxidant activity of *Cassia fistula* extracts, International Journal of Medicinal Chemistry, 6 : 1-6.

ISO International Organization for Standardization, (1992), 10993–5. Biological Evaluation of Medical Devices-Part 5. Tests for Cytotoxicity: *In vitro* Methods; ISO: Geneve, Switzerland,.

Jacob, D.L., Odeh, S.O. and Otsapa, P.B.L. (2002), Preliminary *in vivo* studies of the anti-ulcer effects of the crude seed and leaves extracts of *Cassia occidentalis* in albino Wistar rats, Journal of Medicine in the Tropics, 4(2) : 15-18.

Jafri, M.A., Subhani, M.J., Javed, K. and Singh, S. (1999), Hepatoprotective activity of leaves of *Cassia occidentalis* against paracetamol and ethyl alcohol intoxication in rats, Journal of Ethnopharmacology, 66(3) : 355-361.

Jain, S. and Patil, U.K. (2010), Phytochemical and Pharmacological Profile of *Cassia tora* Linn – An overview, Indian Journal of Natural Products and Resources, 1(4) : 430-437.

Janakiraman, N., Sathish, S. S. and Johnson, M. (2011), UV and FTIR spectroscopic studies on *Peristrophe bicalyculata* (retz.) nees, Asian Journal of Pharmaceutical and Clinical Research, 4, 125-129.

Jawahar, L. and Gupta, P.C. (1972), Galactomannan from the seeds of *Cassia fistula*. Planta Medica, 21 : 70-77.

Jayamathi, P. (2010), Biochemical effects of plumbagin on fibrosarcoma induced rats, International Journal of Pharma Sciences and Research,1(8) : 320-325.

Jayaprakasha, G. K., Selvi, T. and Sakariah, K.K. (2003), Antibacterial and antioxidant activities of grape (*Vitis vinifera*) seed extracts, Food research international, 36(2) : 117-122.

Jayaprakasha, G.K., Selvi, T. and Sakariah, K.K. (2003), Title , Food Res. Int, 36 : 117-122.

Jeena, K., Liju, V.B. and Kuttan, R. (2015), Antitumor and cytotoxic activity of ginger essential oil (*Zingiber officinale* Roscoe), International Journal of Pharmacy and Pharmaceutical Sciences, 7(8) : 341-344.

Jemal, A., Bray, F. and Center, M.M. (2011), Global cancer statistics. A cancer journal for clinicians, 61 : 69-90.

Jenkins, D.C., Charles, I.G., Thomsen, L.L., Moss, D.W., Holmes, L.S., Baylis, S.A., Rhodes, P., Westmore, K., Emson, P.C. and Moncada, S. (1995), Role of NO in tumour growth, Proceedings of the National Academy of Sciences of the United States of America, 92 : 4392–4396.

Jiang, J., Nilsson-Ehle, P. and Xu, N. (2006), Influence of liver cancer on lipid and lipoprotein metabolism, Lipids in Health and Disease, 5(4) : 1-7.

Jones, S., Sudweeks, S. and Yakel, J.L. (2008) Radical-free biology of oxidative stress, Am. J. Physiol. Cell Physiol, 60, 849-868.

Jose, S., Usha, P.T.A. and Priya, P.M. (2012), Comparative study of ethanolic extract of *Cassia alata* and *Tectona grandis* against pathogenic bacteria, International Journal of Research in Phytochemistry and Pharmacology, 2(1) : 41-44.

Joseph, N.M., Sabharwal, M., Shashi, A., Mahor, A. and Rawal, S. (2010), *In vitro* and *in-vivo* models for antioxidant activity evaluation - a review, International Journal of Pharmaceutical Sciences and Research, 1(1) : 1-11.

Jothy S.L., Zakaria, Z., Chen, Y., Lau, Y.L., Latha, L.Y., Shin, L.N. and Sasidharan, S. (2011 b), Bioassay-directed isolation of active compounds with antiyeast activity from a *Cassia fistula* seed extract, Molecules, 16 : 7583-7592;

Jothy, S.L., Torey, A., Darah, I., Choong, Y.S., Saravanan, D., Chen, Y., Latha, L.Y., Deivanai, S. and Sasidharan, S. (2012), *Cassia spectabilis* (DC) Irwin et Barn: A Promising Traditional Herb in Health Improvement, Molecules, 17 : 10292-10305.

Jothy, S.L., Zuraini, Z. and Sasidharan, S. (2011a), Phytochemical screening, DPPH free radical scavenging and xanthine oxidase inhibitiory activities of *Cassia fistula* seeds extract, Journal of Medicinal Plants Research, 5(10) : 1941-1947.

Journal of Ethnopharmacology, 1999, 66(3), 277-282.

Juan-Badaturuge, M., Habtemariam, S. and Thomas, M.J.K. (2011), Antioxidant compounds from a south asian beverage and medicinal plant, *Cassia auriculata*. Food Chemistry, 125 : 221–225.

Jyothi, S.G., Chavan, S.C.S. and Somashekaraiah, B.V. (2012), *In vitro* and *in vivo* antioxidant and antidiabetic efficacy of *Cassia auriculata* L. flowers, Global Journal of Pharmacology, 6 (1) : 33-40.

Kalantari, H., Jalali, M., Jalali, A. and Zsuga, J. (2011), Protective effect of *Cassia fistula* fruit extract on bromobenzene-induced nephrotoxicity in mice, Human and Experimental Toxicology 30(10) : 1710-5.

Kamagate, M., Koffi, C., Kouame, N.M., Akoubet, A., Yao, N.A.R. and Die-Kakou, H.M. (2014), Ethnobotany, phytochemistry, pharmacology and toxicology profiles of *Cassia siamea* Lam., The Journal of Phytopharmacology, 3(1) : 57-76.

Kannampalli, P. Chandrasekaran, V.R.M., Kuppannan, G.A. and Sivanesan, K. (2007), Effect of *Cassia fistula* Linn leaf extract on diethylnitrosamine induced hepatic injury in rats, Chemico-Biological Interaction. 167:

Kannampalli, P., Chandrasekaran, V.R.M., Kuppannan, G.A. and Sivanesan, K. (2005), Effect of pretreatment of *Cassia fistula* Linn leaf extract against subacute CCl4 induced hepatotoxicity in rats, Indian Journal of Experimental Biology, 43 : 526–530.

Kasote, D.M., Katyare, S.S., Hegde, M.V. and Bae, H. (2015), Significance of antioxidant potential of plants and its relevance to therapeutic applications, International Journal of Biological Sciences, 11(8) : 982-991.

Kathirvel, A. and Sujatha, V. (2012), Phytochemical studies of *Cassia occidentalis* Linn. flowers and seeds in various solvent extracts, International Journal of Pharmacognosy and Phytochemical Research, 3(4) : 95-101.

Kaur, R. and Arora, S. (2009), Chemical constituents and biological activities of *Chukrasia tabularis* A. Juss. – A review, Journal of Medicinal Plants Research, 3(4) : 196-216.

Kaur, R., Kapoor, K. and Kaur, H. (2011), Plants as a source of anticancer agents, Journal of Natural Products and Plant Resoures, 1(1) : 119-124.

Kaviraj, A.G., Sangrah, A. and Krishnadas. (1993), Academy Orientalia Publishers and Distributors, Varanasi, 4-32.

Kawasaki, M. (2006), Changes in serum and liver lipid levels and lipid related parameters in Lewis lung carcinoma-implanted mice, Bulletin of Morioka Junior College, Iwate Prefectural University, 8 : 1-5.

Kawasaki, M., Yagasaki, K., Miura, Y. and Funabiki, R. (2004), Comparison of the changes in lipid metabolism between hepatoma-bearing and lipopolysaccharide-treated rats, Bioscience, Biotechnology, and Biochemistry, 68 : 72-78.

Kawsar, S.M.A., Huq, E. and Nahar, N. (2008), Cytotoxicity assessment of the aerial parts of *Macrotylom auniflorum*(L.). International Journal of Pharmacology, **4**(4) : 297-300.

Kerr, M.E., Bender, C. M. and Monti, E.J. (1996), An introduction to oxygen free radicals. Heart Lung, 25(3) : 200-209.

Khairunnisa, K. and Karthik, D. (2014), Evaluation of *in vitro* apoptosis induction, cytotoxic activity of *Hymenodictyon excelsum* (Roxb) Wall in Dalton's lymphoma ascites (DLA) and Lung fibroblast - Mouse L929 cell lines, Journal of Applied Pharmaceutical Science, 4(08) : 011-017.

Khan, B. A., Akhtar, N., Rasul, A., Mahmood, T., Khan, H. S., Iqbal, M., and Murtaza, G. (2012), Investigation of the effects of extraction solvent/technique on the antioxidant activity of *Cassia fistula* L. Journal of Medicinal Plants Research, 6(3) : 500-503.

Khan, R.A., Khan, M.R. and Sahreen, S. (2012b), Assessment of flavonoids contents and *in vitro* antioxidant activity of *Launaea procumbens*., Chemistry Central Journal, 6 : 43-10.

Kimura, Y. (2005), New anticancer agents: *in vitro* and *in vivo* evaluation of the antitumor and antimetastatic actions of various compounds isolated from medicinal plants, *In vivo*, 19 : 37-60.

Kimura, Y., Sumiyoshi, M., Taniguchi, M. and Baba, K. (2008), Antitumor and antimetastatic actions of anthrone-C-glucoside, cassialoin isolated from *Cassia garrettiana* heartwood in colon 26-bearing mice, Cancer Science, 99(11) : 2336-2348.

Kirtikar, K.R. and Basu, B.D. (2006), Indian medicinal plants, Popular Prakashan Pvt. Ltd., Allahabad, Uttar Pradesh, India, I, 174-175.

Koh, E., Noh, S.H., Lee, H.Y., Han, H.W., Lee, H.W. and Hong S. (1999), Differential expression of nitric oxide synthase in human stomach cancer, Cancer Letters, 46 : 173–180.

Kokate, C.K. (2005), Practical Pharmacognosy, 4th Edition, Vallabh Prakashan, New Delhi, 107-111.

Kokate, C.K., Purohit, A.K., Gokhale, S.B., (1990), Pharmacognosy, 1st Edition, Nirali Prakashan, Pune, 123.

Kono, Y. and Fridovich, I. (1982), Superoxide radicals inhibit catalase, Jour Biol Chem, 257 : 5751–5754.

Koppikar, S.J., Choudhari, A.S., Suryavanshi, S.A., Kumari, S., Chattopadhyay, S. and Kaul-ghanekar R. (2010), Aqueous cinnamon extract(ACE-c) from the bark of *Cinnamomum cassia* causes apoptosis in human cervical cancer cell lines (SiHa) through loss of mitochondrial membrane potential. BMC Cancer, **10** : 210, DOI:10.1186/1471-2407-10-210.

Kratchanova, M., Denev, P., Ciz, M., Lojek, A. and Mihailov, A. (2010), Evaluation of antioxidant activity of medicinal plants containingpolyphenol compounds. Comparison of two extraction systems, Biochemica Polonica, 57(2) : 229–234.

Krishnaiah, D., Devi, T., Bono, A. and Sarbatly, R. (2009), Studies on phytochemical constituents of six Malaysian medicinal plants, Journal of Medicinal Plants Research, 3(2) : 067–072.

Kumar, A., Jha, S. and Pattanayak, S.P. (2016), Effect of naringenin on lipids, lipoproteins and lipid metabolising enzymes in 7,12-dimethyl benz(a)anthracene-induced mammary carcinogenesis in sd rats, International Journal of Pharmacy and Pharmaceutical Sciences, 8(2) : 154-158.

Kumar, D. and Rizv, S.I. (2012), Significance of Vitamin C in human health and disease, Annals of Phytomedicine, 1(2) : 9-13.

Kumar, D.G., Rathi, M.A., Meenakshi, P., Thirumoorthi, L., Sunitha, M., Gopalakrishnan, V.K. (2010), Anticancer activity of *Cassia senna* (L) against prostate carcinogenesis, Journal of Pharmacy Research, 3(12) : 3028-3031.

Kumar, R.S., Jayakar, B. and Rajkapoor, B. (2007), Antitumor Activity of *Indigofera trita* on Ehrlich ascites carcinoma induced mice, International Journal of Cancer Research, 3(4) : 180-185.

Lacroix, M., Toillon, R.A. and Leclercq, G.(2006), p53 and breast cancer, an update, Endocrine-Related Cancer, 13(2) : 293-325.

Laghari, A.Q., Memon, S., Nelofar, A. and Laghari, A.H. (2011), Extraction, identification and antioxidantive properties of the flavonoid–rich fractions from leaves and flowers of *Cassia angustifolia*, American Journal of analytical Chemistry, 2 : 871-878.

Lengauer, C., Kinzler, K.W. and Vogelstein, B. (1998), Genetic instabilities in human cancer, Nature., 396 : 643–649.

Levy, A.S. and Carley, S. (2012), Cytotoxic activity of hexane extracts of *Psidium Guajava L (Myrtaceae)* and *Cassia alata L (Caesalpineaceae)* in Kasumi-1 and OV2008 cancer cell lines, Tropical Journal of Pharmaceutical Research, 11(2) : 201-207.

Li, X., Fang, P., Mai, J., Choi, E.T., Wang, H. and Yang, X.F. (2013), Targeting mitochondrial reactive oxygen species as novel therapy for inflammatory diseases and cancers, Journal of Hematology & Oncology, 6, doi: 10.1186/1756-8722-6-19.

Lincoln, T. and Eduardo, Z. (2006), Plant Physiology**,** 4th Edition, Sinauer Publication.

Liu, C.Z., Murch, S.J., El-Demerdash, M. and Saxena, P.K. (2004), *Artemisia judaica* L. : micropropagation and antioxidant activity, Journal of Biotechnology, 110 : 63-71.

Lox, C., Ronaghan, C. and Cobos, E. (1998), Blood chemistry profiles in menopausal women administered with tamoxifen for breast cancer, General pharmacology, 30 : 121-124.

Luck, H. (1974), In: Methods in enzymatic analysis, 2nd Edition, Bergmeyer, Academic Press, New York, 805.

Lukaszewicz-Hussain, A. and Moniuszko-Jakoniuk, J. (2004), Liver catalase, glutathione peroxidase and reductase activity, reduced glutathione and hydrogen peroxide levels in acute intoxication with chlorfenvinphos, an organophosphate insecticide, Polish Journal of Environmental Studies, 13(3) : 303-309.

Lushchak, V.I. (2012), Glutathione homeostasis and functions: potential targets for medical interventions, Journal of Amino Acids, doi: 10.1155/2012/73/837.

Luximon-Ramma, A., Bahorun T., Soobrattee, M.A. and Aruoma, O.I. (2002), Antioxidant activities of phenolics, proanthocyanidins and flavonoid components in extracts of *Cassia fistula*, Journal of Agricultural and Food Chemistry, 50 : 5042-5047.

Maciejewicz, W., Daniewski, M., Bal, K. and Markowski, W. (2007), GC-MS identification of the flavanoid aglycones isolated from propolis, Chromatographia, 53 : 343-346.

Mahesh, V.K., Sharma, R. and Singh, R.S. (1984), Anthraquinones and kaempferol from *Cassia fistula* species, Journal of Natural Products, 47(4) : 733-751.

Maideen, N.M.P., Velayutham, R. and Manavalan, G. (2012), Activity of *Prosopis cineraria* against N-nitrosodiethylamine induced liver tumors by regulating the levels of tumor marker, lipid peroxidation and antioxidants, Asian Journal of Pharmacy and Life Science, 2(1) : 1

Mak, Y.W. Chuah, L.O., Ahmad, R. and Bhat, R. (2013). Antioxidant and antibacterial activities of hibiscus (*Hibiscus rosa-sinensis* L.) and Cassia (*Senna bicapsularis* L.) flower extracts, Journal of King Saud University – Science, 25 : 275–282.

Malick, C.P. and Singh, M.B. (1980), In. plant enzymology and histoenzymology, Kalyani Publishers, New Delhi, 286.

Malmira, M., Ferreirab, E., Serranoa, R., Gomesa, E.T., Canic, M., Silvaa O. (2015), *In vitro* anti-Neisseria gonorrhoeae activity of *Senna podocarpa* root extracts, Industrial Crops and Products, 76 : 467-471.

Mandal, S. and Rath, J. (2015), Phytochemical and antioxidant activities of ethnomedicinal plants used by fisher folks of Chilika lagoon for indigenous phytotherapy, Journal of Pharmacognosy and Phytochemistry, 3(5) : 55-65.

Manonmani, G., Bhavapriya, V., Kalpana, S., Govindasamy, S. and Apparanantham, T. (2005), Antioxidant activity of *Cassia fistula* (Linn.) flowers in alloxan induced diabetic rats., Journal of Ethnopharmacology, 97 : 39–42.

Margis, R., Dunand, C., Teixeira, F.K. and Margis - Pinheiro, M. (2008), Glutathione peroxidase family - An evolutionary overview, FEBS Journal, 275 : 3959-3970.

Masum, A.S.M.G.A., Khandaker, L., Hossain, K.G. and Fuuta, Y. (2010), Total polyphenol, polyphenol oxidase, antioxidant activity and color profiles of some wheat varieties from Bangladesh, Research Journal of Agriculture and Biological Science, 6(2) : 186-190.

Mattson, M.P. and Cheng, A. (2006), Neurohormetic phytochemicals: Low-dose toxins that induce adaptive neuronal stress responses, Trends in Neurosciences, 29(11) : 632-9.

Mazid, M., Khan, T.A. and Mohammed, F. (2012), Role of nitric oxide in H_2O_2 signaling responses against temperature and UV induced oxidative stress in plants, Acta Biologica Indica, 1 : 1-16.

Mazumder, P.M., Percha, V., Farswan, M. and Upaganlawar, A. (2008), *Cassia*: a wonder gift to medical sciences, International Journal of Clinical Pharmacy, 1 : 16-38.

McCarthy, K.D. and de Vellis, J. (1980), Preparation of separate astroglial and oligodendroglial cell cultures from rat cerebral tissue, Journal of Cell Biol, 85 : 890-902.

Mehta, J.P. (2012), Separation and characterization of anthraquinone derivatives from *Cassia fistula* using chromatographic and spectral techniques, International Journal of Chemical Sciences, 10(1) : 306-316.

Mehta, J.P., Parmar, P.H., Vadia, S.H., Patel, M.K. and Tripathi, C.B. (2013), *In vitro* antioxidant and *in vivo* anti-inflammatory activities of aerial parts of *Cassia* species, Arabian Journal of Chemistry, 1-9.

Mensor, C.C., Menezes, F.S., Leitan, G.G., Reis, A.S., Dossaltos, T.C., Carbe, C.S. and Leitao, S.G. (2001), Screening of Brazilian plant extracts for antioxidant activity by use of DPPH free radical methods, Phytotherapy Research, 15 : 127-130.

Menvielle-Bourg, J.F. (2005), Superoxide dismutase (SOD), a powerful antioxidant, is now available orally, Phytothérapie, 3 : 1-4.

Michael, A.G. and Oyeronke, A.O. (2013), *In vitro* antioxidant/radical scavenging activities and hepatoprotective roles of ethanolic extract of *Cassia occidentalis* leaves in sodium arsenite-treated male Wistar rats, British Journal of Medicine and Medical Research, 3(4) : 2141-2158.

Miles, D.W., Happerfield, L.C., Thomsen, L.L. and Filipe, I. (1996), Nitric oxide synthase and localization in gastric carcinoma, Proceedings of the American Association for Cancer Research, 37 : 154.

Mishra, T., Khullar, M. and Bhatia, A. (2011), Anticancer potential of aqueous ethanol seed extract of *Ziziphus mauritiana* against cancer cell lines and Ehrlich ascites carcinoma, Evidence-Based Complementary and Alternative Medicine, Article ID : 765029 : 11 pages.

Misra, M.P. and Fridovich, I. (1972), The role of superoxide anion in the auto oxidation of epinephrine and simple assay for superoxide dismutase, Journal of Biological Chemistry, 247 : 31-34.

Mohamed, A.A., Ali, S.I. and El-Baz, F.K. (2013), Antioxidant and antibacterial activities of crude extracts and essential oils of *Syzygium cumini* Leaves. PLoS One, 8(4) : e60269.

Mohamed, G.A. (2014), New cytotoxic cycloartane triterpene from *Cassia italica* aerial parts, Natural Product Research, 28(13) : 976–983.

Mohammed, A., Limen, M.L. and Atiku, M.K. (2013a), Chemical composition of the methanolic leaf and stem bark extracts of *Senna siamea* Lam., Journal of Pharmacognosy and Phytotherapy, 5(5) : 98-100.

Mohammed, M.M.D., El-Souda, S.S., El-Hallouty, S.M. and Kobayashi, N. (2013b), Antiviral and cytotoxic activities of anthraquinones isolated from *Cassia roxburghii* Linn. leaves, Herba rolonica(polonica), 59(4) : 33-44.

Mondal, A., Karan, S.K., Singha, T., Rajalingam, D. and Maity, T.K. (2012), Evaluation of hepatoprotective effect of leaves of *Cassia sophera* Linn. Evidence-Based Complementary and Alternative Medicine, Volume 2012, 1-5.

Moron, M.S., Bipierre, J.W. and Mannerwick, B. (1979), Levels of glutathione reductase and glutathione –s-transferase in rat lung and liver, Biochemistry and Biophysics Acta, 582 : 67-68.

Mosmann, T. (1983), Rapid colorimetric assay for cellular growth and survival: application to proliferation and cytotoxicity assays, Journal of Immunological Methods, 65 : 55-63.

Moss, D.W. and Butterworth, P.J. (1974), Enzymology and Medicine, London, Pitman Medical, 139.

Murugan, S.B., Deepika, R., Reshma, A. and Sathishkumar, R. (2013), Antioxidant perspective of selected medicinal herbs in India: a probable source for natural antioxidants, Journal of pharmacy research, 7 : 271-274.

Nagarajan, B. and Sankaran, S. (1973), A rapid method for fibrosarcoma in rats and the effect of BCG administration. Indian Journal of Cancer, 10 : 83-4.

Nagavani, and Rao, T.R. (2010), Evaluation of antioxidant potential and qualitative of major polyphenols by RP-HPLC in *Nymphaea nouchali* brum flowers, International Journal of Pharmacy and Pharmaceutical Sciences, 2(4) : 98-104.

Nahak, G. and Sahu, R.K. (2011), Phytochemical evaluation and antioxidant activity of *Piper cubeba* and *Piper nigrum*, Journal of Applied Pharmaceutical Sciences, 1: 153–157.

Naitik, P., Prakash, T., Kotresha, D. and Rao, N.R. (2012), Effect of *Terminalia catappa* on lipid profile in transplanted fibrosarcoma in rats, Indian Journal of Pharmacology, 44(3) : 390-392.

Nakamura, S., Xu, F., Ninomiya, K., Nakashima, S., Oda, Y., Morikawa, T., Muraoka,O., Yoshikawa, M. and Matsuda, H. (2014), Chemical structures andhepatoprotective effects of constituents from *Cassia auriculata* Leaves. The Journal *Chemical* and *Pharmaceutical* Bulletin, 62 : 1026–1031.

Nanda, R. and Agrawal, V. (2016), Elucidation of zinc and copper induced oxidative stress, DNA damage and activation of defence system during seed germination in *Cassia angustifolia* Vahl., Environmental and Experimental Botany, 125 : 31–41,

Narang, A.S. and Desai, D.S. (2009), Anticancer drug development: unique aspects of pharmaceutical development, Pharmaceutical Perspectives of Cancer Therapeutics, 49-92.

Nasir, N.F.M., Raha, M.G., Kadri, N.A., Sahidan, S.I., Rampado, M. and Azlan, C.A. (2006), The study of morphological structure, phase structure and structure of collagen-PEO 600K blends for tissue engineering application, American Journal of Biochemistry and Biotechnology, 2 (5) : 175-179.

Nassar -Allah, A.A., Aboul-Enein, AM., Aboul - Enein,K.M., and Lightfoot, D.A., Cocchetto, A. and El-Shemy, H.A. (2009) Anti-cancer and anti-oxidant activity of some Egyptian medicinal plants, J. Med. Plants Res., 3(10), 799-808.

Nayak, P., Nayak, S. and Darafsh, M.D. (2010), Alteration in plasma lipid profile in recancerous conditions, Journal of Nepal Dental Association, 11(1) : 40-45.

Negi, J.S., Singh, P. and Rawat, B. (2011), Chemical constituents and biological importance of *Swertia*: a review, Current Research on Chemistry, 3 : 1-15.

Neto, C.C. (2007), Cranberry and its phytochemicals:a review of *in vitro* anticancer studies, Journal of Nutrition, 137(1) : 186-193.

Neville, B.W. and Day, T.A. (2002), Oral cancer and precancerous lesions, CA: A Cancer Journal for Clinicians, 52 : 195 McCarthy -215.

Newman, D.J. and Cragg, G.M. (2007), Natural products as sources of new drugs over the last 25 years, Journal of Natural Products, 70 : 461-477.

Nichans, W.G. and Samuelson, B. (1968), Formation of malondialdehyde from phospholipid arachidonate during microsomal lipid peroxidation, European Journal of Biochemistry, 6 : 126-130.

Nirmala, A., Eliza, J., Rajalakshmi, M., Priya, E. and Daisy, P. (2008), Effect of hexane extract of *Cassia fistula* barks on blood gulcose and lipid profile in streptozotocin diabetic rats, International journal of pharmacology, 4(4) : 292-296.

Nisa, S., Bibi, Y., Wahaeed, .A., Zia, M., Sarwar, S., Ahmed, S. and Chadury, M.F. (2010), Evaluation of anticancer of *Debregeasia salicifolia* extract against estrogen receptor positive cell line, African Journal of biotechnology, 10(6) : 990-995.

Noguchi, Y., Vydelingum, N.A., Younes, R.N., Fried, S.K. and Brennan, M.F. (1991), Tumor-induced alterations in tissue lipoprotein lipase activity and mRNA levels, Cancer Research, 51: 863–869.

Ogunkunle, A.T.J. and Ladejobi, T.A. (2006), Ethnobotanical and phytochemical studies on some species of *Senna* in Nigeria. African Journal of Biotechnology, 5 : 2020-2023.

Okhawa, N., Ohishi, K. and Yagi, H. (1979), Assay for lipid peroxides in animal tissues by thio-barbituric acid reaction, Analytical Biochemistry, 95 : 351-358.

Okpuzor, J., Ogbunugafor, H., Kareem, G.K. and Igwo-Ezikpe, M.N. (2009), *In vitro* investigation of antioxidant phenolic compounds in extracts of *Senna alata*, Research Journal of Phytochemistry, 3 : 68-76.

Olaleye, M., Afolabi, C., Adebayo, A., Ogunboye, A. and Akindahunsi, A. (2010), Antioxidant activity and hepatoprotective property of leaf extracts of *Boerhaavia diffusa* Linn against acetaminophen-induced liver damage in rats, Food and Chemical Toxicology, 48 : 2200-2205.

Ozaslan, M., Karagoz, I.D., Kilic, I.H. and Guldur, M.E. (2011), Ehrlich ascites carcinoma, African Journal of Biotechnology, 10(13) : 2375-2378.

Pacher, P., Beckman, J.S. and Liaudet, L. (2008), Nitric oxide and peroxy nitrite in health and disease, Physiological Reviews, 87 : 315-424.

Padmaja, M., Sravanthi, M. and Hemalatha, K.P.J. (2011), Evaluation of antioxidant activity of two Indian medicinal plants, Journal of Phytology, 3(3) : 86-91.

Padumanonda, T., Suntornsuk, L. and Gritsanapan, W. (2007), Quantitative analysis of barakol content in *Senna siamea* leaves and flowers by TLC-densitometry, Medical Principles and Practice, 16(1) : 47-52**.**

Panda, S.K., Padhi, L.P. and Mohanty, G. (2011), Antibacterial activities and phytochemical analysis of *Cassia fistula* (Linn.) leaf, Journal of Advanced Pharmaceutical Technology and Research, 2(1) : 62-67.

Pandey, P., Mehta, R. and Upadhyay, R. (2013), Physico-chemical and preliminary phytochemical screening of *Psoralea corylifolia*, Archives of Applied Science Research, 5 : 261-265.

Panigrahi, G., Maheshwari, R., Vellaikumar, S., Jayaprakash, S.P., Kumar,S. and Prabakaran, J. (2013), Preparative thin-layer Chromatographic separation followed by identification of antifungal compound in *Cassia laevigata* by RP-HPLC and GC-MS, Journal of the Science of Food and Agriculture, 94(2) : 1-9.

Pant, G., Malla, S. and Chauhan, U.K. (2014a), Comparative analysis of heat treatments on morphology of selected *Cassia* species, Asian journal of pharmaceutical and clinical research, 7(2) : 62-67.

Pant, G., Sibi, G., George, S.A., Bhadran, S. and Chauhan, U. (2014b), Variations in biochemical attributes of *Cassia tora* L. and *C. auriculata* L. under temperature stress, American Journal of Life Sciences, 2(6-1) : 16-21.

Parekh, J., Nair, R. and Chanda, S. (2005), Preliminary screening of some folklore medicinal plants from western India for potential antimicrobial activity, Indian Journal of Pharmacology, 37 : 408-409.

Pari, L. and Latha, M. (2002), Effect of *Cassia auriculata* flowers on blood sugar levels, serum and tissue lipids in streptozotocin diabetic rats. Singapore Medical Journal, 43 : 617–21.

Parizadeh, M.R., Gharib, F.G., Abbaspour, A.R., Afshar, J.T. and Ghayour–Mobarhan, M. (2011), Effects of aqueous saffron extract on nitric oxide production by two human carcinoma cell lines: Hepatocellular carcinoma (HepG2) and laryngeal carcinoma (Hep2), Avicenna Journal of Phytomedicine, 1(1) : 43-50.

Parveen, A,, Roy, A.S. and Rao, S. (2012), Biosynthesis and characterization of silver nano particles from *Cassia auriculata* leaf extract and *in vitro* evaluation of antimicrobial activity, International Journal of Applied Biology and Pharmaceutical Technology, 3(2) : 222.

Parveen, M., Malla, F.A.A.M., UrRehman, M.S.K.S., Tabish, M., Silva. M.R. and P.S.Pereira Silva , (2016), Structure elucidation and DNA binding specificity of natural compounds from *Cassia siamea* leaves: A biophysical approach, Journal of Photochemistry and Ohotobiology, B biology, 159 : 218-228.

Patidar, P., Dubey, D. and Dashora, K. (2012), Quantification of (-) epicatechin by HPTLC method in *Cassia fistula* crude drug, lab extract and commercial extract, Asian Journal of Pharmaceutical and Clinical Research, 5(4) : 140-143.

Pattanaya, P., Jena, R.K. and Panda, S.K. (2010), HPTLC fingerprinting in the standardization of sulaharan yoga: an ayurvedic tablet formulation, International Journal of Pharmaceutical Sciences Review and Research, 3(2) : 33.

Pattanayak, S.P., Sunita, P. and Mazumder, P.M. (2014), Restorative effect *of Dendrophthoe falcata* (L. f.) Ettingsh on lipids, lipoproteins, and lipid-metabolizing enzymes in DMBA-induced mammary gland carcinogenesis in Wistar female rats, Comparative Clinical Pathology, 23 : 1013-1022.

Pereira, R.M., Ferreira-Silva, G.A., Pivatto, M., Santos, L.D., Bolzani, V.D.S., de Paula, D.A.C., de Oliveira, J.C., Júnior, C.V. and Ionta, M. (2016), Alkaloids derived from flowers of *Senna spectabilis,* (−)-cassine and (−)-spectaline, have antiproliferative activity on HepG2 cells for inducing cell cycle arrest in G1/S transition through ERK inactivation and downregulation of cyclin D1 expression, Toxicology *in vitro*, 31 : 86-92.

Perron, N.R. and Brumaghim, J.L. (2009), A review of the antioxidant mechanisms of polyphenol compounds related to iron binding, Cell Biochemistry and Biophysics, 53 : 75-100.

Persijn, J.P. and van der Slik, W. (1978), More on serum enzymes in cancer patients, Clinical Chemistry, 24 : 727-728.

Petrov, V.D. and Breusegem, F.V. (2012), H_2O_2 - a central hub for information flow in plant cells, AoB PLANTS, 2012, doi: 10.1093/adopla/pls014.

Pompella, A., Tata, V.D., Paolicchi, A. and Zunino, F. (2006), Expression of glutamyl transferase in cancer cells and its significance in drug resistance. Biochem Pharmacol, 71 : 231-8.

Pradeep, K., Mohan, C.V.R., Gobianand, K. and Karthikeyan, S. (2010), Protective effect of *Cassia fistula* Linn. on diethylnitrosamine induced hepatocellular damage and oxidative stress in ethanol pretreated rats, Biol Res, 43 : 113-125.

Prajapati, N.D., Purohit, S.S., Sharma, A.K. and Kumar, T. (2003), A Handbook of Medicinal Plants, Agrobios (India), Jodhpur, 120.

Prasanna, R., Harish, C.C., Pichai, R., Sakthisekaran, D. and Gunasekaran, P. (2009), Anti-cancer effect of *Cassia auriculata* leaf extract *in vitro* through cell cycle arrest and induction of apoptosis in human breast and larynx cancer cell lines, Cell Biology International, 33(2) : 127-134.

Prieto, P., Pineda, M. and Aguilar, M. (1999), Spectrophotometric quantitation of antioxidant capacity through the formation of a phosphomolybdenum complex:specific application to the determination of vitamin E, Analytical Biochemistry, 269(2) : 337-341.

Priyadharshini, S.D. and Sujatha V, (2013), Determination of four *Cassia* species for their antioxidant and antimicrobial properties, Indian Journal of Applied Research, 3(3) : 32-35.

Purushothaman, N., Newmaster, S.G., Ragupathy, S., Stalin, N., Suresh, D., Arunraj D.R., Gnanasekaran G., Vassou S.L., Narasimhan, D. and Parani M. (2014), A tiered barcode authentication tool to differentiate medicinal *Cassia* species in India, Genetics and Molecular Research, 13(2) : 2959-2968.

Queiroz, C., Lopes, M.L.M., Fialho, E. and Valente-Mesquita. V.L. (2008), Polyphenol oxidase characteristics and mechanisms of browning control, Food reviews international, 24(4) : 361-375.

Raghunathan, K. and Mitra, R. (1999), Pharmacognosy of indigenous drugs / compiling & editing, Central Council for Research in Ayurveda and Siddha, New Delhi, III, 1462.

Raghuveer, C., and Tandon, R.V. (2009), Consumption of functional food and our health concerns, Pakistan Journal of Physiology, 5(1) : 76-83.

Rahman, M.A. and Ahmed, N.U. (2013), Phytochemical and biological activities of ethanolic extract of *Cassia hirsuta* leaves, Bangladesh Journal of Scientific and Industrial Research, 48(1) : 43-50.

Rajwar, S. and Khatri, P. (2012), An overview on potent herbal anticancer drugs, International Journal of Current Pharmaceutical Research and Review, 1(1) : 14-20.

Ramnath, V., Kuttan, G. and Kuttan, R. (2002), Cytotoxic and anti tumor effect of abrin on transplanted tumors in mice, Indian Journal of Physiology and Pharmacology, 46 : 69-77.

Ranganathan, B. and Jebaraj, C.E. (2014), Anticancer activity of *Strychnos potatorum* in

Ranjithkumar, J., Sivasankari, K. and Sekar, T. (2010), Secondary metabolites investigation and its derivatives on *Cassia occidentalis*, J. Chem. Pharm. Res., 2(4) : 371-377.

Rao, S. and Suresh, C. (2013), *In vitro* and *in vivo* effects of the leaf extracts of *Cassia tora* and *Cassia sophera* in reducing the cytotoxicity and angiogenesis, British Biotechnology Journal, 3(3) : 377-389.

Raphae, E. (2012), Phytochemical constituents of some leaves extract of *Aloe vera* and *Azadirachta indica* plant species, Global Advanced Research Journal of Environmental Science and Toxicology, 1 : 14-17.

Reddy, K.P., Subhani, S.M., Khan, P.A. and Kumar, K.B. (1995), Effect of light and benzyl adenine on dark-treated growing rice leaves, II changes in peroxidase activity, Plant cell Physiology, 24 : 987-994.

Reddy, S.H., Chakravarthi, M., Chandrasekhar, K.N. and Naidu, C.V. (2012), Phytochemical screening and antibacterial studies on leaf and root extracts of *Asclepias curassavica* (L)., Journal of Pharmacy and Biological Sciences, 2 : 39-44.

Rekha, C., Poornima, M., Manasa, V., Abhipsa, J., Devi, H.T.P., Kumar, V. and Kekuda, T.R.P. (2012), Ascorbic acid, Total Phenol Content and Antioxidant Activity of Fresh Juices of Four Ripe and Unripe Citrus Fruits, Chemical Science Transactions, 1(2) : 303-310.

Ripunjoy, S. (2013), International science congress association indigenous knowledge on the utilization of medicinal plants by the Sonowal Kachari tribe of Dibrugarh District in Assam, North-East India, International Research Journal of Biological Sciences(Int. Res. J. Biological Sci.), 2(4) : 44-50.

Rizvi, M.M.A., Irshad, M., Hassadi, G.E. and Younis, S.B. (2009), Bioefficacies of *Cassia fistula*: An Indian labrum, African Journal of Pharmacy and Pharmacology, 3(6) : 287-292.

Rocha, A.B.D., Lopes, R.M. and Schwartsmann, G. (2001), Natural Products in Anticancer Therapy, The Current Opinions in Pharmacology, 1 : 364-369.

Roe, J.H. and Kuether, A. (1953), The determination of ascorbic acid in whole blood and urine through 2,4-dinitrophenyl hydrazine derivative of dehydro ascorbic acid, Journal of Biological Chemistry, 147 : 399-404.

Roelofs, B. Tidball, A., Lindborg, A.E., TenHarmsel, A., Kooy, T.O.V. and Louters, L.L. (2006), Acute activation of glucose uptake by glucose deprivation in L929 fibroblast cells, Biochimie, 88(12) : 1941-1946.

Ronan, B., Ademir, J.S.J. and Alaide, B.O. (2009), Plant-derived antimalarial agents: new leads and efficient phytomedicine. part II. non-alkaloid natural products – A review. Molecules, 14 : 3037-3072.

Rosenberg, H.R. (1992), Chemistry and physiology of the vitamins, Inter Science Publishers, New York, 452-453.

Rotruck, J.T., Pope, A.L., Ganthar, H.E., Hafeman, D.G. and Hockstraw, G. (1973), Selenium: Biochemical role as a component of glutathione peroxidase, Science, 179 : 588-590.

Rouser, G., Fleisher, S. and Yamanoto, A. (1970), Two-dimensional thin layer chromatographic separation of polar lipids and determination of phospholipids by phosphorus analysis of spots, Lipids, 5 : 494-6.

Ruch, R. J., Chung, S. U. & Klaunig, J. E., 1984. Spin trapping of superoxide and hydroxyl radicals. Methods in Enzymology, 105:198-209.

Ruch, R.J., Cheng, S.J., and Klaunig, J.E. (1989) Prevention of cytotoxicity and inhibition of intracellular communication by antioxidant catechins isolated from Chinese green tea, Carcinogenesis, 10 : 1003-1008.

Sabir, S.M., Hayat, I. and Gardezi, S.D.A. (2003), Estimations of sterols in edible fats and oils, Pakistan Journal of Nutrition, 2(3) : 178-181.

Saeed, N., Khan, M.R. and Shabbir, M. (2012), Antioxidant activity, total phenolic and totalflavonoid contents of whole plant extracts *Torilis leptophylla* L, BMC Complementary and Alternative Medicine, 12 : 1-12.

Sahadeo, P., Sushilkumar, W., Dipali, S. and Vilas, K. (2014), Phytochemical and chromatographic fingerprint studies on chloroformic extracts of *Cassia tora* L., International Journal of Drug Development and Research, 6(3) : 53-62.

Sairam, R.K. and Tyagi, A. (2004), Physiological and molecular biology of salinity stress tolerance in plants, Current Science, 86 : 407–420.

Sakthivel, K.M., Kannan, N., Angeline, A. and Guruvayoorappan, C. (2012), Anticancer activity of *Acacia nilotica* (L.) Wild. Ex. Delile Subsp. *indica* against Dalton's Ascitic lymphoma induced solid and ascitic tumor model, Asian Pacific Journal of Cancer Prevention, 13 : 3989- 3995.

Sala, A., Recio, M., Giner, R.M., Máñez. S., Tournier. H. and Schinella. G. (2002), Anti-inflammatory and antioxidant properties of *Helichrysum italicum*. Journal of Pharmacy and Pharmacology, 54(3): 365-371.

Sallie, R., Tredger, J.M. and Willam, R. (1991), Drugs and the Liver, Biopharmaceutics and drug disposition, 12 : 251-259.

Sanders, L.H., Devadoss, B., Raja, G.V., O'Connor, J., Su, S., Wozniak, D.J., Hassett, D.J., Berdis, A.J. and Sutton, M.D. (2011), Epistatic roles of *Pseudomonas aeroginosa* Mut S and Din B (DNA Pol V) in coping with ROS-induced DNA damage, PLoS ONE, 6, doi: 10.1371/journal.pone.0018824.t001.

Sangetha, S., Zuraini, Z., Sasidharan, S. and Suryani, S. (2008), Free Radical Scavenging Activity of *Cassia spectabilis* and *Cassia fistula*, International Journal of Natural and Engineering Sciences, 2 : 111–114.

Sankaran, M., Vadivel, A. and Thangam, A. (2010) Curative effect of garlic on alcoholic liver diseased patients, Jordan Journal of Biological Sciences, 3 **:** 147-152.

Sarkar, A., Dash, S., Barik, B.K., Muttigi, M.S., Kedage, V., Shetty, J.K. and Prakash, M. (2010), Copper and ceruloplasmin levels in relation to total thiols and GST in type 2 diabetes mellitus patients, Indian Journal of Clinical Biochemistry, 25(1) : 746.

Sarkar, B., Khodre, S., Patel, P. and Mandaniya, M. (2014), HPLC analysis and antioxidant potential of plant extract of *Cassia alata,* Asian Journal of Pharmaceutical Science and Technology, 4(1) : 4-7.

Sarkar, F.H. and Li, Y. (2006), Using chemopreventive agents to enhance the efficacy of cancer therapy, Cancer Research, 66(7) : 3347-50.

Sarvajeet, S.G. and Narendra, T. (2010), Reactive oxygen species and antioxidant machinery in abiotic stress tolerance in crop plants, Plant Physiology and Biochemistry, 48 : 909-930.

Sathish M, Tharani, C.B. and Niraimathi, V. (2011), Free radical scavenging activity of various extracts from root of *Clerodendrum Phlomidis* (Linn.) evaluated by three *in vitro* methods, Research Journal of Pharmaceutical, Biological and Chemical Sciences, 2(3) : 752-761.

Sati, S.C., Sati, N., Rawat, U. and Sati, O.P. (2010), Medicinal plants as a source of antioxidants. Research Journal of Phytochemistry, 4 : 213-224.

Schedle, A., Samorapoompichit, P., Rausch-Fan, X.H., Franz, A., Fureder, W., Sperr, W.R., Sperr, W., Ellinger, A., Slavicek, R. and Boltz-Nitulescu, G. (1995), Response of L-929 fibroblasts, human gingival fibroblasts, and human tissue mast cells to various metal cations, Journal of Dental Research, 74 : 1513–1520.

Schlebusch, H., Rick, W., Leng, H. and Knedel, M. (1974), Standards in the activities of clinically important enzymes, Deutsche Medizinische Wochenschrift Journal, 99 : 765-766.

Scudiero, D.A., Shoemaker, R.H., Paull, K.D., Monks, A., Tierney, S., Nofziger, T.H., Currens, M.J., Seniff, D. and Boyd, M.R. (1988), Evaluation of soluble tetrazolium formazan assay for cell growth and drug sensitivity in clusters using human and other tumor cell lines, Cancer Research, 48: 4827-4833.

Seasotiya, L., Siwach, P., Malik, A., Bai, S., Bharti, P. and Dalal, S. (2014), Phytochemical evaluation and HPTLC fingerprint profile of *Cassia fistula*, International Journal of Advances in Pharmacy, Biology and Chemistry, 3(3) : 604-611.

Sermakkani, M. and Thangapandian, V. (2010), *In vitro* cytotoxicity of *Cassia italica* Miller. International Journal of Pharma Research and development, 2(9) : 99-106.

Sermakkani, M. and Thangapandian, V. (2012), GC-MS analysis of *Cassia italica* leaf methanol extract, Asian Journal of Pharmaceutical and Clinical Research, 5(2) : 90-94.

Severi, H.T., Malenstein, V., Verslype, C. and Pelt, J.F.V. (2010), Tumor initiation and progression in hepatocellular carcinoma: risk factors, classification, and therapeutic targets, Acta Pharmacologica Sinica., 31(11) : 1409–1420.

Shanmugam, S., Kumar, T.S. and Selvam, K.P. (2010), Estimation of tannin by modified prussian blue method, Laboratory Handbook on Biochemistry, PHI Learning Private Limited, New Delhi, 129-133.

Shanmugasundaram, R., Devi, V.K., Soris, P.T., Maruthupandian, A. and Mohan, V.R. (2011), Antidiabetic, antihyperlipidaemic and antioxidant activity of *Senna auriculata* (L.) Roxb. leaves in alloxan induced diabetic rats, International Journal of Pharm Tech Research, 3(2) : 747-756.

Shao, H., Chu, L., Ming-an, S., Jaleel, C.A. and Mi, H. (2008), Higher plant antioxidants and redox signaling under environmental stresses, Food chemistry, 331(6) : 433-441.

Sharififar, F., Dehghn-Nudeh, G. and Mirtajaldini, M. (2009), Major flavonoids with antioxidant activity from *Teucrium polium* L., Food Chem., 112 : 885-888.

Sharma US, Sharma UK, Singh A, Sutar N, Singh PJ. *In vitro* anthelmintic activity of *Murraya koenigii* linn. Leaves extracts. International journal of pharma and bio sciences 2010; 1(3): 1-4.

Sharma, B., Dhamija, I., Kumar, S. and Chaudhary, H. (2015), *In vitro* and *in vivo* evaluation of antitumor activity of methanolic extract of *Argyreia nervosa* leaves on Ehrlich ascites carcinoma, Bangladesh Journal of Pharmacology, 10 : 399-408.

Sharma, P., Jha, A.B., Dubey, R.S. and Pessarakli, M. (2012), Reactive Oxygen Species, Oxidative Damage, and Antioxidative Defense Mechanism in Plants under Stressful Conditions, Journal of Biology, Article ID 217037, 26 page.

Sharma, S.K., Singh, L. and Singh, S. (2013), A review on medicinal plants having antioxidant potential, Indian Journal of Research in Pharmacy and Biotechnology, 1(3) : 404-409.

Shekhawat, N., Soam, P.S., Singh, T. and Vijayavergia, R. (2010) Assessment of free radical scavenging activity of crude extracts of some medicinal plants, Mddle East Journal of Scientific Research, 5(4) : 298-301.

Shirwaikar, A., Prabhu, K.S. and Punitha, I.S.R. (2006), *In vitro* antioxidant studies of *Sphaeranthus indicus* (Linn). Indian Journal of Experimental Biology, 44 : 993-996.

Shoeb, M. (2006), Anticancer agents from medicinal plants. Bangladesh Journal of Pharmacology, 1 : 35-41.

Shrivastava, R., Bhat, S.H., Malla, M.Y. and Mir, M.I. (2013), Phytochemical investigation and *in vitro* antioxidant activity of *Argemone maxicana* Linn, International Journal of Pharmacy and Biological Sciences, 4(2) : 960-965.

Siddhuraju, P., Mohan, P.S. and Becker, K. (2002), Studies on the antioxidant activity of Indian Laburnum (*Cassia fistula* L.): a preliminary assessment of crude extracts from stem bark, leaves, flowers and fruit pulp, Journal of Agricultural and Food Chemistry, 79 : 61-67.

Siddiqui, A.A. and Ali, M. (1997), Practical Pharmaceutical chemistry, 1st Edition. CBS Publishers and Distributors; New Delhi, 126-131.

Silva J.G.A., Silva, A.A., Coutinho, I.D., Pessoa, C.O., Cavalheirob, A.J. and Silva, M.G.V. (2016), Chemical profile and cytotoxic activity of leaf extracts from *Senna* spp. from Northeast of Brazil, Journal of the Brazilian Chemical Society, Vol. 00, No. 00, 1-1.

Silva, F.D., de Oliveira, I.R., Silva, M.G.D. and Braz-Filho, R. (2010), Chemical compounds of leaves from *Senna spectabilis* (DC) Irwin and Barneby var. excelsa (Schrad.) Irwin & Barneby. Quimica Nova, 33 : 1874–1876.

Silva, R.C. and Goncalves, A.A. (2010), Reactive oxygen species and the respiratory tract diseases of large animals, Ciencia Rural, 40 : 994-1002.

Silva, S., Gomes, L., Leitao, F., Coelho, V. and Boas, L. (2006), Phenolic compounds and antioxidant activity of *Olea europaea L*. fruits and leaves, Food Science Technology International,12 : 385–396.

Singh, A.P. (2006), Short Review: Distribution of steroid like compounds in plant flora, Pharmacognosy Magazine, 2(6) : 87-89.

Singh, D., Sharma, K.S., Bansal, A., Sharma, P. and Hashmi, A. (2013), A comparative study of isolated phytosteroles from different plant parts of selected *Cassia* species, Asian pharma plus, 3 : 117-121.

Singh, D.K., Srivastva, B. and Sahu, A. (2004), Spectrophotometric determination of *Rauwolfia* alkaloids, estimation of reserpine in pharmaceuticals. Analytical Sciences, 20 : 571-573.

Singh, P., Shrivastava, R., Saxena, R.C., Sharma, M., Karchuli, M.C. and Tripathi, J. (2011), Phytochemical screening and evaluation of antioxidant activity of *Parkinsonia aculeata* L. (Family-Leguminoseae) leaves extract, International Journal of PharmTech Research, 3 : 1952-1957.

Singh, R., Singh, S., Kumar, S. and Arora, S. (2007), Evaluation of antioxidant potential of ethyl acetate extract/fractions of *Acacia auricliformis* A. Cunn., Food and Chemical Toxicology, 45 : 1216-1223.

Sirappuselvi, S. and Chitra, M. (2012), *In vitro* antioxidant activity of *Cassia tora* Linn., International Research Journal of Biological Sciences, 1(6) : 57-61.

Sivakumar, G., Bacchetta, L., Gatti, R. and Zappa, G. (2005), Journal of Plant Physiology, 162(11) : 1280-1283.

Sob, S.V.T., Wabo, H.K., Tane, P., Ngadjui, B.T. and Mac, D. (2008), A xanthone and a polyketide derivative from the leaves of *Cassia obtusifolia* (Leguminosae), Tetrahedron 64 : 7999–8002.

Solowey, E., Lichtenstein, M., Sallon, S., Paavilainen, H., Solowey, E. and Lorberboum-Galski, H. (2014), Evaluating medicinal plants for anticancer activity, The Scientific World Journal, 14 : 1-12.

Sousa, R.R.R.D., Queiroz, K.C.S., Souza, A.C.S., Gurgueira, S.A., Augusto, A.C., Miranda, M.A., Peppelenbosch, M.P., Ferreira, C.V. and Aoyama, H. (2006), Phosphoprotein levels, APK activities and NFκB expression are affected by fisetin, Journal of Enzyme Inhibition and Medicinal Chemistry, 22(4) : 439-444.

Spencer, J.P.E. (2008), Flavonoids: modulators of brain function, British Journal of Nutrition, 99(1) : 60-77.

Spolarics, Z. and Wu, J.X. (1997), Role of glutathione and catalase in H_2O_2 detoxification in LPS-activated hepatic endothelial and Kupffer cells, Gastroint. Liver Physiol. 273, G1304.

Sreelatha S. and Padma P.R. (2009), Antioxidant activity and total phenolic content of *Moringa oleifera* leaves in two stages of maturity, Plant Foods for Human Nutrition, 64 : 303-311.

Srigopalram, S. and Jayraaj, I.A. (2012), Effect of *Terminalia chebula* retz on den induced hepatocellular carcinogenesis in experimental rats, International Journal of Pharmacy and Pharmaceutical Sciences, 4(2) :

Sultana, S., Asif, H.M., Nazar, H.M.I., Akhtar, N., Rehman, J.U. and Rehman, R.U. (2014), Medicinal plants combating against cancer - a green anticancer approach, Asian Pacific Journal of Cancer Prevention, 15 : 4385-4394.

Sumi, S. and Saj, O.P. (2012), Antibacterial, anthelmentic and phytochemical investigations on the pod extracts of *Cassia fistula* Linn. International Journal of Medical and Pharmaceutical Sciences, 2(1) : 6-15.

Sun, J., Liu, S.F., Zhang, C.S., Yu, L.N. and Bi, J. (2012), Chemical composition and antioxidant activities of *Broussonetia papyrifera* fruits, PLoS One, 7(2) : e32021.

Surana, S.J., Gokhale, S.B., Jadhav, R.B., Sawant, R.L. and Wadekar, J.B. (2008), "Antihyperglycemic activity of various fractions of *Cassia auriculata* Linn in alloxan diabetic rats", Indian Journal of Pharmaceutical Sciences, 70 : 227-229.

Surapaneni, K.M. and Priya V. (2010), Serum Total sialic acid, lipid peroxidation and glutathione reducatse levels in patients with rheumatoid arthritis, Turkish Journal of Medical Sciences, 40(4) : 537-40.

Surapaneni, K.M. and Priya, V. (2008), Status of lipid peroxidation, glutathione, ascorbic acid, Vitamin E and anti-oxidant enzymes status in neonatal jaundice patients, Journal of Clinical and Diagnostic Research, 2(3) : 827–32.

Suresh, K.P., Sucheta, S., Sudarshana, D.V., Selvamani, P. and Latha, S. (2008), Antioxidant activity in some selected Indian medicinal plants, African Journal of Biotechnology, 7 (12) : 1826-1828.

Surveswaran, S., Cai, Y., Corke, H and Sun, M. (2007), Systematic evaluation of natural phenolic antioxidants from 133 Indian medicinal plants, Food Chemistry, 102 : 938–953.

Tabaraki, R. and Nateghi, A. (2011), Optimization of ultrasonic-assisted extraction of natural antioxidants from rice bran using response surface methodology, Ultrasonics Sonochemistry, 18 : 1279-1286.

Tackie, A.N. and Schiff, P.L. (1993), Jnr. Cryptospirolepine, a unique spiro-noncyclic alkaloid isolated from *Cryptolepis sanguinolenta*, Journal of Natural Products, 56 : 653–655.

Tambe, R., Kulkarni, M. and Bhise, K. (2013), Preliminary Phytochemical Screening and HPTLC Fingerprinting of Bark Extracts of *Symplocos racemosa,* Journal of Pharmacognosy and Phytochemistry, 2(3) : 45-49.

Tang, V.J., Konigsfeld, K.M., Aguilera, J.A. and Milliger, J.R. (2012), DNA binding hydroxyl radical probes, Radiation Physics and Chemistry, 81 : 46-51.

Thakur, V.S., Deb, G., Babcook, M.A. and Gupta, S. (2014), Plant Phytochemicals as Epigenetic Modulators: Role in Cancer Chemoprevention, The American Association of Pharmaceutical Scientists Journal, 16(1) : 151-163.

Thejass, P. and Kuttan, G. (2007), Allyl isothiocyanate (AITC) and phenyl isothiocyanate (PITC) inhibit tumour-speciWc angiogenesis by downregulating nitric oxide (NO) and tumour necrosis factor-ϒ (TNF-ϒ) production. Nitric Oxide, 16 : 247-257.

Thipyapong, P., Stout, M.J. and Atajarusit, J. (2007), Functional analysis of polyphenol oxidases by antisense/sense technology, Molecules, 12 : 1569-1595.

Thirunavukkarasu, C., Singh, J.P.V., Selvendiran, K. and Sakthisekaran, D. (2002), Chemopreventive efficacy of selenium against N-nitrosodiethylamine-induced hepatoma in albino rats, Cell Biochemistry and Function, 19 : 265–271.

Toppo, S., Flohe, L., Ursini, F., Vanin, S. and Maioriso, M. (2009), Catalytic mechanisms and specificities of glutathione peroxidases: variations of basic scheme, Biochimica Biophysica Acta., 1790 : 1486-1500.

Tousson, E., Hafez, E., Zaki, S. and Gad, A. (2014a), P53, Bcl-2 and CD68 expression in response to amethopterin-induced lung injury and ameliorating role of L-carnitine, Biopharma, 3409 : 1-9.

Tousson, E., Zaki ZT, Abu-Shaeir WA, Hassan H. (2014b), Methotrexate-induced Hepatic and Renal Toxicity: Role of L-carnitine in Treatment, Biomedicine and Biotechnology, 2(4) : 85-92.

Townsend, D.M. (2008), S-glutathionylation: indicator of cell stress and regulation of the unfolded protein response, Molecular Interventions, 7 : 313-324.

Turgay, S., Sar, D. and Türkistan, E. (2005), Knowledge, attitudes, risk factors and early detection of cancer relevant to the school teachers inzmir, Preventive Medicine, 40 : 636-641.

Upadhyay, A., Nayak, P.S., Dwivedi, S.K. and Rao, S. (2011), HPTLC densitometric quantification of sennosides from *Cassia angustifolia,* Genetics and Plant Physiology, 1(1-2) : 38-44.

Usha, K., Kasturi, G.M. and Hemalatha, P. (2007), Hepatoprotective effect of hygrophila spinosa and *Cassia occidentalis* on carbon tetrachloride induced liver damage in experimental rats, Indian Journal of Clinical Biochemistry, 22(2) : 132-135.

Vadivel, K., Thangabalan, B., Narayana, K.V., Jessygrace, B.C., Kumar, D.P. and Babu, S.M. (2012), Preliminary phytochemical evaluation of leaf extracts of *Lannea corommandelica* L, International Journal of Pharmacology Research, 2(2) : 64-68.

Vasudevan, K., Manoharan, S., Alias, L.M., Balakrishnan, S., Vellaichamy, L. and Gitanjali, M. (2008), Evaluation of chemopreventive efficacy of *Cassia fistula* in 7, 12-dimethyl benz (a) anthracene (DMBA) induced oral carcinogenesis, International Journal of Chemical Sciences, 6(3) : 1341-1354.

Veerachari, U. and Bopaiah, A.K. (2011) Preliminary phyto-chemical evaluation of the leaf extract of five *Cassia species*, J. Chem. Pharm. Res., 3(5) : 574-583.

Veeraraghavan, V.P., Mohan, S.K., Jainu, M. and Seshadri, C.S.G.V. (2015), Ameliorating effects of *Garcinia mangostana* Linn pericarp extract on hepatic antioxidants in Diethyl nitrosamine (DEN) induced Hepatocellular Carcinoma (HCC), Indian Journal of Pharmaceutical Education and Research, 49(4) : 344-352.

Venereo, J.R. (2002), Daño oxidativo, radicales libres y anti-oxidantes, Revista Cubana de Medicina Militar, 31(2) : 126-33.

Vennila, R., Thirunavukkarasu, S.V. and Muthumarya, J. (2010), *In vivo* studies on anticancer activity of taxol isolated from an endophytic fungus *Pestalotiopsis pauciseta* sacc. Vm1, Asian Journal of Pharmaceutical and Clinical Research, 3(4) : 30-34.

Verma, R., Satsangi, G.P. and Shrivastava, J.N. (2013), Analysis of phytochemical constituents of the ethanolic and chloroform extracts of *Calotropis procera* using gas chromatography-mass spectroscopy (GC-MS) technique, Journal of Medicinal Plants Research, 7(40) : 2986-2991.

Vidigal, F.D., Cocate, P.G., Pereira, L.G. and Alfenas, R.D.C.G. (2012), The role of hyperglycemia in the induction of oxidative stress and inflammatory process, Nutricion Hospitalaria, 27(5) : 1391-1398.

Vijyalakshmi, R. and Ravindran, R. (2012), Preliminary comparative phytochemical screening of root extracts of Diospyrus ferrea (Wild.) Bakh and Arva lanata (L.) Juss. Ex Schultes. Asian Journal of Plant Science and Research, 2 : 581-587.

Vinay, R.P., Prakash, R.P. and Sushil, S.K. (2010), Antioxidant activity of some selected medicinal plants in western region of India. Advances in Biological Research, 4(1) : 23-26.

Vivancos, P.D., Wolff, T., Merkwic, J., Pollardo, F.V. and Foyer, H. (2010), A nuclear glutathione cycle within the cell cycle, Biochemical Journal, 431 : 169-178.

Wadood, A, Ghufran, M, Jamal, S. B, Naeem, M, Khan, A. and Ghaffar, R. (2013), Phytochemical analysis of medicinal plants occuring in local area of Mardan, Biochemistry Analytical Biochemistry, 2(4) : 1-4.

Wadood, A., Ghufran, M., Jamal, S.B., Naeem, M., Khan, A., Ghaffar, R. and Asnad. (2013), Phytochemical analysis of medicinal plants occurring in local area of mardan, Biochemistry and Analytical Biochemistry, 2 : 4.

Wahab, S.I.A., Abdul, A.B., Mohan, S.M., Zubairi, A.S.A. and Elhassan, M.M. (2009), Oncolysis of breast, liver and leukemia cancer cells using ethyl and methanol extracts of *Goniothalamus umbrosus.* Research Journal of Biological Sciences, 4 : 209-215.

Wang, G.X. (2010), *In vivo* anthelmintic activity of five alkaloids from *Macleaya microcarpa* (Maxim) Fedde against *Dactylogyrus intermedius* in *Carassius auratus*. Veterinary Parasitology, 171 : 305–313.

Weber, G., Shen, F., Prajda, N., Yeh, Y.A., Yang, H., Herenyiova, M. and Look, K.Y. (1996), Increased signal transduction activity and down regulation in human cancer cells. Anticancer Research, 16(6A) : 3271-3282.

Williams, R. (1996), Classification, etiology and considerations of outcome in acute liver failure, Seminar in Liver Diseases Journal, 16 : 343–8

Wilson, A.P. and John, R.W. (2000), Animal cell culture: a practical approach. oxford: Oxford University Press.

Winterbourn, C., Hawkins, R.E., Brain, M. and Carelle, R.W. (1975), The estimation of red cell superoxide dismutase activity, T. Lab. Clin. Med., 85, 37- 41 .

Wu, G., Wei, Z.K. and Shao, H.B. (2007a), The mutual responses of higher plants to environment: physiological and microbiological aspects, Biointerfaces, 59 : 113-119.

Wu, J.H., Ward, N.C., Indrawan, A.P., Almeida, C.A., Hodgson, J.M., Porudfoot, J.M., Puddey, I.B. and Croft, K.D. (2007b), Effect of -tocopherol and mixed tocopherol supplementation on markers of oxidative stress and inflammation in type 2 diabetes, Clinical Chemistry, 53 : 511-519.

Yadav, M., Chatterji, S., Gupta, S.K. and Watal, G. (2014), Preliminary phytochemical screening of six medicinal plants used in traditional medicine, International Journal of Pharmacy and Pharmaceutical Sciences(Int J Pharm Pharm Sci), l6(5) : 539-542.

Yadav, R.N. and Agrawala, M. (2011), Phytochemical analysis of some medicinal plants, Journal of Physiology, 3(12) : 10-14.

Yen, G.C. and Chung, D.Y. (1999), Antioxidant effects of extracts from *Cassia tora* L. prepared under different degrees of roasting on the oxidative damage to biomolecules, Journal of Agricultural and Food Chemistry, 47 : 1326–1332.

Yen, G.C., Chen, H.W. and Duh, P.D. (1998), Extraction and identification of an antioxidative component from jueming zi (*Cassia tora* L), Journal of Agricultural and Food Chemistry, 46 : 820-824.

Yu, B.P. (1994), Cellular defense against damage from reactive oxygen species, Physiological Reviews, 74 : 136–162.

Zak, B., Zlatkins, A. and Boyle A.J. (1953), A new method for the determination of serum cholesterol, Journal of Laboratory and Clinical Medicine, 14 : 486.

Ze-Kun, L. and Chen-Haixia. (2012), GC-MS analysis of volatile oils from Bupleurum Chinese vanheurcksi (Muell-Arg) Shen etY-Li, Journal of Medicinal Plants Research, 6 : 926-928.

Zengin, G., Cakmak, Y.S., Guler, G.O. and Aktumsek, A. (2011), Antioxidant properties of methanolic extract and fatty acid composition of *Centaurea urvillei* DC. subp. *hayekiana Wagenitz*. Recent Natural Products, 5 : 123-132.

Zhishen, J., Mengcheng, T. and Jianming, W. (1999), The determination of Flavonoids contents in mulberry and their scavenging effects on superoxide radicals, Food Chemistry, 64 : 555-559.