

Chapter 7



Bibliography

7. Bibliography

- Abbassy MA, Abdelgaleil SAM, Belal ASH and Abdel RMAA.** Insecticidal, antifeedant and antifungal activities of two glucosides isolated from the seeds of *Simmondsia chinensis*. *Ind. Crop Prod.* **26 (3)**: 345–350, 2007.
- Aboaba OO and Efuwape BM.** Antibacterial properties of some Nigerian species. *Bio. Res. Comm.* **13**: 183-188, 2001.
- Abraham G and Aeri V.** A preliminary examination of the phytochemical profile of *Azolla microphylla* with respect to Seasons. *Asian Pac. J. Trop. Biomed.* **2(3)**: S1392-S1395, 2012.
- Addo AA.** Seasonal availability of dietary ascorbic acid and incidence of scurvy in northern state of Nigeria. PhD thesis, Department of Biochemistry. ABU Zaria, 2004.
- Adeneye AA and Agbaje EO.** Pharmacological evaluation of oral hypoglycemic and antidiabetic effects of fresh leaves of ethanol extract of *Morinda lucida* Benth. in normal and alloxan induced diabetes rats. *Afr. J. Biomed.* **11**: 65-71, 2008.
- Aditya A, Hairin T, Atual KK, Nayiar S, Hapipah MA and Mustafa AM.** *In vivo* antidiabetic and antioxidant potential of *Pseudovaria macrophylla* extract. *Int. J. Med Health Biomed. Pharma. Engineer.* **8(9)**: 514-517, 2014.
- Agrawal K, Joshi A, Ghildiyal S, Gautam MK, Gangwar M and Goel RK.** Qualitative phytochemical and physiochemical analysis of *Cassia fistula* L. fruit. *Med. Plants.* **6(2)**: 138-142, 2014.
- Agyare C, Menash AY and Osei-Asante S.** Antimicrobial activity and phytochemical studies of some medicinal plants from Ghana. *Boletín Latinoamericano y del Caribe de Plantas Medicinales y Aromáticas.* **5**: 113-117, 2006.
- Agyare C, Menash AY and Osei-Asante S.** Antimicrobial activity and phytochemical studies of some medicinal plants from Ghana. *Boletín Latinoamericano y del Caribe de Plantas. Med. J. Aroma.* **5**: 113-117, 2006.
- Ahmad R, Srivastava SP, Maurya R, Rajendran SM, Arya KR and Srivastava AK.** Mild antihyperglycaemic activity in *Eclipta alba*, *Berberis aristata*, *Betula utilis*, *Cedrus deodara*, *Myristica fragrans* and *Terminalia chebula*. *Ind. J. Sci. Technology.* **1(5)**: 1-6, 2008.

- Ahmed D, Khan MM and Saeed R.** Comparative analysis of phenolics, flavonoids and antioxidant and antibacterial potential of methanolic, hexanic and aqueous extracts from *Adiantum caudatum* leaves. *Antioxidants*. **4(2)**: 394-409, 2015.
- Ahmed D, Kumar V, Sharma M and Verma A.** Target guided isolation, *in vitro* antidiabetic, antioxidant activity and molecular docking studies of some flavonoids from *Albizia Lebbeck* Benth. bark. *BMC Complement. Altern. Med.* **14**:155, 2014.
- Ahmed MF, Kazim SM, Ghori SS, Mehjabeen SS, Ahmed SR, Ali SM and Ibrahim M.** Antidiabetic activity of *Vinca rosea* extracts in Alloxan-Induced Diabetic Rats. *Int. J. Endocrin.* Article ID 841090: 1155-1161, doi:10.1155/2010/841090, 2010.
- Aiyegoro OA and Okoh AI.** Preliminary phytochemical screening and *in vitro* antioxidant activities of the aqueous extract of *Helichrysum longifolium* DC. *BMC Comp. Alt. Med.* **10(21)**: 1-8, 2010.
- Aiyelaagbe OO and Osamudiamen PM.** Phytochemical screening for active compounds in *Mangifera indica* leaves from Ibaden, Oyo State. *Plant Sci. Res.* **2(1)**: 11-13, 2009.
- Akinpelu DA and Onakoya TM.** Antimicrobial activities of medicinal plants used in folklore remedies in south-western. *Afr. J. Biotechnol.* **5(11)**: 1078-1081, 2006.
- Akiyama H, Fujii K, Yamasaki O, Oono T and Iwatsuki K.** Antibacterial action of several tannins against *Staphylococcus aureus*. *J Antimicrob Chemother.* **48(4)**: 487-491, 2001.
- Akpuaka A, Ekwenchi MM, Dashak DA and Dildar A.** Biological Activities of Characterized Isolates of n-Hexane Extract of *Azadirachta Indica* A.Juss (Neem) leaves. *Nat. Sci.* **11(5)**:141-147, 2013.
- Alabri THA, Al Musalami AHS, Hossain MA, Weli AM and Al-Riyami Q.** Comparative study of phytochemical screening, antioxidant and antimicrobial capacities of fresh and dry leaves crude plant extracts of *Datura metel* L. *J. King Saud Univ. Sci.* **26**: 237-243, 2014.
- Alessandra BR, Elton GB, Beatriz CS, Paula FM, Oscar OSJ, Joana SB and Jesuí VV.** Antioxidant capacity, total phenolic content, fatty acids and correlation by principal component analysis of exotic and native fruits from Brazil. *J. Braz. Chem. Soc.* **24(5)**: 797-804, 2013.

- Ali H, Houghton PJ and Soumyanath A.** alpha-Amylase inhibitory activity of some Malaysian plants used to treat diabetes; with particular reference to *Phyllanthus amarus*. *J. Ethnopharmacol.* **107(3)**: 449-455, 2006.
- Ali MM and Ghatak BRJ.** Pharmacological investigation of an alkaloid fraction isolated from *Strychnos potatorum* L. *Ind. J. Exp. Biol.* **13**:163-167, 1975.
- Allian CC, Poon LS, Chan CSG, Richmond W and Fu PC.** Enzymatic determination of total serum cholesterol. *Clin. Chem.* **20(4)**: 470-475, 1974.
- Almeida MMB, De Souza PHM, Arriaga AMC, Prado GM, Magalhães CEC, Maia GA and De Lemos TLG.** Bioactive compounds and antioxidant activity of fresh exotic fruits from northeastern Brazil. *Food Res. Int.* **44(7)**: 2155-2159, 2011.
- Anagnostis P, Athyros VG, Tziomalos K, Karagiannis A and Mikhailidis DP.** Clinical review: the pathogenetic role of cortisol in the metabolic syndrome: a hypothesis. *J. Clin. Endocrinol. Metab.* **94(8)**: 2692-2701, 2009.
- Angadi KK, Gundampati RK, Jagannadham MV and Kandru A.** Molecular docking studies of guggultetrol from *Nymphaea pubescens* with target glucokinase (GK) related to type-II Diabetes. *Journal of Applied Pharmaceutical Sci.* **3(2)**: 127-131, 2013.
- Annu W, Latha PG, Shaji J, Anuja GI, Suja, SR, Shyamal S, Shine VJ and Rajasekaran S.** Anti-inflammatory, analgesic and anti-lipid peroxidation studies on the leaves of *Commiphora caudata* (Wight & Arn) Engl. *Ind. J. Nat. Pro. Res.* **1(1)**: 44-48, 2010.
- Anuja GI, Latha PG, Shine VJ, Suja SR, Shikha P, Satheesh Kumar K and Rajasekharan S.** Antioedematous and analgesic properties of fertile fronds of *Drynaria quercifolia*. *ISRN Inflamm.* 01-08: Article ID 302089 <http://dx.doi.org/10.1155/2014/302089>, 2014.
- Aqil F, Ahmad I and Mehmood Z.** Antioxidant and free radical scavenging properties of twelve traditionally used Indian medicinal plants. *Turk J Biol.* **30**: 177-183, 2006.
- Arnon DI.** Copper enzymes in isolated chloroplasts. Polyphenoloxidase in *Beta Vulgaris*, *Plant Physiol.* **24**: 1-15, 1949.
- Arumugama S, Kavimanib S, Kadalmanic B, Ahmedd ABA, Akbarshac MA and Raod MV.** Antidiabetic activity of leaf and callus extracts of *Aegle marmelos* in rabbit. *Sci. Asia* **34**:317-321, 2008.

- Arun P, Purushotham KG, Johnsy Jayarani J and Vasantha K.** *In vitro* antibacterial activity of *Oldenlandia umbellata* an Indian medicinal plant. *J. Pharm. Sci. Technol.* **2(4)**: 198-201, 2010.
- Asano N.** Glycosidase inhibitors: update & perspectives on practical use. *Glycobiology.* **13(10)**: 93-104, 2003.
- Asghar SF, Rehmani HU, Choudahry MI and Rahman AU .** Gas chromatography- mass spectrometry (GC-MS) analysis of petroleum ether extract (oil) and bio-assays of crude extracts of *Iris germanica*. *Int. J. Gen. Mol. Bio.* **3(7)**: 95-100, 2011.
- Attarde DL, Chaudhari BJ and Bhambar RS.** Phytochemical investigation and *in vitro* antioxidant activity of extracts from leaves of *Limonia acidissima* linn. (Rutaceae). *J. Pharm Res.* **4(3)**:766-768, 2011.
- Awoyin OA, Balogun O and Ogunnowo AA.** Phytochemical screening and *in vitro* bioactivity of *Cnidioscolus aconitifolius* (Euphorbiaceae). *J. Med. Plants Res.* **1(3)**: 63-65, 2007.
- Bagavathi PE and Ramasamy N.** GC-MS analysis of phytocomponents in the ethanol extract of *Polygonum chinense* L. *Pharmacognosy Res.* **4(1)**: 11-14, 2012.
- Bahadori MB, Kordi FM, Ahmadi AA, Bahadori Sh, Valizadeh H.** Antibacterial evaluation and preliminary phytochemical screening of selected ferns from Iran. *Res. J. Pharma.* **2(2)**: 53-59; 2015.
- Balachandran C, Lakshmi RS, Duraipandiyan V and Ignacimuthu S.** Antimicrobial activity of *Streptomyces* sp. (ERI-CPDA-1) isolated from oil contaminated soil from Chennai, India. *Biores. Technol.* **22**: 129, 2012.
- Banerjee RD and Sen SP.** Antibiotic activity of Pteridophytes. *Ecol. Bot.* **34(3)**: 284-298, 1980.
- Barros ICL, Silva LLS, Takaki GMC, Mariz G.** Deteccao de atividade antibiotic em *Polypodium brasiliense* Poiret. *Biologica. Brasilica* **1(2)**: 173-178, 1989.
- Bartel H, Bohmer M and Heierli C.** Serum creatinine determination without protein precipitation. *Clin. Chem. Acta.* **37**: 193-197, 1972.
- Basha SC, Sreenivasulu M and Pramod N.** Anti-diabetic activity of *Actinopterys radiata* (Linn.). *Asian J. Res. Chem. Pharma. Sci.* **1(1)**: 1-6, 2013.

- Basu S, Roychoudhury A, Sanyal S and Sengupta DN.** Carbohydrate content and antioxidative potential of the seed of three edible indica rice (*Oryza sativa* L.) cultivars. *Ind. J. Biochem. Biophys.* **49(2)**:115-123, 2012.
- Baydas G, Canatan H and Turkoglu A.** Comparative analysis of the protective effects of melatonin and vitamin E on streptozocin induced diabetes mellitus. *J. Pineal Res.* **32(4)**: 225-230, 2002.
- Benniamin A, Irudayaraj V and Manickam VS.** How to identify rare and endangered ferns and fern allies. *Ethnobot. Leaflet.* **12**:108-117, 2008.
- Berman HM, Westbrook J, Feng Z, Gilliland G, Bhat TN, Weissing, H, Shindyalov, IN and Bourne, PE.** The protein data bank. *Nucleic Acids Res.* **28(1)**: 235–242, 2000.
- Bermejo BP, Abad MMJ, Silvan SAM, Sanz GA, Fernandez ML, Sanchez CS and Diaz LAM.** Effects of some iridoids from plant origin on arachidonic acid metabolism in cellular systems. *Planta Med.* **66(4)**: 324-328, 2000.
- Bernfield P.** *Amylase; α & β* , In *Methods in Enzymology*. Colowick SP and Kaplan NO, ed.), Academic Press Inc, New York, USA, **1**:149-158, 1955.
- Bhakta T, Banerjee S, Mandal SC, Maity TK, Saha BP and Pal M:** Hepatoprotective activity of *Cassia fistula* leaf extract. *Phytomedicine.* **8(3)**: 220-224, 2001.
- Bharat J, Shakil DS and Meena D.** Phytochemical studies in eleven species of ferns from Satara district of Maharashtra (India). *Rec. Res Sci. Tech.* **3(9)**: 20-21, 2011.
- Bhaskar KG, Mukul T, Alkesh KL, Eman AS, Narayan PG and Sarkar A.** Antimicrobial activity of ethanolic extracts of *Murraya Koenigii* by disc diffusion and broth dilution method. *J. Pharma.* **4(4)**: 1023-1024, 2011.
- Bir SS and Vasudeva SM.** Pteridophytic flora of Kodaikanal, South India. *J Bombay Nat Hist Soc.* **68**: 169-195, 1971.
- Bligh EG and Dyer.** A rapid method of total lipid extraction and purification. *Can. J. Biochem. Physiol.* **37(8)**: 911-917, 1959.
- Bora K, Miguel OG, Andrade CA and Oliveira AOT.** Determination of the level of polyphenols and their antioxidant potential in different fraction *Dicksonia sellowiana* (Persl.) Hook, Dicksoniaceae. *Visão Acadêmica.* **6(2)**: 6-15, 2005.

- Bravo L.** Polyphenols: chemistry, dietary sources, metabolism and nutritional significance. *Nutr Reviews*. **56(11)**: 317- 333, 1998.
- Bray HG and Thorpe WV.** Analysis of phenolic compounds of interest in metabolism. *Methods Biochem. Anal.* **1**: 27-52, 1954.
- Bressler R and Johnson D.** New pharmacological approaches to therapy of NIDDM. *Diabetes care*. **15(6)**: 792-805, 1992.
- Britto AJ, Gracelin DHS and Benjamin PJRK.** Phytochemical studies on five medicinal ferns collected from Southern Western Ghats, Tamil Nadu. *Asian Pac. J. Trop. Biomed.* **2(2)**: S536-S538, 2012.
- Burja AM, Banaigs B, Abou-Mansour E, Burgess JG and Wright PC.** Marine cyanobacteria - a prolific source of natural products. *Tetrahedron*. **57(46)**: 9347-9377, 2001.
- Burstein M, Scholnick HR and Morfin R.** Rapid method for the isolation of lipoprotein from human serum by precipitation with polyamines. *J. Lipid Res.* **11(6)**: 583-595, 1970.
- Bussa SK and Pinnapareddy J.** Antidiabetic activity of stem bark of *Neolamarckia cadamba* in alloxan induced diabetic rats. *Int. J. Pharm. Technol.* **2(2)**: 314-324, 2010.
- Caius JF.** The medicinal and poisonous ferns of India. *J. Bombay Nat. Hist. Soc.* **38**: 341-361, 1935.
- Campbell IW.** The clinical significance of PPAR gamma agonism. *Curr. Mol. Med.* **5(3)**: 349-363, 2005.
- Carpino PA and Goodwin B.** Diabetes area participation analysis: a review of companies and targets described in the 2008–2010 patent literature. *Expert Opin. Ther. Pat.* **20(12)**: 1627–1651, 2010.
- Celik S, Baydas G, Yilmaz O.** Influence of vitamin E on the leaves of fatty acids and MDA in some tissues of diabetic rats. *Cell Biochem. Funct.* **20(1)**: 67-71, 2002.
- Chai TT and Wong FC.** Antioxidant properties of aqueous extracts of *Selaginella willdenowii*. *J. Med. Plants Res.* **6(7)**: 1289-1296, 2012.
- Chai TT, Elamparuthi S, Yong AL, Quah Y, Ong HC and Wong FC.** Antibacterial, anti-glucosidase, and antioxidant activities of selected highland ferns of Malaysia. *Bot. Studies* **54**: 55, 2013.

- Chai TT, Panirchellum E, Ong HC and Wong FC.** Phenolic contents and antioxidant properties of *Stenochlaena palustris*, an edible fern. *Bot. Studies*. **53**: 439-446, 2012.
- Chai TT, Yeoh LY, Ismail NIM, Ong HC and Wong FC.** Cytotoxicity and antidiabetic potential of six selected edible and medicinal ferns. *Acta Pol. Pharm. Drug Res.* **72(2)**: 397-401, 2015.
- Chai TT, Yeoh LY, Ismail NIM, Ong HC, Wong FC and Manan FA.** Evaluation of antidiabetic inhibitory and cytotoxic potential of five selected edible and medicinal ferns. *Trop. J. Pharma. Res.* **14(3)**: 449-454, 2015.
- Chaitali RN, Preeti G and Malti S.** Antimicrobial activity of leaf extract of *Morus indica* (Mulberry) from Chhattisgarh. *Asian J. Plant Sci Res.* **5(1)**: 28-31, 2015.
- Chakraborty BN, Basu P, Das R., Saha A and Chakraborty U.** Detection of cross reactive antigens between *Pestalotiopsis theae* and tea leaves and their cellular location, *Ann. Appl. Biol.* **127(1)**: 11-21, 1995.
- Chandramohan G, Ignacimuthu S and Pugalendi KV.** A novel compound from *Casuarina esculenta* (Roxb.) root and its effect on carbohydrate metabolism in streptozotocin-diabetic rats. *Eur. J. Pharmacol.* 590(1-3): 437-443, 2008.
- Chang HC, Huang GJ, Agrawal DC, Kuo CL, Wu CR and Tsay HS.** Antioxidant activities and polyphenol contents of six folk medicinal ferns used as "Gusuibu". *Bot. Stud.* **48**: 397-406, 2007.
- Chanishvili S, Badridze G and Janukashvili.** Effect of altitude on the contents of antioxidants in leaves of some herbaceous plants. *Russ. J. Eco.* **38(5)**: 367-373, 2007.
- Charak and Drdhabala.** *The Charak Samhita* explained by K. Sastri and G.N. Chaturvedi edited by Sastri, R., Uppadhyaya Y, Pandeya GS, Gupta B and Mishra B, 22nd revised ed. Chaukhamba Bharti Academy, Varanasi, 1996.
- Chemical Computing Group Inc.** 1255 University Street, Montreal, Quebec, Canada H3B3X3, Molecular Operating Environment (MOE). <http://www.chemcomp.com>. 2005.
- Chen R, Meseck M, McEvoy RC and Woo SL.** Glucose-stimulated and self-limiting insulin production by glucose-6-phosphatase promoter driven insulin expression in hepatoma cells. *Gene Ther.* **7(21)**: 1802-1809, 2000.
- Chen YH, Chang FR, Lin YJ, Hsieh PW, Wu MJ and Wu YC.** Identification of antioxidants from rhizome of *Davallia solida*. *Food Chem.* **107(2)**: 684-691, 2008.

- Chiozem DD, Trinh-Van-Dufat H, Wansi JD, Mbazoa Djama C, Fannang VS, Seguin E, Tillequin F and Wandji J.** New friedelane triterpenoids with antimicrobial activity from the stems of *Drypetes paxii*. *Chem. Pharm. Bull.* **57(10)**: 1119-1122, 2009.
- Chirinos R, Betalleluz-Pallardel I, Huamán A, Arbizu C, Pedreschi, R. and Campos, D.** HPLC-DAD characterisation of phenolic compounds from Andean oca (*Oxalis tuberosa* Mol.) tubers and their contribution to the antioxidant capacity. *Food Chem.* **113(4)**: 1243–1251, 2009.
- Chitravadivu C, Manian S and Kalaichelvi K.** Qualitative analysis of selected medicinal plants, Tamilnadu, India. *Middle-East J. Scientific Res.* **4(3)**:144-146, 2009.
- Chopra RN, Chopra IC, Handa KL and Kapur LD.** Chopra's Indigenous Drugs of India, U.N. Dhur & Sons Pvt. Ltd., Calcutta. pp.647: 1958.
- Chung Y, Chen S, Hsu C, Chang C and Chou S.** Studies on the antioxidative activity of *Graptopetalum paraguayense* E. Walther. *Food Chem.* **91(3)**: 419-424, 2005.
- Chunmei D, Jiabo W, Weijun K, Cheng P and Xiaohe X.** Investigation of antimicrobial activity of catechin on *Escherichia coli* growth by microcalorimetry. *Environ. Toxicol. Pharmacol.* **30(3)**: 284-288, 2010.
- Coban T and Konuklugil B.** Free Radical Scavenging Activity of *Linum arboretum*. *Pharm. Biol.* **43(4)**: 370-372, 2005.
- Coulibaly AY, Hashim R, Sulaiman SF, Sulaiman O, Ang LZ and Ooi KL.** Bioprospecting medicinal plants for antioxidant components. *Asian Pac. J. Trop. Biomed.*Suppl1:S553-S559, 2014.
- Cowley RC and Bennett FC.** *Vinca rosea*. *Australian J. Pharm.* **9**:61, 1928.
- Cumashi A, Ushakova NA, Preobrazhenskaya ME, D'Incecco A, Piccoli A, Totani L, Tinari N, Morozevich GE, Berman AE, Bilan MI, Usov AI, Ustyuzhanina NE, Grachev AA, Sanderson CJ, Kelly M, Rabinovich GA, Lacobelli S and Nifantiev NE.** A comparative study of the anti-inflammatory, anticoagulant, antiangiogenic, and antiadhesive activities of nine different fucoidans from brown seaweeds. *Glycobiology.* **17(5)**: 541-552, 2007.
- Cushnie TPT and Lamb AJ.** Antimicrobial activity of flavonoids. *Int. J. Antimicrob. Agents.* **26(5)**: 343-356, 2005.

- Da Costa CL, Geraldo MRF, Arroteia CC and Kimmelmeier C.** *In vitro* activity of neem oil on *Aspergillus flavus* growth, sporulation viability of spores, morphology and aflatoxin B1 and B2. *Adv. Biosci. Biotechnol.* **1**: 292-299, 2010.
- Dagar JC and Dagar HS.** Some useful pteridophytes of Andaman and Nicobar Islands. *J. Econ. Taxon. Bot.* **9**: 317–324, 1987.
- Dahanukar SA, Kulkarni RA and Rege NN.** Pharmacology of medicinal plants and natural products. *Ind. J. Pharmacol.* **32**: S81-S118, 2000.
- Dalli AK, Saha G and Chakraborty U.** Characterization of antimicrobial compounds from a common fern, *Pteris bicaurita*. *Ind J Exp Biology* **45**: 285-290, 2007.
- Dannemann K.** Use of complementary and alternative medicine in children with type I diabetes mellitus prevalence patterns of use and costs. *Pediatr. Diabetes.* **9(3)**: 228-235, 2008.
- Das H and Chakraborty U.** Anti-hyperglycemic effect of *Scoparia dulcis* in streptozotocin induced diabetes. *Res. J. Pharm. Biol. Chem. Sci.* **2(2)**: 334-342, 2011.
- Das H and Chakraborty U.** Phytochemical constituents of some plants used by the tribals of Dakshin Dinajpur district for medicinal purposes. *Res & Rev: J. Pharmacol.* **1(1)**: 1-7, 2011.
- Das NC.** *Ferns and fern allies of Tripura: North East, India.* International Book Distributors, Dehradun. India, 2007.
- Dashwood R.H., Negishi T., Hayatsu H., Breinholt V., Hendricks J., Bailey G.** Chemopreventive properties of chlorophylls towards aflatoxin B1: a review of antimutagenicity and anticarcinogenicity data in rainbow trout. *Mutat. Res.* **399(2)**: 245-253, 1998.
- Deepa VS, Kumar PS, Vadivukkarasi B and Tilton F.** Molecular docking studies on selected phytochemicals from different *Andrographis* sp against PPAR- γ and C/EBP- α receptors for Type-2 diabetes. *Asian J. Pharm. Clin. Res.* **6(2)**: 196-199, 2013.
- Deetae P, Parichanon P, Trakunleewatthana P, Chanseetis C, Lertsiri S.** Antioxidant and anti-glycation properties of Thai herbal teas in comparison with conventional teas. *Food Chem* **133(3)**: 953-959, 2012.
- DeFeudis FV, Papadopoulos V and Drieu K.** *Ginkgo biloba* extracts and cancer: a research area in its infancy. *Fundam Clin Pharmacol.* **17(4)**: 405-417, 2003.

- DeLano WL.** The PyMOL Molecular Graphics System. DeLano Scientific LLC, San Carlos, CA, USA. <http://www.pymol.org> , 2009.
- Demirezer LÖ, Kuruüzüm-Uz A, Bergere I, Schiewe HJ and Zeeck A.** The structures of antioxidant and cytotoxic agents from natural source: anthraquinones and tannins from roots of *Rumex patientia*. *Phytochem.* **58(8)**: 1213-1217, 2001.
- Denwick PM.** Natural Products: A Biosynthetic Approach. 2nd Edn. England. John Wiley and Sons, Ltd. pp: 241-243, 2002.
- Dewick PM.** Medicinal natural products: a biosynthetic approach. 2nd ed.. John Wiley & Sons Ltd, 2001.
- Dey P, Roy S and Chaudhuri TK.** A quantitative assessment of bioactive phytochemicals of *Nerium indicum*: An ethnopharmacological herb. *Int. J. Res. Pharma. Sci.* **3(4)**: 579-587, 2012.
- Dey P, Saha MR, Chowdhuri SR, Sen A, Sarkar MP, Haldar B and Chaudhuri TK.** Assessment of anti-diabetic activity of an ethnopharmacological plant *Nerium oleander* through alloxan induced diabetes in mice. *J. Ethnopharmacol.* **161**: 128-137, 2015.
- Di Carlo G, Mascolo N, Izzo AA and Capasso F.** Flavonoid: old and new aspects of a class of natural therapeutic drugs. *Life Sci.* **65(4)**: 337-353, 1999.
- Diplock AT, Machlin LJ, Packer L and Pryor WA.** *Vitamin E: Biochemistry and health implications.* New York Academy of Sciences New York, 1989.
- Dixit RD and Vohra JN.** *A dictionary of the pteridophytes of India.* Botanical Survey of India, Howrah, 1984.
- Dixit RD.** *A census of the Indian Pteridophytes. Flora of India. Series IV.* Botanical Survey of India, Department of Environment and Forest, Government of India. Howrah, 1984.
- Dixit RD.** Conspectus of pteridophytic diversity in India. *Ind. Fern J.* **17**: 77-91, 2000.
- Duke JA.** Handbook of Phytochemical Constituents of GRAS herbs and other economic plants. CRC Press, Boca Raton, London New York, 1992.
- Duraipandiyan V, Ayyanar M and Ignacimuthu S.** Antimicrobial activity of some ethnomedicinal plants used by Paliyar tribe from Tamil Nadu, India. *BMC Complement Altern. Med.* **6**:35, 2006.

- Ebrahimzadeh MA, Nabavi SF and Nabavi SM.** Antioxidant activities of methanol extract of *Sambucus ebulus* L. flower. *Pak J Biol Sci.* **12(5):** 447-450, 2009.
- Eddine LS, Segni L, Ridha OM.** Optimization of ultrasonic extraction of phenolic compounds from *Phoenix dactylifera* L and evaluation *In Vitro* of antioxidant and anti-inflammatory Activity. *Int. J. Pharma Phytochem. Res.* **7(1):** 1-7, 2015.
- Edeoga OH, Okwu DE and Mbaebie BO.** Phytochemical constituents of some Nigerian medicinal plants. *Afr. J. Biotechnol.* **4(7):** 685-688, 2005.
- Effiong BN and Sanni A.** Antifungal properties and phytochemical screening of crude extract of *Lemna pauciscostata* (Helgelm) against fish feed spoilage fungi. *Life Sci. J.* **6(3):** 19-22, 2009.
- El Astal ZY, Ashour AERA and Kerrit AAM.** Antimicrobial activity of some medicinal plant extracts in Palestine. *Pak. J. Med. Sci.* **21(2):**187-193, 2005.
- Elbein AD and Molyneux RJ.** Comprehensive Natural Products Chemistry, 3: Barton D and Nakanishi K, ed. Amsterdam, pp.129, 1999.
- Elizabeth KM.** Antimicrobial activity of *Terminalia bellerica*. *Ind. J. Clin. Biochem.* **20(2):**150-153, 2005.
- Emam AM, Diaz Lanza AM, Matellano Fernandez L, Faure R and Moussa AM** Biological activities of buddlejasaponin isolated from *Buddleja madagascariensis* and *Scrophularia scorodonia*, *Pharmazie* **52(1):** 76-77, 1997.
- Eva S, Isabelle VL, Raimano H, Gildas B, Girault JP, Sophie O, Annick M and Rene L.** Ecdysteroids from the medicinal fern *Microsorium scolopendria* (Burm.f.). *Phytochem. Anal.* **18(5):**441-450, 2007.
- Evans WC.** *Trease and Evans Pharmacognosy*, 15th ed. London, W.B Saunders Company Ltd, pp. 230-240, 2002.
- Falodun A, Okunrobo LO and Uzoamaka N.** Phytochemical screening and anti-inflammatory evaluation of methanolic and aqueous extracts of *Euphorbia heterophylla* Linn (Euphorbiaceae). *Afr. J. Biotechnol.* **5 (6):** 529-531, 2006.
- Ferre T, Riu E, Bosch Fand Valera A.** Evidence from transgenic mice that glucokinase is rate limiting for glucose utilization in the liver. *FASEB J.* **10(10):** 1213-1218, 1996.

- Florence NT, Théophile D, Désiré DDP, Bertin V, Etienne D, Beauwens R, Emmanuel AA, Louis Z and Pierre K.** Antidiabetic activities of methanol-derived extract of *Dorstenia picta* twigs in normal and streptozotocin-induced diabetic rats. *Asian J. Tradit. Med.* **2(4)**:140-148, 2007.
- Fossati P and Prencipe L.** Serum triglycerides determined colorimetrically with an enzyme that produces hydrogen peroxide. *Clin. Chem.* **28(10)**:2077-2080, 1982.
- Franke S, Fröhlich K, Werner S, Böhm V and Schöne F.** Analysis of carotenoids and vitamin E in selected oilseeds, press cakes and oils. *Eur. J. Lipid Sci. Technol.* **112(10)**: 1122-1129, 2010.
- Frederich M, Jacquier MJ, Thepenier P, De Mol P, Tits M, Philippe G, Delaude C, Angenot L and Zaches Hanrot M.** Antiplasmodial activity of alkaloids from various *Strychnos* Species *J. Nat. Prod.* **65(10)**:1381-1387, 2002.
- Ganguly G, Sarkar K, Mukherjee S, Bhattacharjee A and Mukhopadhyay R.** Phytochemistry and antimicrobial activity of crude extracts and extracted phenols from an epiphytic fern *Arthromeris himalayensis* (Hook.) Ching. *Biores. Bull* **5**: 311-315, 2011.
- Garcia F, Pivel JP, Guerrero A, Brieva A, Martinez-Alcazar MP, Caamano-Somoza M and Gonzalez S.** Phenolic components and antioxidant activity of Fernblock, an aqueous extract of the aerial parts of the fern *Polypodium leucotomos*. *Methods Find Exp Clin Pharmacol.* **28(3)**: 157-160, 2006.
- Gauniyal P and Teotia UVS.** Phytochemical screening and antimicrobial activity of some medicinal plants against oral flora. *Asian Pac. J. Health Sci.* **1(3)**: 255-263, 2014.
- Gayathri V, Asha VV and Subramoniam A.** Preliminary studies on the immunomodulatory and antioxidant properties of *Selaginella* species. *Ind J Pharmacol* **37(6)**: 381-385, 2005.
- Gengaihi SEL, Ella FMA, Emad MH, Shalaby E and Doha H.** Antioxidant activity of phenolic compounds from different grape wastes. *J. Food Process Technol.* **5**: 296, 2014.
- Gepdireman A, Mshvildadze V, Suleyman H and Elias R.** Acute anti-inflammatory activity of four saponins isolated from ivy: alpha-hederin, hederasaponin-C, hederacolchiside-E and hederacolchiside- F in carrageenan-induced rat paw edema. *Phytomedicine.* **12(6-7)**: 440-444, 2005.

- Ghosh S and Suryawanshi SA.** Effect of *Vinca rosea* extracts in the treatment of Alloxan diabetes in male albino rats. *Ind. J. Exp. Biol.* **39(8):** 748-759, 2001.
- Gibson EL, Wardel J and Watts CJ.** Fruit and vegetable consumption, nutritional knowledge and beliefs in mothers and children. *Appetite.* **31(2):** 205-228, 1998.
- Gill AO and Holly RA.** Mechanisms of bactericidal action of Cinnamaldehyde against *Listeria monocytogenes* and of eugenol against *L. monocytogenes* and *Lactobacillus sakei*. *Appl. Environ. Microbiol.* **70(10):** 5750-5755, 2004.
- Gin H and Rigalleau V.** Post-prandial hyperglycemia and diabetes. *Diabetes Metabol.* **26:** 265-272, 2000.
- Gokhale SB and Kokate CK.** Practical pharmacognosy, Pragati Books Pvt., Pune, pp.13, 2008.
- Gopinath SM, Rakesh CK, Narasimha Murthy TP and Dayananda KS.** Preliminary phytochemical evaluation of leaf extracts of *Gymnema sylvestre*, *Phyllanthus amarus*, *Phyllanthus reticulatus* of Siddarabetta, Tumkur district, Karnataka. *Int. J. Pharmacog. Phytochem. Res.* **4(3):** 109-111, 2012.
- Govindappa M, Sadananda TS, Channabasava R, Jeevitha MK, Pooja KS and Vinay BR.** Antimicrobial, antioxidant activity and phytochemical screening of *Tecoma stans* (L.) Juss. ex Kunth. *J Phytology.* **3(3):** 68-76, 2011.
- Gracelin DHS, De Britto AJ, Kumar PBJR.** Qualitative and quantitative analysis of phytochemicals in five *Pteris* species. *Int J Pharm Pharma Sci.* **5(1):** 105-107, 2013.
- Grimsby J, Sarabu R, Corbett WL, Haynes NE, Bizzarro FT, Coffey JW, Guertin KR, Hillard DW, Kester RF, Mahaney PE, Marcus L, Qi L, Spence CL, Tengji J, Magnuson MA, Chu CA, Dvorozniak MT, Matschinsky FM and Grippo JF.** Allosteric activators of glucokinase: potential role in diabetes therapy. *Science* **301(5631):** 370-373, 2003.
- Guisalberti EL.** Biological and pharmacological activity of naturally occurring iridoids and secoiridoids. *Phytomedicine* **5(2):** 147-163, 1998.
- Gulcin L, Oktay M, Kufrevioglu IO and Aslan A.** Determination of antioxidant activity of lichen *Cetraria islandica* (L.) Ach. *J. Ethnopharm.* **79(3):** 325-329, 2004.
- Gupta A, Singh SK and Yadav AK.** Pharmacological evaluation of antidiabetic activity of *Urginea indica* in laboratory animals. *Int. J. Nutri. Pharmacol. Neurol. Dis.* **5:** 63-68, 2015.

- Gürsoy N, Tepe B and Aşkın AH.** Chemical composition and antioxidant activity of the essential oils of *Salvia palaestina* (Bentham) and *S. ceratophylla* (L.) *Rec. Nat. Prod.* **6(3)**: 278-287, 2012.
- Guttulu S, Rao AA, Sridhar GR and Chakravarthy MS.** Protein ligand interaction analysis an *in silico* potential drug target identification in diabetes mellitus and nephropathy. *J. Bioinform. Seq. Anal.* **3(5)**: 95-99, 2011.
- Hahm SW, Park J and Son YS.** *Opuntia humifusa* stems lower blood glucose and cholesterol levels in streptozotocin-induced diabetic rats. *Nutr. Res.* **31(6)**: 479-487, 2011.
- Hahn NI.** Is Phytoestrogens Nature's Cure for What Ails Us? A Look at the Research. *J. Am. Diet. Assoc.* **98**: 974-976, 1998.
- Halliwell B, Aeschbach R, Lölliger J and Aruoma OI.** The characterization of antioxidants. *Food Chem. Toxicol.* **33(7)**: 601-617, 1995.
- Haq I, Hossain ABMS, Khandaker MM, Merican AF, Faruq G, Boyce AN and Azirun MS.** Antioxidant and antibacterial activities of different extracts and fractions of a mangrove plant *Sonneratia alba*. *Int. J. Agric. Biol.* **16(4)**: 707-714, 2014.
- Harbone JA.** Phytochemical Methods Guide to Modern Techniques in Plant Analysis, 3rd ed. Chapman and Hall, London. 1998.
- Harborne JB and Tomasbarberan FA.** *Ecological Chemistry and Biochemistry of Plant Terpenoids*. Clarendon press, Oxford, 1991.
- Harborne JB.** Phytochemical methods, Chapman and Hall, London, p. 278, 1973.
- Harish KH, Hoti SL and Shruthi SD.** In vitro evaluation of antimicrobial activities of crude extracts from *Murraya koenigii* against pathogenic bacteria. *Int. J. Pharm. Pharm. Sci.* **4(4)**: 74-76, 2012.
- Hasler CM and Blumberg JB.** Phytochemicals: biochemistry and physiology. Introduction. *J. Nutri.* **129**: 756S-757S. 1999.
- Hasmida MN, Nur Syukriah AR, Liza MS and Mohd Azizi CY.** Effect of different extraction techniques on total phenolic content and antioxidant activity of *Quercus infectoria* galls *Int. Food Res. J.* **21(3)**: 1075-1079, 2014.
- Hebeisen P, Kuhn B, Kohler P, Gubler M, Huber W, Kitas E, Schott B, Benz J, Joseph C and Ruf A.** Allosteric FBPase inhibitors gain 10(5) times in potency when

simultaneously binding two neighboring AMP sites. *Bioorg. Med. Chem. Lett.* **18(16)**: 4708-4712, 2008.

Hema R, Kumaravel S and Alagusundaram B. GC/MS Determination of Bioactive components of *Murraya koenigii*. *J Am. Sci.* **7(1)**: 80-83, 2011.

Herin SG, John DB and Benjamin JRK. Antimicrobial potency of five south Indian ferns against *Xanthomonas campestris*. *J. Biopest.* **5(2)**:196-200, 2012.

Hernández-Campos A, Velázquez-Martínez I, Castillo R, López-Vallejo F, Jia P, Yu Y, Giulianotti MA and Medina-Franco JL. Docking of protein kinase B inhibitors: implications in the structure-based optimization of a novel scaffold. *Chem. Biol. Drug Des.* **76(3)**: 269–276, 2010.

Hill AF. *A textbook of useful plants and plant products In: Economic Botany.* 2nd ed. McGraw-Hill Book Company Inc, New York, 1952.

Hima Bindu N, Devi, P Suvarnalatha Rukmini, K Charya, M A Singara. Phytochemical screening and antibacterial activity of *Hemionitis arifolia* (Burm.) Moore. Tirumala Publisher: NISCAIR-CSIR, India, 2011.

Hort MA, Dalbo S, Brighente IMC, Pizzolatti MG, Pedrosa RC and Ribeiro-do-Valle RM. Antioxidant and hepatoprotective effects of *Cyathea phalerata* Mart. (Cyatheaceae). *Basic Clin. Pharmacol. Toxicol.* **103 (1)**: 17-24, 2008.

Hsouna AB, Trigie M, Mansour RB, Jarraya RM, Damak M and Jaoua, S. Chemical composition, cytotoxicity effect and antimicrobial activity of *Ceratonia silisqua* essential oil with preservative effects against listeria inoculated in minced beef meat. *Int. J. Food Microbiol.* **148(1)**: 66-72, 2011.

Ibraheim ZZ, Nafady AM, Mostafa MA and Amin FM. Antioxidant Activity and Total Flavonoids Content of Aerial Parts of *Ficus pyriformis* Hook. & Arn. (Moraceae) Cultivated in Egypt. *Am. J. Chem.* **5(1)**: 23-27, 2015.

IDF Diabetes Atlas: IDF Diabetes Atlas: 6th edition, International Diabetes Federation, 2013. ISBN: 2-930229-85-3

Idonije BO, Festus O and Oluba OM. Plasma glucose, creatinine and urea levels in Type 2 diabetic patients attending a Nigerian teaching hospital. *Res. J. Med Sci.* **5(1)**: 1-3, 2011.

- Imperato F.** The new flavone ester Apigenin-7-O-oxy-p-hydroxybenzoate and 3-Di-C-glycosyl flavones from *Pteris vittata*. *Amer. Fern. J.* **96(2)**: 62-65, 2006.
- Inas SG, Ekram SA, Hoda FB, Ibrahim MF and Somaia AN.** Evaluation of antihyperglycemic action of Oyster ushroom (*Pleurotus ostreatus*) and its effect on DNA damage, chromosome aberrations and sperm abnormalities in streptozotocin-induced diabetic rats. *Global Veterinaria.* **7(6)**: 532-544, 2011.
- Inouye S, Tsuruoka M, Watanabe M, Takeo K, Akao M, Nishiyama Y and Yamaguchi H.** Inhibitory effect of essential oils on apical growth of *Aspergillus fumigatus* by vapour contact. *Mycoses.* **43(1-2)**:17-23, 2000.
- International Federation of Clinical Chemistry (IFCC).** In. *Clinica Chimica Acta* **105**: 145-175F, 1980.
- Irudayaraj V and Senthamarai R.** Pharmacognostical studies on a medicinal fern. *Drynaria quercifolia* (L.) J. Sm. (Polypodiaceae: Pteridophyta). *Phytomorphology* **54**: 193-200, 2004.
- Islam MJ, Barua S, Das S, Khan MS and Ahmed A.** Antibacterial activity of some indigenous medicinal plants. *J.Soil.Nature.* **2(3)**: 26-28, 2008.
- Ito Y.** Golden rules and pitfalls in selecting optimum conditions for high-speed counter current chromatography. *J Chromatogr.* **1065(2)**: 145-168, 2005.
- Jadhav B, Shaikh SD and Dongare M.** Phytochemical studies in eleven species of ferns from Satara district of Maharashtra (India). *Rec. Res. Sci. Technol.* **3(9)**: 20-21, 2011.
- Jagetia GC, Rao SK, Baliga MS and Babu KS.** The evaluation of nitric oxide scavenging activity of certain herbal formulation in vitro. A preliminary study. *Phytother. Res.* **18(7)**: 561-565, 2004.
- Jair Guilherme dos S. Jr., Fabrício H. M. do Monte, Miriam Marcela Blanco, Vanusa Maria do N. Bispo L., Flávio D. M., and Luzia Kalyne de Almeida L.** Cognitive enhancement in aged rats after chronic administration of *Equisetum arvense* L. with demonstrated antioxidant properties *in vitro*. *Pharma. Biochem. Behavior* **81(3)**: 593-600, 2005.
- Jarald E, Joshi SB and Jain DC.** Diabetes and herbal medicines. *Iran J. Pharmacol. Ther.* **7(1)**: 97-106, 2008.

- Jayabalan M, Rajarathinam K and Veerasamy S.** Bioinduction of rubber formation in *Parthenium argentatum*. *Phytomorphology*. **44(1-2)**: 43-54, 1994.
- Jayaraman J.** *In: Laboratory Manual in Biochemistry Fifth Reprint*, New Age International Ltd. New Delhi, 1996.
- Jie Y, Seong-II H and Myeong-Hyeon W.** Antioxidant and antidiabetic activities of extracts from *Cirsium japonicum* roots. *Nutr. Res. Pract.* **2(4)**: 247-251, 2008.
- Jigna P and Sumitra VC.** *In vitro* antimicrobial activity and phytochemical analysis of some Indian medicinal plant. *Turk. J. Biol.* **31**: 53-58, 2007.
- Jiju V, Samuel C, Thomas NS, Sabu MM and Vasudevan DT.** The inhibitory effect of *Carica papaya* leaf extracts on alpha amylase. *Univ. J. Pharm.* **2(1)**: 135-139, 2013.
- Jin XH, Ohgami K, Shiratori K, Suzuki Y, Koyama Y, Yoshida K, Ilieva I, Tanaka T, Onoe K and Ohno S.** Effects of blue honeysuckle (*Lonicera caerulea* L.) extract on lipopolysaccharide-induced inflammation *in vitro* and *in vivo*. *Exp. Eye Res.* **82(5)**: 860–867, 2006.
- Joshi B, Lekhak S and Sharma A.** Antibacterial property of different medicinal plants: *Ocimum sanctum*, *Cinnamomum zeylanicum*, *Xanthoxylum armatum* and *Origanum majorana*. *Kat. Univ. J. Sci. Eng. Tech.* **5(1)**: 143-150, 2009.
- Kagne RM, Jamdhade VC and Surwase BS.** Antifungal activity of various extracts of *Blumea lacera* (Burm.f.) DC. against different *Aspergillus* species. *Online Int. Interdis. Res. J.* **2(5)**: 20-28, 2012.
- Kähkönen MP, Hopia AI, Vuorela HJ, Rauha JP, Pihlaja K and Kujala TS.** Antioxidant activity of plant extracts containing phenolic compounds. *J. Agric. Food Chem.* **47(10)**: 3954-3962, 1999.
- Kalpana DR, Subramani V, Nakulan VR and Annamalai P.** Qualitative and quantitative phytochemical analysis in four Pteridophytes. *Int. J. Pharm.Sci. Rev. Res.* **27(2)**: 408-412, 2014.
- Kalyani G, Sharma D, Vaishnav Y and Deshmukh VS.** A review on drug designing, methods, its applications and prospects. *Int. J. Pharm. Res. Dev.* **5(5)**: 15-30, 2013.
- Kamat JP, Bloor KK and Devasagayam TPA.** Chlorophyllin as an effective antioxidant against membrane damage *in vitro* and *in vivo*, *Biochim. Biophys. Acta* **1487(2-3)**: 113-127, 2000.

- Kamata K, Mitsuya M, Nishimura T, Eiki J and Nagata Y.** Structural basis for allosteric regulation of monomeric allosteric enzyme human glucokinase. *Structure* **12(3)**: 429-438, 2004.
- Kamini S.** Ethnobotanical studies of some important ferns. *Ethnobot. Leaflets*. **11**: 164-172, 2007.
- Kanan GJ and Al-Najar RA.** *In vitro* antifungal activities of various plant crude extracts and fractions against citrus post-harvest disease agent *Penicillium digitatum*. *Jod. J. Bio. Sci.* **1(3)**: 89-99, 2008.
- Kandhasamy M, Arunachalam KD and Thatheyus AJ.** *Drynaria quercifolia* (L.) J.Sm: A potential resource for antibacterial activity. *Afr. J. Microbiol. Res.* **2**: 202-205, 2008.
- Kang TH, Hur JY, Kim HB, Ryu JH, Kim SY.** Neuroprotective effects of the cyanidin-3-O-beta-d-glucopyranoside isolated from mulberry fruit against cerebral ischemia. *Neurosci Lett.* **391**: 122–126, 2006.
- Kasabri V, Afifi FU and Hamdan I.** *In vitro* and *in vivo* acute antihyperglycemic effects of five selected indigenous plants from Jordan used in traditional medicine. *J. Ethnopharmacol.* **133(2)**: 888-896, 2011.
- Katalinic V, Milos M, Kulisic T and Jukic M.** Screening of 70 medicinal plant extracts for antioxidant capacity and total phenols. *Food Chem.* **94**: 550-557, 2006.
- Kesari AN, Gupta RK and Watal G.** Hypoglycemic effects of *Murraya koenigii* on normal and alloxan-diabetic rabbits. *J. Ethnopharmacol.* **97(2)**: 247-251, 2005.
- Keser S, Celik S, Turkoglu S, Yilmaz Ö and Turkoglu I.** Hydrogen peroxide radical scavenging and total antioxidant activity of Hawthorn. *Chem. J.* **2(1)**: 9-12, 2012.
- Khalaf NA, Shakya AK, Al-Othman A, El-Agbar Z and Farah H.** Antioxidant activity of some common plants. *Turk. J. Biol.* **32**: 51-55, 2008.
- Khan A, Haque E, Rahman MM, Mosaddik A, Rahman M and Sultana N.** Isolation of antibacterial constituents from rhizome of *Drynaria quercifolia* and its sub –acute toxicological studies. *DARU* **15(4)**: 205-211, 2007.
- Khomdram SD and Singh PK.** Polyphenolic Compounds and Free Radical Scavenging Activity in Eight *Lamiaceae* Herbs of Manipur. *Not. Sci. Biol.* **3(2)**: 108-113, 2011.

- Kim DO and Lee CY.** Comprehensive study on vitamin C equivalent antioxidant capacity (VCEAC) of various polyphenolics in scavenging a free radical and its structural relationship. *Crit. Rev. Food Sci. Nutri.* **44(4):** 253–273, 2004.
- Kimura Y, Sumiyoshi M, Taniguchi M and Baba K.** Antitumor and antimetastatic actions of anthrone-C-glucoside, cassialoin isolated from *Cassia garrettiana* heartwood in colon 26-bearing mice. *Cancer Sci.* **99(11):** 2336-2348, 2008.
- Kirtikar K and Basu BD.** *Indian Medicinal Plants vol. III.* International Book Distributors, Dehra Dun, India, pp. 2057–2059, 1987.
- Kirtikar KR and Basu BD.** *Indian Medicinal Plants*, L.M. Basu, Allahabad. pp. 2752, 1935.
- Kolodziej H and Kiderlen AF.** Antileishmanial activity and immune modulatory effects of tannins and related compounds on Leishmania parasitised RAW 264.7 cells. *Phytochemistry.* **66 (17):** 2056-2071, 2005.
- Komes D, Belščak-Cvitanović A, Horžić D, Rusak G, Likić and Berendika M.** Phenolic composition and antioxidant properties of some traditionally used medicinal plants affected by the extraction time and hydrolysis. *Phytochem. Anal.* **22(2):** 172-180, 2011.
- Korwar PG, Beknal AK, Patil BS, Halkai MA, Kulkarni U, Hariprasanna RC and Soodam SR.** A study on phytochemical investigation of *Drynaria quercifolia* Linn. rhizome. *Int. J. Pharma Sci. Res.* **1(12):**148-158, 2010.
- Kshirsagar MK, Mehta AR.** Survey of ferns in Gujarat State (India) for presence of antibacterial substances of ferns. *Planta Med.* **22(8):** 386-390, 1972.
- Kubinyi H.** Combinatorial and computational approaches in structure-based drug design. *Current Opinion in Drug Discovery and Development* **1(1):** 16–27, 1998.
- Kumar A and Kaushik P.** Antibacterial activity of *Christella dentata* frosk. study in different seasons. *J.Chem. Pharm. Res.* **3(6):**153-158, 2011.
- Kumar A, Shukla R, Singh P, Prasad CS and Dubey NK.** Assessment of *Thymus vulgaris* L. essential oil as a safe botanical preservative against post harvest fungi infestation of food commodities. *Innovative Food Sci. Emerg. Technol.* **9(4):** 575–580, 2008.
- Kumar BSA, Lakshman K, Nandeesh R, Kumar PAA, Manoj B, Kumar V and Shekar DS.** *In vitro* alpha-amylase inhibition and *in vivo* antioxidant potential of *Amaranthus spinosus* in alloxan-induced oxidative stress in diabetic rats. *Saudi J. Biol. Sci.* **18(1):**1-5; 2011.

- Kumar P and Roy SK.** Some medicinal ferns from Neterhat hills (Bihar), *Journal of Scientific Research*. **23**: 139-142, 1972.
- Kumar S, Kumar V and Chandrashekhar MS.** *In vitro* antioxidant and alpha amylase inhibitory activity of isolated fractions from methanolic extract of *Asystasia dalzelliana* leaves. *Int.J. PharmTech Res.* **3(2)**: 889-894, 2011.
- Kumar SS, Devasagayam TPA, Bhushan B and Verma NC.** Scavenging of reactive oxygen species by chlorophyllin: an ESR study. *Free Radic. Res.* **35(5)**: 563-574, 2001.
- Kumari P, Otaghvari AM, Govindaparyari H, Bahuguna YM and Uniyal PL.** Some ethnomedicinally important pteridophytes of India. *Int. J. Med. Arom. Plants* **1(1)**: 18 - 22, 2011.
- Kumarpal S.** Study of activity of some medicinal ferns of Darjeeling. *Int. J. Sci. Res. Pub.* **3(8)**:1-4, 2013.
- Kusirisin W, Srichairatanakool S, Lerttrakarnnon P, Lailerd N, Suttajit M, Jaikang C and Chaivasut C.** Antioxidative activity, polyphenolic content and anti-glycation effect of some Thai medicinal plants traditionally used in diabetic patients. *Med. Chem.* **5(2)**: 139-147, 2009.
- Lai HY and Lim YY.** Evaluation of antioxidant activities of the methanolic extracts of selected ferns in Malaysia. *Int. J. Environ. Sci. Dev.* **2(6)**: 442-447, 2011.
- Lai HY, Lim YY and Him KH.** *Blechnum orientale* Linn.- a fern with potential as antioxidant, anticancer and antibacterial agent. *BMC Comp. Alt. Med.* **10(15)**:10-15, 2010.
- Lalitharani S, Mohan VR and Regini GS.** GC-MS analysis of ethanolic extract of *Zanthoxylum Rhetsa* (Roxb) DC Spines. *J. Herbal Med. Toxicol.* **4(1)**: 191-192, 2010.
- Langenheim JH.** Higher plant terpenoids: A phytocentric overview of their ecological roles. *J. Chem. Ecol.* **20(6)**: 1223-1280, 1994.
- Lee NJ, Choi JH, Koo BS, Ryu SY, Han YH, Lee SI and Lee DU.** Antimutagenicity and cytotoxicity of the constituents from the aerial parts of *Rumex acetosa*. *Biol. Pharm. Bull.* **28(11)**:2158-2161, 2005.
- Lee SM, Na MK, An RB, Min BS and Lee HK.** Antioxidant activity of two phloroglucinol derivatives from *Dryopteris crassirhizoma*. *Biol. Pharm. Bull.* **26(9)**: 1354-1356, 2003.

- Li YG, Ji DF, Zhong S, Lv ZQ, Lin TB, Chen S and Hu GY.** Hybrid of 1-deoxynojirimycin and polysaccharide from mulberry leaves treat diabetes mellitus by activating PDX-1/insulin-1 signalling pathway and regulating the expression of glucokinase, phosphoenolpyruvate carboxykinase and glucose-6-phosphate in alloxan-induced diabetic mice. *J.Ethnopharmacol.* **134(3):** 961-970, 2011.
- Lichtenthaler HK.** Chlorophylls and carotenoids: Pigments of photosynthetic Biomembranes, *Methods Enzymol.* **148:** 350-382, 1987.
- Lim YY and Quah EPL.** Antioxidant properties of different cultivars of *Portulaca oleracea*. *Food Chem.* **103(3):** 734-740, 2007.
- Londhe AM, Kulkarni AS and Lawand RV.** *In-vitro* comparative study of antibacterial and antifungal activities: A case study of *Ocimum kilimandscharicum*, *Ocimum tenuiflorum* and *Ocimum gratissimum*. *Int. J. Pharma. Phytochem. Res.* **7(1):** 104-110, 2015.
- Lourens ACU, Vuuren SF Van, Viljoen AM, Davids H and Heerden FR Van.** Antimicrobial activity and *in vitro* cytotoxicity of selected South African *Helichrysum* species. *South Afr. J. Bot.* **77(1):** 229–235, 2011.
- Lowry OH, Rosebrough NJ, Farr AL and Randall RJ.** Protein measurement with the Folin phenol reagent. *J. Biol. Chem.* **193:** 265-275, 1951.
- Lu L, Liu SW, Jiang SB and Wu SG.** Tannin inhibits HIV-1 entry by targeting gp41. *Acta Pharmacol Sin.* **25(2):** 213-218, 2004.
- Luo XD, Basile MJ and Kennelly EJ.** Polyphenolic antioxidants from the fruits of *Chrysophyllum cainito* L. (Star apple), *J. Agric. Food. Chem.* **50(6):** 1379-1382. 2002.
- Madhura M. Pawar S and Milos M.** *In-vitro* antioxidant activity of selected Indian medicinal plants. *Indo Am. J. Pharm. Res.* **5(2):** 816-824, 2015.
- Maghrani M, Michel JB and Eddouks M.** Hypoglycemic activity of *Retama raetam* in rats. *Phytoterapy Res.* **19:** 125-128, 2005.
- Maha AA, Ahmed IY and Sakina MY.** Evaluation of antidiabetic activity of plants used in Western Sudan. *Asian Pac. J. Trop. Biomed.* **5(5):** 395-402, 2015.
- Mahadevan A and Sridhar R.** Methods in physiological plant pathology, Sivakami Publications, Madras, pp.316, 1982.

- Mahendran G, Manoj M, Muruges E, Kumar RS, Shanmughavel, PrasadR KJ and Bai NV.** *In vivo* anti-diabetic, antioxidant and molecular docking studies of 1,2,8-trihydroxy-6-methoxy xanthone and 1,2-dihydroxy-6-methoxy xanthone-8-O- β -D-xylopyranosyl isolated from *Swertia corymbosa*. *Phytomedicine* **21(11)**: 1237-1248, 2014.
- Mahesh B and Satish S.** Antimicrobial activity of some important medicinal plant against plant and human pathogens. *World J. Agri. Sci.* **4 (S)**: 839-843, 2008.
- Makinde AA, Igoli JO, Ta`ama L, Shaibu SJ, Garba A** Antimicrobial activity of *Cassia alata*. *Afr. J. Biotechnol.* **6(13)**:1509-1510, 2007.
- Maleki S, Seyyednejad SM, Damabi NM and Motamedi H.** Antibacterial activity of the fruits of Iranian *Torilis leptophylla* against some clinical pathogens. *Pak. J. Biol. Sci.* **11(9)**:1286–1289, 2008.
- Mallikharjuna PB, Rajanna LN, Seetharam YN and Sharanabasappa GK.** Phytochemical studies of *Strychnos potatorum* L.F. A medicinal plant. *E. J. Chem.* **4(4)**: 510-518. 2007.
- Manach C, Scalbert A, Morand C, Remesy C and Jimenez L.** Polyphenols : food sources and bioavailability. *Am. J. Clin. Nutr.* **79(5)**: 727-747, 2004.
- Mandal P, Babu SSP and Mandal NC.** Antimicrobial activity of saponins from *Acacia auriculiformis*. *Fitoterapia*, **76(5)**: 462-465, 2005.
- Manickam VS and Irudayaraj V.** Pteridophyte flora of Western Ghats of South India. BI publications, New Delhi. pp.652, 1992.
- Mannan MM, Maridas M and Victor B.** A Review on the Potential Uses of Ferns. *Ethnobot. Leaflets.* **12**: 281-285. 2008.
- Marasini BP, Baral P, Aryal P, Ghimire KR, Neupane S, Dahal N, Singh A, Ghimire L and Shrestha K.** Evaluation of antibacterial activity of some traditionally used medicinal plants against human pathogenic bacteria. *BioMed. Res. Int.* Article ID 265425: 1-6 <http://dx.doi.org/10.1155/2015/265425>, 2015.
- Mariana AH, Silvia D, Ines Maria CB, Moacir GP, Rozangela Curi P and Ribeiro-do-Valla RM.** Antioxidant and hepatoprotective effects of *Cyathea phalerata* Mart. (Cyatheaceae). *Basic Clin. Pharmacol. Toxicol.* **103(1)**: 17-24, 2008.
- Mariswamy Y, Gnaraj WE and Johnson M.** Chromatographic finger print analysis of steroids in *Aerva lanata* L by HPTLC technique. *Asian Pac J Trop Biomed.* **1(6)**: 428-433, 2011.

- Martinez A and Valencia G.** Manual de practicas de Farmacognosia y Fitoquimia: 1999.1. Medellin: Universidad de Antioquia, Marcha fotiquimica .pp 59-65: 2003.
- Mary SC and Gayathri DS.** Evaluation of *in vitro* alpha amylase and alpha glucosidase inhibitory activities of bark of *Terminalia bellirica*. *J. Pharm. Biol. Res.* **2(2)**: 174-177, 2014.
- Mathai K.** *Nutrition in the Adult Years*. In: Krause's Food, Nutrition, and Diet Therapy, 10th ed. Mahan LK and Escott-Stump S. (eds.) Krause's Food, Nutrition, and Diet Therapy .pp271-275, 2000.
- Mathur A, Singh R, Yousuf S, Bhardwaj A, Verma SK, Babu P, Gupta V, Prasad GBKS and Dua VK.** Antifungal activity of some plant extracts against clinical pathogens. *Adv. Appl. Sci. Res.* **2(2)**: 260-264, 2011.
- McGowan MW, Artiss JD, Strandbergh DR and Zak BA.** A peroxidase-coupled method for colorimetric determination of serum triglycerides. *Clin. Chem.* **29(3)**: 538-542, 1983.
- Medini F, Fellah H, Ksouri R and Abdely C.** Total phenolic, flavonoid and tannin contents and antioxidant and antimicrobial activities of organic extracts of shoots of the plant *Limonium delicatulum*. *J. Taibah Univ. Sci.* **8(3)**: 216–224, 2014.
- Meechaona R, Sengpracha W, Banditpuritat J, Kawaree R and Phuthdhawong W.** Fatty acid content and antioxidant activity of Thai bananas. *Mj. Int. J. Sci. Tech.* **1(2)**: 222-228, 2007.
- Mimica-Dukic N, Simin N, Cvejic J, Jovin E, Orcic D, Bozin B.** Phenolic compounds in field horsetail (*Equisetum arvense* L.) as natural antioxidants. *Molecules.* **13(7)**: 1455-1464, 2008.
- Mithraja MJ, Marimuthu J, Mahesh M, Paul ZM, Jeeva S.** Chemical diversity analysis on some selected medicinally important pteridophytes of Western Ghats, India. *Asian Pac. J Trop Biomed.* S34-S39, 2012.
- Mitra SK, Gopumadhavan S, Muralidhar TS, Anturlikar SD and Sujatha MB.** Effect of D-400, a herbomineral preparation on lipid profile, glycated hemoglobin and glucose tolerance in streptozotocin induced diabetes in rats. *Indian J. Exp. Biol.* **33(10)**: 798-800, 1995.
- Mohamed AAA, Khairuddean M and Chong WK.** Chemical constituents and antioxidant activity of *Teucrium barbeyanum* Aschers. *Rec. Nat. Prod.* **9(1)**: 159-163, 2015.

- Mohamed SSH, Hansi PD and Thirumurugan K.** Antimicrobial activity and phytochemical analysis of selected Indian folk medicinal plants. *Int. J. Pharma Sci. Res.* **1(10)**: 430-434, 2010.
- Mohanlal S, Parvathy R, Shalini V, Mohanan R, Helen A and Jayalekshmy A.** Chemical indices, Antioxidant activity and anti-inflammatory effect of extracts of the medicinal rice “njavara” and staple varieties: A comparative study. *J. Food Biochem.* **37(3)**: 369-380, 2013.
- Mohd Adzim Khalili R, Norhayati AH, Rokiah MY, Asmah R, Siti Muskinah M and Abdul Manaf A.** Determination of radical scavenging activity and vitamin A,C and E in organically grown Red Pitaya (*Hylocereus* sp.). *Int. Food Res. J.* **17**: 405-409, 2010.
- Montro P, Braca A, Pizza C and Tommasi N.** Structure-antioxidant activity relationships of flavonoids isolated from different plant species. *Food Chem.* **92(2)**: 349-355, 2005.
- Moran RC.** *Biogeography of ferns and lycophytes.* In: The Biology and Evolution of Ferns and Lycophytes. Haufler C, Ranker TA (eds) Cambridge University Press, pp.369-396, 2008.
- Morgan SA, Sherlock M, Gathercole LL, Lavery GG, Lenaghan C, Bujalska IJ, Laber D, Yu A, Convey G, Mayers R, Hegyi K, Sethi JK, Stewart PM, Smith DM and Tomlinson JW.** 11beta-hydroxysteroid dehydrogenase type 1 regulates glucocorticoid-induced insulin resistance in skeletal muscle. *Diabetes.* **58(11)**: 2506–2515, 2009.
- Moure A, Domínguez and Parajó JC.** Antioxidant properties of ultrafiltration-recovered soy protein fractions from industrial effluents and their hydrolysates,” *Process Biochem.* **41(2)**: 447-456, 2006.
- Mukherjee PK, Kumar V and Houghton PJ.** Screening of Indian medicinal plants for acetylcholinesterase inhibitory activity. *Phytother. Res.* **21(12)**: 1142-1145, 2007.
- Mukherjee SP and Choudhuri MA.,** Implication of water stress-induced in the levels of endogenous ascorbic acid and hydrogen peroxide in *Vigna* seedlings. *Physiol. Plantarum* **58(2)**: 166-170, 1983.
- Muraleedharannair JM, Irudayaraj V, Kiruba S and Jeeva S.** Antibacterial efficacy of *Drynaria quercifolia* (L.) J. Smith (Polypodiaceae) against clinically isolated urinary tract pathogens. *Asian Pacific J. Trop. Biomed.* S131-S135, 2012.

- Muraleedharannair JM, Johnson MA and Mony M.** Inter-specific variation studies on the phyto-constituents of *Christella* and *Adiantum* using phytochemical methods. *Asian Pac. J. Trop. S40-S45*; 2012.
- Murray M.** The healing power of herbs. Rocklin, CA: Prima Publishing, pp. 375, 1995.
- Murray PR.** Manual of Clinical Microbiology, 6th ed. Baron EJ, Pfaller MA, Tenover FC and Tenover FC (eds), Washington DC, ASM press, 1995.
- Murthy PS, Moorti R, Pugazhenthii S, Babu BV, Prabhu KM, Ratnakar P, Shukla R, Puri D, Dev G, Rusia U and Aggarwal S.** Studies with purified orally active compounds from fenugreek seeds, banyan tree bark, bittergourd fruits and garlic bulbs in diabetes mellitus, hypercholesterolemia and tuberculosis. *Trends Clin. Biochem. Lab. Med.* 635-639, 2003.
- Musa YM, Haruna AK, Ilyas M, Yaro AH , Ahmadu AA and Usman H.** Phytochemical analgesic and anti-inflammatory effects of the ethylacetate extract of the leaves of *Pseudocedrella kotschyii*. *Afr. J. Trad. Complement Alter. Med.* **5(1)**: 92-96, 2008.
- Nair AS, Shylesh BS, Gopakumar B and Subraminiam A.** Anti-diabetes and hypoglycaemic properties of *Hemionitis arifolia* (Burm.) Moore in rats. *J. Ethnopharmacol.* **106(2)**: 192-197, 2006.
- Nair R and Chanda SV.** Antibacterial activities of some medicinal plants of the Western Region of India. *Turk. J. Biol.* **31**: 231-236, 2007.
- Nammi S, Boini KM, Lodagala SD and Behara RBS.** The juice of fresh leaves of *Catharanthus roseus* Linn. reduces blood glucose in normal and alloxan diabetic rabbits. *BMC Complement. Altern. Med.* **3(4)**: 2003.
- Nanthakumar R, Udhayasankar MR, Ashadevi V, Arumugasamy K and Shalimol A.** *In vitro* antimicrobial activity of aqueous and ethanol extracts of *Rhinacanthus nasutus*- A medicinal plant. *Int. J. Pharma. Chem. Biol. Sci.* **4(1)**: 164-166, 2014.
- Narayanaswamy N and Balakrishnan KP.** Evaluation of some medicinal plants for their antioxidant properties. *Int. J. PharmTech Res.* **3(1)**: 381-385, 2011.
- Narkhade MB, Ajimire PV, Wagh AE, Mohan M and Shivashanmugam AT.** *In vitro* antidiabetic activity of *Caesalpinia digyna* (R.) methanol root extract. *Asian J.Plant Sci. Res.* **1(2)**: 101-106, 2011.
- Nayar BK.** Medicinal Ferns of India. *Bult. National Botanical Garden.* **29**: 1-36, 1957.

- Neef H, Declereq P and Laekeman G.** Hypoglycaemic activity of selected European plants. *Phytother Res.* **9(1)**: 45-48, 1995.
- Negishi T., Rai H., Hayatsu H.** Antigenotoxic activity of natural chlorophylls. *Mutat. Res.* **376(1-2)**: 97-100, 1997.
- Nishikimi M, Appaji Rao N and Yagi K.** The occurrence of superoxide anion in the reaction of reduced phenazine methosulfate and molecular oxygen. *Biochem. Biophys. Res. Commun.* **46(2)**: 849-853, 1972.
- Niyonzima G and Vlientinck AJ.** Hypoglycaemic activity of *Spathodeal campanulatal* stem bark decoction in mice. *Phytothe. Res.* **7(1)**: 64-67, 1993.
- Oboh G. Akinyemi AJ and Ademiluyi.** Inhibition of α -amylase and α -glucosidase activities by ethanolic extract of *Telfaira occidentalis* (fluted pumpkin) leaf. *Asian Pac. J. Trop. Biomed.* **2(9)**: 733-738, 2012.
- Odunayo RA, Ibukun EA, Tayo A, Toyin A and Tolu O.** *In vitro* antimicrobial activity of crude extracts from plants *Bryophyllum pinnatum* and *Kalanchoe crenata*. *Afr. J. Tradit. Complement. Altern. Med.* **4(3)**: 338-344, 2007.
- OECDiLibrary.** OECD guidelines for the testing of chemicals, Section 4: Health effects. ISBN: 9789264071001(PDF). <http://dx.doi.org/10.1787/9789264071001-en>.
- Okwori AEJ, Dina CO, Junaid S, Okeke IO, Adetunji JA and Olabode AO.** Antibacterial activities of *Ageratum conyzoides* extracts on selected bacterial pathogens. *The Internet J. Microbiol.* **4(1)**: 2006.
- Okwu DE and Omadamiro OD.** Effects of hexane extract and phytochemical content of *Xylopi aethiopia* and *Ocimum gartissimum* on the uterus of guinea pig. *Bio-Res.* **3(2)**: 40-44, 2005.
- Okwu DE.** Phytochemicals and vitamin content of indigenous spices of southeastern Nigeria. *J Sustain Agric Environ.* **6**: 30-34, 2004.
- Oloyede FA, Ajayi OS, Bolaji IO and Famudehin TT.** An assessment of biochemical, phytochemical and antinutritional compositions of a tropical fern: *Nephrolepis cordifolia* L. *Ife J. Sci.* **15(3)**: 645- 651, 2013.
- Omage K, Erifeta OG, Uhunmwangho SE, Josiah JS and Ajeigbe OK.** Evaluation of hypoglycemic and antioxidative properties of aqueous extract of *Garcinia kola* seeds in Wistar rats. *Curr. Res. J. Biol. Sci.* **3(4)**: 326-329, 2011.

- Osguthorpe DJ, Sherman W and Hagler AT.** Generation of receptor structural ensembles for virtual screening using binding site shape analysis and clustering. *Chem. Biol. Drug Des.* **80(2)**: 182-193, 2012.
- Owoyale JA, Olatunji GA, Oguntoye SO.** Antifungal and antibacterial activities of an alcoholic extract of *Senna alata* leaves. *J. Appl. Sci. Environ Manag.* **9(3)**: 105-107, 2005.
- Oyaizu M.** Studies on products of browning reaction--antioxidative activities of products of browning reaction prepared from glucosamine. *Jpn. J. Nutr.* **44(6)**: 307-315, 1986.
- Packer L and Ong ASH.** *Biological oxidants and antioxidants: molecular mechanisms and health effects.* Champaign, Illinois USA, AOCS Press, 1998.
- Padilla E, Ruiz E, Redondo S, Gordillo-Moscocco A, Slowing K and Tejerina T.** Relationship between vasodilation capacity and phenolic content of Spanish wines, *Eur. J. Pharmacol.* **517(1-2)**: 84-91, 2005.
- Pal SK.** Study of activity of some ethnomedicinal ferns of Darjeeling. *Int. J. Pharma. Res.* **4(1)**: 23-26, 2014.
- Panghal M, Kaushal V and Yadav JP.** *In vitro* antimicrobial activity of ten medicinal plants against clinical isolates of oral cancer cases. *Ann. Clin. Microbiol Antimicrob.* **10**:21, 2011.
- Papaccio G, Pisanthi FA, Latronica MY, Ammendola E and Galdieri M.** Multiple low-dose and single high dose treatments with streptozotocin do not generate nitric oxide. *J. Cell. Biochem.* **77(1)**: 82-91, 2000.
- Parekh J and Chanda SV.** *In vitro* antimicrobial activity and phytochemical analysis of some Indian medicinal plant. *Turk. J. Biol.* **31**: 53-58. 2007.
- Pari L and Latha M.** Antihyperglycaemic effect of *Scoparia dulcis*: effect of key metabolic enzymes of carbohydrate metabolism in streptozotocin-induced diabetes, *Pharm. Biol.* **42(8)**: 570-576, 2005.
- Pari L, Karamac M, Kosinska A, Rybarczyk A, and Amarowicz R.** Antioxidant activity of the crude extracts of drumstick tree (*Moringa oleifera* Lam.) and sweet broomweed (*Scoparia dulcis* L.) leaves. *Pol. J. Food Nutr. Sci.* **57(2)**: 203-208, 2007.
- Parihar P, Parihar L and Bohra A.** *In vitro* antibacterial activity of fronds (leaves) of some important pteridophytes. *J. Microbiol. Antimicrob.* **2(2)**:19-22, 2010.

- Partha G and Chowdhury HR.** Pharmacognostic, phytochemical and antioxidant studies of *Adenanthera pavonina* L. *Int. J. Pharm. Phytochem. Res.* **7(1)**: 30-37, 2015.
- Parveen M, Ghalib RM, Khanam Z, Mehdi SH and Ali M.** A novel antimicrobial agent from the leaves of *Peltophorum vogelianum* (Benth.). *Nat. Prod. Res.* **24(13)**: 1268–1273, 2010.
- Pasquale TR and Tan JS.** Nonantimicrobial effects of antibacterial agents. *Clin. Infect. Dis.* **40(1)**: 127-135, 2005.
- Patil SM, Kadam VJ and Ghosh R.** *In vitro* antioxidant activity of methanolic extract of stem bark of *Gmelina arborea* Roxb. (Verbenaceae). *Int. J. PharmTech. Res.* **1(4)**: 1480-1484, 2009.
- Patric Raja D, Johnson M, Irudayaraj V and Janakiraman N.** Antimicrobial efficacy of selected ferns of Western Ghats, South India. *Int. J. Curr. Pharma. Res.* **4(2)**: 2012.
- Patrick OE.** Herbal Medicines: Challenges (Editorial). *Trop. J. Pharm. Res.* **1(2)**: 53-54, 2002.
- Paul T and Banerjee S.** *In vitro* evaluation of α -amylase inhibitory activity and antioxidant potential of *Pteris vittata* L. with special reference to its HPTLC profile. *Int. J. Pharm. Bio. Sci.* **4(2)**: 494-503, 2013.
- Paul T, Das B, Apte KG, Banerjee S and Saxena RC.** Evaluation of anti-hyperglycemic activity of *Adiantum philippense* Linn. a pteridophyte in alloxan induced diabetic rats. *J. Diabetes Metab.* **3**: 226. doi: 10.4172/2155-6156.1000226, 2012.
- Paul T, Das B, Apte KG, Banerjee S and Saxena RC.** Hypoglycemic activity of *Pteris vittata* L., a fern on alloxan induced diabetic rats. *Inventi rapid: Planta Activa* **2**: 88-91, 2012.
- Paulsamy S, Moorthy D, Nandakuma K and Saradha M.** Evaluation of *in vitro* antioxidant potential of methanolic extracts of the Ferns, *Actiniopteris radiata* (SW) Link. and *Equisetum ramosissimum* Desf. *Int. J. Res. Dev. Pharm. L. Sci.* **2(3)**: 451-455, 2013.
- Pederson BA, Schroeder JM, Parker GE, Smith MW, De Paoli-Roach AA and Roach PJ.** Glucose metabolism in mice lacking muscle glycogen synthase. *Diabetes* **54(12)**: 3466-3473, 2005.
- Pereira VP, Knor FJ, Velloso JCR and Beltrame FL.** Determination of phenolic compounds and antioxidant activity of green, black and white teas of *Camellia sinensis* (L.) Kuntze, Theaceae *Rev. Bras. Pl. Med.* **16(3)**: 490-498, 2014.

- Peres MLTP, Simionatto E, Hess SC, Bonani VFL, Candido ACS, Castelli C, Poppi NR, Honda NK, Cardoso CAL and Faccendo.** Estudos quimicos e biologicos de *Microgramma vacciniifolia* (Langsd. & Fich.) Copel. (Polypodiaceae). *Quimica Nova.* **32(4):** 897-901, 2009.
- Peter AM.** *Structure and function of the water soluble vitamins.* Reader in biochemistry Royal in Veterinary College, University of London. pp.54, 1990.
- Phillipson JD.** A matter of some sensitivity. *Phytochem.* **38(6):** 1319-1343, 1995.
- Phillipson, JD.** New drugs from nature-it could be yew. *Phytother. Res.* **13:** 2-8. 1999.
- Pillay PP, Nair CPM and Kumari TNS.** *Lochnera rosea* as a potential source of hypotensive and other remedies. *Bul. Res. Inst. Univ. Kerala.* **1:** 51-54, 1959.
- Plummer DT.** *Introduction to practical biochemistry.* Tata McGraw-Hill Education, 1978.
- Po-Jung C, Ying-Chen C, Shou-Chin L and Fuu S.** Dietary flavonoids suppress adipogenesis in 3T3-L1 preadipocytes. *J. Food and Drug Anal.* **13:** 168-175, 2005.
- Prakash A and Suneetha V.** *Punica granatum* (Pomegranate) rind extract as a potent substitute for L-Ascorbic acid with respect to the antioxidant activity. *Res. J. Pharm. Bio. Chem. Sci.* **5(2):** 597-603, 2014.
- Prasad SK, Kulshreshtha A and Qureshi TN.** Antidiabetic activity of some herbal plants in streptozotocin induced diabetic albino rats. *Pak. J.Nutr.* **8(5):** 551-557, 2009.
- Premanath R and Lakshmidhevi N.** Studies on anti-oxidant activity of *Tinospora cordifolia* (Miers.) leaves using *in vitro* models. *J. Amer.Sci.* **6(10):**736-743, 2010.
- Prince PS, Menon VP and Pari L.** Hypoglycaemic activity of *Syzygium cumini* seeds: effects on lipid peroxidation in alloxan diabetic rats. *J. Ethnopharmacol.* **61(1):** 1-7, 1998.
- Priyadarsini SS, Vadivu R and Jayshree N.** *In vitro* and *In vivo* antidiabetic activity of the leaves of *Ravenala madagascariensis* Sonn., on alloxan induced diabetic rats. *J. Pharm. Sci. Tech.* **2(9):** 312-317, 2010.
- Product data sheet.** Triglyceride –G code No.997-69801, WAKO Pure Chemical Industries Ltd., Dallas TX.
- Proestos C and Komaitis M.** Analysis of naturally occurring phenolic compounds in aromatic plants by RP-HPLC coupled to Diode Array Detector (DAD) and GC-MS after silylation. *Foods* **2(1):** 90-99, doi:10.3390/foods2010090, 2013.

- Proestos C, Sereli D and Komaitis M.** Determination of phenolic compounds in aromatic plants by RP-HPLC and GC-MS. *Food Chem.* **95(1)**: 44-52, 2006.
- Pullaiah T.** *Polypodiaceae medicinal value.* In: Encyclopedia of World Medicinal Plant.2 Regency Publications, New Delhi. pp.826-830, 2006.
- Quetin- Lacqlercq J, Favel A, Balansard G, Regli P and Angenot L.** Screening for *in vitro* antifungal activities of some indole alkaloids. *Planta Med.* **61(5)**:475-477, 1995.
- Quideau S, Deffieux D, Douat-Casassus C and Pouységu L.** Plant polyphenols: chemical properties, biological activities, and synthesis. *Angew. Chem. Int. Ed. Engl.* **50(3)**: 586-621, 2011.
- Rahman MM, Ahmad SH, Mohamed MTM and Rahman M. Z. Ab.** Antimicrobial compounds from leaf extracts of *Jatropha curcas*, *Psidium guajava* and *Andrographis paniculata*. *The Sci. World J.* Article ID 635240, 1-8, 2014.
- Raimano H, Taivini T, Dennis L, Bianchini JP, Girault JP and Rene L.** Phytoecdysteroids in the genus *Microsorium* (Polypodiaceae) of French polynesia. *Nat. Prod. Commun.* **8**: 803-806, 2007.
- Raja DP, Manickam VS, De Britto AJ, Gopalakrishnan S, Ushioda T, Satoh M, Tanimura A, Fuchino H and Tanaka N.** Chemical and chemotaxonomical studies on *Dicranopteris* species. *Chem. Pharm. Bull.* **43(10)**: 1800-1803, 1995.
- Rajimol EK, Mohammed SP, Latheef N, Sriganesan P.** Evaluation of antidiabetic and hypoipidemic potential of *Drynaria quercifolia* Linn. rhizome streptozotocin induced diabetic rats. *Int. J. Pharm. Sci. Rev. Res.* **25(1)**: 118-124, 2014.
- Rajurkar N and Kunda G.** Evaluation of phytochemicals, antioxidant activity and elemental content of *Adiantum capillus veneris* leaves. *J. Chem. Pharm. Res.* **4(1)**: 365-374, 2012.
- Ramesh B and Pugalendi KV.** Antihyperglycemic effect of umbelliferone in streptozotocin-diabetic rats. *J.Med. Food.* **9(4)**: 562-566, 2006.
- Ramesh N, Viswanathan MB, Saraswathy A, Balakrishna K, Brindha P and Lakshmanaperumalsamy P.** Phytochemical and antimicrobial studies on *Drynaria quercifolia*. *Fitoterapia.* **72(8)**: 934-936, 2001.
- Ramirez-Espinosa JJ, Garcia-Jimenez S, Rios MY, Medina-Franco JL, Lopez-Vallejo F, Webster SP, Binnie M, Ibarra-Barajas M, Ortiz-Andrade R and Estrada-Soto S.**

- Antihyperglycemic and sub-chronic antidiabetic actions of morolic and moronic acids, *in vitro* and *in silico* inhibition of 11 β -HSD 1. *Phytotherapy* **20(7)**: 571- 576, 2013.
- Rancon S, Chaboud A, Darbour N, Comte G, Bayet C, Simon PN, Raynaud J, Di Pietro A, Cabalion P and Barron D.** Natural and synthetic benzophenones: interaction with the cytosolic binding domain of P-glycoprotein. *Phytochemistry*. **57(4)**: 553-557, 2001.
- Rang HP and Dale MM.** *The Endocrine System Pharmacology*, 2nd ed. Longman Group Ltd., Harlow, UK, pp: 504-508, 1991.
- Rani D, Khare PB and Dantu PK.** *In vitro* antibacterial and antifungal properties of aqueous and non-aqueous frond extracts of *Psilotum nudum*, *Nephrolepis biserrata* and *Nephrolepis cordifolia*. *Indian J. Pharm. Sci.* **72(6)**: 818-822, 2010.
- Rani PM, Kannan PSM and Kumaravel S.** Screening of antioxidant activity, total phenolics and gas chromatograph and mass spectrometer (GC-MS) study of *Delonix regia*. *Afr. J. Biochem. Res.* **5(12)**: 341-347, 2011.
- Rao NK and Nammi S.** Antidiabetic and renoprotective effects of the chloroform extract of *Terminalia chebula* Retz. seeds in streptozotocin-induced diabetic rats. *BMC Complement. Altern. Med.* **6**:17 doi: 10.1186/1472-6882-6-17, 2006.
- Rasool R, Ganai BA, Akbar S, Kamili AN and Masood A.** Phytochemical screening of *Prunella vulgaris* L.- an important medicinal plant of Kashmir. *Pak. J. Pharm. Sci.* **23(4)**: 399- 402, 2010.
- Rastogi RP and Mehrotra BN.** *Compendium of Indian medicinal plants* , **2**, (CDRI, Lucknow & National Institute of Science communication, New Delhi, 1991.
- Ratnam DV, Ankola DD, Bhardwaj V, Sahana DK and Kumar RMNV.** Role of antioxidants in prophylaxis and therapy: A pharmaceutical perspective. *J. Control. Release.* **113(3)**: 189-207, 2006.
- Reddy PA, Reddy N, Bhakshu MDL, Ratnam V, Reddy V.** Chemical composition, antimicrobial and antioxidant activities of essential oils from leaves and fruits of *Commiphora caudata* Engl. *Int. J. Pharm. Phytochem. Res.* **7(1)**: 38-44, 2015.
- Research and markets reports.** Diabetes R and D pipeline: 11beta- HSD1 inhibitors. Available from http://www.researchandmarkets.com/reports/1207429/diabetes_r_and_d_pipeline_11betahsd1_inhibitors (accessed 13.12.12), 2012.

- Rodzil R, Cheah YL, Ooi KK, Othman F, Mohtarrudin N, Tohid SF, Suhaili Z and Zakaria ZA.** Chemopreventive potential of methanol extract of *Dicranopteris linearis* leaf on DMBA/croton oil-induced mouse skin carcinogenesis. *Afr. J. Pharm. Pharmacol.* **7(35):** 2484-2498, 2013.
- Roeschlau P, Bernt E and Gruber W.** Enzymatic determination of total cholesterol in serum. *Z. Klin. Chem. Klin. Biochem.* **12(5):** 226, 1974.
- Rojas JJ, Ochoa VJ, Ocampo SA and Munoz JF.** Screening for antimicrobial activity of ten medicinal plants used in Colombian folkloric medicine: a possible alternative in the treatment of non-nosocomial infections. *BMC Complement. Altern. Med.* **6:2**, 2006.
- Rout SD, Panda T and Mishra N.** Ethnomedicinal studies on some pteridophytes of Similipal Biosphere Reserve, Orissa, India. *Int. J. Med. Med Sci.* **1(5):** 192-197, 2009.
- Ruch RJ, Cheng SJ and Klaunig JE.** Prevention of cytotoxicity and inhibition of intercellular communication by antioxidant catechins isolated from Chinese green tea. *Carcinogenesis.* **10(6):** 1003-1008, 1989.
- Rufino MSM., Alves RE, Brito ES, Pérez-Jiménez J, Saura-Calixto F and Mancine-Filho J.** Bioactive compounds and antioxidant capacities of 18 non-traditional tropical fruits from Brazil. *Food Chem.* **121:** 996- 1002, 2010.
- Runa JF, Hossain M, Hasanuzzaman M and Ali MR.** Investigation of phenolic profiles, cytotoxic potential and phytochemical screening of different extracts of *D. quercifolia* J.Smith (Leaves). *Adv. Pharm. Bul.* **3(2):** 465-467, 2013.
- Sadasivam S and Manickam A.** *Phenolics.* In Biochemical Methods for agricultural sciences. Wiley Eastern Ltd, New Delhi, India, pp.187-191, 1992.
- Saeed N, Khan MR and Shabbir M.** Antioxidant activity, total phenolic and total flavonoid contents of whole plant extracts *Torilis leptophylla* L. *BMC Complement. Altern. Med.* **12:** 221, 2012.
- Sahreen S, Khan MR and Khan RA.** Phenolic compounds and antioxidant activities of *Rumex hastatus* D.Don. leaves. *J. Med. Plants Res.* **5(13):** 2755-2765, 2011.
- Salantino MLF and Prado J.** Flavonoid glycosides of Pteridaceae from Brazil. *Biochem. Sys. Ecol.* **26(7):** 761-769, 1998.

- Sangeetha R and Vedasree N.** *In vitro* α -amylase inhibitory activity of the leaves of *Thespesia populnea*. ISRN Pharmacology. Article ID 515634: 5402-5405, <http://dx.doi.org/10.5402/2012/515634>, 1-4, 2012.
- Sani Ali Audu, Ilyas Mohammed1 and Haruna Abdul Kaita.** Phytochemical screening of the leaves of *Lophira lanceolata* (Ochanaceae). *Life Sci. J.* **4(4)**: 75-79, 2007.
- Sanjappa M.** Plant diversity in India-status, conservation and challenges (P. Maheshwari Medal Award Lecture). In: XXVIII Conference of *Indian Bot. Soc.* Dehrudun, India pp. 5-6, 2005.
- Santhi R., Lakshmi G, Priyadharshini AM and Anandaraj L.** Phytochemical screening of *Nerium oleander* leaves and *Momordica charantia* leaves. *Int. Res. J. Pharm.* **2(1)**: 131-135, 2011.
- Santos JG Jr., Blanco MM, Monte FHM, Russi M, Lanziotti VMNB, Leal LKAM and Cunhe GM.** Sedative and anticonvulsant effects of hydroalcoholic extract of *Equisetum arvense*. *Fitoterapia.* **76(6)**: 508-513; 2005a.
- Santos JG Jr., Monte FHM, Blanco MM, Lanziotti VMNB, Mala FD, Leal LKA.** Cognitive enhancement in aged rats after chronic administration of *Equisetum arvense* L. with demonstrated antioxidant properties *in vitro*. *Pharmacol. Biochem. Behav.* **81(3)**: 593-600, 2005b.
- Saravanan S and Parimelazhagan T.** *In vitro* antioxidant, antimicrobial and anti-diabetic properties of polyphenols of *Passiflora ligularis* Juss. fruit pulp. *Food Sci. Human Wellness.* **3(2)**: 56-64, 2014.
- Sasidharan S, Chen Y, Saravanan D, Sundram KM and Yoga Latha.** Extraction, isolation and characterization of bioactive compounds from Plants' extracts. *Afr. J. Tradit. Complement. Altern. Med.* **8(1)**: 1-10, 2011.
- Satheesh KD, Kottai MA, Smith AA and Manavalan R.** *In vitro* antioxidant activity of arious extracts of whole plant of *Mucuna pruriens* (Linn). *Int. J. PharmTech Res.* **2(3)**: 2063-2070, 2010.
- Sathiyaraj G, Muthukumar T and Ravindran KC.** Ethnomedicinal importance of fern and fern allies traditionally used by tribal people of Palani Hills (Kodaikanal), Western Ghats, South India. *J. Med. Herbs Ethnomed.* **1(1)**: 4-9, 2015.

- Sato M, Imai K, Kimura R and Murata T.** Effect of sodium copper chlorophyllin on lipid peroxidation. VI. Effect of its administration on mitochondrial and microsomal lipid peroxidation in rat liver. *Chem. Pharm. Bull. (Tokyo)* **32(2)**: 716-722, 1984.
- Sato M, Imai K, Kimura R and Murata T.** Effect of sodium copper chlorophyllin on lipid peroxidation. VIII. Its effect on carbon tetrachloride-induced liver injury in rats. *Chem. Pharm. Bull. (Tokyo)* **33(8)**: 3530-3533, 1985.
- Sauvaire Y, Baissae VH, Leconte O, Petit P and Ribes G.** Steroid saponins from fenugreek and some of their biological properties. *Adv. Exp. Med. Biol.* **405**: 37-46, 1996.
- Scalbert A, Manach C, Remesy C and Morand C.** Dietary polyphenols and the prevention of diseases. *Crit. Rev. Food Sci. Nutr.*, **45(4)**: 287-306, 2005.
- Seckl JR and Walker BR.** Mini review: 11 beta -hydroxysteroid dehydrogenase type 1-a tissue - specific amplifier of glucocorticoid action. *Endocrinology* **142(4)**: 1371-1376, 2001.
- Sengul M, Yildiz H, Gungor N, Cetin B, Eser Z and Ercisli S.** Total phenolic content, antioxidant and antimicrobial activities of some medicinal plants. *Pak. J. Pharm. Sci.* **22(1)**:102-106, 2009.
- Shah BA, Qazi GN and Taneja SC.** Boswellic acids: a group of medicinally important compounds. *Nat. Prod. Rep.* **26(1)**: 72-89, 2009.
- Shan B, Cai YZ, Sun M and Corke H.** Antioxidant capacity of 26 spice extracts and characterization of their phenolic constituent. *J. Agric. Food Chem.* **53(20)**: 7749-7759, 2005.
- Shareef MI, Reddy PJM, Gopinath SM, Dayananda KS, Mandal A and Purushotham KM.** *In vitro* α -amylase inhibitory activity of the leaves of *Tinospora cordifolia*. *Int. J. Innov. Res. Sci. Eng. Technol.* **3(3)**: 10091-10096, 2014.
- Sharma BD and Vyas MS.** Ethnobotanical studies on the fern and fern allies of Rajasthan. *Bull. Bot. Suvr. India.* **27(1-4)**: 90-91, 1985.
- Sharma VJ and Patel PM.** Evaluation of antibacterial activity of methanolic extract of plant *Rivea ornata*. *Int. Res. J. Pharm.* **4(1)**: 233-234, 2013.
- Sheeja K and Kuttan G.** Activation of cytotoxic T lymphocyte responses and attenuation of tumor growth in vivo by *Andrographis paniculata* extract and andrographolide. *Immunopharmacol. Immunotoxicol.* **29(1)**: 81-93, 2007.

- Shetti A and Kaliwel BB.** Hypoglycemic activity of ethanolic leaf extract of *Phyllanthus amarus* in alloxan induced diabetic mice. *Eur. J. Exp. Biol.* **5(1)**: 26-29, 2015.
- Shi J, Arunasalam K, Yeung D, Kakuda Y, Mittal G and Jiang Y.** Saponins from edible legumes: Chemistry, processing and health benefits, *J. Med. Food.* **7(1)**: 67-78, 2004.
- Shil S and Choudhury DM.** Ethnomedicinal importance of pteridophytes used by Reang tribe of Tripura, North East India. *Ethnobot. Leaflets.* **13**: 634-643, 2009.
- Shrikant NM and Manjunath KP.** *In vitro* α -amylase inhibition and chromatographic isolation of *Cassia fistula* Linn. bark. *Int. J. Adv. Pharm. Biol. Chem.* **2(1)**: 16-20, 2013.
- Shrivastavaa KA, Pandey B and Chauhan D.** Phytochemical analysis of *Adiantum* and *Pteris* ferns & its role as antioxidant. *Indian J. Sci. Res.* **4(1)**: 31-38, 2014.
- Shyur LF, Tsung JH, Chen JH, Chiu CY and Lo CP.** Antioxidant properties of extracts from medicinal plants popularly used in Taiwan. *Int. J. Appl. Sci. Eng.* **3(3)**: 195-202, 2005.
- Siddique O, Sun Y, Lin JC and Chien YW.** Facilitated transdermal transport of insulin. *J. Pharm. Sci.* **76(4)**: 341-345, 1987.
- Sies H.** *Antioxidant in Disease, Mechanisms and Therapy.* Academic Press, New York, 1996.
- Singariya P, Kumar P and Mourya KK.** Antimicrobial activity of fruit coat (calyx) of *Withania somnifera* against some multi drug resistant microbes. *Int. J. Biol. Pharm. Res.* **3(2)**: 252-258, 2012.
- Singh H and Kapoor VK.** Investigation of *Strychnos* spp. VI - Pharmacological studies of alkaloids of *Strychnos potatorum* seeds. *Planta Med.* **38(2)**:133-137, 1980.
- Singh HB.** Potential medicinal pteridophytes of India and their chemical constituents, *J. Econ. Tax. Bot.* **23(1)**: 63-78, 1999.
- Singh M, Govindarajan R, Rawat AKS and Khare PB.** Antimicrobial flavonoids rutin from *Pteris vittata* L. against pathogenic gastrointestinal microflora. *Am. Fern. J.* **98(2)**: 98-103, 2008.
- Singh M, Singh N, Khare PB and Rawat AKS.** Antimicrobial activity of some important *Adiantum* species used traditionally in indigenous systems of medicine. *J. Ethnopharmacol.* **115(2)**: 327-329; 2008.

- Singh SK, Vishnoi R, Dhingra GK and Kishor K.** Antibacterial activity of leaf extracts of some selected traditional medicinal plants of Uttarakhand, North East India. *J. Appl. Nat. Sci.* **4(1)**: 47–50, 2012.
- Singleton VL and Rossi JA Jr.** Colorimetry of total phenolics with phosphomolybdic – phosphotungstic acid reagents. *Am. J. Enol. Vitic.* **16(3)**: 144-158, 1965.
- Singleton VL, Orthofer R and Lamuela-Raventos RM.** Analysis of total phenols and other oxidation substrates and antioxidants by means of Folin-Ciocalteu reagent. *Methods Enzymol.* **299**: 152-178, 1999.
- Sini KR, Sinha BN, Karpagavalli M.** Determining the antioxidant activity of certain medicinal plants of Attapady, (Palakkad), India using DPPH Assay. *Curr. Bot.* **1(1)**: 13-16, 2011.
- Siqun J, Xiaoming Z and Liang-Jun Y.** Antioxidant activity, antitumor effect and antiaging property of proanthocyanidins extracted from *Kunlun Chrysanthemum* flowers. *Oxidative medicine cellular longevity*. Article ID 983484: doi.org/10.1155/2015/983484, 2015.
- Sivakumar T, Kannan K, Kannappan N and Kathiresan K.** Anti-inflammatory activity of *Commiphora caudata* (Wight and Arn.). *Asian J. Chem.* **21(5)**: 4130-4132, 2009.
- Slot C.** Plasma creatinine determination. A new and specific Jaffe reaction method. *J. Clin. Lab. Invest.* **17(4)**: 381-387, 1965.
- Sodipo OA, Akiniyi JA and Ogunbamosu JU.** Studies on certain characteristics of extracts of bark of *Pansinystalia macruceras* (K schemp) Pierre Exbeille. *Global J. Pure Appl. Sci.* **6**: 83-87, 2000.
- Sokeng SD, Lontsi D, Moundipa PF, Jatsa HB, Watcho P and Kamtchouing P.** Hypoglycemic effect of *Anacardium occidentale* L. methanol extract and fractions on streptozotocin-induced diabetic rats. *Global J. Pharmacol.* **1(1)**: 1-5, 2007.
- Solecki RS.** Shanidar IV, a Neanderthal flower burial of northern Iraq. *Science.* **190(4217)**: 880-881, 1975.
- Soni A and Sosa S.** Phytochemical nalysis and Free Radical Scavenging Potential of Herbal and Medicinal Plant Extracts. *J. Pharmacogn. Phytochem.* **2(4)**: 22-29, 2013.
- Soto-Vaca A, Losso JN, Xu Z and Finley JW.** Evolution of phenolic compounds from color and flavor problems to health benefits. *J. Agric. Food Chem.* **60(27)**: 6658-6677, 2012.

- Srinivasan R, Chandrasekar MJN, Nanjan MJ and Suresh B.** Antioxidant activity of *Caesalpinia digyna* root. *J. Ethnopharmacol.* **113(2)**: 284–291, 2007.
- Stalikas CD.** Extraction, separation and detection methods for phenolic acids and flavonoids. *J. Sep. Sci.* **30(18)**: 3268-3295, 2007.
- Strack D.** *Phenolic metabolism.* In Plant Biochemistry. Dev PM. and Harborne JB (Eds.), London, UK, Academic press, pp. 387-416, 1997.
- Sultana B, Anwar F and Ashraf M.** Effect of extraction solvent/technique on the antioxidant activity of selected medicinal plant extracts. *Molecules.* **14**: 2167-2180, 2009.
- Sultana B, Anwar F and Pirzybyiski R.** Antioxidant activity of phenolic components in barks of *Azadirachta indica*, *Terminalia arjuna*, *Acacia nilotica* and *Eugenia jambolana* Lam. trees. *Food Chem.* **104(3)**: 1106-1114, 2007.
- Sun JE, Ao ZH, Lu ZM, Xu HY, Zhang XM, Dou WF and Xu ZH.** Antihyperglycemic and antilipid peroxidative effects of dry matter of culture broth of *Inonotus obliquus* in submerged culture on normal and alloxan-diabetes mice. *J. Ethnopharmacol.* **118(1)**: 7-13, 2008.
- Sundarranjan T, Kumar TR, Udhayakumar E, Sekar M and Kumar MKS.** Antidiabetic activity of methanolic extract of *Hibiscus cannabinus* in streptozotocin induced diabetic rats. *Int. J. Pharma. Bio. Sci.* **2(1)**: 125-130, 2011.
- Syafni N, Putra DP and Arbain D.** 3,4-dihydroxybenzoic acid and 3,4-dihydroxybenzaldehyde from the fern *Trichomanes chinense* L.; isolation, antimicrobial and antioxidant properties. *Indo. J. Chem.* **12(3)**: 273-278, 2012.
- Syeda FA, Rehman HU, Choudahry MI and Rahman AU.** Gas Chromatography-Mass Spectrometry (GC-MS) analysis of petroleum ether extract (oil) and bioassays of crude extract of *Iris germanica*. *Int. J. Gen. Mol. Bio.* **3(7)**: 95-100, 2011.
- Takeoka GR and Dao LT.** Antioxidant constituent of almond [*Prunus dulcis*(Mill.) D.A. Webb.] hulls. *J. Agric Food Chem.* **51(2)**: 496-501, 2003.
- Talke H and Schubert GE.** Enzymatic urea determination in the blood and serum in the Warburg optical test. *Klin. Wochenschr.* **1(43)**: 174-175, 1965.
- Tanzin R, Rahman S, Hossain MS, Agarwala B, Khatun Z, Jahan S, Rahman MM, Mou SA and Rahmatullah.** Medicinal potential of pteridophytes- an antihyperglycemic and

antinociceptive evaluation of methanolic extract of whole plants of *Christella dentata*. *Adv. Nat. Appl. Sci.* **7(1)**: 67-73, 2013.

Telagari M and Hullatti K. *In-vitro* α -amylase and α -glucosidase inhibitory activity of *Adiantum caudatum* Linn. and *Celosia argentea* Linn. extracts and fractions. *Ind. J. Pharmacol* **47(4)**: 425-429, 2015.

Thalwal SS, Gupta A, Abhimanyu, Saini N, Patel SK and Kapoor L. Antimicrobial activity of traditionally used herbs against human pathogens. *Int. J. Biomed. Res.* **4(6)**: 236-240, 2013.

Tirupatirao S, Sankar KG, Kannan S and Naik RN. Comparative analysis of anti-bacterial activity of medicinal plants. *Int. J. PharmTech Res.* **6(1)**: 262-265, 2014.

Tomer K, Singh V, Sethiya NK, Kumar M, Jaiswal D, Yadav IK, Singh HP, Chandra D and Jain DA. Isolation and characterization of new lanosteroid from ethanolic extracts of *Eclipta alba* Linn. *J. Pharm. Res.* **2(10)**: 1635-1637, 2009.

Trease GE and Evans WC. *Pharmacognosy*. 13th (ed). ELBS/Bailliere Tindall, London. pp. 345-346, 535-536, 772-773, 1989.

Triffany TO, Jansen JM, Burtis CA, Overton JB and Scott CD. Enzymatic kinetic rate and end-point analysis of substrate by use of a GEMSAEC fast analyzer. *Clin. Chem.* **18**: 829-834, 1972.

Trinder P. Determination of glucose in blood using glucose oxidase with an alternative oxygen acceptor. *Ann. Clin. Biochem.* **6**: 24-27, 1969.

Trivedi N and Sinha A K. Resistance induced in rice plants against *Helminthosporium* infection by treatment with various fungal fluids. *Phytopathol. Z.* **86**: 335-344, 1976.

Trott O and Olson AJ. AutoDock Vina: improving the speed and accuracy of docking with a new scoring function, efficient optimization and multithreading. *J. Comput. Chem.* **31(2)**: 455-461, 2010.

Tsao A, Kim ES and Hong WK. Chemoprevention of cancer. *CA-Cancer J. Clin.* **54(3)**: 150-180, 2004.

Tulsidas. *Ramcharitmanas*. 1631 samvat.

- Turkmen N, Sari F and Velioglu YS.** Effects of extraction solvents on concentration and antioxidant activity of black and black mate tea polyphenols determined by ferrous tartrate and Folin-ciocalteu methods. *Food Chem.* **99(4)**: 835-841, 2006.
- Tyler VE.** Phytomedicines: back to the future. *J. Nat. Prod.* **62(11)**: 1589-1592, 1999.
- Upreti K, Jalal JS, Tewari LM, Joshi GC, Pangtey YPS and Tiwari G.** Ethnomedicinal Uses of Pteridophytes of Kumaun Himalaya, Uttarakhand, India, *J. Am. Sci.* **5(4)**: 167-170, 2009.
- Ushimaru PI, Silva MTN, Di Stasi LC, Barbosa L and Fernandes Junior A.** Antibacterial activity of medicinal plant extracts. *Bras. J. Microbiol.* **38**: 717-719, 2007.
- Uttra KM, Devrajani BR, Shah SZA, Devrajani T, Das T, Raza S and Naseem.** Lipid profile of patients with Diabetes mellitus (A Multidisciplinary Study). *World Appl. Sci. J.* **12(9)**: 1382-1384, 2011.
- Vadi R, Vats M, Gupta N and Sardana S.** Antidiabetic potential of whole plant of *Adiantum capillus veneris* Linn. in streptozotocin induced diabetic rats. *Int. J. Pharma. Clin. Res.* **6(4)**: 341-347, 2014.
- Vaidyaratnam PS Varier's.** *Indian Medicinal Plants*, 1st ed. Orient Longman, Chennai, India, pp. 107–108: 1996.
- Valizadeh H, Sonboli A, Kordi FM, Dehghan H and Bahadori MB.** Cytotoxicity, antioxidant activity and phenolic content of eight fern species from North of Iran. *Pharma. Sci.* **21(1)**: 18-24, 2015.
- Vasco C, Ruales J and Kamal-Eldin A.** Total phenolic compounds and antioxidant capacities of major fruits from Ecuador. *Food Chem.* **111(4)**: 816, 2008.
- Vats V, Yadav SP and Grover JK.** Effect of *T. foenum graecum* on glycogen content of tissues and the key enzymes of carbohydrate metabolism. *J Ethnopharmacol.* **85(2-3)**: 237-242, 2003.
- Viji M and Murugesan S.** Phytochemical analysis and antibacterial activity of medicinal plant *Cardiospermum halicacabum* Linn. *J. Phytol.* **2(1)**: 68-77, 2010.
- Wallace RA, Sander GP and Feri RJ.** *Biology: the science of life*. New York: HarperCollins, pp. 547-555, 1991.

- Wang SY.** Antioxidant capacity of berry crops, culinary herbs and medicinal herbs. *Acta Hort.* **620**: 461–473, 2003.
- Wang TC, Ti MC, Lo SC and Yang CC.** Free radical-scavenging activity of aqueous extract of *Pteris multifida* Poiret. *Fitoterapia* . **78(3)**: 248-249, 2007.
- Watt G.** *A Dictionary of the Economic Products of India* vols. 1–6, Cosmo Publications, Delhi, India. 1972.
- WHO (World Health Organization).** World Health Organization “Principles of laboratory animal care.” *WHO Chronicle*, **39**: 51-56, 1985.
- Wiernsperger NF and Bailey CJ.** The antihyperglycaemic effect of metformin: therapeutic and cellular mechanisms. *Drugs* **58(1)**: 75-82, 1999.
- William D’y mock.** *Pharmacographia Indica, Part III*, pp. 138-139: 1976.
- Willson TM, Brown PJ, Sternbach DD and Henke BR.** The PPARs: from orphan receptors to drug discovery. *J. Med. Chem.* **43(4)**: 527-550, 2000.
- Wojdyło A, Oszmian´ski, J and Czemerys R.** Antioxidant activity and phenolic compounds in 32 selected herbs. *Food Chem.* **105**: 940–949, 2007.
- Yadav M, Chatterji S, Gupta SK and Watal G.** Preliminary phytochemical screening of six medicinal plants used in traditional medicine. *Int. J. Pharm. Pharm. Sci.* **6(5)**: 539-542, 2014.
- Yao X, Zhu L, Chen Y, Tian J and Wang Y.** *In vivo* and *in vitro* antioxidant activity and α -glucosidase, α -amylase inhibitory effects of flavonoids from *Cichorium glandulosum* seeds. *Food Chem.* **139(1-4)**: 59–66, 2013.
- Yen GC, Duh PD and Tsai HL.** Antioxidant and pro-oxidant properties of ascorbic acid and gallic acid. *Food Chem.* **79(3)**: 307-313, 2002.
- Yuan X, Xuansheng H, Hu L, Hongyi S, Zhenya Z and Delin C.** *In vitro* and *in vivo* anti-diabetic activity of extracts from *Actinidia kolomikta*. *Int. J. Biol.* **6(3)**: 1-10, 2014.
- Zakaria ZA, Mohamed AM, Mohad. Jamil NS, Rofiee MS, Somchit MN, Zuraini A, Arifah AK and Sulaiman MR.** *In vitro* cytotoxic and antioxidant properties of the aqueous, chloroform and methanol extracts of *Dicranopteris linearis* leaves. *Afr. J. Biotechnol.* **10(2)**: 273-282, 2011.

- Zakaria ZA.** Free radical scavenging activity of some plants available in Malaysia. *Iranian J. Pharm.acol. Ther.* **6(1)**: 87-91, 2007.
- Zeliński H and Kozłowska H.** Antioxidant activity and total phenolics in selected cereal grains and their different morphological fractions. *J Agric. Food Chem.* **48(6)**: 2008-2016, 2000.
- Zeng-fu L, Huil I, Hang-yi Z and Jun-chen Z.** Review on the extraction of flavonoids from fern. *J. Sanm. Univ.* **25**: 22, 2008.
- Zhang L, Ravipati AS, Koyyalamudi SR, Jeong S, Reddy N, Smith PT, Bartlett J, Shanmugam K, Münch G and Wu MJ.** Antioxidant and anti-inflammatory activities of selected medicinal plants containing phenolic and flavonoid compounds. *J. Agric. Food Chem.* **59(23)**: 12361–12367, 2011.
- Zheng XK, Zhang L, Wang WW, Wu YY, Zhang QB and Feng WS.** Antidiabetic activity and potential mechanism of total flavonoids of *Selaginella tamariscina* (Beauv.) Spring in rats induced by high fat diet and low dose STZ. *J. Ethnopharmacol.* **137(1)**: 662-668, 2011.
- Zhongxiang Z, Jing J, Jinlan R, Chenchen Z, Chaozhan L, Wei F and Yaling C.** Antioxidant flavonoid glycosides from aerial parts of the fern *Abacopteris penangiana*. *J. Nat. Prod.* **70(10)**:1683-1686, 2007.