

## 6. REFERENCES

- Abdel-Azeem, F. (2002).** Digestion, neomycin and yeast supplementation in broiler diets under Egyptian summer conditions. *Egypt. Poult. Sci.*, Vol. 22: 235-257.
- Abou- Egla, El- Samra, Genedy, Salwa, G. K., Abou-Zeid, A.E. and H. S. Zeweil. (2001).** Nigella sativa seed oil meal as a nontraditional source of plant protein in Japanese Quail diets. *Egypt. Poult. Sci.*, Vol. 21: 107-125.
- Abramovitz, D., S., Gavri, D. Harats, H., Levkovitz, D., Mirelman, T., Miron, S., Eilat-Adar, A., Rabinkov, M., Wilchek, M., Eldar and Z. Vered (1999).** Allicin-induced decrease in formation of fatty streaks (atherosclerosis) in mice fed a cholesterol-rich diet. *Coron Artery Dis.* 10:515-519.
- Ademola, S.G., Farinu G.O and G.M Babatunde (2009).** Serum lipid growth and haematological parameters of broilers fed garlic, ginger and their mixture. *World Journal of Agricultural Sciences.* 5(1): 99-104.
- Ademola, S.G., Farinu G.O., Adelowo O.O., Fadade M.O. and G.M. Babatunde (2005).** Growth performance and antimicrobial activity of garlic and ginger mixture fed to broilers. *Proceedings of the 2005 Nigerian society for animal production Nigeria.* 71-74.
- Ademola, S.G., Farinu, G.O., Ajayi Obe, A.O. and G.M Babutunde. (2004).** Growth, hematological and biochemical studies on garlic- and ginger-fed broiler chicken. *Moor J. Agric. Res.*, 5(2): 122-128.
- Adetumbi, M., Javor, G.T, and B.H.S. Lau, (1986).** *Allium sativum* (garlic) inhibits lipid synthesis by *Candida albicans*. *Antimicrobial Agents Chemotherapy.* 30: 499–501
- Adhikari, S., K. Priyadarsini and T. Mukherjee, (2007).** Physico-chemical studies on the evaluation of the antioxidant activity of herbal extracts and active principles of some Indian medicinal plants. *J. Clin. Biochem. Nutr.*, 40(3): 174-183.
- Adibmoradi, M, Navidshad, B., Seifdavati, J., and M. Royan (2006).** Effect of dietary garlic meal on histological structure of small intestine in broiler chickens. *The Journal of Poultry Science* 43, 378-383.
- Adulyatham, P. and R. Owusu-Apenten (2005).** Stabilization and partial purification of protease from ginger rhizome (*Zingiber officinale* Roscoe). *Journal Food Science.* 70: 231–234.
- Afsharmanesh, M., B. Sadeghi Ronizi, M. Mehrabadi (2008). *The Comparison of Natural Feed Additives (garlic and yogurt) with Antibiotic Growth Promoters on Broiler Performance; 1<sup>st</sup> National Conference Livestock and Poultry Industry of Golestan Province, Dec. 2008,* 23-25.
- Afzal, M., D. Al-Hadidi, M. Menon, J. Pesek and M. S. Dhimi (2001).** Ginger: an ethnomedical, chemical and pharmacological review. *Drug Metabolism and Drug Interaction.* 18:159 – 190.
- Afzal, M., R.A.H. Hassan, A.A. El-kazini and R.M.A. Fattah, (1985).** *Allium sativum* in the control of atherosclerosis. *Agric. Biol. Chem.*, 49; 1187-1188.
- Agarwal, K.C., (1996).** Therapeutic actions of garlic constituents. *Med. Res. Rev.* 16(1); 111-124.
- Ahmad, S. (2005).** Comparative efficiency of garlic, turmeric and kalongi as growth promoter in broiler. M.Sc. (Hons.) Thesis, Department Poultry Sciences, University of Agriculture, Faisalabad, Pakistan
- Ahmed, R. S. and S. B. Sharm (1997).** Biochemical studies on combined garlic (*Allium sativum*) and ginger (*Zingiber officinale* Rosc) in albino rats. *India Journal of Experimentation* 35 841-843.
- Ahmed, R., V. Seth and B. Banerjee, (2000).** Influence of dietary ginger (*Zingiber officinale* Rosc) on antioxidant defense system in rat: comparison with ascorbic acid. *Indian J. Exp. Biol.*, 38: 604 - 606.

- Ahsan M, Chowdhury, A.K.A., Islam, S.N., and Z.U, Ahmed (1996).** Garlic extract and allicin: Broad spectrum antibacterial agents effective against multiple drug resistant strains of *Shigella dysenteriae* type 1 and *Shigella flexneri*, enterotoxigenic *Escherichia coli* and *Vibrio cholerae*. *Phytotherapy Research* 10, 329-331.
- Aifang, D.u.; Songhua, H.u. and W,Suhua., (2005).** *Eimeria tenella*: Ginsenoside enhanced immune response to the immunization with recombinant 5401 antigen in chickens. *Experimental Parasitology*, Volume 111, Issue 3, November, Pages 191-197.
- Ajuyah, A. O., R. T. Hardin and J. S. Sim (1993).** Effect of dietary full-fat flax seed with and without antioxidant on the fatty acid composition of major lipid classes of chicken meats. *Poult. Sci.* 72: 125-136.
- Akhani, S.P.; Vishwakarma, S.L. and R.K Goyal., (2004).** Anti-diabetic activity of *Zingiber officinale* in Streptozotocin-induced type I diabetic rats. *J. of Pharmacy and Pharmacol.* 56: 101-105.
- Akoachere, J. F. T. K., R. N. Ndip, E. B. Chenwi, L. M. Ndip, T. E. Njock and D. N. Anong (2002).** Anti-bacterial effect of *zingiber officinale* and *garcinia kola* on respiratory tract pathogens. *East African Medical Journal.* 79: M. Thomson, K. Al-qattan, R. Peltonen-Shalaby and M. Ali, (2005) 88 – 592.
- Al-Amin, Z., M. Thomson, K. Al-qattan, R. Peltonen-Shalaby and M. Ali, (2006).** Anti-diabetic and hypolipidaemic properties of ginger (*Zingiber officinale*) in streptozotocin-induced diabetic rats. *Br. J. Nutr.*, 96(4): 660-666.
- Al-Azhary, D. B. (2011).** Ginger enhances antioxidant activity and attenuates atherogenesis in diabetic cholesterol-fed rats. *Australian Journal of Basic and Applied Sciences*, 5(12): 2150-2158.
- Alcicek, A., M. Bozkurt and M. Cabuk, (2003).** The effect of an essential oil combination derived from selected herbs growing wild in turkey on broiler performance. *South African Journal of Animal Science.* 33; 89-92.
- AL-Homidan, A. A. (2005).** Efficacy of using different sources and levels of *allium cepa*, *allium sativum* and *zingiber officinale* on broiler chick's performance. *Saudi Journal of Biological Sciences.* 12 (2): 96- 102.
- Ali, B., G. Blunden, M. Tanira and A. Nemmar (2008).** Some phytochemical, pharmacological and toxicological properties of ginger (*Zingiber officinale* Roscoe): a review of recent research. *Food Chem. Toxicol.*, 46: 409-420.
- Al-Kassie, G. A.M. and Huda F. H. Al-Qaraghul (2013).** A comparative study between the effects of garlic extract and Jerusalem artichoke tuber mixture as a source of prebiotic and probiotic (Biomine) on the performance and health of broiler. *International Journal of Science and Nature* 4 (1): 120-123.
- AL-Rikabi, Ahlam, A. and A. A. H. Jawad (2013).** Protective effect of ethanolic ginger extract against cadmium toxicity in male rabbits. *Bas.j.vet.Res.* Vol.12 (1): 13-29.
- Amagase H., Petesch B. L., Matsuura H., Kasuga S., Itakura Y. (2001).** Intake of garlic and its bioactive components. *J. Nutr.* 131:955S–962S.
- Anonymous, (2008).** Cholestyramine resin. <http://www.savemedication.com> accessed on 06/02/08.
- A.O.A.C. (1995).** Official methods of Analysis 16<sup>th</sup> Edition Association of official Analytical chemists. Washington D.C.
- Apers, S.; Babronikova, S.; Sindambiwe, J.B.; Witvrouw, M., De Clercq, E.; Vanden Berghe, D.; Van Marck, E.; Vlietinck, A. and L Pieters.,(2000).** Antiviral, haemolytic

- and molluscicidal activities of triterpenoid saponins from *Maesa lanceolata*: establishment of structure-activity relationships. *Planta Medica* 67, 528–532.
- Apitz-Castro R, Cabrera S, Cruz MR, Ledezma E , MK , Jain (1983).** Effects of garlic extract and of three pure components isolated from it on human platelet aggregation, arachidonate metabolism, release reaction and platelet ultrastructure. *Thromb Research* , 32: 155-169.
- Arora, DS and J, Kaur (1999).** Antimicrobial activity of spices. *International Journal of Antimicrobial Agents* 12, 257-262.
- Assinewe, V. A.; Amason, J. T.; Aubry J A.; Mullin, J. and Lemaire, I. (2002).**Extractable polysaccharides of *Panax quinquefolius* L. (North American ginseng) root stimulate TNF $\alpha$  production by alveolar macrophages.
- Avato P, Tursil E, Vitali C, Miccolis V, and V, Candido (2000).** Allylsulfide constituents of garlic volatile oil as antimicrobial agents. *Phytomedicine : International Journal of Phytotherapy and Phytopharmacology* 7, 239-243.
- Awang, D.V.C. (1999).** Immune stimulants and antiviral botanicals: Echinacea and ginseng. p. 450–456. In: J. Janick (ed.), *Perspectives on new crops and new uses*.ASHS Press, Alexandria, VA.
- Badreldin, H.A., B. Gerald, O.T. Musbah and N. Abderrahim (2008).** Some phyto-chemical, pharmacological and toxicological properties of ginger (*zingiber officinale roscoe*): a review of recent research. *Food Chemistry and Toxicology*. 46: 409–420.
- Bahrke, M.S.and Morgan, W.P. (1994).** Evaluation of the ergogenic properties of ginseng. *Sports Med*. 18:229-248.
- Baldwin, B. A. (1976).** Quantitative studies on taste preference in pigs. *Proceedings of the Nutrition Society*. 35 69–73.
- Bamidele, O. and I.O. Adejumo (2012).** Effect of Garlic (*Allium sativum* L.) and Ginger (*Zingiber officinale Roscoe*) Mixtures on Performance Characteristics and Cholesterol Profile of Growing Pullets. *International Journal of Poultry Science* 11 (3): 217-220
- Banerjee, G. C. (1998).** *A Text Book of Animal Husbandry*. 2nd edition. India publication, Delhi, India.
- Barazesh, H., M. B. Pour, S. Salari, T. M. Abadi (2013).** The effect of ginger powder on performance, carcass characteristics and blood parameters of broilers. *International journal of Advanced Biological and Biomedical Research* Volume 1 (1). 1645-1651.
- Barr, I. G.; Sjolander, A. and J. C. Cox, (1998).** **ISCOMs and other saponin based adjuvants** (Review). *Advanced Drug Delivery Reviews*.32, 247–271.
- Benjilali B, Tantaoui-Elaraki A, Ayadi A, and M, Ihlal (1984).** Method to study antimicrobial effects of essential oils: application to the antifungal activity of six Moroccan essences. *Journal of Food Protection (USA)* 47, 748-752.
- Bespalov, V.G.; Alexandrov,V. A.; Limarenko, A. Y.; Voytenkov, B. O.; Okulov, V. B.; Kabulov, M. K.; Peresunko, A. P.; Slepyan, L. I.; Davydov, V. V. (2001).**Chemoprevention of mammary, cervix and nervous system carcinogenesis in animals using cultured panax ginseng drugs and preliminary clinical trials in patients with precancerous lesions of the esophagus and endometrium .*J Korean Med Sci.*, (Supl 16):S42-53.
- Betz, E., and R. Weidler (1989).** Die Wirkung von Knoblauchextrakt auf die atheerogenese bei kaninchen. In *Die anwendung aktueller methoden in der arteriosklerose*. Forschung Edited by Betz E. 1989, 304-311.
- Bhandari , U; Sharma, J.N and R. Zafar, ( 2005a).** The prodective action of ethanolic ginger (*zingiberoffecinale*) extract cholesterol fed rabbits . *J. Ethanopharmacol.*, 61( 2): 167-171.

- Bhandari, U.; Kanojia, R. and K.K. Pillai, (2005b).** Effect of ethanolic extract of *Zingiber officinale* on dyslipidaemia in diabetic rats. *J. Ethnopharmacol.*,(97):227-230.
- Bhandari, U; J. N. Sharma and R. Zafer ( 1998).** The protective active of ethanolic ginger (*ZingiberOfficinale* ) extract in cholesterol fed rabbits .*J. Ethanopharmacol.*, 61: 167-171.
- Birrenkott, G., G. E. Brockenfett, M. Owens and E. Halpin (2000).** Yolk and blood cholesterol levels and organoleptic assessment of eggs from hens fed a garlic supplement diet. *Poultry Science* 79, 75 (Abstr.)
- Bloom, B. R. (1989).** Vaccines for the Third World Nature 342,115–116.
- Bordia, A., S. Verma and K. Srivastava, 1997.** Effects of ginger and fenugreek on blood lipids, blood sugar and platelet aggregation in patients with coronary artery disease. *Prostaglandins, Leukotrienes and essential fatty acids*, 56: 379-384.
- Bordia, A., H.C. Bansal, S.K. Arora and S.V. Singal, (1975).** Effect of the essential oils of garlic and onion on dementary hyperlipemia. *Atherosclerosis*, 2; 15-18.
- Borris, R. P. (1996).** Natural product research: perspective from a major pharmaceutical company. *Journal of Ethnopharmacology*. 51; 29-38.
- Bratta, M.T., S. G. Deans, D. M. Biondi and G. Ruberto (1998).** Chemical composition antimicrobial and antioxi-dative activity of laurel, Sage, Rosemary, Oregano and Coriander Essentials Oils. *Journal of Essential Oil Re-search*, 10, 618-627.
- Brugalli, I. (2003).** Alimentacao alternativa: a utilizacao de fitoterapicos ou nutraceuticos como moduladores da imunidade e desempenho animal. *Anais Do Simposio Sobre Manejo E Nutricao De Aves E Suínos; Campinas, Sao Paulo. Brasil. Campinas: CBNA, Pp: 167-182.*
- Byun, B. H.; Shin, I.; Yoon, Y. S.; Kim, S. I. and C. O Joe.,(1997).** Modulation of protein kinase C activity in NIH 3T3 cells by plant glycosides from *Panax ginseng*. *Planta Med.* 63: 389-392.
- Cabuk M, M. Bozkurt, A. Alcicek, Y. Akbas, and K. Kucukyilmaz (2006).** Effect of a herbal essential oil mixture on growth and internal organ weight of broilers from young and old breeder flocks. *South African Journal of Animal Science* 36, 135-141.
- Canogullari, S. and M. Karaman (2009).** *Bull Vet. Inst. Pulawy* 53: 515-519.
- Cao, Z., Z. Chen and P. Guo, (1993).** Scavenging effect of ginger on superoxide anion and hydroxyl radical. *Chung – kuo Chung Yao Tsa Chih*, 18: 750-764. Fuhrman et Canogullari, S., M. Karaman, *Bull Vet Inst Pulawy*.2009, 53, 515-519.
- Carrijo, A.S., Madeira, L.A., Sartori, J.R., Pezzato, A.C., Goncalves, J.C, da Cruz, V.C., Kuibida, K.V., and D.F. Pinheiro (2005).** Powdered garlic in the alternative feeding of broiler chickens. *Pesquisa Agropecuaria Brasileira* 40, 673-679.
- Cavallito, C.J., Buck, J.S. and C.M Suter (1994)** Allicin, the antibacterial principle of *Allium sativum*. Determina-tion of the chemical composition. *Journal of the Ameri-can Chemical Society*, 60, 1952-1958.
- Ceylan, N., Gunal, M. and C.M Caliskaner, (1998).** Effect of enzyme and antibiotic supplementation on growth per-formance and ileal parameters in broilers fed rye diets. *UNL Poultry Reports*. <http://ianrpubs.unl.edu/poultry/mp70/mp70-14.htm>
- Chang, Y., Liu, C., Wu, C., Chiang, C., Lian, J., & S. Hsieh, (2011).** Dietary administration of zingerone to enhance growth, non-specific immune response, and resistance to *Vibrio alginolyticus* in Pacific white shrimp (*Litopenaeus vannamei* ) juveniles. *Fish & Shell Immunology*, 32 (2), 284-290.
- Chang, M. L. W. and M. a. Johnson (1980).** Effect of garlic on carbohydrate metabolism and lipid synthesis in rats. *J Nutr* , 110:931-936. [PubMed Abstract](#)
- Charlson, M. and M’ M. McFerren (2007).** “Garlic” what we know and what we don’t know: *Archives of International Medicine*, 167(4):325-326.

- Cheeke, P.R., N. Patton, S. D. Lukefahr and J. I. McNitt (1987).** Rabbit Production, Sixth edition inter State, Danville's.
- Cherian, G., F. W. Wolfe, and J. S. Sim (1996).** Dietary oils with added tocopherols: effects on egg or tissue tocopherols, fatty acids and oxidative stability. *Poult. Sci.*, 75:423–431.
- Chi, M. S., E. T. Koh and T. J. Stewart (1982).** Effect of garlic on lipid metabolism in rats fed cholesterol or lard. *J Nutr* , 112:241-248. [PubMed Abstract](#)
- Choi, H. K. and D. W. Seong (1995).** Effectiveness for erectile dysfunction after the administration of Korean red ginseng. *Korean journal of ginseng science*, 19:17–21.
- Choi, I. H., W. Y. Park and Y. J. Kim (2010).** Effects of dietary garlic powder and -tocopherol supplementation on performance, serum cholesterol levels, and meat quality of chicken. *Poult Sci.* 89,1724-1731
- Chowdhury, S.R., S.D. Chowdhury and T. K. Smth. (2002).** Effect of dietary garlic on cholesterol metabolism in laying hens. *J. Poult. Sci.* 81: 1856-1862.
- Chrastinova, L., M. Chrenková, M. Polacicova, A. Lauková, M. Simonová, R. Szabóová, V. Strompfová, L. Ondruska, J. Rafay, Z. Vasilková, I. Plachá, Š. Faix, M. Haviarová, J. Mojto. (2009).** Utilization of an extract product from ginseng supplementation in diets and different energy levels of granulated feed in the nutrition of rabbits. *Archiva Zootechnica* 12:1, 72-79.
- Chrubasik, S., M. H. Pittler and B. D. Androufogalis (2005).** Zingiberis rhizoma: a comprehensive review on the ginger effect and efficacy profiles. *Phytomedicine.* 12: 684 – 701.
- Coles, E.H. (1986).** Erythrocytes. In: *Veterinary clinical pathology*, 2nd ed. Saundal WB. Company, Philadelphia, London, Toronto. pp. 99-141.
- Cross, D.E., R.M. McDevitt, K. Hillman and T. Acamovic (2007).** The effect of herbs and their associated essential oils on performance, dietary digestibility and gut microflora in chickens from 7 to 28 days of age. *Brit. Poult. Sci.* 48: 496-506.
- Cui, X.; Sakaguchi, T.; Ishizuka, D.; Tsukada, K. and K' Hatakeyama., (1998).** Orally administered ginseng extract reduces serum total cholesterol and triglycerides that induce fatty liver in 66% hepatectomized rats. *J Int Med Res.* Aug-Sep; 26(4):181-187.
- Cullen, S. P., F.J. Monahan, J.J. Callan and J.V. O'Doherty (2005).** The effect of dietary garlic and rosemary on grower-finisher pig performance and sensory characteristics of pork. *Irish Journal of Agricultural and Food Research* 44: 57–67, 2005
- Delmas, F.; Di Giorgio, C.; Elias, R.; Gasquet, M.; Azas, N.; Mshvildadze, V.; Dekanosidze, G.; Kemertelidze, E. & Timon-David, P. (2000).** Antileishmanial activity of three saponins isolated from ivy, alpha-hederin, beta-hederin and hederacolchiside A (1), as compared with their action on mammalian cells cultured in vitro. *Planta Medica* 66, 343–347.
- Demir, E., Sarica, S., Ozcan M.A. and Suicmez, M. (2003).** The use of natural feed additives as alternatives for an antibiotic growth promoter in broiler diets. *British Poultry Science*, 44, S44-S45. [doi:10.1080/00071660301944](https://doi.org/10.1080/00071660301944)
- De Wit J.C, Notermans, S., Gorin, N., and E.H. Kampelmacher (1979).** Effect of garlic oil or onion oil on toxin production by *Clostridium botulinum* [food poisoning bacteria] in meat slurry. *Journal of Food Protection (USA)* 42, 222-224.
- Dias, M.C; Spinardi, B.A.L; Rodrigue, M.N.M Teran, E and L.F' Barbisan ,(2006).** Lack of chemo preventive effect of ginger on colon carcinogenesis induced by 1,2-dimethylhydrazine in Rats. *Food. Chem. Toxicol.*, 44(6): 877-884.
- Dieumou, F. E., A. Teguia, J. R. Kuate, J. D. Tamokou, N. B. Fonge and M. C. Dongmo (2009).** Effects of ginger (*zingiber officinale*) and garlic (*allium sativum*) essential oils on

- growth performance and gut microbial population of broiler chickens. *Livestock Research for Rural Development*. 21: 25-34.
- Di Pasqua R, Betts G, Hoskins N, Edwards M, Ercolini D, and G. Mauriello (2007).** Membrane toxicity of antimicrobial compounds from essential oils. *Journal of Agricultural and Food Chemistry* 55, 4863-4870.
- Dorman, H. J. D. and S. G. Deans (2000).** Antimicrobial agents from plants: antimicrobial activity of plant volatile oils. *Journal of Applied Microbiology*. 88: 308-316.
- Duncan, D.B. (1955).** Multiple range and multiple f tests. *Biometrics*, 11:1-42.
- Durak, I, Ozturk H.S, Olcay, E., C. Guven (2002).** Effects of garlic supplementation on blood lipid and antioxidant parameters and atherosclerotic plaque formation process in cholesterol-fed rabbits. *Journal of Herbal Pharmacotherm* 2(2): 19-23.
- Eilers, R. J. (1967).** Notification of final adoption of an international method and standard solution for hemoglobinnometry: Specific action for preparation of standard solution. *Am. J. Clin. Pathol.* 47: 212-213.
- Ekwenye UNand Elegalam (2005).** Antibacterial activity of ginger (*Zingiber officinale* Roscoe) and garlic (*Allium sativum* L.) extracts on *Escherichia coli* and *Salmonella typhi*. *Journal of Molecular Medicine and Advanced Science* 1, 411-416.
- EL Bushuty, Dina, H.and Shanshan, M. Naglaa (2012).** Managing Knowledge and intellectual capital in Higher Education institutions in Egypt and Arab World 11-12 April 2012 Faculty of Specific Education - Mansoura University
- EI-Deek, A.A., Y.A. Attea, M. Maysa and M. Hannfy, (2002).** Effect of anise (*Pimpinella anisumii*), ginger (*Zingiber officinale* Roscoe) and fennel (*Foeniculum vulgare*) and their mixture on performance of broilers. *Arch. Geflugelkd*, 67: 92-96.
- Emadi M and H. Kermanshahi (2007).** Effect of turmeric rhizome powder on immunity responses of broiler chickens. *Journal of Animal and Veterinary Advances* 6, 833-836.
- Engberg, R. M., M. S. Hedemann, T. D. Leser and B. B. Jensen (2000).** Effect of zinc bacitracin and salinomycin on intestinal micro flora and performance of broilers. *Poultry Science*. 79: 1311–1319.
- Eric, B. (2010).** “Garlic and Other Alliums: The Lore and the Science” Cambridge, Royal Society of Chemistry 34:152-166.
- Esonu, B.O., Emenalom, O.O., Udedibie, A.B.I., Herbert, U., Ekpor, C.F., Okoli, I.C. and F.C. Ihukwumere, (2001).** Performance and blood chemistry of weaner pigs fed raw *Mucuna* beans meal. *Trop. Animal Production Investment* 4:49-54.
- Faix S, Faixová Z, Plachá I, and J. Koppel (2009).** Effect of *Cinnamomum zeylanicum* essential oil on antioxidative status in broiler chickens. *Acta Veterinaria Brno* 78, 411-417.
- Fakhim, R., Y. Ebrahimnezhad, H. R. Seyedabadi and T. Vahdatpour (2013).** Effect of different concentrations of aqueous extract of ginger (*Zingiber officinale*) on performance and carcass characteristics of male broiler chickens in wheat-soybean meal based diets. *J. BioSci. Biotech.* 2013, 2(2): 95-99.
- FAO (1992).** Food and Agriculture Organization. Rome, In: J. L. Brewster, (1994): Onion and other Vegetable, Alliums. Pp 10-20.
- Farinu, G.O., S.G. Ademola, A.O. Ajayi Obe and G.M. Babatunde, (2004).** Growth, haematological and biochemical studies on garlic and ginger fed broiler chickens. *Moor. J. Agric. Res.*, 5: 122-128.
- Farooq M, Faisal S, Mian MA, Durrani FR and M. Arshad (2001).** Status of broiler breeders in Abbottabad and Mansehra. *Sarhad Journal of Agriculture*. 17 489-495.
- Fernell, K. L., N. N. Ekhatior and R. J. Coppings (1990).** A note on the calculation of carcass yield. *J. Appl. Rabbit. Res.* 13: 91-92.

- Foster, S., (2008).** The science and therapeutic application of *Allium sativum*: [www.Stevenfoster.com/education/monograph/garlic.html](http://www.Stevenfoster.com/education/monograph/garlic.html). Accessed on 24/10/11
- Francis, G.; Makkar, H. P. S and K. Becker, (2002).** Dietary supplementation with a Quillaja saponin mixture improves growth performance and metabolic efficiency in common carp (*Cyprinus carpio* L). *Aquaculture* 203, 311–320.
- Fuhrman, B., M. Rosenblat, T. Hayek, R. Coleman and M. Aviram, (2000).** Ginger extract consumption reduces plasma cholesterol, inhibits LDL oxidation and attenuates development of atherosclerosis in atherosclerosis in atherosclerotic apolipoprotein E deficient mice. *J. Nutr.*, 130: 1124-1131.
- Gao, Q. P.; Kiyohara, J.C.; Cyong, H. and Yamada (1991).** Chemical properties and anti-complementary activities of heteroglycans from the leaves of *Panax ginseng*. *Planta Med.* 57:132–136.
- Gao, H. F.; Wang, E. J.; Lien and M. D. Trousdale, (1996).** Immunostimulating polysaccharides from *Panax notoginseng*. *Pharm.Res.* 13 (8):1196-1200.
- Garcia, V, Catalá-Gregori P, Hernández F, Megias M.D. J. Madrid. (2007).** Effect of formic acid and plant extracts on growth, nutrient digestibility, intestine mucosa morphology, and meat yield of broilers. *J. Appl. Poult. Res.*, 16(4): 555-562.
- Gebhardt, R., H. Beck, K.Wagner, (1994).** Inhibition of cholesterol biosynthesis by allicin and ajoene in rat hepatocytes and Hep G2 cells. *Biochim. Biophys. Acta.* 1213; 57-62.
- Ghayur, M., A. Gilani, M. Afridi, and P. Houghton,( 2005).** Cardiovascular effects of ginger aqueous extract and its phenolic constituents are mediated through multiple pathways. *Vascular pharmacology*, 43(4): 234-241.
- Ghazaiah, AA, El-Hakim ASA. AM. Refaie.( 2007).** Response of broiler chicks to some dietary growth promoters throughout different growth periods. *Egyptian Poult. Sci. J.*, 27: 53-57.
- Ghazalah, A.A. and A.M. Ali (2008).** Rosemary leaves as a dietary supplement for growth in broiler chickens. *International Journal of Poultry Science.* 7, 234-239.
- Ghosh, A. K., Banerjee, S., Mullick, H. I., and J. Banerjee, (2011).** *Zingiber officinale*: A natural gold. *International Journal of Pharma and Bio Sciences*, 2 (1). Retrieved from [www.ijpbs.net](http://www.ijpbs.net)
- Gibson, G.R. (2001).** Prebiotics for improved gut health. *Food Science and Technology Abstracts*, Abstract 3731.
- Grau, A., R. Codony, S. Grimpa, M. D. Baucells and F. Guardiola (2001).** Cholesterol oxidation in frozen dark chicken meat : influence of dietary fat source and  $\alpha$ - tocopherol and ascorbic acid supplementation. *Meat Science* 57 (2): 197-208.
- Greathead, H. (2003).** Plants and plant extracts for improving animal productivity. *Proceedings of the Nutrition Society.*
- Grela, E. R., R. Krusiński, and J. Matras. (1998).** Efficacy of diets with antibiotic and herb mixture additives in feeding of growing-finishing pigs. *J. Anim. Feed Sci.* 7:171-175.
- Gupta, S. and S. Ravishankar (2005).** A comparison of the antimicrobial activity of garlic, ginger, carrot, and turmeric pastes against *Escherichia coli* O157: H7 in laboratory buffer and ground beef. *Foodborne Pathogens and Disease* 2, 330-340.
- Halliwell, B.E., and J.M.C. Gutteridge, (1989).** Lipid peroxidation: a radical chain reaction. In: *Free Radicals in Biology and Medicine*, 2nd ed. Oxford University Press, New York, NY, pp. 188–218.
- Hammer, KA, Carson CF, and TV. Riley (1999).** Antimicrobial activity of essential oils and other plant extracts. *Journal of Applied Microbiology* 86, 985-990.
- Harris, W. S.; Dujovne, C. A.; Windsor, S. L.; Gerrond, L. L. C.; Newton, F. A. and R. A. Gelfand, (1997).** Inhibiting cholesterol absorption with CP-88,818 (beta-tigogenin

- cellobioside; tiqueside): Studies in normal and hyperlipidemic subjects. *Journal of Cardiovascular Pharmacology* 30, 55–60.
- Harris, J.C., Cottrell S, Plummer S, and D. Lloyd (2001).** Antimicrobial properties of *Allium sativum* (garlic). *Applied Microbiology and Biotechnology* 57, 282-286.
- Harwood, H. J. ; Chandler, C. E.; Pellarin, L. D.; Bangerter, F. W.; Wilkins, R. W.; Long, C. A.; Cosgrove, P. G.; Malinow, M. R.; Marcetta, C. A.; Pettini, J. L.; Savoy, Y. E. and J. T. Mayne, (1993).** Pharmacologic consequences of cholesterol absorption inhibition: alteration in cholesterol metabolism and reduction in plasma cholesterol concentration induced by the synthetic saponin b-tigogenin cellobioside (CP-88818; tiqueside). *Journal of Lipid Research* 34, 377–395.
- Hashemi, S. R., and H. Davoodi (2010).** Phytochemicals as new class of feed additive in poultry industry. *Journal of Animal and Veterinary Advances*. 9(17): 2295 - 2304.
- Hashish, S.M., El-Ghamry, A. and S.A. Ibrahim, (1995).** The effect of using kemzyme, zinc bacitracin, lysosyme and fermacto on carcass and meat quality in broiler chicks. *Proceedings of the 10th European Symposium on Poultry Nutrition, Antalya, 15-19 October 1995*, 403-404.
- Heinrich, M, Barnes J, Gibbons S, ME .Williamson (2004).** *Fundamentals of Pharmacognosy and Phytotherapy-A textbook*. Churchill Livingstone, U.K. 32-33 & 220-221.
- Hepler, O. E. (1966).** *Manual of Clinical Laboratory Method*. Thomas: Springfield, Illinois.
- Herawati, Veterinary Medical School University of Brawijaya Malang 65145 Indonesia (2010).** The Effect of Red Ginger as Phytobiotic on Body Weight Gain, Feed Conversion and Internal Organs Condition of Broiler. *International Journal of Poultry Science* 9(10): 963 – 967.
- Hernandez, F., Madrid, J., Garcia, V., Orengo, J. and M.D. Megías, (2004).** Influence of two plant extracts on broilers performance, digestibility, and digestive organ size. *Poultry Science*, 83, 169-174.
- Hiai, S.; Yokoyama, H.; Oura, H. and S. Yano, (1979).** Stimulation of pituitary-adrenocortical system by ginseng saponin. *Endocrinol Jpn.* Dec; 26(6):661-5.
- Horton, G.M.J., M.J. Fnnell and B.M. Prasad, (1991a).** Effects of dietary garlic (*Allium sativum*) on performance, carcass composition and blood chemistry changes in broiler chickens. *Can. J. Anim. Sci.*, 71; 939-942.
- Horton, G.M.J, Blethen DB and Prasad BM (1991b).** The effect of garlic (*Allium sativum*) on feed palatability of horses and feed consumption, selected performance and blood parameters in sheep and swine. *Canadian Journal of Animal Science*. 71: 607–610.
- Hu, S.; Concha, C.; Johannisson, A.; Meglia, G. and K. P. Waller, (2001).** Effect of subcutaneous injection of ginseng on cows with subclinical staphylococcus aureus mastitis. *Journal of Veterinary Medicine Series B*. 48 (7):519-528.
- Hu, S.; Concha, C.; Lin, F. and K. P. Waller, (2003).** Adjuvant effect of ginseng extracts on the immune responses to immunization against *Staphylococcus aureus* in dairy cattle. *Veterinary Immunology and Immunopathology*. 91(1):29-37.
- Hughes, P. and J. Heritage (2009).** Antibiotic growth-promoters in food animals. [http://www.fao.org/docrep/article/agrippa/555\\_en.htm](http://www.fao.org/docrep/article/agrippa/555_en.htm). FAO. 14-4-. Ref Type: Electronic Citation
- Hui ,Y.H (1996).** Oleoresins and essential oils. In: Hui Y. H. editor, *Bailey’s industrial oil and fat products*. New York: Wiley-intersciences publication. Pp 145-153.
- Hussein, M. A. (2012).** The effect of ginger (*Zingibar officinale*) aqueous extract on some biochemical parameters and kidney function in male mice. *Kufa Med.Journal* 2012.VOL.15 (1): 273-278.

- Ibrahim, Sh. A. M., O. A. A. Abedo, F. A. F. Ali and S. S. Abdel-Majid (2011).** Ginger root (*Zingiber officinale*) as feed additive in rabbit diets with two levels of protein. *American-Eurasian J. Agric. And Environ. Sci.*, 10 (5): 906-916.
- Immanuel, G., Uma, R. P., Iyapparaj, P., Citarasu, T., Punitha Peter, S. M., Babu, M. M., and A. Palavesam, (2009).** Dietary medicinal plant extracts improve growth, immune activity, and survival of tilapia, *Oreochromis mossambicus*. *Journal of Fish Biology*, 74, 1462- 1475. doi: 10.1111/j.1095-8649.2009.02212.x
- Incharoen, T. , & K. Yamauchi, (2009).** Production performance, egg quality and intestinal histology in laying hens fed dietary dried fermented ginger. *International Journal of Poultry Science*, 8 (11), 1078-1085.
- Indu, S. and A.M. Nirmala (2010).** Comparative chemical composition and antimicrobial activity fresh and dry ginger oils (*zingiber officinale roscoe*). *International Journal of Current Pharmaceutical Research*. 2(4): 40-43.
- Indu M.N, Hatha A.A.M, Abirosh, C, Harsha U, and G. Vivekanandan (2006).** Antimicrobial activity of some of the south-Indian spices against serotypes of *Escherichia coli*, *Salmonella*, *Listeria monocytogenes* and *Aeromonas hydrophila*. *Brazilian Journal of Microbiology* 37, 153-158.
- Islam, R, Sapkota D, and T.N. Upadhyay (2006).** Effect of dietary *Embllica officinalis* in ameliorating aflatoxicosis in broiler chickens. *Indian Veterinary Journal* 83, 865-868.
- Issa, K. J. and J. M. Abo Omar (2012).** Effect of garlic powder on performance and lipid profile of broilers. *Open Journal of Animal Sciences* Vol.2, No.2, 62-68 (2012) <http://dx.doi.org/10.4236/ojas.2012.22010>
- Jagetia, G.C, Baliga M.S, Venkatesh P, and J.N. Ulloor (2003).** Influence of ginger rhizome (*Zingiber officinale Rosc*) on survival, glutathione and lipid peroxidation in mice after whole-body exposure to gamma radiation. *Radiation Research* 160, 584-592.
- Jain, R. C. (1975).** Onion and garlic an experimental cholesterol atherosclerosis in rabbits. *Artery*, 1:115-125.
- Jamroz, D., Orda, J., Kamel, C., Wiliczewicz, A., Wartelecki, T. and J. Skorupinska., (2003).** The influence of phytogetic extracts on performance, nutrient digestibility, carcass characteristics, and gut microbial status in broiler chickens. *Journal of Animal and Feed Sciences*, 12, 583-596.
- Jang I.S, Ko Y.H, Yang HY, Ha J.S, Kim J.Y, Kang, S.Y, Yoo, D.H, Nam D.S, Kim., D.H, and CY. Lee (2004).** Influence of essential oil components on growth performance and the functional activity of the pancreas and small intestine in broiler chickens. *Asian-Australasian Journal of Animal Sciences* 17, 394-400.
- Janz, J. A. M., P. C. H. Morel, B. H. P. Wilkinson, and R. W. Purchas.( 2007).** Preliminary investigation of the effects of low-level dietary inclusion of fragrant essential oils and oleoresins on pig performance and pork quality. *Meat Sci.* 75:350-355.
- Jie, Y. H.; Cammisuli, S. and M. Baggiolini (1984).** Immunomodulatory effects of *Panax ginseng* C. A. Meyer in the mouse. *Agents and actions*, 15:386–391.
- Jimoh, A. A., Olorede B. R., Abubakar A., Fabiyi J. P., Ibitoye E. B., Suleiman N. and S. J. Garba (2012).** Lipids profile and Haematological Indices of Broiler Chickens fed Garlic (*Allium sativum*) - Supplemented Diets. *Vet Adv* 201 2 , 2 (10): 474- 480
- Johnson, MG and R.H. Vaughn (1969).** Death of *Salmonella typhimurium* and *Escherichia coli* in the presence of freshly reconstituted dehydrated garlic and onion. *Applied and Environmental Microbiology* 17, 903-905.

- Jolad, S. D., R. C. Lantz, A. M. Solyom, G. J. Chen, R. B. Bates and B. N. Timmermann (2004).** Fresh organically grown ginger (*Zingiber officinale*): composition and effects on lps-induced pge2 production. *Phytochemistry*. 65: 1937-1954.
- Jun-ling S.; Yuan-liang H.; De-yun W.; Bao-kang Z. and L. Jia-guo. (2006).** Immunologic enhancement of compound Chinese herbal medicinal ingredients and their efficacy comparison with compound Chinese herbal medicines. *Vaccine*. 24; 13:2343-2348.
- Juven, B.J, Kanner, J, Schved F, and H .Weisslowicz (1994).** Factors that interact with the antibacterial action of thyme essential oil and its active constituents. *Journal of Applied Microbiology* 76, 626-631.
- Kamel, C. (2001).** Tracing modes of action and the roles of plant extracts in non-ruminants. In: recent advances in animal nutrition. Eds. Garnsworthy, P.C., & Wiseman, J., Nottingham University Press, Nottingham. Pp. 135-150.
- Kensil, C. R. (1996).** Saponins as vaccine adjuvants. *Critical Reviews in Therapeutic Drug Carrier Systems* 13, 1-55.
- Khalil, H. A., Attia Faten, A. M., Haiam Abd Elhalim, S. and M. E. Mady (2007).** Effect of dietary garlic under hot weather in Japanese quail. *Egypt. Poult. Sci.* 27 (III): 645-661.
- Khan, S., A. Sultan, N. Chand, M. Mushtaq, Rafiullah and M. S. Qureshi (2012).** Garlic (*Allium sativum*) Modulated Serum Cholesterol Level and Improved Immune Status and Carcass Quality of Meat Type Birds. *Proceedings of the 15th AAAP Animal Science Congress 26-30 November (2012)*, Thammasat University, Rangsit Campus, Thailand
- Khan S.H., S. Hasan, R. Sardar, M. A. Anjum (2008).** Effects of dietary garlic powder on cholesterol concentration in Native Desi laying hens. *American Journal of Food Technology*, 3, 207-213
- Kikuzaki, H. and N. Nakatani,(1996).** Cyclic diarylheptanoids from rhizomes of *Zingiber officinale*. *Phytochemistry* ,43:273-277.
- Kim YJ, Jin SK, and HS .Yang (2009).** Effect of dietary garlic bulb and husk on the physicochemical properties of chicken meat. *Poultry Science* 88, 398-405.
- Kim, D. H.; Moon, Y. S.; J. S. Jung (2003).** Effects of ginseng saponin administered intraperitoneally on the hypothalamo-pituitary-adrenal axis in mice. *Neurosci Lett.* 343:62-66.
- Kim, T. H.; Lee, Y. S.; Cho, C. K.; Park, S.; Choi, S. Y.; S. Y. Yool,(1996).** Protective effect of ginseng on radiation-induced DNA double strand breaks and repair in murine lymphocytes. *Cancer Biother Radiopharm* 11:267-272.
- Kim, H. (1992).** Ginsenosides protect pulmonary vascular endothelium against radical-induced injury. *Biochemical and biophysical research communications*, 189, 670-676.
- Kim, J. Y.; Germolec, D. R. and M. I. Luster., (1990).** Panax ginseng as a potential immunomodulator: Studies in mice. *Immunopharmacol Immunotoxicol.* 12:257-76.
- Kim, C. (1976).** Influence of ginseng on mating behavior in male rats. *American journal of Chinese medicine*, 4:163-168.
- Klein, C.; T. Sato ; M. M. Meguid and G. Miyata (2000).** From food to nutritional support to specific nutraceuticals: a journey across time in the treatment of disease. *J Gastroenterol* .35:1-356.
- Köhler, E., Köhle's Medizinal-Pflanzen. (1887).** Hannover: Pabst, G.
- Konjufca VH, Pesti GM, Bakalli RI (1997).** Modulation of cholesterol levels in broiler meat by dietary garlic and copper. *Poultry science* 76: 1264-1271
- Krishnakantha, T. and B. Lokesh,( 1993).** Scavenging of superoxide anions by spice principles. *Indian J. Biochem. Biophys.*, 30: 133-134.

- Kudo, K.; Akasaka, Y.; Miyate, Y.; Takahashi, E.; Tachikawa, E. and T. Kashimoto (1992).** Effects of red ginseng fractions on catecholamine secretion from bovine adrenal medullary cells. *J. Med. Pharm Soc Wakan-Yaku*. 9:236–239. (text in Japanese with English abstract).
- Kumar, M., R.S. Choudhary and J.K. Vaishnar, (2005)** *Ind. J. Poult. Sci.*, 40, 137-141.
- Kyo, E., N. Uda, S. Kasuga, and Y. Itakura (2001).** Immunomodulatory Effects of Aged Garlic Extract. *J. Nutr.* Vol. 131 ( 3): 1075S-1079S
- Lawson, L.D. (1998).** Garlic: A review of its medicinal effects and indicated active compounds. In: Lawson, L.D. and R. Bauer, (eds.), *Phytomedicines of Europe: Their Chemistry and Biological Activity* Pp: 176–209. ACS Symposium Series, No. 691, Washington, D.C: American Chemical Society.
- Lee, E. J.; E. Ko and J. Lee (2004).** Ginsenoside Rg1 enhances CD4(+)T-cell activities and modulates Th1/Th2 differentiation. *Int Immunopharmacol* .4:235-244.
- Lee, K. W., H. Everts, H. J. Kappert, M. Frehner, R. Losa and A. C. Beynen (2003).** Effects of dietary essential oil components on growth performance, digestive enzymes and lipid metabolism in female broiler chickens. *British Poultry Science*. 44:450-457.
- Lewis, M.R, Rose S.P, Mackenzie A.M, and L.A. Tucker (2003).** Effects of dietary inclusion of plant extracts on the growth performance of male broiler chickens. *British Poultry Science* 44, 43-44.
- Lin, J. H. (1995).** Effects of ginseng on the blood chemistry profile of dexamethasonetreated male rats. *American journal of Chinese medicine*, 23:167–172.
- Liu, J. S.; Wang, H.; Liu, L.; Yang, and G. Nan. (1995):** Stimulatory effect of saponin from *Panax ginseng* on immune function of lymphocytes in the elderly. *Mechanisms Ageing Development* 83:43–53.
- Liu, Z. Q.; Luo, X. Y. and G. Z. Liu, (2003).** In vitro study of the relationship between the structure of ginsenoside and its antioxidative or prooxidative activity in free radical induced hemolysis of human erythrocytes. *J Agric Food Chem*, 51:2555-2558.
- Longhout, P. (2000).** New additives for broiler chickens. *World Poultry-Elsevier*, 16 (3): 22-27.
- Lonzotti, V. (2006).** The analysis of onion and garlic. *Journal of Chromatography*, 112: 3–22.
- Lopez, P, Sanchez C, Batlle R, and C. Nerin (2005).** Solid-and vapor-phase antimicrobial activities of six essential oils: Susceptibility of selected foodborne bacterial and fungal strains. *Journal of Agricultural and Food Chemistry* 53, 6939-6946.
- Lovkova, M.Y., Buzuk, G.N., Sokolova, S.M. and N.I Kli-ment'eva (2001).** Chemical features of medicinal plants (a review). *Applied Biochemistry and Microbiology*, 37, 229-237. doi:10.1023/A:1010254131166
- Luadicina, D.C., and L.J Marnett (1990).** Enhancement of hydroperoxide-dependent lipid peroxidation in rat liver microsomes by ascorbic acid. *Arch. Biochem. Biophys.*, 278: 73–80.
- Lucky, (1977).** Handbook of histopathologic and histochemical staining. 3<sup>rd</sup> Ed., Buterworth London . O. Lysenko, (1961): *Pseudomonas* on attempt at general classification. *J. of Microbiol.* 25, 379.
- Mahady, G. B., S. L. Pendland, G. S. Yun, Z. Z. Lu and A. Andstoia (2003).** Ginger (*zingiber officinale roscoe*) and the gingerols inhibit the growth of cag a± strains of *helicobacter pylori*. *Anticancer Research*. 23: 3699 – 3702.
- Mahmood S, Mushtaq-Ul-Hassan M, Alam M, and F. Ahmad (2009).** Comparative efficacy of *Nigella sativa* and *Allium sativum* as growth promoters in broilers. *International Journal of Agriculture and Biology* 11, 775-778.

- Malekizadeh , M; Moeini , M.M and S.H. Ghazi ( 2012).** The effects of different levels of ginger (*ZingiberOfficinaleRescoe* ) and Turmeric (*Curcuma longa* Linn) Rhizomes powder on some blood metabolites and production performance characteristic of Laying Hens . J. Agr ,Sci. Tech ., 14: 127-134.
- Malu, S. P., G. O. Obochi, E. N. Tawo and B. E. Nyong (2008).** Antibacterial activity and medicinal properties of ginger (*zingiber officinale* ). Global Journal of Pure and Applied Sciences. 15(3): 365-368.
- Maluf ,M.L.F, Takahachi, G, Svidzinski T.I.E, Xander, P, Apitz-Castro R, Bersani-Amado CA, and R.K.N. Cuman. (2008).** Antifungal activity of ajoene on experimental murine paracoccidioidomycosis. Revista Iberoamericana de Micologia 25, 163-166.
- Manal, Ismail, F. Mohamed Z. Gad and Mohamed A. Hamdy.(1999).** Study of the hypolipidemic properties of pectin, garlic and ginseng in hypercholesterolemic rabbits.Pharmacological Research.39; 2; 157-166.
- Mansoub, N. H. and M. A. M. Nezhady. (2011).** The effect of using Thyme, Garlic and Nettle on performance, carcass quality and blood parameters. Annals of Biological Research, 2011, 2 (4) :315-320
- Mathew, B. C., N. V. Prasad and R. Prabodh. (2004).** Cholesterol-lowering effect of organo-sulphur compounds: a possible mechanism of action. Kathmandu University Med. J. 2 (2): 100-102.
- Matsuura, M. (2001).**Saponins in garlic as modifiers of the risk of cardiovascular disease.Journal of Nutrition 131, 1000S–1005S.
- McAllister, T. A.; Annett, C. B.; Cockwill, C. L.; Olson, M. E.; Wang, Y. and P.R. Cheeke (2001).**Studies on the use of *Yucca schidigera* to control giardiasis. Veterinary Parasitology 97, 85–99.
- McGhee, J. R.; Mestecky, J.; Dertzbaugh, M. T.; Eldridge, J. H.; Hirasawa, M. and H. Kiyono (1992).** The mucosal immune system: from fundamental concepts to vaccine development. Vaccine 10, 75–88.
- Mellor, S. (2000).** Nutraceuticals- alternatives to antibiotics. World Poultry. 16; 30-33.
- Mengoni, F.; Lichtner, M.; Battinelli, L.; Marzi, M.; Mastroianni, C. M.; Vullo, V. and G. Mazzanti,. (2002).** In vitro anti-HIV activity of oleanolic acid on infected human mononuclear cells. Planta Medica 68, 111–114.
- Mitruka, B.M. and H.M .Rawnsley,. (1977).** Clinical biochemical and hematological reference values in normal experimental animals. Masson Publ. Co. New York, pp. 102-117.
- Mohamed, A. B., M. A. M. Al-Rubae and A. Q. Jalil (2012).** Effect of ginger (*zingiber officinale*) on performance and blood serum parameters of broiler. International Journal of Poultry Science. 11 (2): 143-146.
- Moorthy, M., S. Ravi, M. Ravikumar, K. Viswanathan and S. C. Edwin (2009).** Ginger, pepper and curry leaf powder as feed additives in broiler diet. International Journal of Poultry Science. 8 (8): 779 – 782.
- Morrissey, P.A., Brandon, S., Buckley, D.J., Sheehy, P.J.A., and M. Frigg,. (1997).** Tissue content of  $\alpha$ -tocopherol and oxidative stability of broilers receiving dietary  $\alpha$ -tocoperol acetate supplement for various periods postslaughter.
- Muhammad J, Durrani F, Hafeez A, Khan RU and M I .Ahmad. (2009).** Effect of aqueous extract of plant mixture on carcass quality of broiler chicks Journal of Agriculture and Biological Science. 9 56-59.
- Murphy, L. L.and T. J. Lee,. (2002).** Ginseng, sex behavior and nitric oxide. Ann NY Acad Sci. 962:372-377.

- Muwalla, M. M. and M .N .Abuirmeileh., (1990).** Suppression of avian hepatic cholesterogenesis by dietary ginseng .The Journal of Nutritional Biochemistry, Volume1, Issue 10, October 1990, Pages 518-521.
- Myung ,S.C, Eunsook T.K, T.J. Stewart. (1982).** Effects of garlic on lipid metabolism in rats fed cholesterol or lard. Journal of Nutrition 112:241–248.
- Nah, S. Y.; Park, H. J and E. W. Mc Cleskey., (1995).** A trace component of ginseng that inhibit Ca<sup>2+</sup> channels through a pertussis toxin –sensitive G protein, Proc. Natl. Acad. Sci. USA, 92:8739-8743.
- Naidoo, V., L. J. McGaw, S. P. Bisschop, N. Duncan, and J. N. El off. (2008).** The value of plant extracts with antioxidant activity in attenuating coccidiosis in broiler chickens. Veterinary Parasitology. 153: 214–219.
- Najafi., P. and M .Torki. (2010).** Performance, blood metabolites and immunocompetence of broiler chicks fed diets included essential oils of medicinal herbs. Journal of Animal and Veterinary Advances 9, 1164-1168.
- Nakajima, S.; Uchiyama, Y.; Yoshida, K.; Mizukawa, H. and E .Haruki., (1998).**The effects of Ginseng Radix Rubra on human vascular endothelial cell.American Journal of Chinese Medicine. 26(3/4):365-373.
- Nakatani, N. (2000).** Phenolic antioxidants from herbs and spices. Bio factors, 13: 141 – 146.
- Nammi, S., S. Sreemantula and B. D. Roufogalis (2009).** Protective Effects of Ethanolic Extract of Zingiber officinale Rhizome on the Development of Metabolic Syndrome in High-Fat Diet-Fed Rats. Basic & Clinical Pharmacology & Toxicology, 104: 366–373.
- Nanasombat S and P .Lohasupthawee. (2005).** Antibacterial activity of crude ethanolic extracts and essential oils of spices against Salmonellae and other enterobacteria. KMITL Science and Technology Journal 5, 462-469.
- National., Research Council (N.R.C) (1977).** Nutrient Requirements of Domestic Animals USA National Academy of Science. Washington, D. C.
- Natt, M. P. and C. A. Herrick (1952).** A New Blood Diluent for Counting the Erythrocytes and Leucocytes of the chicken. Poultry Sci. 31: 735-738.
- NCEP., ( 2001).** Executive summary of the third report of the National Cholesterol Education Program (NCEP) Expert panel on detection, evaluation and treatment of high blood cholesterol in adults (Adult Treatment Panel 111). J. Am. Med. Assoc., 285: 2486-2497.
- Nicoll , R and M.Y .Henein ,.( 2009).** Ginger (Zingiber Officinale Roscoe) : a hot remedy for cardiovascular disease . In. J. cardiol., 131: 408- 409.
- Njidda, A. A., Igwebuike, J. U. and , C. E .Isidahomen. (2006).**Haematological Parameters and carcass characteristics of weaning rabbits fed grade levels of molasses.Global Journal of Agric. Sci., 5(7): 167-172.
- North, M.O. (1981).** Commercial Chicken production. Manual 2<sup>nd</sup> Edition Library of Congress AVI Publishing Comany INC, USA.
- Ock, S. S.; Kroh, M.; Kim Nam Ryeol; Joh Yong Geul; Cho Min Young (2002).** Effect of red ginseng upon post-operative immunity and survival in patients with stage 111 gastric cancer. American Journal of Chinese Medicine; 30(40):483-494.
- Oda, K.; Matsuda, H.; Murakami, T.;Katayama, S.; Ohgitani, T. and M. Yoshikawa.,(2000).** Adjuvant and haemolytic activities of 47 saponins derived from medicinal and food plants. Biological Chemistry 381, 67-74.
- Okada, S., (1996).** Iron-induced tissue damage and cancer: the role of reactive oxygen species-free radicals. Pathology International, 46: 311–332.

- Okoye, F.C, Ugwueme M.C. and J.U. Mbarah, (2006).** Effects of local spices on the utilization of cassava peel meal based diets by weaver rabbits. *Pakistan Journal of Nutrition*. 5(3) 202- 205.
- Oladele, O. A.; Emikpe, B. O. and H. Bakare., (2012).** Effects of Dietary Garlic (*Allium sativum* Linn.) Supplementation on Body Weight and Gut Morphometry of Commercial Broilers. *Int. J. Morphol.*, 30(1):238-240.
- Omage J.J, Onimisi P.A, Adegbite E.K. and M.O .Agunbiade (2007).** The effect of ginger (*Zingiber officinale* Roscoe) waste meal on growth performance, carcass characteristics, serum lipid and serum cholesterol profiles of rabbit. *Pakistan Journal of Nutrition*. 6 (4): 359-362.
- Onibi GE, Adebisi OE, Fajemisin AN, and AV. Adetunji. (2009).** Response of broiler chickens in terms of performance and meat quality to garlic (*Allium sativum*) supplementation. *African Journal of Agricultural Research* 4, 511-517.
- Onimisi, P. A., I. I. Dafwang and J. J. Omage (2005).** Growth performance and water consumption pattern of broiler chicks fed graded levels of ginger waste meal. *J. Agric. Forest. Soc. Sci.*, 3(2): 113-119.
- Ortsergu, D. D., A. C. Andyar and T. I. Anthony (2008).** Growth performance of growing rabbits fed graded levels of garlic (*Allium sativum*). *Proceedings of the 33rd Annual Conference of the Nigerian Society for Animal Production* 189-191.
- Osfor, M. M. H. (1995).** Some biochemical and nutritional studies on the effect of *Panax ginseng* powder on adult Japanese quails. *Polish Journal of Food and Nutrition Sciences* Vol. 4/45, 73-79.
- Ouwehand AC, Tiihonen K, Kettunen H, Peuranen S, Schulze H, and N. Rautonen (2010).** In vitro effects of essential oils on potential pathogens and beneficial members of the normal microbiota. *Veterinari Medicina* 55, 71-78.
- Owen, R. T. (1981).** Ginseng: A pharmacological profile. *Drugs of today*, 17:343–351.
- Park, K. M.; Kim ,Y. S.; Jeong, T. C.; Joe, C. O.; Shin, H. J; Lee, Y. H ;Nam.,K. Y.and J. D .Park, .(2001).** Nitric oxide is involved in the immunomodulating activities of acidic polysaccharide from *Panax ginseng*. *Planta Med. Mar*; 67(2):122-126.
- Perto, Nihal, K. (2007).** Effect of ginseng supplementation on immunity and physiological response of broiler chicks. M. Sc. Thesis, Fac. Agric. (Dammanhour), Alexandria University.
- Pervez., A (1992).** Response of broiler chicks to different feed additives. M.Sc Thesis NWFP Agricultural University, Peshawar, Pakistan.
- Phillipson, J. D. and Anderson, L. A. (1984).** Ginseng-quality safety and efficacy? *Pharm J*. 232:161-165.
- Platel, K. and K. Srinivasan (2000).** Influence of dietary spices and their active principles on pancreatic digestive enzymes in albino rats. *Nahrung*. 44: 42 – 46.
- Platel, K. and K. Srinivasan (1996).** Influence of dietary spices or their active principles on digestive enzymes of small intestinal mucosa in rats. *International Journal of Food Science and Nutrition*. 47: 55 – 59.
- Plock, A.; Sokolowska-Kohler, W. and W. Presber, (2001).** Application of flow cytometry and microscopical methods to characterize the effect of herbal drugs on *Leishmania* spp. *Experimental Parasitology* 97, 141–153.
- Potter, S. M.; Jimenez-Flores, R.; Pollack, J.; Lone, T. A.and M. D. Berber-Jimenez., (1993).** Protein saponin interaction and its influence on blood lipids. *Journal of Agricultural and Food Chemistry* 41, 1287–1291.

- Prasad, R., M.K.Rose, M. Virmani, S.L. Garg, and J.P. Puri, (2009).** Lipid profile of chicken (*Gallus domesticus*) in response to dietary supplementation of garlic (*Allium sativum*). *J. Poult. Sci.* 8(3); 270-276.
- Prathap, D.P and. K.A. Ponnusamy (2007).** Factor influencing the attitude of farmers of Jamill Nada, India towards farming. *Livestock Research for Rural Development* 19 (6) 51-54.
- Qureshi, A. A., T. D. Crenshaw, N. Abuirmeileh, D. M. Peterson and C. E. Elson (1987).** Influence of minor plant constituents on porcine hepatic lipid metabolism: impact on serum lipid. *Atherosclerosis*, 64: 109-115.
- Qureshi, A.A., Abuirmeileh, N., Din, Z.Z., Elson, C.E. and W.C. Burger, (1983a)** Inhibition of cholesterol and fatty acid biosynthesis in liver enzymes and chicken hepatocytes by polar fractions of garlic. *Lipids*, 18, 343- 348. doi:10.1007/BF02537229
- Qureshi, A. A.; Abuirmeileh, N.; Din, Z.Z.; Ahmad, Y.; Burger, W.C. and C. E Elson,.(1983b).** Suppression of cholesterologenesis and reduction of LDL cholesterol by dietary ginseng and its fractions in chicken liver. *Atherosclerosis*, Volume 48, Issue1, July 1983, Pages 81-94.
- Rababah, T. M., N. S. Hettiarachchy and R. Horax (2004).** Total phenolics and antioxidant activities of fenugreek, green tea, black tea, grape seed, ginger, rosemary, gotu kola, and ginkgo extracts, vitamin e, and tertbutylhydroquinone. *Journal of Agriculture, Food and Chemistry.* 52: 5183 – 5186.
- Raeesi, M., S.A. Hoeyini-Aliabad, A. Roofchae, A. Zare Shahneh and S. Pirali, (2010).** Effect of periodically use of garlic (*Allium sativum*) powder on performance and carcass characteristics in broiler chickens. *World Academy of Science, Engine. Techno.* 68; 1213-1219.
- Rahimi, S., Z. T. Zadeh, M. A. K. Torshizi, R. Omidbaigi and H. Rokni (2011).** Effect of the three herbal extracts on growth performance, immune system, blood factors and intestinal selected bacterial population in broiler chickens. *Journal of Agricultural Science and Technology.* 13: 527 - 539.
- Rajasree, C. R., T. Rajmohan, and K. T. Agusti (1999).** Biochemical effects of garlic on lipid metabolism in alcohol fed rats. *Ind J Exp Biol*, 37:243-247.
- Ramakrishna , R.R; Plated , K and K. Srinivasan ,( 2003).** In vitro influence of spices and spice-active principle on digestive enzymes of rat pancreas and small intestine. *Nahrung.*, 47: 408-412.
- Rao, R. R., K. Platel and K. Srinivasan (2003).** In vitro influence of spices and spiceactive principles on digestive enzymes of rat pancreas and small intestine (Abstract). *Nahrung-Food.* 47: 408-412.
- Rao, G.N. (1996).** Influence of diet on tumors of hormonal tissues. *Prog Clin Biol Res.*, 394:41-56.
- Reeds PJ, Burrin DG, Davis TA and ML. Fiorotto (1993).** Post-natal growth of gut and muscle: competitors or collaborators. *Proceedings of the Nutrition Society* 52 57–67
- Rivera, E.; Pettersson, F. E.; Inganas, M.; Paulie, S. and K. O. Gronvik, (2005).** The Rb1 fraction of ginseng elicits a balanced Th1 and Th2 immune response. *Vaccine.* 23(46/47):5411-5419.
- Rivera, E.; Daggfeldt, A. and S. Hu., (2003).** Ginseng extract in a aluminium hydroxide adjuvanted vaccine improves the antibody response of pigs to porcine parvovirus and *Erysipelothrix rhusiopathiae*. *Veterinary Immunology and Immunopathology.* 91(1): 19-27.

- Roscoe, W. (1807).** The transactions of the linnean society of london. A new arrangement of the plants of the monandrian class usually called scitamineae. Vol. 8. London: Linnean Society of London.
- Saeid, J.M.; Mohamed,A.B. and M.A. AL-Baddy,(2010).** Effect of aqueous extract of ginger (*Zingiber officinale*) on blood biochemistry parameters of broiler. *International Journal of Poultry Science* , 9 (10): 944-947.
- Sahin, K., and O. Kucuk,. (2003a).** Heat stress and dietary vitamin supplementation of poultry diets. *Nutr. Abstr. Rev. Ser. B Livest. Feed Feeding* 73, 41R–50R.
- Sarica S, Ciftci A, Demir E, Kilinc K, and Y Yildirim (2005).** Use of an antibiotic growth promoter and two herbal natural feed additives with and without exogenous enzymes in wheat based broiler diets. *South African Journal of Animal Science* 35, 61-72.
- SAS Institute, (2000).** SAS SQL Procedure User Guide, Version 8. 1<sup>st</sup> Edn. SAS, Cary, ISBN: 13: 978- 158025599X, pp: 576. *Science* 81:1856–1862.
- Scaglione, F.; Cattaneo, G.; Alessandria, M.and R. Cogo, (1996).** Efficacy and safety of the standardized Ginseng extract G115 for potentiating vaccination against the influenza syndrome and protection against the common cold [corrected]. *Drugs Exp Clin Res.* 22:65-72.
- Scaglione, F.; Ferrara, F.; Dugnani, S.; Falchi, M.; Santoro, G.and ,F Frascini.(1990).** Immunomodulatory effects of two extracts of *Panax ginseng* C.A. Meyer.*Drugs Exp Clin Res.* 16:537-42.
- Schalm, O.W; N.C.Jain; E.J.Carroll (1986):** *Veterinary haematology* 4<sup>th</sup> Ed. Lea and Febiger. Philadelphia.
- Scholant, W (1985).** A compendium of rabbit production appropriate for conditions in developing countries. *Schriftenreihe der GTZ* No. 169, pp. 85.
- Sertie´, J. A., A. C. Basile and S. Panizza (1991).** Pharmacological assay of *Cordia verbenacea*. Iii: oral and topical anti-inflammatory activity and gastrotoxicity of a crude leaf extract. *Journal of Ethnopharmacology.* 31: 239-247.
- Shariq, S., S. H. Tajuddin and S.H. Afaq (2011).** Spice and medicine: *zingiber officinale*. *International Journal of Applied Biology and Pharmaceutical Technology.* 1 (3): 968-973.
- Sharma, I.; Gusain, D. and V.P. Dixit,. (1996).** Hypolipidemic and antiatherosclerotic effects of *Zingiber officinale* in cholesterol-fed rabbits. *Phto. Res.* 10:517-518.
- Sharma, V. D., M. S. Sethi, A. Kumar and J. R. Rarotra (1977).** Antibacterial property of *Allium sativum* Linn.: In vivo and in vitro studies. *Indian Journal of Experimental Biology* 15, 466-468.
- Shin ,J. Y.; Song, J. Y.; Yun ,Y. S.; Yang ,H. O.; Rhee, D. K. and S .Pyo, . (2002).**Immunostimulating effects of acidic polysaccharides extract of *Panax ginseng* on macrophage function. *Immunopharmacol Immunotoxicol.* 2002 Aug; 24(3):469-82.
- Shin, K. S.; Kiyohara, H.; Matsumo, T.and H.Yamada, (1997).** Rhamnogalactouronan II from the leaves of *Panax ginseng* C.A. Meyer as macophage Fc-receptor expression enhancing polysaccharide. *Carbohydr Res.* 300:239-49.
- Siddaraju, M. and S. Dharmesh,( 2007).** Inhibition of gastric H<sup>+</sup>, K<sup>+</sup>-ATPase and *Helicobacter pylori* growth by phenolic antioxidants of *Zingiber officinale*. *Mol. Nutr. Food Res.*, 51(3): 324-332.
- Simonová, M, R. Szabóová, L.Chrastinova, A. Lauková, M. Haviarová, V. Strompfová, I. Plachá, S. Faix, Z. Vasilková, J. Mojto and J. Rafay (2008).** The use of a Ginseng extract in rabbit. In: 9th World Rabbit Congress, 2008, Verona, Italy, 809-813.

- Sindambiwe, J. B.; Calomme, M.; Geerts, S. ;Pieters,L.;Vlietnck, A. J. and D.A Vanden,Berghe,(1998).**Evaluation of biological activities of triterpenoid saponins from *Maesa lanceolata*. *J.of Natural production* 61,585-590.
- Singh, S. S., S. K. Agarwal, S. Verma, M. S. Siddiqui, and S. Kumar (1998).** Chemistry of garlic (*Allium sativum*) with special reference to alliin and allicin: A review. *Journal of Medicinal and Aromatic Plant Sciences* 20, 93-100.
- Sirosis, M. (1995).** Veterinary clinical laboratory procedure. Mosby year book, Inc. St. Louis, Missouri, USA.
- Sivam, G.P. (2001).** Protection against helicobacter pylori and other bacterial infections by garlic. *Journal of Nutri-tion*, 131, 1106S-1108S.
- Sklan, D., Y. N.Berner, H. D. Rabinowitch (1992).** The effect of dietary onion and garlic on hepatic lipid concentrations and activity of antioxidative enzymes in chicks, *Journal of Nutrition and Biochemistry* 3:322–325.
- Smith-Palmer, S. (1998).** Antimicrobial properties of plant essential oils and essences against five important food-borne pathogens. *Letters in Applied Microbiology* 26, 118-122.
- Soliman, A. Z. M. Ali, M. A. and Zeinab M. A. Abdo.(2003).** Effect of marjoram, bacitracin and active yeast as feed additives on the performance and the microbial content of the broiler's intestinal tract. *Egypt. Poult. Sci., Vol. 23:* 445-467.
- Song, Zhijun; A. Kharazmi; Hong-Wu; V. Faber, ; C. Moser ; H. K. Johansen ; J. Rygaard and N. Hoidy (1998).** Effects of ginseng treatment on neutrophil chemiluminescence and immunoglobulin G subclasses in arat model of chronic *Pseudomonas aeruginosa* pneumonia.*Clinical and Diagnostic Laboratory Immunology.* 5(6):882-887.
- Song, Z. J.; Johansen, H. K.; Faber, V.and N. Hoiby,. (1997).** Ginseng treatment enhances bacterial clearance and decreases lung pathology in athymic rats with chronic *P. aeruginosa* pneumonia. *APMIS, Acta Pathologica, Microbioloica et Immunological Scandinavica.* 105(6):438-444.
- Song Sanga, A. A.S.; U. S. A. O. Reawadee; P. S. Penpak; A. A. S. Sawanit; P. Wunchai (2008):** Effect of Garlic (*Allium sativum*) Supplementation in Diets of Broilers on Productive Performance, Meat Cholesterol and Sensory Quality. *Tropentag 2008*, University of Hohenheim, October 7-9.Conference on International Research on Food Security, Natural Resource Management and Rural Development.
- Sonnenborn, U. and Y. Proppert (1991).**Ginseng (*Panax ginseng* C.A. Meyer). *British journal of phytotherapy*, 2: 3–14.
- Southon, S.; Johnson, I. T.; Gee, J. M. and K. R. Price,. (1988).**The effect of Gypsophylla saponins in the diet on mineral status and plasma cholesterol concentration in the rat. *British Journal of Nutrition* 59, 49–55.
- Sovova, M. and P. Sova (2004).** Pharmaceutical importance of *Allium sativum* L 5. Hypolipidemic effects in vitro and in vivo, *Ceska. Slovakia Farm* 53(3):117-123.
- Soyebo,. K.O (2006).** Constraints against wide spread rabbit keeping among household in Osun and Ogun State. Implications for family economic empowerment. *Journal of Applied Science and Research.* 2 (12) 1244-1247.
- Spore,. (2007).** Rearing rabbits. *Family farming: the future of world.* Spore 131 CTA publication.. 6.
- Spreeuwenberg, M.A.M, Verdonk J.M.A.J, Gaskins, H.R and M.W.A Verstegen (2001).** Small intestine epithelial barrier function is compromised in pigs with low feed intake at weaning. *Journal of Nutrition* 131, 1520–1527.
- Stanacev, V, Dragan G, Niko M, Nikola P, Vldislav S, P. Nada (2011).** Effect of garlic (*Allium sativum*). in fattening chicks nutrition. *Afr. J. Agric. Res.* 6(4):943- 948.

- Steiner, T. (2009).** Phytogenics in animal nutrition: natural concepts to optimize gut health and performance. Nottingham University Press, Austria, ISBN: 978-1-904761-71-6.
- Sturkie, P. D. (1986).** Avian Physiology. 4 ed. Springer-Verlag. New-York. Berlin. Heidelberg. Tokyo.
- Tatara M. R., Śliwa E., Dudek K., Mosiewicz J., T. Studzińska.(2005).** Effect of aged garlic extract and allicin administration to sows during pregnancy and lactation on body weight gain and gastrointestinal tract development of piglets. Bull Vet. Inst. Pulawy. 49:349–355.
- Thayalini, K., S. Shanmugavelu, P. M. Saminathan, M. S. Siti Masidayu, Y. Nor Idayusni, H. Zainuddin, C. A. Nurul Akmal, and H. K. Wong (2011).** Effects of cymbopogon citratus leaf and zingiber officinale rhizome supplementation on growth performance, ileal morphology and lactic acid concentration in broilers. Malaysian Journal of Animal Science. 14:43-49.
- Thomson , M; al- Qattan , K; Khan , I; Ali, M and al-Sawan, S.( 2002).** The use of ginger ( ZingiberOfficinaleRescoe) as a potential anti- inflammatory and antithrombotic agent. Prostaglandins leukot .Essent .Fatty Acid ., 76: 475-478.
- Thompson, E. H., I. D. Wolf, and C. E. Allen (1973).** Ginger rhizome: A New source of proteolytic enzyme. Journal of Food Science, Vol. 38: 652-655.
- Thongson C, Davidson PM, Mahakarnchanakul W, and J. Weiss (2004).** Antimicrobial activity of ultrasound-assisted solvent-extracted spices. Letters in Applied Microbiology 39, 401-406.
- Tode, T.; Kikuchi, Y.; Hirata, J.; Kita, T.; Nakata, H.and I. Nagata,.(1999):** Effect of Korean red ginseng on psychological functions in patients with severe climacteric syndromes. Department of Obstetrics and Gynecology, National Defense Medical College, Tokorozawa, Saitama, Japan. qw104765@nifty.ne.jp. Int J Gynaecol Obstet.( 1999) Dec; 67(3):169-74.
- Tollba AAH, H. M. M. Azouz and M. H. Abd-Samad.(2007).** Antioxidants supplementation to diet of Egyptian chicken under different environmental conditions: 2 - The growth during cold winter stress. Egyptian Poult. Sci. J., 27: 727-748.
- Tollba, A.A.H. and M.S.H. Hassan,. (2003)** Using some natural additives to improve physiological and productive performance of broiler chicks under high temperature conditions. Black cumin (niglla sativa) or Garlic (allium sativum). Poultry Science, 23, 327-340.
- Tomoda, M. K.; Takeda, N.; Shimizu, R.; Gonda, N.and Ohara (1993).** Characterization of two acidic polysaccharides having immunological activities from the root of Panax ginseng. Biol. Pharm. Bul. 16(1):22–25.
- Traore ,F.; Faure, R.; Ollivier ,E.; Gasquet ,M.; Azas, N.; Debrauwer, L.; Keita, A.; Timon-David ,P. and G. Balansard ., (2000).** Structure and antiprotozoal activity of triterpenoid saponins from Glinus oppositifolius. Planta Medica 66, 368–371.
- Tropentag.( 2008).** University of Hohenheim, October 7-9, 2008, Conference on International Research on Food Security, Natural Resource Management and Rural Development
- Onu , P. N. and P. M. Aja. (2011).** Growth Performance and Haematological Indices of Weaned Rabbits Fed Garlic (Allium Sativum) And Ginger (Zingiber Officinale) Supplemented Diets. International Journal of Food, Agriculture and Veterinary Sciences ISSN: 2277-209X (Online) An Online International Journal Available at <http://www.cibtech.org/jfav.htm> 2011 Vol. 1 (1):51-59.
- Velíšek J., Kubec R., J Davídek. (1997).** Chemical composition and classification of cullnary and pharmaceutical garlic-cased products. Z. Lebensm Unters Forsch A. 204:161–164.

- Venkatramalingam, K., Godwin-Christopher, J., & T. Citarasu., (2007)** Zingiber officinalis an herbal appetizer in the tiger shrimp *Penaeus monodon* (Fabricius) larviculture. *Aquaculture Nutrition*, 13 (6), 439-443. doi: 10.1111/j.1365-2095.2007.00495.x
- Verma, S., M. Singh, P. Jain, and A. Bordia,( 2004).** Protective effect of ginger, Zingiber officinale ROSC on experimental atherosclerosis in rabbits. *Indian J. Exp. Biol.*, 42(7): 736-738.
- Voces, J.; Alvarez, A. I.; Vila, L.; Ferrando ,A.; Cabral de Oliveira ,C.and J.G Prieto, .(1999).** Effects of administration of the standardized Panax ginseng extract G115 on hepatic antioxidant function after exhaustive exercise.*Comp Biochem Physiol C Pharmacol Toxicol Endocrinol.* (1999) Jun; 123(2):175-84.
- Wadikar, D. D. , & K. S. Premavalli., (2011).** Appetizer administration stimulates food consumption, weight gain and leptin levels in male Wistar rats. *Appetite*, 57, 131-133.
- Wagner, H.; Norr, H. and H. Winterhoff, (1994).** Plant adaptogens. *Phytomedicine*, 1:63.
- Wang, H and TB. Ng (2005).** An antifungal protein from ginger rhizomes. *Biochemical and Biophysical Research Communications* 336, 100-104.
- Wang, J. P., J. S. Yoo, H. D. Jang, J. H. Lee, J. H. Cho and I. H. Kim. (2011).** Effect of dietary fermented garlic by *Weissella koreensis* powder on growth performance, blood characteristics, and immune response of growing pigs challenged with *Escherichia coli* lipopolysaccharide. *J ANIM SCI* July 2011 vol. 89 no. 7 2123-2131
- Wang, M.; Guilbert, L. J.; Ling, L.; Li, J.; Wu, Y.; Xu, S.; Pang, P. and J. Shan, J..(2001).** Immunomodulating activity of CVT-E002, a proprietary extract from North American ginseng (*Panax quinquefolium*). *J. PharmPharmacol.*53 (11):1515-23.
- Wang, Y.; McAllister, T. A.; Yanke, L. J. and P. R. Cheeke., (2000).** Effect of steroidal saponin from *Yucca schidigera* extract on ruminal microbes. *Journal of Applied Microbiology* 88, 887–896.
- Weber ND, Anderson DO, North JA, Murray V, Lawson LD, Hughes BG (1992).** In vitro virucidal effects of *Allium sativum* (garlic) extract and compounds, *Planta Medica*, 58: 417–23.
- Wenk, C. (2000).** Why all the discussion about herbs? *Proc. Alltech, S16th Ann. Symp. Biotechnol. In The Feed Industry.* Ed. Lyons, T.P., Alltech Tech. Publ., Nottingham, University Press, Nicholasville, KY. Pp.79-96.
- Wichtl, M., Teedrogen Und Phytopharmaka. 4 Ed. (2002).** Stuttgart: Wissenschaftliche Verlagsgesellschaft Mbh.
- Williams, P. and R. Losa, (2001)** The use of essential oils and their compounds in poultry nutrition. *World's Poultry*, 17, 14-15.
- Windisch W., K. Schedle, C. Plitzner and A. Kroismayr (2008).** Use of phytogetic products as feed additives for swine and poultry. *Journal of Animal Science.* 86: 140 – 148.
- Windisch W and A. Kroismayr (2007).** Natural phytobiotics for health of young piglets and poultry: Mechanisms and application. *Journal of Dairy Science* 90, 643.
- Yamamoto, M. (1977).** Stimulatory effect of Panax ginseng principals on DNA and protein synthesis in rat testes. *Arzneimittel-Forschung*, 27:1404–1405.
- Yan L., Meng Q. W., Ao X., Zhou T. X., Yoo J. S., Kim H. J., I. H. Kim. (2010).** Effects of fermented garlic powder supplementation on growth performance, blood characteristics and meat quality in finishing pigs fed low-nutrient-density diets. *Livest. Sci.* 137:255–259.
- Yang, Y.; Wu, T.; He, K. and Z.U. Fu., (1999).** Effect of aerobic exercise and ginsenosides on lipid metabolism in diet-induced hyperlipidemia mice. *Zhongguo Yao Li Xue Bao.* Jun; 20(6):563-5.

- Yarru LP, Settivari RS, Antoniou E, Ledoux DR, and Rottinghaus GE (2008).** Effects of aflatoxin, curcumin, and their combination on the expression of liver antioxidant, immune and biotransformation genes in broiler chicks. *Poultry Science* 87, 170.
- Yason CV, Summers BA, and KA. Schat (1987).** Pathogenesis of rotavirus infection in various age groups of chickens and turkeys: Pathology. *American Journal of Veterinary Research* 48, 927-938.
- Yin, M.C. and W.S. Cheng. (2003):** Antioxidant and antimicrobial effects of four garlic-derived organosulfur compounds in ground beef. *Meat Science* 63(1), 23-28.
- Yoshida, S., S. Kasuga, N. Hayashi, T. Ushiroguchi, H. Matsuura and S. Nakagawa (1987).** Antifungal activity of ajoene derived from garlic. *Applied and Environmental Microbiology* 53, 615-617.
- Yu T. H., Lin L. Y., C. T. Ho. (1994).** Volatile compounds of blanched, fried blanched, and baked blanched garlic slices. *J. Agric. Food Chem.* 42:1342–1347.
- Yun, Y. S.; Lee, Y. S.; Jo, S. K.; and I. S. Jung. (1993).** Inhibition of autochthonous tumor by ethanol insoluble fraction from *Panax ginseng* as an immunomodulator. *Planta Med.* 59:521–524.
- Zeweil ,Hassan S., Kamel, I. Kamel, Mocktar, I. Yousef and Lamiaa, F. Asal (2013).** Antioxidant effects of tomato powder on semen quality and antioxidant status in young and aged rabbits housed under Egyptian heat stress conditions. The 11th World Conference on Animal Production October 15 - 20, 2013 in Beijing, China.
- Zeweil, H. S. (2008).** Effect of Bio-Buds or black seed oil on the performance and egg quality of Japanese quail hens. The 13<sup>th</sup> Animal Science Congress of The Asian-Australian Association of Animal Production Societies, Hanoi-Vitnam, September 22-26, 2008.
- Zhang G.F, Yang Z.B, Wang, Y., Yang W.R, Jiang, S.Z, and G.S. Gai (2009).** Effects of ginger root (*Zingiber officinale*) processed to different particle sizes on growth performance, antioxidant status, and serum metabolites of broiler chickens. *Poultry Science* 88, 2159-2166.
- Zhang, W.F., D.F. Li, W.Q. Lu and G.F. Yi (2003).** Effects of Isomalto Oligosaccharides on Broiler Performance and Intestinal Micro flora. *Poultry Science.* 82: 657-663.
- Zhang, G. Q.; Ye, R. G.; Kong, Q. Y.; Yang, N. S.; Zhang, J. L.; Guan, W. M. and W. M. Chen., (1998).** *Panax notoginseng* saponins induced of human renal interstitial fibroblast and its mechanisms. *Chin J Nephrology*, 14:93-95.
- Zhang, D.; T. Yasuda and Y. Yu (1996).** Ginseng extract scavenges hydroxyl radical and protects unsaturated fatty acids from decomposition caused by iron-mediated lipid peroxidation. *Free Radic Biol. Med.* 20:145-150.
- Zhao, X., Z. B. Yang, W. R. Yang, Y. Wang, S. Z. Jiang, G. G. Zhang (2011).** Effects of ginger root (*Zingiber officinale*) on laying performance and antioxidant status of laying hens and on dietary oxidation stability. *Poultry Science* 90 (8): 1720-1727.
- Ziauddin, S. K., D. N. Rao, and B. L. Amla (1995).** Effect of lactic acid, ginger extract and sodium chloride on electrophoretic pattern of buffalo muscle proteins. *Journal of Food Science and Technology.* 32: 224 – 226.