

## CHAPTER VIII

### BIBLIOGRAPHY

- Aagrahar-Murugkar, D., & Subbulakshmi, G. (2005). Nutritional value of edible wild mushrooms collected from the Khasi hills of Meghalaya. *Food Chemistry*, 89(4), 599-603.
- Abd Malek, S. N., Kanagasabapathy, G., Sabaratnam, V., Abdullah, N., & Yaacob, H. (2012). Lipid components of a Malaysian edible mushroom, *Termitomyces heimii* Natarajan. *International Journal of Food Properties*, 15(4), 809-814.
- Acharya, K., Ghosh, S., & Saha, T. (2017). Physicochemical characterization and antioxidant property of powdered basidiocarp of wild *Lentinus sajor-caju*. *International Journal of ChemTech Research*, 10(1), 126-1327.
- Adedokun, O. M., & Akuma, A. H. (2013). Maximizing agricultural residues: Nutritional properties of straw mushroom on maize husk, waste cotton and plantain leaves. *Natural Resources*, 4(08), 534.
- Adejumo, T. O., Coker, M. E., & Akinmoladun, V. O. (2015). Identification and evaluation of nutritional status of some edible and medicinal mushrooms in Akoko Area,Ondo State, Nigeria. *International journal of Current Microbiology and Applied Sciences* 4(4), 1011-1028.
- Afiukwa, C. A., Ebem, E. C., & Igwe, D. O. (2015). Characterization of the proximate and amino acid composition of edible wild mushroom species in Abakaliki, Nigeria. *AASCIT Journal of Bioscience*, 1(2), 20-25.
- Agoramoorthy, G., Chandrasekaran, M., Venkatesalu, V., & Hsu, M. J. (2007). Antibacterial and antifungal activities of fatty acid methyl esters of the blind-your-eye mangrove from India. *Brazilian Journal of Microbiology*, 38(4), 739-742.
- Akyuz, M., Onganer, A. N., Erecevit, P., & Kirbag, S. (2010). Antimicrobial activity of some edible mushrooms in the eastern and southeast Anatolia region of Turkey. *Gazi University Journal of Science*, 23(2), 125-130.

Aletor, V. A. (1995). Compositional studies on edible tropical species of mushrooms. *Food Chemistry*, 54(3), 265-268.

Alves, M. J., Ferreira, I. C., Dias, J., Teixeira, V., Martins, A., & Pintado, M. (2012). A review on antimicrobial activity of mushroom (Basidiomycetes) extracts and isolated compounds. *Planta Medica*, 78(16), 1707-1718.

Alves, M. J., Ferreira, I. C., Froufe, H. J., Abreu, R. M. V., Martins, A., & Pintado, M. (2013). Antimicrobial activity of phenolic compounds identified in wild mushrooms, SAR analysis and docking studies. *Journal of Applied Microbiology*, 115(2), 346-357.

Anderson, E. E. and Fellers, C. R. (1942). The food value of mushrooms (*Agaricus campestris*). In *Proceedings American Society for Horticultural Science*. 41: 301-304.

AOAC (1990). Official methods of analysis (15th Ed.). Association of Official Analytical Chemists.

AOAC (1995). Official methods of analysis (16th Ed.). Arlington: Association of Official Analytical Chemists.

Appiah, T., Boakye, Y. D., & Agyare, C. (2017). Antimicrobial activities and time-kill kinetics of extracts of selected ghanaian mushrooms. *Evidence-Based Complementary and Alternative Medicine*. 1-15.

Arbaayah, H. H., & Kalsom, Y. U. (2013). Antioxidant properties in the oyster mushrooms (*Pleurotus* spp.) and split gill mushroom (*Schizophyllum commune*) ethanolic extracts. *Mycosphere*, 4(4), 661-673.

Arora, D. K., & Arora, D. (Eds.). (1991). *Handbook of applied mycology. 3. Foods and feeds*. Dekker.

Arora, D., & Hershey, H. (1986). *Mushrooms Demystified* (Vol. 23). Berkeley: Ten Speed Press.

Arvind, G., Atri, N. S., Sharma, S. K., & Sharma, B. M. (2011). Nutritional studies on five wild *Lentinus* species from North-West India. *World Journal of Dairy & Food Sciences*, 6(2), 140-145.

Atri, N. S., Kumari, Babita., & Upadhyay, R. C. (2014). Taxonomy, sociobiology, nutritional and nutraceutical potential of termitophilous and lepiotoid mushrooms from North West India, *ICMBMP8* (pp. 19-22).

Ayodele, S. M., & Idoko, M. E. (2011). Antimicrobial activities of four wild edible mushrooms in Nigeria. *International Journal of Science and Nature*, 2(1), 55-58.

Bahl, N (1983). Medicinal value of edible fungi. In *Proceeding of the international conference on science and cultivation technology of edible fungi. Indian Mushroom Science II* (Vol. 1983203209).

Balouiri, M., Sadiki, M., & Ibnsouda, S. K. (2016). Methods for in vitro evaluating antimicrobial activity: A review. *Journal of Pharmaceutical Analysis*, 6(2), 71-79.

Bano, Z. and Rajarathanam, S. (1982). Pleurotus mushrooms as a nutritious food. In: *Tropical mushrooms –Biological Nature and Cultivation Methods*, (Chang, S.T, Quimio, TH, Eds.) The Chinese University press, Hong Kong, pp. 363-382.

Bano, Z., Bhagya, S., & Srinivasan, K. S. (1981). Essential amino acid composition and proximate analysis of the mushrooms *Pleurotus eous* and *Pleurotus florida*. *Mushroom Newsletter from Tropics*, 1(3), 6-10.

Bano, Z., Rajarathnam, S., & Steinkraus, K. H. (1988). Pleurotus mushrooms. Part II. Chemical composition, nutritional value, post-harvest physiology, preservation, and role as human food. *Critical Reviews in Food Science & Nutrition*, 27(2), 87-158.

Barros, L., Baptista, P., Estevinho, L. M., & Ferreira, I. C. (2007). Effect of fruiting body maturity stage on chemical composition and antimicrobial activity of *Lactarius* sp. mushrooms. *Journal of Agricultural and Food Chemistry*, 55(21), 8766-8771.

Barros, L., Calhelha, R. C., Vaz, J. A., Ferreira, I. C., Baptista, P., & Estevinho, L. M. (2007). Antimicrobial activity and bioactive compounds of Portuguese wild edible mushrooms methanolic extracts. *European Food Research and Technology*, 225(2), 151-156.

Barros, L., Cruz, T., Baptista, P., Estevinho, L. M., & Ferreira, I. C. (2008). Wild and commercial mushrooms as source of nutrients and nutraceuticals. *Food and Chemical Toxicology*, 46(8), 2742-2747.

Barros, L., Dueñas, M., Ferreira, I. C., Baptista, P., & Santos-Buelga, C. (2009). Phenolic acids determination by HPLC–DAD–ESI/MS in sixteen different Portuguese wild mushrooms species. *Food and Chemical Toxicology*, 47(6), 1076-1079.

Barua, P., Adhikary, R. K., Kalita, P., Bordoloi, D., Gogoi, P., Singh, R. S., & Ghosh, A. C. (1998). Wild edible mushrooms of Meghalaya. *Ancient science of life*, 17(3), 190-193.

Basu, A., & Bhuyan, D. J. (2017). Phenolic Compounds potential health Benefits and toxicity. In *Utilisation of Bioactive Compounds from Agricultural and Food Production Waste* (pp. 27-59). CRC Press.

Bedi, G. K., Singh, V., Dhingra, G. S., & Shri, R. (2017). A study of taxonomy, physicochemical features and chemical constituents of a few edible mushroom species. *Research Journal of Pharmaceutical Biological and Chemical Sciences*, 8(4), 1155-1160.

Beelman, R. B., Royse, D. J., & Chikthimmah, N. (2003). Bioactive components in button mushroom *Agaricus bisporus* (J. Lge) Imbach (Agaricomycetideae) of nutritional, medicinal, and biological importance. *International Journal of Medicinal Mushrooms*, 5(4).

Benedict, R. G., & Brady, L. R. (1972). Antimicrobial activity of mushroom metabolites. *Journal of Pharmaceutical Sciences*, 61(11), 1820-1822.

Benzie, I. F., & Strain, J. J. (1996). The ferric reducing ability of plasma (FRAP) as a measure of “antioxidant power”: the FRAP assay. *Analytical Biochemistry*, 239(1), 70-76.

Bertalanič, L., Košmerl, T., Poklar Ulrich, N., & Cigić, B. (2012). Influence of solvent composition on antioxidant potential of model polyphenols and red wines determined with 2, 2-diphenyl-1-picrylhydrazyl. *Journal of Agricultural and Food Chemistry*, 60(50), 12282-12288.

Binding, G. J. (1978). Biology and Cultivation of Edible Mushrooms.

Bisen, P. S. (2014). *Laboratory protocols in applied life sciences*. CRC Press.

Bligh, E. G., & Dyer, W. J. (1959). A rapid method of total lipid extraction and purification. *Canadian Journal of Biochemistry and Physiology*, 37(8), 911-917.

Bonatti, M., Karnopp, P., Soares, H. M., & Furlan, S. A. (2004). Evaluation of *Pleurotus ostreatus* and *Pleurotus sajor-caju* nutritional characteristics when cultivated in different lignocellulosic wastes. *Food Chemistry*, 88(3), 425-428.

Borah, D., Gogoi, D., & Yadav, R. N. S. (2015). Computer aided screening, docking and ADME study of mushroom derived compounds as Mdm2 inhibitor, a novel approach. *National Academy Science Letters*, 38(6), 469-473.

Borchers, A. T., Stern, J. S., Hackman, R. M., Keen, C. L., & Gershwin, M. E. (1999). Mushrooms, tumors, and immunity. *Proceedings of the Society for Experimental Biology and Medicine*, 221(4), 281-293.

Botticher, W., Pannwitz & Nier. (1941). The utilization of mushrooms growing in the forests of Germany as food and fodder. *Vorrats Pflege Lebensmittel Forsch.* 4:488-497.

Breene, W. M. (1990). Nutritional and medicinal value of specialty mushrooms. *Journal of Food Protection*, 53(10), 883-894.

Brem, F. M., & Lips, K. R. (2008). *Batrachochytrium dendrobatidis* infection patterns among Panamanian amphibian species, habitats and elevations during epizootic and enzootic stages. *Diseases of Aquatic Organisms*, 81(3), 189-202.

Brinda, G.B., Susha, S., Thara., & Divakar, S., (2017) Nutritional analysis and organoleptic evaluation of paddy straw mushroom (*Volvariella* sp.) *Food Science Research Journal* ,8(2), 230-234.

Buswell, J. A. and Chang, S. T. (1993). Edible mushrooms: attributes and applications. In: Genetics and breeding of edible mushrooms Overseas Publishers Association NV. (pp. 297-324).

Cao, H., Li, D., Su, Z., & Zhang, Y. (2003). Study on exploiting new food antibiotic from *Agrocybe aegerita*. *Mycosistema*, 22(3), 445-451.

Carocho, M., & CFR Ferreira, I. (2013). The role of phenolic compounds in the fight against cancer—a review. *Anti-Cancer Agents in Medicinal Chemistry (Formerly Current Medicinal Chemistry-Anti-Cancer Agents)*, 13(8), 1236-1258.

Chan, K. W., Iqbal, S., Khong, N. M., & Babji, A. S. (2011). Preparation of deodorized antioxidant rich extracts from 15 selected spices through optimized aqueous extraction. *Journal of Medicinal Plants Research*, 5(25), 6067-6075.

Chan, K. W., Iqbal, S., Khong, N. M., Ooi, D. J., & Ismail, M. (2014). Antioxidant activity of phenolics–saponins rich fraction prepared from defatted kenaf seed meal. *LWT-Food Science and Technology*, 56(1), 181-186.

Chandalia, M., Garg, A., Lutjohann, D., Bergmann, V. K., Grundy, S. M., & Brinkley, L. J. (2000). Beneficial effects of high dietary fiber intake in patients with type 2 diabetes mellitus. *New England Journal of Medicine*, 342(19), 1392-1398.

Chang, S. T. (1999). Global impact of edible and medicinal mushrooms on human welfare in the 21st century: nongreen revolution. *International Journal of Medicinal Mushrooms*, 1(1). 1-7.

Chang, S. T., & Buswell, J. A. (1996). Mushroom nutriceuticals. *World Journal of Microbiology and biotechnology*, 12(5), 473-476.

Chang, S. T., & Miles, P. G. (1989). Edible mushrooms and their cultivation. *Edible mushrooms and their cultivation*. CRC press, Boca Raton, USA.

Chang, S. T., Chang, S. T., & Quimio, T. H. (Eds.). (1982). *Tropical mushrooms: Biology, Nature and cultivation methods*. Chinese University Press. 221-252.

Chang, S.T. (1980). Mushroom as human food, *Bio Science* 30: 339-401.

Chatterjee, S., Saikia, A., Dutta, P., Ghosh, D., Pangging, G., & Goswami, A. K. (2006). Biodiversity significance of North east India. *WWF-India, New Delhi*, 1-71.

Chennupati, S., Valluru, S., & Bhogavalli, P. (2012). Studies on antioxidant capacity of petroleum ether and acetone extracts of *Pleurotus florida*. *Asian Journal of Biochemical and Pharmaceutical Research*, 2(2), 82-88.

Cheung, L. M., & Cheung, P. C. (2005). Mushroom extracts with antioxidant activity against lipid peroxidation. *Food Chemistry*, 89(3), 403-409.

Chihara, G. (1992). Immunopharmacology of lentinan, a polysaccharide isolated from *Lentinus edodes*: its application as a host defense potentiator. *International Journal of Oriental Medicine*, 17, 57-77.

Clifford, M. N. (1999). Chlorogenic acids and other cinnamates—nature, occurrence and dietary burden. *Journal of the Science of Food and Agriculture*, 79(3), 362-372.

Cochran, K. W. (1978). Medical effects. *The biology and cultivation of edible mushrooms*, 169-187.

Crisan, E.W. and Sands, A. (1978). A nutritional value. In: Chang S.T. and Hayes W.A. (Eds.). *The biology and cultivation of edible mushrooms*. Academic Press, New York, pp. 172-189.

Crozier, A., Clifford, M. N., & Ashihara, H. (Eds.). (2008). *Plant Secondary Metabolites: Occurrence, Structure and Role in the Human Diet*. John Wiley & Sons.

Daba, A. S., & Ezeronye, O. U. (2003). Anti-cancer effect of polysaccharides isolated from higher basidiomycetes mushrooms. *African Journal of Biotechnology*, 2(12), 672-678.

Dadachova, E., Bryan, R. A., Huang, X., Moadel, T., Schweitzer, A. D., Aisen, P. Nosanchuk. D, & Casadevall, A. (2007). Ionizing radiation changes the electronic properties of melanin and enhances the growth of melanized fungi. *PloS one*, 2(5), e457.

Das, A. R., Saha, A. K., Joshi, S. R., & Das, P. (2017). Wild edible macrofungi consumed by ethnic tribes of Tripura in Northeast India with special reference to antibacterial activity of *Pleurotus djamor* (Rumph. ex Fr.) Boedijn. *International Food Research Journal*, 24(2). 834-838.

Das, U. N. (2006). Essential fatty acids: biochemistry, physiology and pathology. *Biotechnology Journal: Healthcare Nutrition Technology*, 1(4), 420-439.

Delena, T. (1999). Edible and useful plants of Texas and South west—A practical guide University of Texas Press.

Dembitsky, V. M., Terent'ev, A. O., & Levitsky, D. O. (2010). Amino and fatty acids of wild edible mushrooms of the genus *Boletus*. *Records of Natural Products*, 4(4), 218-223.

Demirbaş, A. (2001). Concentrations of 21 metals in 18 species of mushrooms growing in the East Black Sea region. *Food Chemistry*, 75(4), 453-457.

Dođan, H. H., & Aydin, S. (2013). Determination of antimicrobial effect, antioxidant activity and phenolic contents of desert truffle in Turkey. *African Journal of Traditional, Complementary and Alternative Medicines*, 10(4), 52-58.

Doyle, J. J. (1987). A rapid DNA isolation procedure for small quantities of fresh leaf tissue. *Phytochem. Bull.*, 19, 11-15.

Due, E. A., Michel, K. D., & Digbeu, Y. D. (2016). Physicochemical and functional properties of flour from the wild edible mushroom *Termitomyces heimii* Natarajan harvested in Côte d'Ivoire. *Turkish Journal of Agriculture-Food Science and Technology*, 4(8), 651-655.

Dutta, A. K., Pradhan, P., Roy, A., & Acharya, K. (2011). Volvariella of West Bengal, India I. *Researcher*, 3(5), 13-17.

Eguchi, F., Kalaw, S. P., Dulay, R. M. R., Miyasawa, N., Yoshimoto, H., Seyama, T., & Reyes, R. G. (2015). Nutrient composition and functional activity of different stages in the fruiting body development of Philippine paddy straw mushroom, *Volvariella volvacea* (Bull.: Fr.) Sing. *Advances in Environmental Biology*, 9(22 S3), 54-66.

Egwin, E. C., Elem, R. C., & Egwuche, R. U. (2011). Proximate composition, phytochemical screening and antioxidant activity of ten selected wild edible Nigerian mushrooms. *American Journal of Food Nutrition*, 1(2), 89-94.

Elmastas, M., Isildak, O., Turkekul, I., & Temur, N. (2007). Determination of antioxidant activity and antioxidant compounds in wild edible mushrooms. *Journal of Food Composition and Analysis*, 20(3-4), 337-345.

Eyssartier, E., Stubbe, D., Walleyn, R., & Verbeken, A. (2009). New records of Cantharellus species (Basidiomycota, Cantharellaceae) from Malaysian dipterocarp rainforest. *Fungal Diversity*, 36(5). 57-67.

Fasidi, I. O., & Olorunmaiye, K. S. (1994). Studies on the requirements for vegetative growth of *Pleurotus tuber-regium* (Fr.) Singer, a Nigerian mushroom. *Food chemistry*, 50(4), 397-401.

Ferreira, I. C., Baptista, P., Vilas-Boas, M., & Barros, L. (2007). Free-radical scavenging capacity and reducing power of wild edible mushrooms from Northeast Portugal: Individual cap and stipe activity. *Food chemistry*, 100(4), 1511-1516.

Ferreira, I. C., Barros, L., & Abreu, R. (2009). Antioxidants in wild mushrooms. *Current Medicinal Chemistry*, 16(12), 1543-1560.

Florezak, J., Karmnska, A., & Wedzisz, A. (2004). Comparision of the chemical contents of the selected wild growing mushrooms. *Bromatologia Chemia Toksykologiczna*, 37(4), 365-371.

Fraga, C. G. (Ed.). (2009). *Plant phenolics and human health: biochemistry, nutrition and pharmacology* (Vol. 1). John Wiley & Sons.

Fuchs, F. D. (2004). Princípios gerais do uso de antimicrobianos. *Farmacologia clínica: fundamentos da terapêutica racional*. 3<sup>a</sup> ed. Rio de Janeiro: Guanabara Koogan, 342-9.

Gan, C. H., Amira, N. B., & Asmah, R. (2013). Antioxidant analysis of different types of edible mushrooms (*Agaricus bisporous* and *Agaricus brasiliensis*). *International Food Research Journal*, 20(3), 1095-1102.

Geng, Y., Zhu, S., Lu, Z., Xu, H., Shi, J. S., & Xu, Z. H. (2014). Anti-inflammatory activity of mycelial extracts from medicinal mushrooms. *International journal of medicinal mushrooms*, 16(4), 319-325.

Giacomini. 1957. Mushrooms, the fungi as foods. *Sci. Aliment.* 3:103-108.

Gianinazzi, S., Gollotte, A., Binet, M. N., van Tuinen, D., Redecker, D., & Wipf, D. (2010). Agroecology: the key role of arbuscular mycorrhizas in ecosystem services. *Mycorrhiza*, 20(8), 519-530.

Gilbert, F. A., & R. F. Robinson. (1957). Food and fungi. *Economic Botany* 11:126-145.

Giri, S., Biswas, G., Pradhan, P., Mandal, S. C., & Acharya, K. (2012). Antimicrobial activities of basidiocarps of wild edible mushrooms of West Bengal, India. *International Journal of PharmTech Research*, 4(4), 1554-1560.

Gómez-Hernández, M., Williams-Linera, G., Guevara, R., & Lodge, D. J. (2012). Patterns of macromycete community assemblage along an elevation gradient: options for fungal gradient and metacommunity analyse. *Biodiversity and Conservation*, 21(9), 2247-2268.

Guarro, J., Gené, J., & Stchigel, A. M. (1999). Developments in fungal taxonomy. *Clinical Microbiology Reviews*, 12(3), 454-500.

Guerra Dore, C. M. P., Azevedo, T. C. G., de Souza, M. C. R., Rego, L. A., de Dantas, J. C. M., Silva, F. R. F., Rocha, H.A.O., Basia, I.G., Leite, E. L. (2007). *Antiinflammatory, antioxidant and cytotoxic actions of β-glucan-rich extract from Geastrum saccatum mushroom*. *International Immunopharmacology*, 7(9), 1160–1169.

Guillamón, E., García-Lafuente, A., Lozano, M., D'Arrigo, M., Rostagno, M. A., Villares, A., & Martínez, J. A. (2010). *Edible mushrooms: Role in the prevention of cardiovascular diseases*. *Fitoterapia*, 81(7), 715–723.

Gülçin, İ. (2006). Antioxidant activity of caffeic acid (3-, 4-dihydroxycinnamic acid). *Toxicology*, 217(2-3), 213-220.

Gülçin, I., Küfrevioğlu, Ö. İ., Oktay, M., & Büyükokuroğlu, M. E. (2004). Antioxidant, antimicrobial, antiulcer and analgesic activities of nettle (*Urtica dioica* L.). *Journal of ethnopharmacology*, 90(2-3), 205-215.

Guo, F. C., Williams, B. A., Kwakkel, R. P., Li, H. S., Li, X. P., Luo, J. Y., Li., K. W & Verstegen, M. W. A. (2004). Effects of mushroom and herb polysaccharides, as alternatives for an antibiotic, on the cecal microbial ecosystem in broiler chickens. *Poultry science*, 83(2), 175-182.

Han, S., Caspers, N., Zaniewski, R. P., Lacey, B. M., Tomaras, A. P., Feng, X., Geoghegan, F. K & Shanmugasundaram, V. (2011). Distinctive attributes of β-lactam target proteins in *Acinetobacter baumannii* relevant to development of new antibiotics. *Journal of the American Chemical Society*, 133(50), 20536-20545.

Harbarth, S., Harris, A. D., Carmeli, Y., & Samore, M. H. (2001). Parallel analysis of individual and aggregated data on antibiotic exposure and resistance in gram-negative bacilli. *Clinical Infectious Diseases*, 33(9), 1462-1468.

Harborne, J. B. (1989). *Methods in Plant Biochemistry. Volume 1. Plant phenolics*. Academic Press Ltd. London.

Hawksworth, D. L. (2001). Mushrooms: the extent of the unexplored potential. *International journal of medicinal mushrooms*, 3(4). 33-37.

Hayes, W. A. (1976). The food value of the cultivated mushroom and its importance to the mushroom industry. *Mushroom Journal*, 40, 104-110.

Heckman, D. S., Geiser, D. M., Eidell, B. R., Stauffer, R. L., Kardos, N. L., & Hedges, S. B. (2001). Molecular evidence for the early colonization of land by fungi and plants. *Science*, 293(5532), 1129-1133.

Heleno, S. A., Barros, L., Sousa, M. J., Martins, A., & Ferreira, I. C. F. R. (2010). Tocopherols composition of Portuguese wild mushrooms with antioxidant capacity. *Food Chemistry*, 119(4), 1443–1450.

Hobbs, C. (2000). Medicinal value of *Lentinus edodes* (Berk.) Sing.(Agaricomycetideae). A literature review. *International Journal of Medicinal Mushrooms*, 2(4). 287-302.

Hobbs, C. H. L. (1997). Medicinal Mushrooms. Academic Press, New York.

Hobbs. C. Mushrooms, M. (1995). An Exploration of Tradition, Healing and Culture. 2<sup>nd</sup> ed. Botanica press, Santa Cruz. USA.

Hood, I. A. (2006). The mycology of the Basidiomycetes. In *ACIAR proceedings* (Vol. 124, p. 34). ACIAR; 1998.

Hosaka, K., & Uno, K. (2011). Assessment of the DNA quality in mushroom specimens: effect of drying temperature. *Bull. Natl. Mus. Nat. Sci*, 37, 101-111.

Huang, B. H., Yung, K. H., & Chang, S. T. (1989). Fatty acid composition of *Volvariella volvacea* and other edible mushrooms. *Mushroom Science*, 12, 533-540.

Huang, D., Ou, B., & Prior, R. L. (2005). The chemistry behind antioxidant capacity assays. *Journal of Agricultural and Food Chemistry*, 53(6), 1841-1856.

Huffman, D. M. (2008). *Mushrooms and other fungi of the midcontinental United States*. University of Iowa Press.

Hughes, D. H. (1962). Preliminary characterization of the lipid constituents of the cultivated mushroom *Agaricus campestris*. *Mushroom Science*, 5, 540-546.

Ijioma Blessing, C., Ihediohanma Ngozi, C., Onuegbu Ngozi, C., & Okafor Damaris, C. (2015). Nutritional composition and some anti-nutritional factors of three edible mushroom species in South Eastern Nigeria. *European Journal of Food Science and Technology*, 3(2), 57-63.

Ishikawa, N. K., Kasuya, M. C. M., & Vanetti, M. C. D. (2001). Antibacterial activity of *Lentinula edodes* grown in liquid medium. *Brazilian Journal of Microbiology*, 32(3), 206-210.

Iwalokun, B. A., Usen, U. A., Otunba, A. A., & Olukoya, D. K. (2007). Comparative phytochemical evaluation, antimicrobial and antioxidant properties of *Pleurotus ostreatus*. *African Journal of Biotechnology*, 6(15). 1732-1739.

Johnsy, G., Davidson, S., Dinesh, M. G., & Kaviyarasan, V. (2011). Nutritive value of edible wild mushrooms collected from the Western Ghats of Kanyakumari District. *Botany Research International*, 4(4), 69-74.

Johnsy. G., & Kaviyarasan V., (2015) GCMS Analysis Of Bioactive Constituents And Evaluation Of Antimicrobial Activity From The Ethyl Acetate Extract Of *Neolentinus kauffmanii*. *European journal of pharmaceutical and medical research* 2(4), 724-732.

Jonathan.G S., & Fasidi, I. O. (2005). Antimicrobial activities of some selected Nigerian mushrooms. *African Journal of Biomedical Research*, 8(2), 83-87.

Jones, E. G., & Lim, G. (1990). Edible mushrooms in Singapore and other Southeast Asian countries. *Mycologist*, 4(3), 119-124.

Justo, A., & Castro, M. L. (2010). The genus Volvariella in Spain: *V. dunensis* comb. & stat. nov. and observations on *V. earlei*. *Mycotaxon*, 112(1), 261-270.

Kalač, P. (2009). Chemical composition and nutritional value of European species of wild growing mushrooms: A review. *Food Chemistry*, 113(1), 9-16.

Kalač, P. (2013). A review of chemical composition and nutritional value of wild-growing and cultivated mushrooms. *Journal of the Science of Food and Agriculture*, 93(2), 209-218.

Kalava, S. V., & Menon, S. G. (2012). Protective efficacy of the extract of *Volvariella volvacea* (bulliard ex fries) singer. against carbontetrachloride induced hepatic injury. *International Journal of Pharmaceutical Sciences and Research*, 3(8), 2849-2856.

Källman, S. (1991). Nutritive value of Swedish wild plants. *Svensk Botanisk Tidskrift (Sweden)*.

Kalyoncu, F., Oskay, M., Sağlam, H., Erdoğan, T. F., & Tamer, A. Ü. (2010). Antimicrobial and antioxidant activities of mycelia of 10 wild mushroom species. *Journal of Medicinal Food*, 13(2), 415-419.

Kankana Pegu , Dhrubajyoti Gogoi , Ashok Kumar Rai , Manabjyoti Bordoloi ,Rajib Lochan Bezbaruah. (2014). Docking & virtual screening of edible mushroom Derived Compounds as *Plasmodium falciparum* Triosephosphate Isomerase- Phosphoglycolate Inhibitor, *Indo Global Journal of Pharmaceutical Sciences*, 2014; 4(1): 29-36.

Karunaratnha, S. C., Yang, Z. L., Zhao, R. L., Vellinga, E. C., Bahkali, A. H., Chukeatirote, E., & Hyde, K. D. (2011). Three new species of Lentinus from Northern Thailand. *Mycological Progress*, 10(4), 389-398.

Keleş, A., Koca, I., & Gençcelep, H. (2011). Antioxidant properties of wild edible mushrooms. *Journal of Food Processing & Technology*, 2(6), 2-6.

Kempf, M., & Rolain, J. M. (2012). Emergence of resistance to carbapenems in *Acinetobacter baumannii* in Europe: clinical impact and therapeutic options. *International journal of antimicrobial agents*, 39(2), 105-114.

Khaund, P., & Joshi, S. R. (2013). Wild edible macrofungal species consumed by the Khasi tribe of Meghalaya, India. *Indian journal of Natural Products and Resources*, Vol. 4(2), June 2013, pp. 197-204.

Kinsalin VA, Kumar PS, Duraipandian V, Ignacimuthu S, Al-Dhabi NA. (2014) Antimicrobial activity of methanol extracts of some traditional medicinal plants from Tamil Nadu, India. *Asian Journal of Pharmaceutical and Clinical Research* 7(1), 36–40.

Kitamura, Y., Ebihara, A., Agari, Y., Shinkai, A., Hirotsu, K., & Kuramitsu, S. (2009). Structure of d-alanine-d-alanine ligase from *Thermus thermophilus* HB8: cumulative conformational change and enzyme–ligand interactions. *Acta Crystallographica Section D: Biological Crystallography*, 65(10), 1098-1106.

Klein, E., Smith, D. L., & Laxminarayan, R. (2007). Hospitalizations and deaths caused by methicillin-resistant *Staphylococcus aureus*, United States, 1999–2005. *Emerging infectious diseases*, 13(12), 1840.

Kornerup, A. and Wanscher, J.H. (1978). Methuen handbook of colour, 3rd edn. Eyre Methuen Ltd., London.

Kotilínek, M., Hiiesalu, I., Košnar, J., Šmilauerová, M., Šmilauer, P., Altman, J., Dvorsky., M. & Doležal, J. (2017). Fungal root symbionts of high-altitude vascular plants in the Himalayas. *Scientific Reports*, 7(1), 6562. 1-14.

Kozarski, M., Klaus, A., Jakovljevic, D., Todorovic, N., Vunduk, J., Petrović, P., Niksic, M., Vrvic, M.M., Griensven, L.V. (2015). *Antioxidants of Edible Mushrooms. Molecules*, 20(10), 19489–19525.

Krajewska, B., van Eldik, R., & Brindell, M. (2012). Temperature-and pressure-dependent stopped-flow kinetic studies of jack bean urease. Implications for the catalytic mechanism. *JBIC Journal of Biological Inorganic Chemistry*, 17(7), 1123-1134.

Kreula, M., & Saarivirta, M. (1976). On the composition of nutrients in wild and cultivated mushrooms. *Karstenia*. 16,10-14.

Kües, U., & Liu, Y. (2000). *Fruiting body production in Basidiomycetes. Applied Microbiology and Biotechnology*, 54(2), 141–152.

Kumar, S., & Trivedi, A. V. (2016). A review on role of nickel in the biological system. *International Journal of Current Microbiology and Applied Science*, 5(3), 719-727.

Kumari, D., Reddy, M. S., & Upadhyay, R. C. (2011). *Studies on the Diversity and Nutritional Value of Cantharellaceae of Western Himalayas, India* (Doctoral dissertation).

Kumari, S. G., Kumar, R. P. K. & Geetha, S., (2017) *In Vitro* Antioxidant and antimicrobial activity of edible mushroom (*Termitomyces heimii*), *International Journal of Development Research* 7(12), 17531-17535.

Lata & Atri, N. (2017). Amino acid profile of a basidiomycetous edible mushroom-*lentinus sajor-caju*. *International Journal of Pharmacy and Pharmaceutical Sciences*, 9(9), 252-257.

Le Calvez, T., Burgaud, G., Mahé, S., Barbier, G., & Vandenkoornhuyse, P. (2009). Fungal diversity in deep-sea hydrothermal ecosystems. *Applied and Environmental Microbiology*, 75(20), 6415-6421.

Lee, K. J., Yun, I. J., Kim, K. H., Lim, S. H., Ham, H. J., Eum, W. S., & Joo, J. H. (2011). Amino acid and fatty acid compositions of *Agrocybe chalingu*, an edible mushroom. *Journal of Food Composition and Analysis*, 24(2), 175-178.

Levy, C., Minnis, D., & Derrick, J. P. (2008). Dihydropteroate synthase from *Streptococcus pneumoniae*: structure, ligand recognition and mechanism of sulfonamide resistance. *Biochemical Journal*, 412(2), 379-388.

Li, G.S.F. and Chang, S.T. (1982). Nutritive value of *Volvariella volvacea*, Chinese university press Hong Kong, pp. 199-219.

Li, T. H., Chen, X. L., Shen, Y. H., & Li, T. (2009). A white species of Volvariella (Basidiomycota, Agaricales) from Southern China. *Mycotaxon*, 109(1), 255-261.

LigPrep, S. R. (2009). version 2.3. *Schrödinger, LLC, New York, NY*.

Lin, Z. (1995) Advance in the pharmacology of *Tremella* polysaccharides. In: Chang, S. T., Buswell, J. A. and Siuwai Chiu (eds). *Mushroom Biology and Mushroom Products*. Chinese University Press, Hong Kong. 370p.

Liu, G. T. (1993). Pharmacology and clinical uses of Ganoderma. *Mushroom Biology and Mushroom Products*, 267-273.

Lowry, O. H., Rosebrough, N. J., Farr, A. L., & Randall, R. J. (1951). Protein measurement with the Folin phenol reagent. *Journal of Biological Chemistry*, 193, 265-275.

Magan N (2006). Fungi in extreme environments: Environmental and microbial relationships. In: Christian PK, Irina SD (eds) *The Mycota IV*. Springer, Netherlands. pp. 85-104.

Manimohan, P., Divya, N., Kumar, T. A., Vrinda, K. B., & Pradeep, C. K. (2004). The genus Lentinus in Kerala State, India. *Mycotaxon*, 90(2), 311-318.

Manoharachary, C., Sridhar, K., Singh, R., Adholeya, A., Suryanarayanan, T. S., Rawat, S., & Johri, B. N. (2005). Fungal biodiversity: distribution, conservation and prospecting of fungi from India. *Current Science*, 58-71.

Manzi, P., Gambelli, L., Marconi, S., Vivanti, V., & Pizzoferrato, L. (1999). Nutrients in edible mushrooms: an inter-species comparative study. *Food Chemistry*, 65(4), 477-482.

Mattila, P., Könkö, K., Eurola, M., Pihlava, J. M., Astola, J., Vahteristo, L., Hietaniemi, V., Kumpulainen, J., & Piironen, V. (2001). Contents of vitamins, mineral elements, and some phenolic compounds in cultivated mushrooms. *Journal of Agricultural and Food Chemistry*, 49(5), 2343-2348.

Mattila, P., Lampi, A. M., Ronkainen, R., Toivo, J., & Piironen, V. (2002a). Sterol and vitamin D<sub>2</sub> contents in some wild and cultivated mushrooms. *Food Chemistry*, 76(3), 293-298.

Mattila, P., Salo-Väänänen, P., Könkö, K., Aro, H., & Jalava, T. (2002b). Basic composition and amino acid contents of mushrooms cultivated in Finland. *Journal of Agricultural and Food Chemistry*, 50(22), 6419-6422.

Mau, J. L., Chang, C. N., Huang, S. J., & Chen, C. C. (2004). Antioxidant properties of methanolic extracts from *Grifola frondosa*, *Morchella esculenta* and *Termitomyces albuminosus* mycelia. *Food chemistry*, 87(1), 111-118.

Mc Connell, J. E., & Esselen, W. B. (1947). Carbohydrate in cultivated mushrooms. *Food Research*, 12, 118-121.

McGaw, L. J., Jäger, A. K., & Van Staden, J. (2002). Isolation of antibacterial fatty acids from *Schotia brachypetala*. *Fitoterapia*, 73(5), 431-433.

Mdachi, S. J. M., Nkunya, M. H. H., Nyigo, V. A., & Urasa, I. T. (2004). *Amino acid composition of some Tanzanian wild mushrooms*. *Food Chemistry*, 86(2), 179–182.

Menolli Junior, N., Asai, T., Capelari, M., & Paccola-Meirelles, L. D. (2010). Morphological and molecular identification of four Brazilian commercial isolates of *Pleurotus* spp. and cultivation on corncob. *Brazilian Archives of Biology and Technology*, 53(2), 397-408.

Miles, P. G., & Chang, S. T. (2004). *Mushrooms: cultivation, nutritional value, medicinal effect, and environmental impact*. CRC press. London.

Minami, K. (1957). Bactericidal action of oleic acid for *Tubercle bacilli*: ii. Morphological Response. *Journal of bacteriology*, 73(3), 345-352.

Mshandete, A. M., & Cuff, J. (2007). Proximate and nutrient composition of three types of indigenous edible wild mushrooms grown in Tanzania and their utilization prospects. *African Journal of Food, Agriculture, Nutrition and Development*, 7(6). 4-16.

Nakama, T., Nureki, O., & Yokoyama, S. (2001). Structural basis for the recognition of isoleucyl-adenylate and an antibiotic, mupirocin, by isoleucyl-tRNA synthetase. *Journal of Biological Chemistry*, 276(50), 47387-47393.

Nhi, N. N. Y., & Hung, P. V. (2012). Nutritional composition and antioxidant capacity of several edible mushrooms grown in the Southern Vietnam. *International Food Research Journal* 19(2): 611-615.

Nilsson, R. H., Kristiansson, E., Ryberg, M., Hallenberg, N., & Larsson, K. H. (2008). Intraspecific ITS variability in the kingdom Fungi as expressed in the international sequence databases and its implications for molecular species identification. *Evolutionary bioinformatics*, 4, EBO-S653.

Nilsson, R. H., Ryberg, M., Kristiansson, E., Abarenkov, K., Larsson, K. H., & Kõljalg, U. (2006). Taxonomic reliability of DNA sequences in public sequence databases: a fungal perspective. *PloS one*, 1(1), e59.

Nishikimi, M., Rao, N. A., & Yagi, K. (1972). The occurrence of superoxide anion in the reaction of reduced phenazine methosulfate and molecular oxygen. *Biochemical and Biophysical Research Communications*, 46(2), 849-854.

Nosrati, M., & Behbahani, M. (2015). Molecular Docking Study of HIV-1 Protease with Triterpenoides Compounds from Plants and Mushroom. *Arak Uni Med Sci J*, 18(3), 67-79.

Nwachukwu, E., & Uzoeto, H. O. (2010). Antimicrobial activity of some local mushrooms on pathogenic isolates. *Journal of Medicinal Plants Research*, 4(23), 2460-2465.

Ohtsuka, Y., & Asami, K. (1997). Highly active catalysts from inexpensive raw materials for coal gasification. *Catalysis Today*, 39(1-2), 111-125.

Oksana, S., Marian, B., Mahendra, R., & Bo, S. H. (2012). Plant phenolic compounds for food, pharmaceutical and cosmetics production. *Journal of Medicinal Plants Research*, 6(13), 2526-2539.

Olajire, A. A., & Azeez, L. (2011). Total antioxidant activity, phenolic, flavonoid and ascorbic acid contents of Nigerian vegetables. *African Journal of Food Science and Technology*, 2(2), 22-29.

Omer, I. (2017). *Chemical Composition and Nutritional Value of Some Types of Wild Mushrooms in Blue Nile State* (Doctoral dissertation, Sudan University of Science and Technology).

Oso, B.A. (1997). *Pleurotus* tuber-regium from Nigeria. *Mycologia* 69:271-279.

Ouzouni, P. K., Petridis, D., Koller, W. D., & Riganakos, K. A. (2009). Nutritional value and metal content of wild edible mushrooms collected from West Macedonia and Epirus, Greece. *Food Chemistry*, 115(4), 1575-1580.

Oyeleke G. O., Olagunju', E. O. Busari T., Ishola A. D., & Lawal. R. T.,(2017) Nutritional Evaluation of *Lentinus sajor-caju* (Fr.) Mushroom at different growth stages and effect of boiling on antinutrient components. *Asian Journal of Advances in Agricultural Research*, 1(1), 2456-8864.

Oyetayo, F. L., Akindahunsi, A. A., & Oyetayo, V. O. (2007). Chemical profile and amino acids composition of edible mushrooms *Pleurotus sajor-caju*. *Nutrition and health*, 18(4), 383-389.

Oyetayo, V. O., Dong, C. H., & Yao, Y. J. (2009). Antioxidant and antimicrobial properties of aqueous extract from *Dictyophora indusiata*. *The Open Mycology Journal*, 3(1), 20-26.

Paisey, E. C., & Abbas, B. (2015). Morphological characteristics and nutritional values of wild types of sago mushrooms (*Volvariella* sp.) that growth naturally in Manokwari, West Papua. *Natural Science*, 7(13), 599-604.

Pathak, N. C. (1975). New species of *Volvariella* from central Africa. *Bulletin du Jardin botanique national de Belgique/Bulletin van de Nationale Plantentuin van Belgie*, 45(1). 195-196.

Pegler, D. N. (1983). Agaric flora of the Lesser Antilles. *Kew Bulletin Add.*

Perera, W. A. S. W., Abeytunga, D. T. U., & Wijesundara, R. L. C. (2001). Antibacterial activities of *Volvariella volvacea*. *Journal of National Science Foundation, Sri Lanka* 2001, 29(1&2):61-68.

Peres-Bota, D., Rodriguez, H., Dimopoulos, G., DaRos, A., Mélot, C., Struelens, M. J., & Vincent, J. L. (2003). Are infections due to resistant pathogens associated with a worse outcome in critically ill patients?. *Journal of Infection*, 47(4), 307-316.

Philippoussis, A, & Diamantopoulou, P. (2011, October). Agro-food industry wastes and agricultural residues conversion into high value products by mushroom cultivation. In *Proceedings of the 7th International Conference on Mushroom Biology and Mushroom Products (ICMBMP7), France* (pp. 4-7).

Poucheret, P., Fons, F., & Rapior, S. (2006). Biological and pharmacological activity of higher fungi: 20-year retrospective analysis. *Cryptogamie Mycologie*, 27(4), 311-333.

Przybytniak, G. K., Zagórski, Z. P., & Żuchowska, D. (1999). Free radicals in electron beam irradiated blends of polyethylene and butadiene-styrene block copolymer. *Radiation Physics and Chemistry*, 55(5-6), 655-658.

Punitha, S. C., & Rajasekaran, M. (2014). Free radical scavenging activity of fruiting body extracts of an edible mushroom, *Volvariella volvacea*. *Bull. ex Fr.) Singer: an in vitro study. Asian Journal of Biomedical and Pharmaceutical Science*, 4(30), 6-11.

Punitha, S. C., & Rajasekaran, M. (2016). Cardioprotective effect of *Volvariella volvacea* in streptozotocin administered rats. *Bangladesh Journal of Pharmacology*, 11(4), 903-910.

Puttaraju, N. G., Venkateshaiah, S. U., Dharmesh, S. M., Urs, S. M. N., & Somasundaram, R. (2006). Antioxidant activity of indigenous edible mushrooms. *Journal of Agricultural and Food Chemistry*, 54(26), 9764-9772.

Raghukumar, C., & Raghukumar, S. (1998). Barotolerance of fungi isolated from deep-sea sediments of the Indian Ocean. *Aquatic Microbial Ecology*, 15(2), 153-163.

Raja, H. A., Miller, A. N., Pearce, C. J., & Oberlies, N. H. (2017). Fungal identification using molecular tools: a primer for the natural products research community. *Journal of Natural Products*, 80(3), 756-770.

Rajarathnam, S., Shashirekha, M. N., & Rashmi, S. (2003). Biochemical changes associated with mushroom browning in *Agaricus bisporus* (Lange) Imbach and *Pleurotus florida* (Block & Tsao): commercial implications. *Journal of the Science of Food and Agriculture*, 83(14), 1531-1537.

Ramesh, C. H., & Pattar, M. G. (2010). Antimicrobial properties, antioxidant activity and bioactive compounds from six wild edible mushrooms of Western Ghats of Karnataka, India. *Pharmacognosy research*, 2(2), 107-112.

Ranadive, K. R., Belsare, M. H., Deokule, S. S., Jagtap, N. V., Jadhav, H. K., & Vaidya, J. G. (2013). Glimpses of antimicrobial activity of fungi from World. *Journal on New Biological Reports*, 2(2), 142-162.

Rao, J. R., Millar, B. C., & Moore, J. E. (2009). Antimicrobial properties of shiitake mushrooms (*Lentinula edodes*). *International Journal of Antimicrobial Agents*, 33(6), 591-592.

Rauha, J. P., Remes, S., Heinonen, M., Hopia, A., Kähkönen, M., Kujala, T., Philaja, K., Vuorela, H. & Vuorela, P. (2000). Antimicrobial effects of Finnish plant extracts containing flavonoids and other phenolic compounds. *International Journal of Food Microbiology*, 56(1), 3-12.

Ravn, H., Andary, C., Kovács, G., & Mølgaard, P. (1989). Caffeic acid esters as *in vitro* inhibitors of plant pathogenic bacteria and fungi. *Biochemical Systematics and Ecology*, 17(3), 175-184.

Re, R., Pellegrini, N., Proteggente, A., Pannala, A., Yang, M., & Rice-Evans, C. (1999). Antioxidant activity applying an improved ABTS radical cation decolorization assay. *Free Radical Biology and Medicine*, 26(9-10), 1231-1237.

Redecker, D., Kodner, R., & Graham, L. E. (2000). Glomalean fungi from the Ordovician. *Science*, 289(5486), 1920-1921.

Reid, T., Kashangura, C., Chidewe, C., Benhura, M. A., & Mduluza, T. (2016). Antibacterial properties of wild edible and non-edible mushrooms found in Zimbabwe. *Academic Journals* 10(26), pp. 977-984.

Reis, F. S., Barros, L., Martins, A., & Ferreira, I. C. (2012). Chemical composition and nutritional value of the most widely appreciated cultivated mushrooms: an inter-species comparative study. *Food and Chemical Toxicology*, 50(2), 191-197.

Reneses, M. A. M., Dulay, R. M. R., & DE LEON, A. M. (2016), proximate nutritive composition and teratogenic effect of *Lentinus sajor-caju* collected from Banaue, Ifugao Province, Philippines. *International Journal of Biology, Pharmacy and Allied Science* (IJBPAS). 5(7), 1771-1786.

Reshetnikov, S. V., & Tan, K. K. (2001). Higher Basidiomycota as a source of antitumor and immunostimulating polysaccharides. *International Journal of Medicinal Mushrooms*, 3(4). 80-114.

Ribeiro, B., de Pinho, P. G., Andrade, P. B., Baptista, P., & Valentão, P. (2009). Fatty acid composition of wild edible mushrooms species: A comparative study. *Microchemical Journal*, 93(1), 29-35.

Rice-Evans, C. A., Miller, N. J., & Paganga, G. (1996). Structure-antioxidant activity relationships of flavonoids and phenolic acids. *Free radical biology and medicine*, 20(7), 933-956.

Roy, A., Prasad, P., & Gupta, N. (2014). *Volvariella volvacea*: A macrofungus having nutritional and health potential. *Asian Journal of Pharmacy and Technology*, 4(2), 110-113.

Rudawska, M., & Leski, T. (2005). Macro-and microelement contents in fruiting bodies of wild mushrooms from the Notecka forest in West-Central Poland. *Food chemistry*, 92(3), 499-506.

Ruess, L., Häggblom, M. M., Zapata, E. J. G., & Dighton, J. (2002). Fatty acids of fungi and nematodes—possible biomarkers in the soil food chain. *Soil Biology and Biochemistry*, 34(6), 745-756.

Sachindra, N. M., Airanthi, M. K. W. A., Hosokawa, M., & Miyashita, K. (2010). Radical scavenging and singlet oxygen quenching activity of extracts from Indian seaweeds. *Journal of Food Science and Technology*, 47(1), 94-99.

Sadler, M. (2003). Nutritional properties of edible fungi. *Nutrition Bulletin*, 28(3), 305-308.

Salamat, D., Shahid, M., & Najeeb, J. (2017). Proximate analysis and simultaneous mineral profiling of five selected wild commercial mushroom as a potential nutraceutical. *International Journal of Chemical Studies*, 5(3), 297-303.

Sales-Campos, H., Reis de Souza, P., Crema Peghini, B., Santana da Silva, J., & Ribeiro Cardoso, C. (2013). An overview of the modulatory effects of oleic acid in health and disease. *Mini Reviews in Medicinal Chemistry*, 13(2), 201-210.

Santoyo, S., Ramírez-Anguiano, A. C., Reglero, G., & Soler-Rivas, C. (2009). Improvement of the antimicrobial activity of edible mushroom extracts by inhibition of oxidative enzymes. *International journal of food science & technology*, 44(5), 1057-1064.

Schmidt, S. K., Sobieniak-Wiseman, L. C., Kageyama, S. A., Halloy, S. R. P., & Schadt, C. W. (2008). Mycorrhizal and dark-septate fungi in plant roots above 4270 meters elevation in the Andes and Rocky Mountains. *Arctic, Antarctic, and Alpine Research*, 40(3), 576-583.

Schoch, C. L., Seifert, K. A., Huhndorf, S., Robert, V., Spouge, J. L., Levesque, C. A., Chen, W. & Fungal Barcoding Consortium. (2012). Nuclear ribosomal internal transcribed spacer (ITS) region as a universal DNA barcode marker for Fungi. *Proceedings of the National Academy of Sciences*, 109(16), 6241-6246.

Schrödinger., (2018). LLC, New York, NY, 2018.

Segal-Maurer, S., Urban, C., & Rahal Jr, J. J. (1996). Current perspectives on multidrug-resistant bacteria: epidemiology and control. *Infectious Disease Clinics of North America*, 10(4), 939-957.

Seidel, V., & Taylor, P. W. (2004). *In vitro* activity of extracts and constituents of Pelagonium against rapidly growing mycobacteria. *International Journal of Antimicrobial Agents*, 23(6), 613-619.

Senatore, F., Dini, A., Marino, A., & Schettino, O. (1988). Chemical constituents of some basidiomycetes. *Journal of the Science of Food and Agriculture*, 45(4), 337-345.

Senthilarasu, G., Sharma, R., & Singh, S. K. (2012). A new species of Volvariella from India. *Mycotaxon*, 119(1), 467-476.

Sharma, S. K., & Atri, N. S. (2014). Nutraceutical composition of wild species of genus Lentinus Fr. from Northern India. *Current Research in Environmental & Applied Mycology*, 4(1), 11-32.

Sharma, S. K., & Atri, N. S. (2015). The genus Lentinus (Basidiomycetes) from India-an annotated checklist. *Journal of Threatened Taxa*, 7(11), 7843-7848.

Sharma, T. K. (2008). Vegetable caterpillar, Science Reporter. 5th May ISBN 0036-8512. *National Institute of Science Communication and Information Resources (NISCAIR)*, CSIR, 33-35.

Sharma, V. P., Kamal, S., Upadhyay, R. C., Kumar, S., Sanyal, S. K., & Singh, M. (2015). Taxonomy, phylogeny, cultivation And biological activities of a Lentinus Species from Andman & Nicobar Islands (INDIA). *Emirates Journal of Food and Agriculture*, 570-576.

Shen, H. S., Shao, S., Chen, J. C., & Zhou, T. (2017). Antimicrobials from mushrooms for assuring food safety. *Comprehensive Reviews in Food Science and Food Safety*, 16(2), 316-329.

Sherer, B. A., Hull, K., Green, O., Basarab, G., Hauck, S., Hill, P., Loch, T.J., Mullen, G., Bist, S., Bryant, J., Boriack-Sjodin, A., Read, J., DeGrace, N., Uria-Nickelsen, M., Illingworth, N.R., & Eakin, E.A. (2011). Pyrrolamide DNA gyrase inhibitors: optimization of

antibacterial activity and efficacy. *Bioorganic & medicinal chemistry letters*, 21(24), 7416-7420.

Shimada, K., Fujikawa, K., Yahara, K., & Nakamura, T. (1992). Antiosxidative properties of xanthan on the autoxidation of soybean oil in cyclodextrin emulsion. *Journal of Agricultural and Food Chemistry*, 40(6), 945-948.

Shoeb, M., Mondal, P., Kylin, H., & Nahar, N. (2017). Chemical and biological activity of mushrooms naturally occurring in Bangladesh. *Asian Journal of Pharmacognosy*, 1(3), 42-51.

Singdevsachan, S. K., Patra, J. K., & Thatoi, H. (2013). Nutritional and bioactive potential of two wild edible mushrooms (*Lentinus sajor-caju* and *Lentinus torulosus*) from Simlipal Biosphere Reserve, India. *Food Science and Biotechnology*, 22(1), 137-145.

Singer, R. (1961). Mushrooms and truffles. Leonard Hill (Books) Ltd.

Singh, V., Praveen, V., Tripathi, D., Haque, S., Somvanshi, P., Katti, S. B., & Tripathi, C. K. M. (2015). Isolation, characterization and antifungal docking studies of wortmannin isolated from *Penicillium radicum*. *Scientific Reports*, 5, 11948.

Singha, K., Pati, B. R., Mondal, K. C., & Mohapatra, P. K. D. (2017). Study of nutritional and antibacterial potential of some wild edible mushrooms from Gurguripal Ecoforest, West Bengal, India. *Indian Journal of Biotechnology* 16, pp 222-227.

Singleton, V. L., & Rossi, J. A. (1965). Colorimetry of total phenolics with phosphomolybdic-phosphotungstic acid reagents. *American Journal of Enology and Viticulture*, 16(3), 144-158.

Sjuts, H., Vargiu, A. V., Kwasny, S. M., Nguyen, S. T., Kim, H. S., Ding, X., Omik, R. A., Ruggerone, P., Bowlin, B.L., Nikaido, H., Pos, K. M. & Opperman, J.T (2016). Molecular basis for inhibition of AcrB multidrug efflux pump by novel and powerful pyranopyridine derivatives. *Proceedings of the National Academy of Sciences*, 113(13), 3509-3514.

Skotti, E., Anastasaki, E., Kanellou, G., Polissiou, M., & Tarantilis, P. A. (2014). Total phenolic content, antioxidant activity and toxicity of aqueous extracts from selected Greek medicinal and aromatic plants. *Industrial Crops and Products*, 53, 46-54.

Smolskaitė, L., Venskutonis, P. R., & Talou, T. (2015). Comprehensive evaluation of antioxidant and antimicrobial properties of different mushroom species. *LWT-Food Science and Technology*, 60(1), 462-471.

Stamets, P. (2011). *Growing gourmet and medicinal mushrooms*. Ten Speed Press.

Steinkraus, G., White, R., & Friedrich, L. (2007). Vancomycin MIC creep in non-vancomycin-intermediate *Staphylococcus aureus* (VISA), vancomycin-susceptible clinical methicillin-resistant *S. aureus* (MRSA) blood isolates from 2001–05. *Journal of Antimicrobial Chemotherapy*, 60(4), 788-794.

Sterflinger, K., Tesei, D., & Zakharova, K. (2012). Fungi in hot and cold deserts with particular reference to microcolonial fungi. *Fungal Ecology*, 5(4), 453-462.

Sudha, A., Lakshmanan, P., & Kalaiselvan, B. (2008). Antioxidant properties of paddy straw mushroom *Volvariella volvacea* (Bull. ex Fr.) Sing. *International Journal of Applied Agricultural Research*, 3(1), 9-16.

Tam, S. C., Yip, K. P., Fung, K. P., & Chang, S. T. (1986). Hypotensive and renal effects of an extract of the edible mushroom *Pleurotus sajor-caju*. *Life Sciences*, 38(13), 1155-1161.

Tenover, F. C. (2006). Mechanisms of antimicrobial resistance in bacteria. *American Journal of Infection Control*, 34(5), S3-S10.

Thiribhuvanamala, G., Prakasam, V., Chandrasekar, G., Sakthivel, K., Veeralakshmi, S., Velazhahan, R., & Kalaiselvi, G. (2011, October). Biodiversity, conservation and utilization of mushroom flora from the Western Ghats region of India (*ICMBMP7*) (pp. 155-164).

Tseng, Y. H., & Mau, J. L. (1999). Contents of sugars, free amino acids and free 5'-nucleotides in mushrooms, *Agaricus bisporus*, during post-harvest storage. *Journal of the Science of Food and Agriculture*, 79(11), 1519-1523.

Ul Haq, I., Khan, M. A., Khan, S. A., & Ahmad, M. (2011). Biochemical analysis of fruiting bodies of *Volvariella volvacea* strain Vv pk, grown on six different substrates. *Soil & Environment*, 30(2). 146-150.

Valverde, M. E., Hernández-Pérez, T., & Paredes-López, O. (2015). Edible mushrooms: improving human health and promoting quality life. *International Journal of Microbiology*. 1-14.

Vaupotic, T., Veranic, P., Jenoe, P., & Plemenitas, A. (2008). Mitochondrial mediation of environmental osmolytes discrimination during osmoadaptation in the extremely halotolerant black yeast *Hortaea werneckii*. *Fungal Genetics and Biology*, 45(6), 994-1007.

Velioglu, Y. S., Mazza, G., Gao, L., & Oomah, B. D. (1998). Antioxidant activity and total phenolics in selected fruits, vegetables, and grain products. *Journal of Agricultural and Food Chemistry*, 46(10), 4113-4117.

Vellinga, E. C. (2002). New combinations in *Chlorophyllum*. *Mycotaxon*, 83, 415-417.

Vellinga, E. C. (2003). *Chlorophyllum* and *Macrolepiota* (Agaricaceae) in Australia. *Australian Systematic Botany*, 16(3), 361-370.

Venkatachalapathi, A., & Paulsamy, S. (2016). Exploration of wild medicinal mushroom species in Walayar Valley, the Southern Western Ghats of Coimbatore district Tamil Nadu. *Mycosphere*, 7(2), 118-130.

Verma, R. N., Singh, G. B., & Bilgrami, K. S. (1987). Fleshy fungal flora of NEH India-I. Manipur and Meghalaya. *Indian Mushroom Science*, 2, 414-421.

Vizzini, A., Contu, M., & Justo, A. (2011). Additional records of *Volvariella dunensis* (Basidiomycota, Agaricales): morphological and molecular characterization. *Mycotaxon*, 117, pp37-43.

Vizzini, A., Perrone, L., Gelardi, M., Contu, M., Li, T., Zhang, M., & Xia, W. Y. (2014). A new collection of *Chlorophyllum hortense* (Agaricaceae, Agaricales) from South-Eastern China: molecular confirmation and morphological notes. *Rivista Micologica Romana*, 91(1), 3-19.

Waksman, S. A. (1944). Decomposition of cellulose and hemicelluloses by microorganisms. *Wood Chemistry*, by EW Louis (Ed), Reinhold Publishing Corp., New York, 828-852.

Wang, H. X., Liu, W. K., Ng, T. B., Ooi, V. E. C., & Chang, S. T. (1996). The immunomodulatory and antitumor activities of lectins from the mushroom *Tricholoma ongolicum*. *Immunopharmacology*, 31(2-3), 205-211.

Wani, B. A., Bodha, R. H., & Wani, A. H. (2010). Nutritional and medicinal importance of mushrooms. *Journal of Medicinal Plants Research*, 4(24), 2598-2604.

Wasser, S. P. (2002). Medicinal mushrooms as a source of antitumor and immunomodulating polysaccharides. *Applied Microbiology and Biotechnology*, 60(3), 258-274.

Wasser, S. P. (2002). Review of medicinal mushrooms advances: good news from old allies. *HerbalGram*. (56). 29-33.

Wasser, S. P., & Weis, A. L. (1999). Medicinal properties of substances occurring in higher basidiomycetes mushrooms: current perspectives. *International Journal of medicinal mushrooms*, 1(1). 31-62.

Weaver, J. C., Kroger, M., & Kneebone, L. R. (1977). Comparative protein studies (Kjeldahl, dye binding, amino acid analysis) of nine strains of *Agaricus bisporus* (Lange) Imbach mushrooms. *Journal of food Science*, 42(2), 364-366.

Whitlow, M., Howard, A. J., Stewart, D., Hardman, K. D., Kuyper, L. F., Baccanari, D. P., Kutper, F.L., Baccanari, P.D., Fling,E.M., & Tansik, R. L. (1997). X-ray Crystallographic Studies of *Candida albicans* Dihydrofolate reductase high resolution structures of the holoenzyme and an inhibited ternary complex. *Journal of Biological Chemistry*, 272(48), 30289-30298.

World Health Organization report antimicrobial resistance (AMR).2010.

World Health Organization, (2005). World Health Organization report on infectious diseases 2000: Overcoming Antimicrobial Resistance. January 2001.

Xu, J., Yang, Z. L., Zhang, Y., Yu, Z., & Zhang, K. (2011). Diversity And Population Biology Of Wild Mushrooms From Southwestern China. In *Mushroom biology and mushroom products. Proceedings of the 7th International Conference on Mushroom Biology and Mushroom Products, Arcachon, France, 4-7 October, 2011. Volume 1. Oral presentations* (pp. 77-90). Institut National de la Recherche Agronomique (INRA).

Yamaç, M., & Bilgili, F. (2006). Antimicrobial activities of fruit bodies and/or mycelial cultures of some mushroom isolates. *Pharmaceutical Biology*, 44(9), 660-667.

Yang, Q.Y.; Hu, Y.J.; Li, X.Y.; Yang, S.X.; Liu, J.X.; Liu, T.F.; Xu, G.M. and Liao, L.M. (1993). A New Biological Response Modifier - PSP. The Chinese University Press, Hong Kong, pp. 247-259.

Yao, Q. Z., Yu, M. M., Ooi, L. S., Ng, T. B., Chang, S. T., Sun, S. S., & Ooi, V. E. (1998). Isolation and characterization of a type 1 ribosome-inactivating protein from fruiting bodies of the edible mushroom (*Volvariella volvacea*). *Journal of Agricultural and Food Chemistry*, 46(2), 788-792.

Yip, K. P., Fung, K. P., Chang, S. T., & Tam, S. C. (1987). Purification and mechanism of the hypotensive action of an extract from edible mushroom *Pleurotus sajor-caju*. *Neuroscience Letters Suppl*, 28, S59.

Yoshioka, Y., Ikekawa, T., Noda, M., & Fukuoka, F. (1972). Studies on antitumor activity of some fractions from basidiomycetes. An antitumor acidic polysaccharide fraction of *P. ostreatus* (Fr.) Quél. *Chemical and Pharmaceutical Bulletin*, 20(6), 1175-1180.

Zacharia R.M., Rakhee N., Deepa K. and Leenakumary S.. (2017). Biochemical comparison of commonly cultivated mushrooms of Kerala. *Mushroom Research* 26 (1) : 77-83.

Zheng, C. J., Yoo, J. S., Lee, T. G., Cho, H. Y., Kim, Y. H., & Kim, W. G. (2005). Fatty acid synthesis is a target for antibacterial activity of unsaturated fatty acids. *FEBS letters*, 579(23), 5157-5162.