

---

## REFERENCES

- Ajith, T. A and Janardhanan, K. K. (2003). Cytotoxic and antitumor activities of a polypore macrofungus, *Phellinus rimosus* (Berk) Pilat. *Journal of Ethnopharmacology*. **84**. 157 – 162.
- Akhmedova, Z.R. (1996). Ligninolytic enzymes of basidiomycetes: lignin peroxidase from fungus *Pleurotus ostreatus* UZBI – ZAX 108. Isolation purification and characterization of isoenzyme. *Biochemistry (Moscow)*. **61(8)**. 981 – 987.
- Alexopoulos and Constantine, J. (1996). *Introductory Mycology 4th Ed*. New York: Wiley. (p. 50 – 156).
- Ali, A., Carlos, M., Cer, G. R., Gustavo, V. G. and Mayra, D. L. T. (2006). Carbon distribution and redirection of metabolism in *Paecilomyces fumosoroseus* during solid state and liquid fermentations. *Process Biochemistry*. **41**. 1303 – 1310.
- Alofe, F.V. (1985). *The General Characteristics and Cultivation of Some Nigerian Mushrooms*. Ph.D Thesis, Obafemi Awolowo University, Nigeria.
- Anupama, N. D., Gajanan, B. Z. and Karuppayil, S. M. (2005). Potential of plant oils as inhibitors of *Candida albicans* growth. *FEMS Yeast Research*. **5**. 867 – 873.
- Bauer, A.W., Kirby, M.M., Sherris, J.C. and Turck, M. (1966). Antibiotic susceptibility testing by a standardized single disk method. *The American Journal of Clinical Pathology*. **36(3)**. 493 – 496.
- Biesebeke, R., Ruijter, G., Rahardjo, Y., Hoogschagen, M., Heerikhuisen, M. and Levin, A. (2002). *Aspergillus oryzae* in solid state and submerged fermentation progress report on a multi disciplinary project. *FEMS Yeast Research*. **2**. 245 – 8.
- Brand., A. H. (1995). GFP in *Drosophila*. *Trend In Genetics*. **11(8)**. 324 – 325.

- Bum, C. L., Jun, T. B., Tae, B. C., Sang, W. K., Hye, J. H. and Jong, W. Y. (2004). Submerged culture conditions for the production of mycelial biomass and exopolysaccharides by the edible Basidiomycete *Grifola frondosa*. *Enzyme and Microbial Technology*. **35**. 369 – 376.
- Celia, M. M. D. S. S., Itamar, S. D. M. and Pablo, R. D. O. (2005). Ligninolytic enzyme production by *Ganoderma* sp. *Enzyme and Microbial Technology*. **21**. 132 – 140.
- Chang S. T., Buswell J. A. and Chang, S. T. (1999). *Ganoderma lucidum* (Curt.:Fr.) P. Karst. (Aphyllophoromycetideae) a mushrooming medicinal mushroom. *International Journal of Medicinal Mushrooms*. **1(2)**. 139 – 146.
- Chang, S. T., Buswell, J. A. and Chiu, S. W. (1993). *Mushroom Biology and Mushroom Products*. The Chinese University Press. (p. 370).
- Chihara., G. (1969). Study on the antineoplastic activity and analysis of active fractions of Polyporaceae, *Lentinus edodes* and other basidiomycetes. *Nippon Rinsho*. **27(6)**. 1739-174
- Connie, R. M and George, M (1998). *Textbook of Diagnostic of Microbiology*. WB Saunders. (p. 468).
- Dang, N.Q., Toshihiro Hashimoto and Yuuki Arakawa (2005). Grifolin derivatives from *Albatrellus caeruleoporus*, new inhibitors of nitric oxide production in RAW 264.7 cells. *Bioorganic and Medicinal Chemistry*. **14**. 164 – 168.
- David, A.W., Robert, B.B. and David, M.B. (2006). Manganese and other micronutrient additions to improve yield of *Agaricus bisporus*. *Biosource Technology*. **97**. 1012 – 1017.
- David, L. (1996). Fungi as a platform for new medicine. *Mushroom, Fungi and Medicine*. **75**. 162 – 170.

- 
- David, R., Cabaleiro., Susana Rodriguez Couto., Angeles, S. and Maria, A. L. (2002). Comparison between the protease production ability of ligninolytic fungi cultivated in solid state media. *Process Biochemistry*. **37**. 1017 – 1023.
- Dictionary of Fungi** (2001). In website <http://www.indexfungorum.org/> accessed on CABI Bioscience Databases 2004.
- Elisashvili, V., Penninckx, M., Kachlishvili, E., Asatiani, M. and Kvesitadze, G. (2006) Use of *Pleurotus dryinus* for lignocellulolytic enzymes production in submerged fermentation of mandarin peels and tree leaves. *Enzyme Micro. Technol.* **38**. 998 – 1001.
- Emma, N. Q., Antonio, R. S. and Marta, A. V. (2001). Screening of antifungal activities of selected medicinal plants. *Journal of Ethnopharmacology*. **74**. 89 – 96.
- Eric C. Swann and John W. Taylor (1993). Higher taxa of basidiomycetes: an 18 rRNA gene perspective. *Mycologia*. **85(6)**. 923-936.
- Farnsworth, N.R. and Bingel, A.S. (1977). Problems of discovering new drugs from higher plants by pharmacology screening. In Wagner, H. and Wolff, P. (Eds.), *Proceedings in Life Sciences – New Natural Products and Plant Drugs with Pharmacological, Biological or Therapeutical Activity*. Germany: Springer-verlag Berlin Heidelberg. (p. 1 – 22).
- Fasidi, I.O. (1996). Studies on *Volvariella esculenta* (mass) Singer: cultivation on agricultural wastes and proximate composition of stored mushrooms. *Food Chemistry*. **55**. 161 – 163.
- Fasola, T.R., Gbolagade, J.S. and Fasidi, I.O. (2006). Nutritional requirements of *Volvariella speciosa* (Fr. Ex. Fr.) Singer, a Nigerian edible mushroom. *Food Chemistry*. **100**. 904 – 908.

- Gabriela, M.C., Roberti, M. J. and Wright, J. E. (2002). Cryptoporic and isocryptoporic acids from the fungus cultures of *Polyporus arcularius* and *P. ciliatus*. *Phytochemistry*. **61**. 189 – 193.
- Giorgio, D. S., Daniela, C. and Irene, I. (2002). Synthesis of antifungal N-isoprenyl-indole alkaloids from the fungus *Aporpium caryae*. *Tetrahedron Letters*. **43**. 8839 – 8841.
- Gramss, M., Gunther, T. H. and Fritsche, W. (1998). Spot tests for oxidative enzymes in ectomycorrhiza, wood-, and litter decaying fungi. *Mycology Research*. **102(1)**. 67 – 72.
- Guo., Wang., H. X. and Ng, T. B. (2005). Isolation of trichogin, an antifungal protein from fresh fruiting bodies of the edible mushroom *Tricholoma giganteum*. *Peptide*. **26**. 575 – 580
- Gupte, M., Kulkarni, P. and Ganguli. (2002). Antifungal antibiotics. *Appl Microbial Biotechnol*. **58**. 46 – 57.
- Hang, Y. D. and Woodams, E. E. (2003). Control of *Fusarium oxysporum* by baking soda. *Lebensm Wiss. U. Technol*. **36**. 803 – 805.
- Hikino, H. and Mizuno, T. (1989). Hypoglycemic actions of some heteroglycans of *Ganoderma lucidum* fruit bodies. *Planta Medica*. **55(4)**. 385
- Hirata, Y. and Nahanishi, K. (1950). Grifolin, an antibiotic from a basidiomycetes. *Journal Biological Chemistry*. **184**. 135 – 144.
- <http://biology.about.com> accessed on about.com.
- Huang, P. (1993). *Mushroom Cultivation Hunan*. Hunan Science and Technology Publication. (p. 206 – 221).

- 
- Hugo J. de Boer., Anneleen Kool and Anders Broberg (2005). Anti-fungal and anti-bacterial activity of some herbal remedies from Tanzania. *Journal of Ethnopharmacology.* **96.** 461 – 469.
- Ian Tribe (1977). *Mushrooms In The Wild.* Istituto geografico de Agostini Novara. (p 23 – 58).
- Idaya (2001). *Taxonomy and Biodiversity Study of Basidiomycetes in the Order Aphyllophorales and Puffball in Malaysia Nature Society's Heritage Trail.* Thesis submitted to Faculty of Science, University Malaya in particular fulfillment for Bachelor Science (Microbiology) Degree.
- Inam-ul-Haq, M., Javed, N., Ahmad, R. and Rehman, A. (2003). Evaluation of different strains of *Pseudomonas fluorescens* for the biocontrol of Fusarium wilt of Chickpea. *Pakistan Journal of Plant Pathology.* **2 (1).** 65 – 74.
- Inmaculada, S., Francisco, A. and Francisco J. Asensio. (2000). Screening of basidiomycetes for antimicrobial activities. *Kluwer Academic Publishers.* **78.** 129 – 139.
- Irinoda, K., Mashihi, N.K., Chihara, G., Kaneko, Y. and Katori, T. (1992). Stimulation of microbicidal host defence mechanism against aerosol influence virus infection by Lentinan. *Immunopharmal.* **14.** 971 – 977.
- Jiang., Howard, B. and Terry, R. (2002). Novel strategies in antifungal lead discovery. *Current Opinion in Microbiology.* **5.** 466 – 471.
- Jonathan, G., Loveth, K. and Elijah, O. (2007). Antagonistic effect of extracts of some Nigerian higher fungi against selected pathogenic microorganisms. *American Eurasian Journal Agriculture and Environment Science.* **2(4).** 364 – 368.

- 
- Jonathan, S.G. and Fasidi, I.O. (2001). Effect of carbon, nitrogen and mineral sources on growth of *P. atroumbonata* (Pegler), a Nigerian edible mushroom. *Food Chemistry.* **72.** 479 – 483.
- Jorgensen, J. H., Turnidge, J. D. and Washington, J. A. (1999). Antibacterial susceptibility tests: Dilution and disc diffusion method. In Murray, P. R., Baron, E. J., Pfaffer, M. A., Tenover, F. C. and Yolken, R. H. (eds), *Manual of Clinical Microbiology*. 7<sup>th</sup> Edition. Washington: ASM Press. (p.1526 – 1543).
- Kalaiwaney A/P Muniandy (2001). *Production, Molecular Weight and Isoelectric Point Determination of Lignin Peroxidase from A Bacteria, Actinomycetes Strain B 23*. Thesis submitted to Faculty of Science, University Malaya in particular fulfillment for Bachelor Science (Biotechnology) Degree.
- Kaneno, R., Fontanari, L. M. and Santos, S. A. (2004). Effects of extracts from Brazilian sun-mushroom (*Agaricus blazei*) on the NK activity and lymphoproliferative responsiveness of Ehrlich tumor-bearing mice. *Food and Chemical Toxicology.* **42.** 909 – 916.
- Kiiskinen, L.L., Ratto, M. and Kruus, K. (2004) Screening for novel laccase producing microbes. *Journal Application Microbiology.* **97.** 640 – 646.
- Kool, A., Broberg, A. and William, R. M. (2005). Anti-fungal and anti-bacterial activity of some herbal remedies from Tanzania. *Journal of Ethnopharmacology.* **96.** 461 – 469.
- Kuthubutheen, A.J. (1981). Fungi associated with the aerial parts of Malaysian mangrove plants. *Mycopathologia.* **76.** 33-43
- Lau, C.C. (2006). *Antioxidant, Antimicrobial and Cytotoxic Properties of Selected Polyporales Cultured in Submerged Fermentation*. Thesis submitted to Faculty of Science, University Malaya in particular fulfillment for Bachelor Science (Biotechnology) Master Degree.

- Lee, B. C., Jun, T. B. and Hyeong, B. P. (2004). Submerged culture conditions for the production of mycelial biomass and exopolysaccharides by the edible Basidiomycete *Grifola frondosa*. *Enzyme and Microbial Technology*. **36**. 369 – 376.
- Lee, B. W., Lee, M. S., Park, K. M., Kim, C. H., Ahn, P. U. and Choi, C. U. (1992). Anticancer activities of the extract from the mycelia of *Coriolus versicolor*. *Korean Journal of Applied Microbiology and Biotechnology*. **20(3)**. 311 – 315.
- Liu Geng Tao. (1999). Recent advance in research of pharmacology and clinical applications of *Ganoderma* P. Karst. Species (Aphyllophoromycetidae) in China. *International journal of medicinal mushrooms*. **1(1)**. 63 – 67.
- Luo, D. Q., Shao, H. J., Zhu, H. J. and Liu, J. K. (2005). Activity *in vivo* and *in vitro* against plant pathogenic fungi of grifolin isolated from the basidiomycetes *Albatrellus dispansus*. *Naturforsch*. **60**. 50 – 56.
- Makiko Nukata., Toshihiro Hashimoto., Isao Yumamoto., Nobuki, I., Masami, T. and Yoshinori, A. (2002). Neogrifolin derivatives possessing anti – oxidative activity from the mushroom *Albatrellus ovinus*. *Phytochemistry*. **59**. 731 – 737.
- Mao, X. B., Titiporn, E. and Somchai, C. (2005). Optimization of carbon source and carbon/nitrogen ratio for cordycepin production by submerged cultivation of medicinal mushroom *Cordyceps militaris*. *Process Biochemistry*. **40**. 1667 – 1672.
- Mao Ye., Liu, J. K. and Lu, Z. X. (2005). Grifolin, a potential antitumor natural product from the mushroom *Albatrellus confluens*, inhibits tumor cell growth by inducing apoptosis *in vitro*. *FEBS Letters*. **579**. 3437 – 3443.
- Marc Stadler and Olov Sterner (1998). Production of bioactive secondary metabolites in the fruit bodies of macrofungi as a response to injury. *Phytochemistry*. **9(4)**. 1013 – 1019.

- Marx., L. F. and Peterson., R. L. (1969). Induction of protoplast formation in the Ectomycorrhizal fungus *Paxillus involutus* by the root rot pathogen *Fusarium oxysporum*. *New Phytologist*. **116(1)**. 107-113.
- McLaughlin, D.M., Beckett, A. and Yoon, K.S. (1985). Ultrastructure and evolution of ballistosporic basidiospores. *Botanical Journal Linnean Society*. **91**. 253-271.
- Mellado, E., Cuenca-Estrella, M. and Regadera, J. (2000). Sustained gastrointestinal colonization and systemic dissemination by *Candida albicans*, *Candida tropicalis* and *Candida parapsilosis* in adult mice. *Diagnostic Microbiology and Infectious Disease*. **38**. 21 – 28.
- Mizuno, T. (1999). The extraction and development of antitumor-active polysaccharides from medicinal mushrooms in Japan (review). *International Journal of Medicinal Mushrooms*. **1(1)**. 9 – 29.
- Mizuno, T. (2000). Antitumor polysaccharides from mushroom during storage. *Biofactor*. **12(1 - 4)**. 275 – 281.
- Mohammed, E., Dominique, T. and Bouzaggou, B. (2005). Rapid identification of *Candida* species by FT – IR microspectroscopy. *Biochimica et Biophysica Acta*.
- Moncalvo, J. M. and Ryvarden, L. (1997). *A Nomenclatural Study of the Ganodermataceae Donk*. Oslo, Norway: Fungiflora. (p.114 )
- Ngai, P. H. K. and Ng, T. B. (2003). Lentin, a novel and potent antifungal protein from shiitake mushroom with inhibitory effects on activity of human immunodeficiency virus-1 reverse transcriptase and proliferation of leukemia cells. *Life Sciences*. **73**. 2263 – 3374.
- Ng, T. B. (1998). A review of research on the protein – bound polysaccharide (Polysaccharopeptide, PSP) from the mushroom *Coriolus versicolor* (Basidiomycetes : Polyporaceae). *Pharmacy*. **30**. 1 – 4.

- Ng, T. B. (2004). Peptides and proteins from fungi. *Peptides*. **25**. 1055 – 1073.
- Nuske, J., Scheibner, K., Dornberger, U., Ullrich, R. and Hofrichter, M. (2002). Large scale production of manganese – peroxidases using agaric white-rot fungi. *Enzyme and Microbial Technology*. **30**. 556 – 561.
- Ooi., V. E and Liu., F. (2000). Immunomodulation and anti-cancer activity of polysaccharide-protein complexes. *Medicine Chemistry*. **7(7)**. 715 – 29.
- Ostermayer, I. (1993). *Prescribing Habits in City Council Health Facilities. Knowledge of Patients Concerning Drugs. Availability of Essential Drugs*. DUHP, Swiss Tropical Institute, Basel.
- Patrick, H. K., Zheng Zhao and Ng, T. B. (2005). Agrocybin, an antifungal peptide from the edible mushroom *Agrocybe cylindracea*. *Peptides*. **26**. 191 – 196.
- Pegler, D. N. (1997). *The Larger Fungi of Borneo*. Kota Kinabalu: Natural History Publication.
- Philip, G. M. and Shu, T. C. (1997). *Mushroom Biology, Concise Basics and Current Developments*. World Scientific. (p. 78).
- Richard, F. H. (2005). An overview of antifungal drugs and their use for treatment of deep and superficial mycoses in animals. *Small Animal Practice*. **20**. 240 – 249.
- Roncero, M. I. G., Hera, C. and Manuel, R. (2003). *Fusarium* as a model for studying virulence in soilborne plant pathogens. *Physiological and Molecular Plant Pathology*. **62**. 87 – 98.

- Rosa, L. H., Machado, K. M. G., Jacob, C. C., Marina, C., Carlos, A. G. and Carlos, L . Z. (2003). Screening of Brazilian *basidiomycetes* for antimicrobial activity. *Mem Inst Oswaldo Cruz, Rio de Janeiro.* **98**(7). 967 – 974.
- Rothschild, N., Novotny, C. and Sasek, V. (2002). Ligninolytic enzymes of the fungus *Irpea lacteus* (*Polyporus tulipiferae*): isolation and characterization of lignin peroxidase. *Enzyme and Microbial Technology.* **31**. 627 – 633.
- Saleem Basha and Kandasamy Ulaganathan (2002). Antagonism of *Bacillus* species (strain BC 121) towards *Curvularia lunata*. *Current Science.* vol. 82, NO. 12
- Salmiah Ujang and Thillainathan, P. (1998). *Some Common Macrofungi in Malaysia.* FRIM publication unit, Forest research institute Malaysia. No. 64, 1998.
- Samuelsson, G. (1999). *Drugs of Natural Origin.* 4 Edition. Apotekar Societeten, Stockholm. (p.10).
- Shamtsyan, M., Valentina, K. and Yulia, M. (2004). Immunomodulating and anti-tumor action of extracts of several mushrooms. *Journal of Biotechnology.* **113**. 77 – 83.
- Shao, B. M., Hui Dai and Wen Xu (2004). Immune receptors for polysaccharides from *Ganoderma lucidum*. *Biochemical and Biophysical Research Communications.* **323**. 133 – 141.
- Solomon, P. W. (2002). Review of medicinal mushrooms advances: good news from old allies. *The Journal of the American Botanical Council.* **56**. 28 – 33.
- Stamets and Chilton, J. S. (1983). *The Mushroom Cultivator: A Practical Guide to Growing Mushrooms at Home.* Washington: Agarikon Press.

- Stuardo, M., Larrondo, L. F., Vasques, M., Vicuna, R. and Gonzalez, B. (2005). Incomplete processing of peroxidase transcripts in the lignin degrading fungus *Phanerochaete chrysosporium*. *FEMS Microbiology Letters*. **242**. 37 – 44.
- Suay, I., Arenal, F., Asensio, F.J., Basilio, A., Cabello, M.A., Diez, M.T., Garcia, J.B., Gonzalez del Val, A., Gorrochategui, J., Hernandez, P., Pelaez, F, and Vicente, F.M. (2000). Screening of basidiomycetes for antimicrobial activities. *Antonie von Leeuwenhock*. **78**. 129 – 139.
- Sugiyama, K., Kawagishi, H., Tanaka, A., Saeki, S., Yoshida, S., Sakamoto, H. and Ishiguro, Y. (1992). Isolation of plasma cholesterol – lowering components from ningyotake (*Polyporus confluens*) mushroom. *Journal Nutri Science Vitaminol*. **38**. 335 – 342.
- Tan Nguk Wei (2001). *Analysis of Anti – tumor Properties in Selected Polypores*. Thesis submitted to Faculty of Science, University Malaya in particular fulfillment for Bachelor Science (Biotechnology) Degree.
- Tang, Y. J. and Zhong, J. J. (2002). Fed – batch fermentation of *Ganoderma lucidum* for hyperproduction of polysaccharide and ganoderic acids. *Enzyme Microbial Technology*. **31**. 20 – 8.
- Tan, Y. H. and Moore, O. (1994) High concentration of mannitol in shiitake mushroom: *Lentinula edodes*. *Microbios*. **79**. 31 – 35.
- Tochikura, T.S., Nakashima, H., Ohashi, Y. and Yamamoto, N. (1988). Inhibition (*in vitro*) of replication and the cytopathic effect of human immunodeficiency virus by an extract of culture medium of *Lentinus edodes* mycelia. *Medicine Microbiology*. **177**. 235 – 244.
- Wang., H. X., Ng, T. B. and Qinghong Liu (2004). Alveolarin, a novel antifungal polypeptide from the wild mushroom *Polyporus alveolaris*. *Peptides*. **25**. 693 – 696.

- Wang., H. X. and Ng, T. B. (2005). Ganodermin, an antifungal protein from fruiting bodies of the medicinal mushroom *Ganoderma lucidum*. *Peptides.* **484**. 4 – 7.
- Warren, N. G. and Hazen, K. C. (1999). *Candida*, *Cryptococcus*, and other yeasts of medical importance In Murray, P. R., Baron, E. J., Pfaller, M. A., Tenover, F. C. and Yolken, R. H. (eds), *Manual of Clinical Microbiology*. 7<sup>th</sup> Edition. Washington: ASM Press. (p.1184-1200).
- Watanabe, T., Watanebe, Y. and Nakamura, K. (2003). Biodegradation of wood in dual cultures of selected two fungi determined by chopstick method. *Journal of Bioscience and Bioengineering.* **95(6)**. 623 – 626.