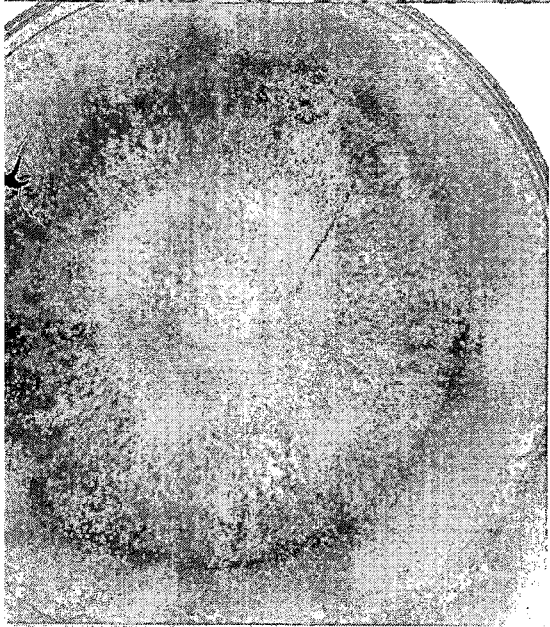
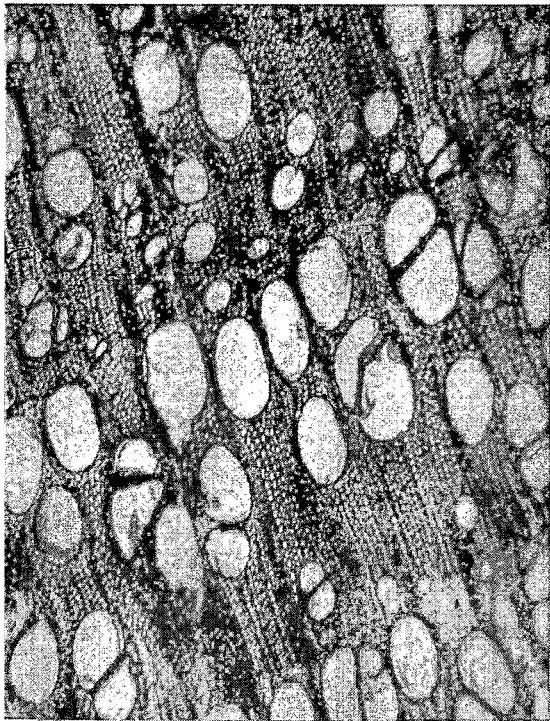
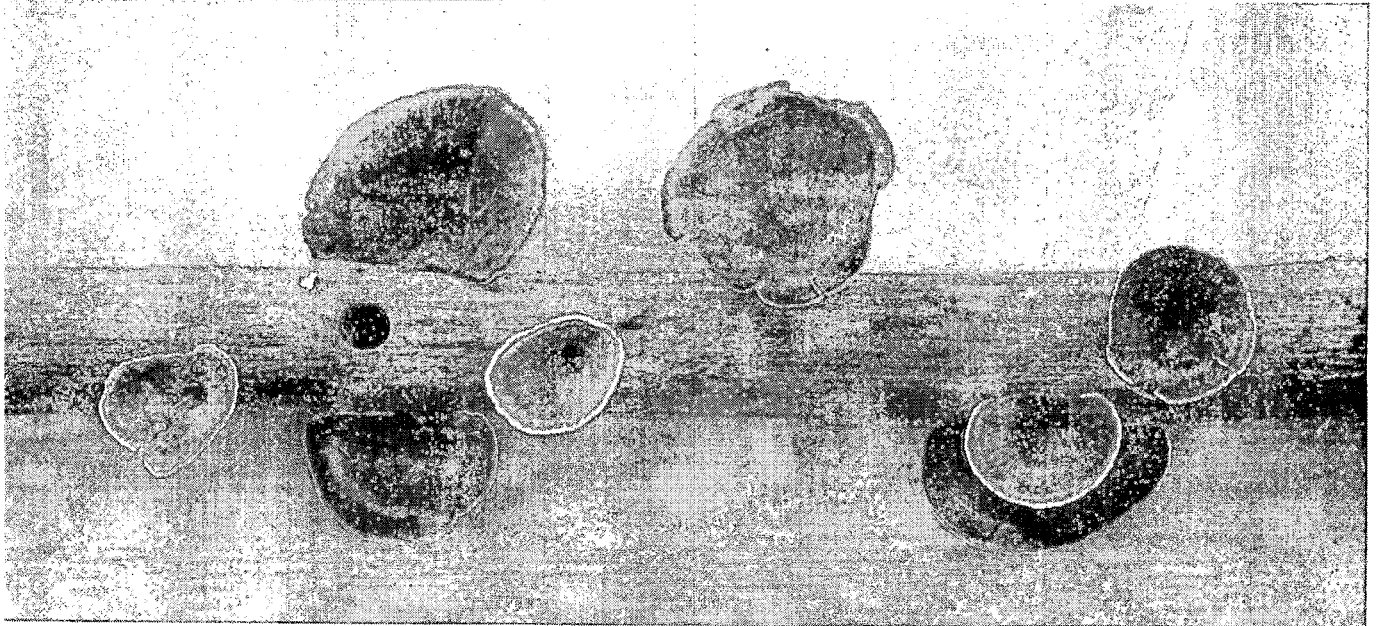




References



- Adaskaveg, J.E.; Gilbertson, R.L.; and Blanchette, R.A. (1990). Comparative studies of delignification caused by *Ganoderma* species. *Appl. Environ. Microbiol.* 56 (6): 1932–1943.
- Adejoye O. D. and Fasidi I.O. (2009). Effect of Cultural conditions on Biomass and Laccase Production in Submerged Medium by *Schizophyllum Commune* (Fr.), a Nigerian Edible Mushroom *Electronic Journal of Environmental, Agricultural and Food Chemistry* 8 (11) :1186-1193
- Adejoye D., Adebayo-Tayo B.C., Ogunjobi A.A., and Afolabi O.O. (2007). Physicochemical studies on *Schizophyllum commune* (Fries) a Nigerian Edible Fungus. *World Applied Sciences Journal* 2 (1): 73-76.
- Adejoye O.D. and Fasidi I.O. (2009) Biodegradation of agrowaste by some Nigerian white rot fungi. *Bioresources* 4 (2): 816-824
- Agharkar S.P. and Banerjee S.N. (1933). Some Hymenomycetous fungi from Calcutta and suburbs. *Proc. 20th Indian Sci. Congr.* P.69.
- Agosin E., Blanchette R. A., Silva H., Lapierre C., Cease K. R., Ibach R. E., Abad A.R., and Mugas P. (1990). Characterization of Palo Podrido, a Natural Process of Delignification in Wood. *Applied and Environmental Microbiology*, 56 (1): 65-74
- Aitken, M.D.; and Irvine, R.L. (1989). Stability testing of ligninase and Mn-peroxidase from *Phanerochaete chrysosporium*. *Biotechnol. Bioeng.*, 34, 1251-1260,
- Akhtar M., Attridge M. C., Myers G. C. and Blanchette R. A. (1993). Biomechanical pulping of loblolly pine chips with selected white rot fungi. *Holzforschung* 47: 36-40.
- Alder E. (1977). Lignin chemistry-past present and future; *Wood Sci. Technol.* 11: 169-218
- Amee P., Albert S., Nagadesi P. K. and Arya A. (2010). Lignin degradation by *Flavodon flavus* (Klotzsch.) Ryv. and *Schizophyllum commune* Fr. on *Mangifera indica* and *Syzygium cumini* woods. *Journal of Wood Chemistry and Technology* 30 (2): 129-139
- American Society for Testing Materials (ASTM) Standard method of accelerated laboratory test of natural decay resistance of woods. ASTM D-2017-71 (Reapproved 1978), Annual Book of ASTM Standards, Part 22, Philadelphia, pp 639– 645, 1981.
- Ammyor and Timberlakwe, E. (1990). Sequence and molecular structure of the *Aspergillus niddans* A (laccase 1) gene. *Nucleic Acids Research* 18, 341 5.
- Anagnost, S.E. (1998) Light microscopic diagnosis of wood decay. *IAWA* 19 (2): 141-1 67
- Ananthanarayanan, S.; Wajid, S.A.; and Padmanabhan, S. (1970) Studies on enzymatically liberated lignin in some Indian hardwoods. *Wood Sci. Tech.* 4: 213–215.
- Ander, P. and Pettersson, B. (1992). Reactions of hemoglobin and peroxidases with lignin-related phenols in the presence of chlorine compounds. In: Kuwahara, M. & Shimada, M. (eds.): *Proceedings of the 5th International Conference on Biotechnology in the Pulp and Paper Industry*, Kyoto, Japan, May 27-30, 1992, Uni Publishers Co, Tokyo, pp. 345-350.
- Ander, P. and Eriksson K.E. (1977). Selective degradation of wood components by white rot fungi. *Physiol. Pl. (Copenhagen)* 41: 239-248.
- Ander P. and Eriksson K, E. (1976). The importance of phenol oxidase activity in lignin degradation by the white rot fungus *Sporotrichum pulverulentum*. *Archives of Microbiology* 109, 1-8.
- Ander P., and Eriksson K.E. (1978). Lignin degradation and utilization by microorganisms. *Prog. Ind. Microbiol.* 14:1-58.
- Archibald F, and Roy B. (1992). Production of manganic chelates by laccase from the lignin-degrading fungus *Trametes versicolor*. *Appl Environ Microbiol* 58:1496–1499.
- Archibald, F. (1992). Lignin peroxidase activity is not important in biological bleaching and delignification of unbleached kraft pulp by *Trametes versicolor*. *Applied and Environmental Microbiology* 58: 3101-3109.
- Ardon, O., Kerem Z. and Hadar Y. (1996). Enhancement of laccase activity in liquid cultures of the ligninolytic fungus *Pleurotus ostreatus* by cotton stalk extract. *Journal of Biotechnology*, 51: 201-207.
- Arya A. (1982). Cultural and pathological studies of certain fungi-imperfecti. A Ph.D. thesis submitted to University of Allahabad; p 26.
- Arya A. (1988). Control of *Phomopsis* fruit rot of grapes and guava. *Indian Phytopath* 41(2): 214-219
- Arya A., and Arya C. (2009). Botanical pesticides to control Post Harvest Disease of Avocado, Mango, Guava and Chiku. In: *Disease of Fruit Trees* (ed. A. Arya) pub by International Book Distributing Co. India, Lucknow pp 226-239

- Arya A., Chauhan R. and Arya C. (1995). Effect of allicin and extracts of Garlic and Bignonia on two fungi. *Indian J. Mycology and Pl. Pathology*. 25(3) :316-318.
- Arya A. (2004). New and interesting records of basidiomycetous fungi from Gujarat, India. In: *Vistas in Palaeobotany and Plant Morphology: Evolutionary and Environmental Perspectives*, Prof D D Pant Memorial Vol, PC. Srivastava (ed) Published by UP Offset, Lucknow, India. pp 321-327.
- Arya A, Albert S, and Nagadesi P. K. (2008). New and interesting records of Basidiomycetous fungi from Ratanmahal Wildlife Sanctuary, Gujarat, India. *J Mycol Pl Pathol* (Udaipur) 38 (2): 221-226.
- Asada, Y., Watanabe, A., Ohtsu, Y. and Kuwahara, M. (1995b). Purification and characterization of an aryl-alcohol oxidase from the lignin-degrading basidiomycete *Phanerochaete chrysosporium*.
- Asgher M., Sharif, Y., and Bhatti, H.N. (2010) "Enhanced Production of Ligninolytic Enzymes by *Ganoderma lucidum* IBL-06 Using Lignocellulosic Agricultural Wastes," *International Journal of Chemical Reactor Engineering*: 8: 59.
- Balázs B., Tóth G., Rao P. S., Narender T., Subba Rao N., Horváth Gy., Duddeck H. (1999). Neoadifolin, a new indole alkaloid from the heartwood of *Adina cordifolia*. *Magnetic Resonance in Chemistry* 37 (10): 751 – 753
- Bailey P.J. Liese W and Rosch R. (1968). Some aspects of cellulose degradation in lignified cell walls In: *Biodeterioration of Materials*. Elsevier Publ. Co., Ltd. Borking. Essex, England. Pp 546-557.
- Bains R.K., Rahi D.R. and Hoondal G.S. (2006). Evaluation of wood degrading enzymes of some indigenous white rot fungi. *J Mycol Pl Pathol* 36(2): 161-164
- Bakshi, B.K., (1955). Diseases and decay of conifer in the Himalayas. *Ind. Forester*, 81: 779-797.
- Bakshi B.K. (1956). Occurrence of *Polyporus squamosus* (Hund.) Fr. in India. *Indian Phytopath.* 9:191-194.
- Bakshi B.K. (1965). Four *Fomes* as unrecorded tree parasites in India. *Indian For. Bull.* No. 244 (N.S.).
- Bakshi B.K. (1971). *Indian Polyporaceae*. Indian Council of Agricultural Research, New Delhi. 246 pp
- Bakshi, B.K., (1976). *Forest Pathology Principle and Practices in Forestry*. Published by the Controller of Publication, Delhi, pp: 55-72.
- Bakshi B.K. and Bagchee K.D. (1950). Principle diseases and decay of Oaks in India; *Indian Phytopath.* 4: 139
- Bakshi B.K. Puri Y.N. and Singh S. (1967). Natural decay resistance of Indian timbers I. Introduction and method II. Decay resistance of sal (*Shorea robusta* Gaertn) and Teak (*Tectona grandis* L.f.). *Indian forester* 93: 305-328.
- Bakshi B.K., Sehgal H.S. and Singh B. (1969). Cultural diagnosis of Indian Polyporaceae I genus *Polyporus*. *Indian. For. Rec. (N.S.)* 2(9): 205-244.
- Bakshi B.K., Manjusri S. and Singh B. (1970). Cultural diagnosis of Indian Polyporaceae II. Genera *Fomes* and *Trametes*. *Indian. For. Rec. (N.C.)* 2(10):245-476.
- Bagchee K.D. and Bakshi B.K. (1950). Some fungi as wound parasites of India trees. *Indian Forester* 76:244-253.
- Bagchee K.D. and Bakshi B.K. (1951). *Poria monticola* Murr. On Chir (*Pinus longifolia* Roxb.) in India *Nature* 167:824.
- Bagchee K.D. and Bakshi B.K. (1954). Studies on Indian Thelephoraceae I. some species of *Stereum*, *Peniophora* and *Corticium*. *Ind. For. Bull.* 166: 1-11.
- Bagchee K.D. Puri Y.N. and Bakshi B.K. (1954). Principal disease and decays of Oaks and other heard woods in india-II *Indian Phytopath* 7: 18-42.
- Bagchee, K.D., (1950). Progress of forest pathology in india during the quinquennium 1944-1949. *Ind. Forester*, 76: 216-220.
- Bagchee, K.D., (1961). The fungal disease of sal (*Shorea robusta* Gaertn. F. and Fils) IV. *Fomes caryophyllii* (Rac.) Bres. A distructive heart rot of sal. *Ind. Forest Records. (N.S.)*, 2: 15-58.
- Banerjee S.N. (1946). Some higher fungi of Sikkim-Himalayas. *Sci. and Cult.* 11: 444-445.
- Banerjee S.N. and Chakravorthy, M. (1945). On the biology of *Polyporus agaricus* Berk. *Proc. 32nd Indian Sci. Congr.* P.69.
- Banerjee S.N. and Ghosh T. (1945). On the collection of Hymenomycetous fungi from the Sikkim-Himalayas. *Proc. 32nd Indian Sci. Congr.* P.69.

- Banerjee S.N. and Sinha A.K. (1955). A simple method for producing typical sporophores of *Polystictus sanguineus* (L.) Mey. Sci. and Cult 20: 612-613.
- Barr, D. P., and Aust, S. D. (1994) EnViron. Sci. Technol. 28, 78A-87A.
- Barrett M. F. (1910). Three Common Species of *Auricularia*. Mycologia, 2 (1): 12-18
- Barrongl L. (2003). Predatory fungi, wood decay, and the carbon cycle. Biodiversity. 4: 3-9
- Baucher M., Chabbert B., Pilate C., Van Doorselaere J., Tollier M., Conil M P., Cornu D., Monties B., Van Montagu M., Inze D., Jouanin L., and Boerjan W. (1996). Red Xylem and Higher Lignin Extractability by Down-Regulating a Cinnamyl Alcohol Dehydrogenase in Poplar. Plant Physiol 112: 1479-1490
- Bealing, F. J. (1953). Mould "Glucosaccharase": a fructosidase. Biochem. J. (London) 55: 93.
- Beerappa M. and Koppad A. G. (2009). Assessment of fuelwood collection on depletion of forest resources in Uttara Kannada district. Karnataka J. Agric. Sci., 22: in press
- Belova N., Psurtseva N., Yakovleva N., Kiyashko A., Lundell T., Hatakka A. (2006) Laccase Production by Basidiomycetes under Various Fermentation Conditions In: Oxizymes in Oeiras, 3rd European Meeting in Oxizymes September 7-9, 2006 Oeiras, Portugal p.65
- Berg A, Gardenfors U, Hallingback T, and Noren M (2002) Habitat preferences of red-listed fungi and bryophytes in woodland key habitats in southern Sweden—analyses of data from a national survey. Biodivers Conserv 11:1479-1503.
- Berkeley M. J. (1839). Description of Exotic fungi in the collection of Sir. W. J. Hooker from Memories and notes of J.F. Klotzsch with additions and corrections Ann. Nat. Hist. 3: 375-401.
- Berkeley M. J. (1847). Decades of fungi XV-XIX. Ceylon Fungi No. 183. Lond. J. Bot. 6: 312-326
- Berkeley M. J. (1850). Decades of fungi XXV-XXX. Sikkim-Himalayan fungi Hook J. Bot. 2: 42-51
- Berkeley M. J. (1851). Decades of fungi XXXI-XXXVI. Sikkim Himalayan fungi collected by Dr. Hooker. Hook J. Bot. 3: 4-21, 39-49, 77-84, 167-172, 200-206
- Berkeley M. J. (1854). Decades of fungi XLI-L. Indian fungi. Hook J. Bot. 6: 129-143, 161-174, 204-212, 225-35
- Berkeley M. J. (1855). Fungi, in Hooker, W.J. (ed) Botany of the Antarctic Voyage II. Flora Nova-Zealandia 2. London.
- Berkeley M. J. (1866). Fungi of the plains of India. Intellectual Observer 12: 18-21
- Berkeley M.J. (1872). Australian fungi received principally from Baron F. Von Mueller and Dr. R. Schomburgk J. Linn. Soc. Bot 13: 155-177.
- Bhat K. M., Thulasidas P. K., Maria Florence E. J. and Jayaraman K. (2005) Wood durability of home-garden teak against brown-rot and white-rot fungi. Trees 19: 654-660
- Bhat K. M. and Florence E. J. M. (2003) Natural decay resistance of juvenile teak wood grown in high input plantations. Holzforschung 57:453-455
- Bhatti H. N., Akram N. and Asgher M. (2008). Optimization of Culture Conditions for Enhanced Decolorization of Cibacron Red FN-2BL by *Schizophyllum commune* IBL-6. Appl Biochem Biotechnol 149:255-264
- Biely P. and Petrakova E. (1984). Novel inducers of the xylan degrading enzyme system of *Cryptococcus albidus*. Journal of Bacteriology 160, 408-412
- Blachin M., Dean S.G., and Hort S. (1996). Bioactivity of geranium oils from different commercial sources. J. Essent. Oil Res. 8: 2181-2190
- Blanchette R.A. (1980) wood decomposition by *Phellinus pini*, a scanning electron microscopy study. Can. J. Bot. 58: 1946-1953.
- Blanchette R.A. (1984a). Selective delignification of eastern hemlock by *Ganoderma tsugae*. Phytopath. 74: 153-160.
- Blanchette, R.A. (1984b). Screening wood decayed by white rot fungi for preferential lignin degradation. Appl. Environ. Microbiol. 48: 647-653
- Blanchette R.A. (1987). New directions in forest products pathology. Can. J. Plant Pathol. 9: 361-369.
- Blanchette R.A. and Reid I.D. (1986). Ultrastructural aspects of wood delignification by *Phlebia* (*Merulius*) *tremellosus*. Applied and Environmental Microbiology 52(2): 239-245.
- Blanchette R.A. and Shaw C.G. (1978). Associations among bacteria, yeasts and basidiomycetes during wood decay. Phytopathology 68: 631-637.
- Blanchette R.A., Otjen L., and Carlson M.C. (1987). Lignin distribution in cell of birch wood decayed by white rot basidiomycetes. Phytopathology 77: 684-690.
- Blanchette, R.A., Otjen L., Effland M.J., and Eslyn W.E. (1985). Changes in structural and chemical components of wood delignified by fungi. Wood Sci. Technol. 19:35-46.

- Blatter E. (1911). A list of Indian fungi, chiefly of the Bombay Presidenc, with the description of two new species. *J. Bombay Nat. Hist. Soc.* 21:146-152.
- Boddy L. (1983). Effect of temperature and water potential on growth rate of wood-rotting basidiomycetes. *Tra. Brit Mycol. Soc.* 80(1):141-149
- Boddy L. (1992). Development and function of fungal communities in decomposing wood. In the fungal community its organization and role in the ecosystem; ed. D.T. Wicklow and C.G. Carrol , Marcel Dekker press, New York. USA, 749-782pp.
- Bohadana AB, Massin N, Wild P, Toamain JP, Engel S, Goutet P (2000) Symptoms, airway responsiveness, and exposure to dust in beech and oak wood workers. *Occup Environ Med* 57: 268-273.
- Bonnen, A.M.; Anton, L.H.; and Orth, A.B. (1994). Lignin-Degrading Enzymes of the Commercial Button Mushroom, *Agaricus bisporus*. *Appl. Environ. Microbiol.*, 60, 960-965,
- Boominathan, K., and Reddy C.A. (1992). Fungal degradation of lignin: biotechnological applications, p. 763-822. In D. K. Arora, R. P. Elander, and K. G. Mukerji (ed.), Handbook of applied mycology, vol. 4. Marcel Dekker, Inc., New York, N.Y.
- Bose S. R. (1919-1928). Polyporaceae of Bengal part I-IX Bull. *Camichael Med Coll Belgachia* IV: 1-5
- Bose S. R. (1937a). Polyporaceae from Lokra hills(Assam). *Ann Mycol* 35:119-137.
- Bose S. R. (1944). Importance of anatomy in systematics of polyporacea. *J. Indian Bot. Soc.* 23: 153-157.
- Bourbonnais R., and Paice M.G. (1990). Oxidation of non-phenolic substrates. An expanded role for laccase in lignin biodegradation. *FEBS Lett* 267:99-102.
- Bourbonnais R., and Paice M.G. (1992). Demethylation and delignification of kraft pulp by *Trametes versicolor* laccase in the presence of 2,29-azinobis(3-ethylbenzthiazoline-6-sulphonate). *Appl Microbiol Biotechnol* 36:823-827.
- Bourbonnais, R., Paice M.G., Reid I.D., Lanthier P., and Yaguchi M., (1995). Lignin oxidation by laccase isozymes from *Trametes versicolor* and role of the mediator, 2, 29- azinobis (3-ethylbenzthiazoline-6-sulfonate) in kraft lignin depolymerization. *Applied Environmental Microbiology*, 61: 1876-1880
- Boyce J.S. (1961). *Forest pathology* 3rd ed. McGraw-Hill New York. USA.
- Boyle, C.D.; Kropp, B.R.; and Reid, I.D. (1992) Solubilization and mineralization of lignin by white rot fungi. *Appl. Environ. Microbiol.* 58, 3217-3224.
- Bravery A.F. (1971). The application of scanning electron microscopy in the study of timber decay. *J. Inst. Wood Sci.* 30:13-19
- Brock T.O. (1951). Studies on the nutrition of *Morchella esculenta*. *Mycologia*. 43: 402-422.
- Bucher V.V.C., Pointing S.B., Hyde K.D. and Reddy C.A. (2004) Production of wood decay Enzymes, Loss of Mass, and Lignin Solubilization in Wood by Diverse Tropical Freshwater Fungi. *Microbial ecology*. 48 : 331-337
- Bucher, V.V.C., Hyde, K.D., Pointing, S.B. and Reddy, C.A. (2004a). Production of wood decay enzymes, mass loss and lignin solubilization in wood by marine ascomycetes and their anamorphs. *Fungal Diversity* 15: 1-14.
- Bumpus, J.A.; Tien, M.; Wright, D.; and Aust, S.D. (1985). Oxidation of persistant environmental pollutants by a white-rot fungus. *Science*. 228, 1434- 1436.
- Burge H.A. (1989) Airborne allergenic fungi: classification, nomenclature and distribution. *Immunol. Allergy Clin. North Am.* 9: 307-319.
- Burkill I.H. (1966). A dictionary of the economic products of the malay peninsula, 2vols. Ministry of Agriculture and Co-operatives, Kuala Lumpur.
- Buswell J.A, Cai J.Y and Chang S. (1996). Ligninolytic enzyme production and secretion in edible mushroom fungi. In mushroom biology and mushroom products, Royse (ed) Penn State University press. Pp 113-122
- Buswell, J. A., and Odier E. (1987). Lignin biodegradation. *CRC Rev. Biotechnol.* 6:1-60.
- Buswell, J. A., Cai Y., and Chang S.T. (1995). Effect of nutrient nitrogen and manganese on manganese peroxidase and laccase production by *Lentinula (Lentimus) edodes*. *FEMS Microbiol. Lett.* 128:81-88.
- Butler E.J. (1903), A Deodar diseases in Jaunsar. *Indian. Forester* 29: 1-8
- Butler E.J. (1909). *Fomes lucidus* (Leyss.) Fr. A suspected parasite Indian *Forester* 35: 514-518
- Butler E.J. (1918). Fungi and Diseases in plants. Thacker, Spink & co. Culcutta 547pp.

- Butler E.J. and Bisby G.R. (1931). The fungi of india Imp. Coun of Agr. Res. India, Calcutta, Sci. Monogr. 1, 237pp
- Butterworth, J.H. and Morgan E.D. (1968). Isolation of a substance that suppress feeding of locust. *Chemical Communication* pp 23-24.
- Cairney J. W. G. and Burke R. M. (1996) Physiological Heterogeneity within Fungal Mycelia: An Important Concept for a Functional Understanding of the Ectomycorrhizal Symbiosis. *New Phytologist*, 134 (4): 685-695
- Call, H.P., and Mucke I., (1997). History, overview and applications of mediated lignolytic systems, especially laccase-mediator-systems (Lignozym process). *Journal of Biotechnology*, 53: 163-202.
- Cannon J.R. Ghisalberti EL and Lojanaiwatna V. (1980) . Isolation of cadambine from *Adina cordifolia* Benth and Hook. F. J. Sci. Soc. Thailand 6(1): 54-58
- Caroline D and Anne M. (2000) Airborne microfungi from eastern Canadian sawmills *Can. J. Microbiol.* 46(7): 612-616
- Carranza-Morse, J.; Gilbertson, R.L. (1986) Taxonomy of the *Fomitopsis rosea* complex (Aphyllporales, Polyporaceae). *Mycotaxon*; 25(2): 476
- Castillo G. and Demoulin V. (1997) NaCl salinity and temperature effects on growth of three wood-rotting basidiomycetes from a Papua New Guinea coastal forest. *Mycological Research*. 101 (3) : 341-344
- Catcheside D.E.A. and Ralph J.P. (1999) Biological processing of coal. *Appl. Microbiol. Biotechnol.* 52, 16-24.
- Chakravarty D.K. and Mallick A.K. (1979). studies on the physiology of mushroom fungi. *Volvariella displasia* and *V. esculenta*. *Indian J. mycol. Pl. Pathol.* 9:9-12.
- Chattopadhyay D., Sinha B.K., and Vaid L.K. (1998) Antibacterial activity of *Syzygium* sp. *Fitoterapia* 69: 356-367.
- Chen S., Ge W. and Buswell J.A. (2004). Biochemical and molecular characterization of a laccase from the edible straw mushroom *Volvariella volvacea*. *European Journal of Biochemistry* 271 (2): 318-328.
- Chet W.J. and Termanan H. (1986). Association of rhizomorph formation with laccase activity in *Armillaria* spp. *Journal of General Microbiology* 132, 2527-2533.
- Chi J.H., Ha T.M., Kim Y.H. and Rho Y.D. 1996. Studies on the main factors affecting the mycelial growth of *Phellinus linteus*. *Kor. J. Mycol.* 24(3): 214-222.
- Chowdhury K. A. (1936). Termal and initial parenchyma cells in the wood of *Terminalia tomentosa* W. & A. the *New Phytologist*. 35(4): 351-358.
- Christensen M., Hahn K., Mountford E.P., Ódor P., Standovár T., Rozenberger D., Diaci J., Wijdeven S, Meyer P., Winter S., Vrska T. (2005) Dead wood in European beech (*Fagus sylvatica*) forest reserves. *For Ecol Manage* 210:267-282.
- Clifford M.N. (1974) Specificity of acidic phloroglucinol reagent. *J Chromatogr* 94: 321-324
- Coll, P.M., Fernandez-Abalos J.M., Villanueva J.R., Santamaria R., and Perez P. (1993). Purification and characterization of a phenoloxidase (laccase) from the lignin degrading basidiomycete PM1 (CECT 2971). *Applied Environmental Microbiology*, 59: 2607- 2613.
- Cooke M.C. (1876). Some Indian Fungi. *Grevillea* 4: 114-118
- Cooke M.C. (1881). Some Exotic Fungi *Grevillea* 9: 97-101.
- Cooke M.C. (1891a). Additions to *Daedalea* . *Grevillea* 19: 91-93.
- Cooke M.C. (1891c). *Favolus* and *Laschia* *Grevillea* 19: 105
- Cooke M.C. (1891b). *Trametes* and its allies *Grevillea* 19: 91-93
- Cowling E.B. (1961). Comparative biochemistry of the decay of Sweetgum by white rot and brown rot fungi. U.S. Dep. Agric. For. Serv. Tech. Bull. 1259. Washington D.C. 79pp.
- Cowling E.B. and Brown W. (1969). Structural features of cellulosic materials in relation to enzymatic hydrolysis. *Adv. Chem. Ser.* 95: 152-187.
- Croan C.S., Burdsall Jr. H.H., and Rentmeester M.R. (1999). Preservation of tropical wood inhabiting Basidiomycetes. *Mycologia* 91(5): 908-916.
- Crook B. and Olenchock S.A. (1995) Industrial workplaces. In: Cox CS, Wathes CM (Eds): *Bioaerosols Handbook*., CRC Press, Boca Raton. pp 531-545
- Cullen D. (1997). Recent advances on the molecular genetics of ligninolytic fungi. *J Biotechnol* 53:273-289.

- Curling S.F., Clausen C.A., and Winandy J.E. (2002) Experimental method to quantify progressive stages of decay of wood by basidiomycete fungi International Biodeterioration & Biodegradation 49 13-19.
- Czapzik F. (1899). Ueber die sogenannten Ligninreactionen des Holzes. Z. physiol. Chem., 27, 141-166.
- Daniel, G., Vole J., and T. Nilsson. (1992) Soft rot and multipler-branching by the basidiomycete *Oudemansiella mucida*. Mycol. Research 96: 49-54.
- Datta A, Bettermann A, and Kirk K.T. (1991). Identification of a specific manganese peroxidase among lignolytic enzymes secreted by *Phanerochaete chrysosporium* during wood decay. Appl Environ Microbiol 57:1453-1460.
- De Jong, E., Field, J.A. and de Bont, J.A.M. (1994). Aryl alcohols in the physiology of ligninolytic fungi. FEMS Microbiol Rev 13, 153-188.
- De souza T.M., Merritt C.S., and Reddy C.A (1999), Lignin-Modifying Enzymes of the White Rot Basidiomycete *Ganoderma lucidum* Applied and Environmental Microbiology, 65, (12):5307-5313
- De Souza S.C.M.M.; De Melo, I.S.; and De Oliveira, P.R. (2005). Ligninolytic enzyme production by *Ganoderma* spp. Enzyme Microb. Technol. 37, 324-329.
- De Souza T.M.; Boominathan K.; and Reddy CA. (1996). Isolation of laccase gene-specific sequences from white rot and brown rot fungi by PCR. Applied and environmental microbiology 62(10): 3739-3744.
- De Vries, O.M.H., Kooistra W.H.C.F., and Wessels G.H., (1986). Formation of an extracellular laccase by *Schizophyllum commune* dikaryon. Journal of Genral Microbiology, 132: 2817-2826.
- De Zotti R, and Gubian F (1996) Asthma and rhinitis in wooding workers. *Allergy Asthma Proc* 17: 199-203.
- Delgado G, Fidalgo ML, Mansur M, Martinez EO, Ortega G, Martinez AT, and Gonzalez A.E. (1992). Lignin alteration during the solid-state fermentation of sugarcane wastes with *Pleurotus ostreatus* and *Phanerochaete chrysosporium*. In: Kuwahara M, Shimada M, eds. Biotechnology in pulp and paper industry. Tokyo: UNI Publishers. P 209-214.
- Demers PA, Teschke K, and Kennedy S. M. (1997). What to do about softwood dust? A review of respiratory effects and recommendations regarding exposure limits. *Am J Ind Med* 31: 385-398.
- Dennekamp M, Demers P.A, Bartlett K, Davies H.W, and Teschke K. (1999) Endotoxin exposure among softwood lumber mill workers in the Canadian province of British Columbia. *Ann Agric Environ Med* 6: 141-146.
- Dey, S., Maiti T. K., and Bhattacharyya B. C. (1991). Lignin peroxidase production by a brown-rot fungus, *Polyporus ostreiformis*. J. Ferment. Bioeng. 72:402-404
- Dirol D. (1976). Etude in vitro de la colonisation et de la degradation structurale du bois de hetre par *Coriolus versicolor* (L.). Q. Revue de Mycol 40 :295-317.
- Dill. I, and Kraepelin G. (1986). Palo Podrido: Model for extensive delignification of wood by *Ganoderma applanatum*. *Appl. Environ. Microbiol* 52(6): 1305-1312.
- Dishanth K. and Rajender K.G. (2006) Biocontrol of wood rotting fungi. Indian Journal of Biotechnology 5:20-25
- Dittmer, J.K., Patel N.J., Dhawale S.W., and Dhawale S.S. (1997). Production of multiple laccase isoforms by *Phanerochaete chrysosporium* grown under nutrient sufficiency. FEMS Microbiol. Lett. 149:65-70.
- Dixit S.N. Dubey N.K and Tripathi N.N. (1903). Fungitoxic essential oils Vis-à-vis disease control. In: *Recent advances in Plant Pathology* (Eds. Hussain A, Singh K, Singh GB.P and Agnihotri V.P.) Print house (India) Lucknow 320 pp
- Dodson, P.J., Evans C.S., Harvey P.J, and Palmer J.M. (1987). Production and properties of an extracellular peroxidase from *Coriolus versicolor* which catalyses C₁-C₂ cleavage in a lignin model compound. FEMS Microb. Lett. 42: 17- 22.
- Donaldson L. A. and Singh A. P, (1990) Ultrastructure of *Terminalia* wood from an ancient Polynesian canoe. IAWA Bulletin 11 (2): 195-202
- Donnelly D. P. and Boddy L. (1997) Development of mycelial systems of *Stropharia caerulea* and *Phanerochaete velutina* on soil: effect of temperature and water potential. Mycological Research 101 (6) : 705-713
- Duchaine C., Meriaux A., Thorne P.S. and Cornier, Y. (2000) Assessment of particulates and bioaerosols in eastern Canadian sawmills. *Am. Ind. Hyg. Assoc. J.* 61: 727-732.

- Duncan C. G and Deverall F. J. (1964) Degradation of wood preservatives by fungi. *Appl. Microbiol.* 12: 57-62.
- Durrens P. (1981). The phenol oxidase of the ascomycetes *Podospora anserina*; the three forms of the major laccase activity. *Archives of Microbiology* 130(2): 121-124.
- Dutkiewicz J. (1989) Bacteria, fungi and endotoxin in stored timber logs and airborne sawdust in Poland. In: O'Rear CE, Llewellyn GC (Eds): *Biodeterioration Research 2*, Plenum Press, New York pp 533-547
- Dutkiewicz J., Kryszka-Traczyk E., Prazmo Z., Skorska C. and Sitkowska J. (2001) Exposure to airborne microorganisms in Polish sawmills. *Ann Agric Environ Med.* 8: 191-199.
- Eaton, R.A., and Hale. M.D.C. (1993). Wood decay, pests, and protection. Chapman & Hall, London, United Kingdom. 546 pp.
- Edman, M. and Jonsson, B. G (2001) Spatial pattern of downed logs and wood-decaying fungi in an old-growth *Picea abies* forest *Journal of Vegetation Science* 12: 609-620,
- Eduard W. (1993) Assessment of Mould Spore Exposure and Relations to Symptoms in Wood Trimmers. Ph.D Thesis. Agricultural University, Wageningen
- Eggert, C., Temp U., and Eriksson K.E. L. (1996a). The ligninolytic system of the white rot fungus *Pycnoporus cinnabarinus*: purification and characterization of the laccase. *Appl. Environ. Microbiol.* 62:1151-1158.
- Eggert, C., Temp U., Dean J.F.D and Eriksson E.K.L. (1996). A fungal metabolite mediates oxidation of non-phenolic lignin model compounds and synthetic lignin by laccase. *FEBS Letters*, 391: 144-148.
- Ejечи B. O. (2001). Wood biodeterioration control potential of *Acalypha hispida* leaf phenolic extracts in combination with *Trichoderma viride* culture filtrate. *World Journal of Microbiology and Biotechnology* 17: 561-565.
- Ejечи B. O. (2003). Immobilization of Cu (II) and Cr (IV) in basidiomycete-colonized sawdust. *World Journal of Microbiology & Biotechnology* 19: 135-137,
- Elia, S. and Julieta, C. (2004). Variations on physical, chemical, mechanical and anatomical properties of teak (*Tectona grandis*) caused by *Rigidoporus* sp. in Costa Rica. *Inoculum* 55(4): 33-34
- Elisashvili V, Parlar H, Kachlishvili E, Chichua D, Bakradze M, and Kohreidze N (2001). Ligninolytic activity of basidiomycetes grown under submerged and solid-state fermentation on plant raw material (sawdust of grapevine cuttings). *Adv. Food. Sci.* 23: 117-123.
- Emelyanova E. V. (2005). Effects of cultivation conditions on the growth of the basidiomycete *Coriolus hirsutus* in a medium with pentose wood hydrolyzate. *Process Biochemistry* 40 (3-4): 1119-1124
- Emerhi, E. A., Ekeke, B. A. and Oyebade, B. A. (2008) Biodegrading effects of some rot fungi on *Pinus caribaea* wood. *African Journal of Biotechnology*.7 (10): 1512-1515,
- Enarson D.A, and Chan-Yeung M. (1990) Characterization of health effects of wood dust exposures. *Am J Ind Med* 17, 33-38.
- Enarson D.A. 1994: Wood processing. In: Rylander R, Jacobs RR (Eds): *Organic Dusts. Exposure, Effects and Prevention*, Lewis Publishers, Boca Raton, FL.pp. 233-246
- Erden E.; Ucar M. C.; Gezer T.; and Pazarlioglu N. K. (2009). Screening for ligninolytic enzymes from autochthonous fungi and applications for decolorization of Remazole Marine Blue Braz. *J. Microbiol.* 40 (2).
- Eriksson K E. (1981) Fungal Degradation of wood components. *Pure & Appl. Chem.* 53: 33-43.
- Eriksson, K.E., Blanchette, R.A. and Ander, P. (1990). Microbial and enzymatic degradation of wood and wood components. *Springer Series in Wood Sciences*, Berlin, Springer-Verlag. 407p.
- Eriksson, K.E.; and Kirk, T.K. (1994) Biopulping: An overview of developments in an environmentally safe paper making technology. *FEMS Microbiol. Rev.* 13, 351-364.
- Eslyn W.E. and Higley T.L. (1976). Decay resistance and susceptibility of sapwood of fifteen tree species. *Phytopathology* 66:1010-1017.
- Etter B. E. (1929). New Media for Developing Sporophores of Wood-Rot Fungi.. *Mycologia.* 21(4):197-203.
- Farmer, V.C., Henderson, M.E.K., and Russell, J.D., (1960). Aromatic- alcohol-oxidase activity in the growth medium of *Polystictus Gersicolor*. *Biochem. J.* 74, 257-262.

- Farrell RL, Murtagh KF, Tien M, Mozuch MD and Kirk KT. (1989). Physical and enzymatic properties of lignin peroxidase isoenzymes from *Phanerochaete chrysosporium*. *Enzyme Microbiol Technol* 11:322–328.
- Fasidi, I.O. and Jonathan S.G., (1994). Growth requirements of *Volvariella esculenta* (Mass) Singer, a Nigerian Edible Mushroom. *Chem. Mikrobiol. Tech. Lebensm.*, 16 (56): 151-155
- Fawole, M. O. (1973), Studies on the carbon nutrition of *Coriopsis occidentalis* (Klotzsch) Murr. *Zeitschrift für allgemeine Mikrobiologie*, 13: 395–403.
- Felsenstein, J. (1985). Confidence limits on phylogenies: An approach using the bootstrap. *Evolution*, 39, 783-791.
- Ferraz A, Córdoba AM, and Machuca A (2003) Wood biodegradation and enzyme production by *Ceriporiopsis subvermispora* during solid-state fermentation of *Eucalyptus grandis*. *Enzyme Microb Technol* 32:59–65
- Field J., De Jong E., Feijoo-Costa, G. and De Bont J.A.M. (1993). Screening for ligninolytic fungi applicable to the biodegradation of xenobiotics. *Trends in Biotechnol* 11, 44-49.
- Findlay G.W.D. and Levy J.F. (1969). Scanning electron microscopy as an aid to the study of wood anatomy and decay. *J. Inst. Wood. Sci.* 23: 57-63.
- Foster J.W. (1949). chemical activities of fungi. Academic press, New York 648 pp.
- Fowler T.J. and Mitton M.F. (2000) Scooter, a New Active Transposon in *Schizophyllum commune*, Has Disrupted Two Genes Regulating Signal Transduction *Genetics* 156: 1585–1594
- Friel M.T. and McLoughlin A.J. (2000) Production of a liquid inoculum/spawn of *Agaricus bisporus*. *Biotechnology Letters* 22: 351-354.
- Fries N. (1950) growth factor requirements of some higher fungi. *Svensk bot. Tid.* 44: 379-386.
- Fries N. (1973). Effect of volatile organic compounds on the growth and development of fungi. *Tras. Brit. Mycol. Soc.* 60:1-21.
- Fryar S.C., Kirby G.C. and Hyde K.D. (1999). Species abundance patterns of two wood decay basidiomycete communities. *Fungal Diversity* 3: 39-56.
- Fukushima Y., and Kirk K.T. (1995). Laccase component of the *Ceriporiopsis subvermispora* lignin-degrading system. *Appl Environ Microbiol* 61:872–876.
- Gadd G.M. (2001). *Fungi in Bioremediation*, Pub by British Mycological Society, Cambridge University press, U.K.
- Ganesh P.N. and Lcelavathy K.M., (1986). New records of *Phellinus* from India. *Curr. Sci.*, 55: 727-728.
- Galhaup C. and Haltrich D. (2001). Enhanced formation of laccase activity by the white rot fungus *Trametes pubescens* in the presence of copper. *Applied Microbiology and Biotechnology*, 56: 225-232.
- Galliano H., Gas G., and Boudet A.M. (1988). Biodegradation of *Hevea brasiliensis* ligno celluloses by *Rigidosporus lignosus*: influence of culture conditions and involvement of oxidizing enzymes. *Plant Physiol Biochem* 26:612–627.
- Galliano H, Gas G, Seris J.L, and Boudet A.M. (1991). Lignin degradation by *Rigidoporus lignosus* involves synergistic action of two oxidizing enzymes: Mn peroxidase and laccase. *Enzyme Microb Technol* 13:478–482.
- Gao M. and Chamuris G.P. (1993) Microstructural and Histochemical Changes in *Acer platanoides* Rhytidome Caused by *Dendrothele acerina* (Aphyllphorales) and *Mycena meliigena* (Agaricales) *Mycologia*, 85 (6): 987-995
- Garcha H.S., Karia K.L. and Beg G.M. (1978). Physiology of weed mushroom. *Mus. Sci.* 10 (2): 349-355.
- Garcia S., and Latgé J.P. (1987) A new colorimetric method for dosage of lignin. *Biotechnol Tech* 1: 63-68
- Garcia S., Latge J.P., Prevost M.C. and Leisola M. (1987). Wood degradation by white rot fungi: cytochemical studies using lignin peroxidase-immunoglobulin-gold complexes. *Appl. Environ. Microbiol.* 53: 2384-2387.
- Garrett S.D. (1936). Soil conditions and the take-all disease of wheat. *Ann. appl. Biol.* 33: 667-99.
- Garraway M.O., Akhtar M. and Wokoma E.C.W. (1989). Effect of high temperature stress on peroxidase activity and electrolyte leakage in maize in relation to sporulation of *Bipolaris maydis* race T. *Phytopathology* 79: 800-805

- Gbolagade J., Sobowale A. and Adejoye D. (2006) Optimization of sub-merged culture conditions for biomass production in *Pleurotus florida* (mont.) Singer, a Nigerian edible fungus. *African Journal of Biotechnology* 5 (16): 1464-1469.
- Geiger H. (1985) The identification of phenolic compounds by colour reactions. In CF Van Sumere, PJ Lea, eds, *Annual Proceedings of the Phytochemical Society of Europe (The Biochemistry of Plant Phenolics, Vol 25)*. Clarendon Press, Oxford, UK, pp 45-56
- Gelpke M.D.S., Lee J., and Gold M.H. (2002) Lignin Peroxidase Oxidation of Veratryl Alcohol: Effects of the Mutants H82A, Q222A, W171A, and F267L *Biochemistry*, 41, 3498-3506
- Germanu, A., Muller G, Hunziker E. and Lerchk, (1988). Characterisation of two allelic forms of *Neurospora crassa* laccase. Amino- and carboxyl-terminal processing of a precursor. *Journal of Biological Chemistry* 263, 885-896.
- Ghosh A.K. and Sengupta S. (1977). Studies on biochemistry of higher fungi. I submerged growth of *Volvariella volvacea* in synthetic medium. *J. Sci. Technol* 14: 6-10
- Gilbertson R. L. (1979). The genus *Phellinus* (Aphylllophorales: Hymenochaetaceae) in Western North America. *Mycotaxon* 9(1): 51-60.
- Gilbertson, R. L. (1981). North American wood rotting fungi that cause brown rots *Mycotaxon* 12:372-416.
- Ginterova A. (1971). Nitrogen utilization *Mykol Sub.* 8: 60-63
- Ginterova A. (1973). Nitrogen fixation by higher fungi *Biologia (Bratislava)* 28: 199-202.
- Ginterova A, Hrabovcova J, Mansur M, Gutierrez I, and Lois J. (1992). Cultivation of fungi on sugar cane biomass. *Folia Microbiologica* 37:60-65.
- Glava M. (1996) Osnove umarske fitopatologije. umarski fakultet Sveuilitau Zagrebu.
- Glava M. (1999) Gljivine bolesti umskog drvea. umarski fakultet Sveuilitau Zagrebu.
- Glenn, J.K., Akileswaran, L. and Gold, M.H. (1986). Mn(II) oxidation is the principal function of the extracellular Mn-peroxidase from *Phanerochaete chrysosporium*. *Arch Biochem Biophys* 251, 688-696.
- Gold, M. H., and Alic M.. (1993). Molecular biology of the lignin degrading basidiomycete *Phanerochaete chrysosporium*. *Microbiol. Rev.* 57:605-622.
- Gold, M. H., Wariishi H., and Valli K. (1989). Extracellular peroxidases involved in lignin degradation by the white rot basidiomycete *Phanerochaete chrysosporium*, p. 127 140. In J. R. Whitaker and P. E. Sonnet (ed.), *Biocatalysis in agricultural biotechnology*. ACS Symposium Series 389. American Chemical Society, Washington, D.C.
- Gray W.D. (1959). *The relation of fungi to human affairs*. Pub.by Henry Holt and Co. inc. USA 510 pp
- Greaves H. (1971) The bacterial factor in wood decay. *Wood Sci Technol* 5: 6-16.
- Greaves, H., Levy, J. F. (1965). Comparative degradation of the sapwood of Scots pine, beech and birch by *Lenzites trabea*, *Polysfictus versicolor*, *Chaetomium globosum* and *Bacillus polymyxa*. *J. Inst. Wood Sci.* 3. 15. 55-63.
- Green F., Larsen M. and Highley T. (1990). Ultrastructural Morphology of the Hyphal Sheath of Wood Decay Fungi Modified by Preparation for Scanning Electron Microscopy. *Biodeterioration Research* 3: 311-325
- Green III. F., Clausen, C. A., Larsen, M. J., and Highley, T. L. (1992). Immune-scanning electron microscopic localization of extracellular wood-degrading enzymes within the fibrillar sheath of the brown-rot fungus *Postia placenta*. *Can. J. Microbiol.* 38: 898-904.
- Grove S.J. (2002) Saproxylic insect ecology and the sustainable management of forests. *Ann Rev Ecol Syst* 33:1-23.
- Grover N., Nawange S. R., Naidu J., Singh S. M., and Sharm A. (2007) Ecological niche of *Cryptococcus neoformans* var. *grubii* and *Cryptococcus gattii* in decaying wood of trunk hollows of living trees in Jabalpur City of Central India *Mycopathologia* 164:159-170
- Guilley E., Charpentier J. P., Ayadi N., Snackers G., Nepveu G., and Charrier B. (2004) Decay resistance against *Coriolus versicolor* in Sessile oak (*Quercus petraea* Liebl.): analysis of the between-tree variability and correlations with extractives, tree growth and other basic wood properties. *Wood Sci Technol* 38: 539-554.
- Gupte A., Gupte S. and Patel H. (2007). Ligninolytic enzyme production under solid state fermentation by white rot fungi. *Journal of Scientific and Industrial Research*. 66: 611-614.
- Hacksaylo J., Lilly L.G., and Barnett H.L. (1954) growth of fungi on three sources of nitrogen. *Mycologia* 46: 691-701.

- Haddadin M.S.; Al-Natour, R.; Al-Qsous, S., and Robinson, R.K. (2002). Bio-degradation of lignin in olive pomace by freshly-isolated species of Basidiomycete. *Biores. Tech.* 82 (2), 131–137.
- Halpin D.M.G, Graneek B.J., Turner-Warwick M., and Newman Taylor A.J. (1994) Extrinsic allergic alveolitis and asthma in a sawmill worker: case report and review of the literature. *Occup Environ Med* 51: 160-164.
- Halpin D.M.G, Graneek B.J., Lacey J., Nieuwenhuijsen M.J., Williamson P.A.M., Venables K.M., and Newman-Taylor A.J. (1994) Respiratory symptoms, immunological responses and aeroallergen concentration at a sawmill. *Occup Environ Med*, 51: 165-172.
- Hammel, K. E., Jensen, K. A., Jr., Mozuch, M. D., Landucci, L. L., Tien, M., and Pease, E. A. (1993) *J. Biol. Chem.* 268,12274-12281.
- Hammel, K. E., Kalyanaraman, B., and Kirk, T. K. (1986) *J. Biol. Chem.* 261, 16948-16952.
- Hammond, W.B.J., (1978). Changes in composition of harvested mushrooms (*Agaricus bisporus*). *Phytochemistry*, 18: 415-418.
- Haniefkhan A. (1910). Root infection of *Trametes pini* (Brot.) Fr. *Indian Forester* 36: 559-562.
- Harkin, J. M., and Obst. J. R. (1973). Syringal- dazine, an effective reagent for detecting laccase and peroxidase in fungi. *Experientia* 29: 381- 387.
- Harley J.L. (1971). Fungi in ecosystems. *J Ecol* 59:653–668
- Harley, B.S.; Brodo, P.M.A.; and Senior, P.J. (1988) Proceeding of Royal Society Discussion Meeting on Utilisation of Lignocellulosic Wastes. Cambridge University Press: Cambridge, UK.
- Harmon M.E., Franklin J.F., Swanson F.J, Sollins P., Gregory S.V, Lattin J.D., Anderson N.H., Cline S.P., Aumen N.G., Sedell J.R., Lienkaemper G.W., Cromack K., and Cummins K.W. (1986) Ecology of coarse woody debris in temperate ecosystem. *Advances in Ecological Research* 15: 133-302
- Harsh N. S. K., Soni K. K., and Tiwari C. K. (1993). *Ganoderma* root-rot in an *Acacia arboretum*. *European Journal of Plant Pathology*. 23(4): 252-254
- Harsh N. S. K. Chandra S. and Uniya K. (2010) Screening resistance of *Dalbergia sissoo* clones against *Ganoderma lucidum* root rot disease in field conditions. *European Journal of Forest Pathology*. doi: 10.1111/j.1439-0329.2010.00685.x
- Hartig R. (1878). Die Zersetzungserscheinungen des Holzes der Nadelholzbaume und der Eiche in forstlicher, botanischer und chemischer Richtung. Springer-Verlag, Berlin Heidelberg New York.
- Hatakka A. (1994). Lignin-modifying enzymes from selected white-rot fungi production and role in lignin degradation. *FEMS Microbiol Rev* 13:125–135.
- Haupt, M., Leithoff, H., Meier, D., Puls, J., Richter H.G., and Faix, O. (2003). Heartwood extractives and natural durability of plantation-grown teakwood (*Tectona grandis* L.) - a case study. *Holz als Roh- und Werkstoff* 61: 473-474.
- Heilmann C.J. and Boddy L. (2005). Inhibition and stimulation effects in communities of wood decay fungi, exudates from colonized wood influence growth by other species. *Microb. Ecol.*, 49: 399-406
- Hennings P. (1900). Fungi indiae Orientalis Hedwigia 39: 150-153
- Hennings P. (1901). Fungi indiae Orientalis II, Cl. W. Gollana .1900 colecti. Hedwigia 40: 323-345
- Henningsson B. (1967) Physiology of fungi attacking birch and aspen pulpwood submitted to Srogshogskolan, Royal College of Forestry Stockholm Printed in Sweden by Esselte Ab, pp 54
- Henningsson, B. (1965) Physiology and decay activity of the birch conk fungus *Polyporus betulinus* (Bull.) Fr. *Studia Forestalia Suecica.*, 34: 1–77.
- Herr D., Baumer F., and Dellweg H.(1978). Purification and properties of an extracellular endo 1,4-b-glucanase from *Lenzites treabea*. *Arch. Microbiol* 117: 287-292
- Highley T. L. (1973) Influence of Carbon Source on Cellulase Activity of White-rot and Brown-rot Fungi. *Wood and Fiber Science* 5 (1): 50-58
- Highley T.L. (1976). Hemicellulases of white and brown rot fungi in relation to host preferences *Mater. Org.* 11: 33-46.
- Highley T.L. (1977). Requirements for cellulose degradation by a brown rot fungus. *Mater. Org.* 12: 25-36.
- Highley T.L. and Murmanis L.L. (1987). Micromorphology of degradation in western hemlock and sweetgum by the white rot fungus *Coriolus versicolor*. *Holzforschung* 41: 67-71.
- Highley T. L., Carol C. A., Suki C. C., Green F., Illman B. L. and Micales J. S. (1994) Research on biodeterioration of wood, 1987-1992. I. Decay mechanisms and biocontrol. *Res. Pap. FPL-RP-529*. Madison, Forest products laboratory 20p.

- Higuchi, T. (1989). Mechanisms of lignin degradation by lignin peroxidase and laccase of white-rot fungi. In: Lewis, N.G. & Paice, M.G. (eds.): Plant cell wall polymers. ACS Symp Ser vol 399, Washington, American Chemical Society, pp. 482-502.
- Hirai H., Kashima Y., Hayashi K., Sugiura T., Yamagishi K., Kawagishi H. and Nishida T. (2008) Efficient expression of laccase gene from white-rot fungus *Schizophyllum commune* in a transgenic tobacco plant. FRMS Microbiolgy Letters. 286(1): 130-135
- Hofgaard A. (1993). Fifty years of changes in a Swedish boreal old-growth *Picea-Abies* forest. J.Vegetation Sci. 4: 773-782.
- Homma H., Shinoyama H., Amachi M T S., Fukiharu T., and Fujii T. (2006) Fruiting-body formation, cultivation properties, and host specificity of a fungicolous fungus, *Asterophora lycoperdoides*. Mycoscience 47:269-276
- Horvath, E. M., Srebotnik E., and Messner K. (1993). Production of lignin degrading enzymes by *Ganoderma colossum* compared to *Phlebia radiata* and *Coriolus versicolor*, p. 163-164. In J. C. Duarte, M. C. Ferreira, and P. Ander (ed.), Lignin degradation and transformation; biotechnological applications. Proceedings of FEMS Symposium. Elsevier Science, Amsterdam, The Netherlands.
- Hrmova E. M, Rakova V. and Biely P. (1991) Induction of cellulose and xylan-degrading enzyme systems in *Aspergillus terreus* by homo- and heterodisaccharides composed of glucose and xylose. Journal of General Microbiology 137: 541-547.
- Hrmovam M, Biely P., and Vrsanskam M (1986). Specificity of cellulose and p-xylanase induction in *Trichoderma reesei* QM 9414. Archives of Microbiology 144: 307-311
- Hrmovam M, Biely P., and Vrsanskam M (1989). Cellulose- and xylandegrading enzymes of *Aspergillus terreus* and *Aspergillus niger*. Enzyme and Microbial Technology 11: 610-616.
- Hrmovam M, Biely P., Vrsanskam M. and Petrakovae.E, (1984). Induction of cellulose and xylan-degrading enzyme complex in the yeast *Trichosporon cutaneum*. Archives of Microbiology 138: 371-376.
- Hsu, H.T. and Hu K.J. (1967). Nitrogen nutrition of *Agaricus bisporus*. I form of inorganic nitrogen utilized by *Agaricus bisporus*. Nung Yen Chiu 16:25-28.
- Hudson H J (1972). Fungal Saprophytism. Institute of Biology's Studies in Biology No. 32. Edward Arnold, London.
- Hulme, M.A.; Shields, J.K. (1970). Biological control of decay fungi in wood by competition for nonstructural carbohydrates. Nature. 227(5255): 300-301.
- Humar M., Amartei S.A., Pohleven F. (2006). Influence of corn steep liquor and glucose on colonization of control and CCB (Cu/Cr/B)-treated wood by brown rot fungi Waste Management 26: 459-465
- Iimura Y., Katayama Y., Kawai S. and Morohoshi N. (1995). Degradation and solubilization of ¹³C-, ¹⁴C-side chain labelled synthetic lignin (dehydrogenative polymerizate) by laccase III of *Coriolus versicolor*. Bio. Sci. Biotech. Biochem. 59: 903-905.
- Iimura Y., Takenouchi, K., Katayama, Y., Nakamura, M. Kawai. S. and Morohoshi, N. (1991). Elucidation of the biodegradation mechanism of ¹³C-, ¹⁴C-labelled solid state lignin by *Coriolus versicolor*. Proceedings of the 6th International Symposium on Wood and Pulping Chemistry, vol. 2, pp. 285-289. Melbourne, Australia.
- Iimura, Y., Takenouchi, K., Nakamura, M., Kawai, S. and Morohoshi, N. (1992). Cloning and sequence analysis of laccase genes and its use for a expression vector in *Coriolus versicolor*. Proceedings of the 5th International Conference on Biotechnology in the Pulp and Paper Industry, pp. 145-146. Kyoto, Japan.
- Imazeki R., Kobayasi Y and Aoshima (1966). Fungi: in flora of Eastern Himalayas, (ed. H. Hara), Tokyo press, Tokyo, Japan, 611-626pp.
- Ito Y., Fushimi T. and Yanagi S.O. (1998) Discrimination of species and strains of basidiomycete genus *Coprinus* by Random amplified polymorphic DNA (RAPD) analysis. Mycoscience 39:361-365.
- Jaccard P (1908) Nouvelles recherchesur la distribution florale.Bull Soc Vaud Sci Natl 44:223-270.
- Jana K.K. and Purkayastha R.P (1987) Nutritional effects on the growth of two edible fungi and their nutritive values. Indian Mush. Sci. 2 : 305-308.
- Jandaik C. L. and Kapoor J. N. (1976). Effect of carbon and nitrogen on growth of *Pleurotus sajor-caju*. Indian phytopathology 29: 326-327.

- Jaouani A, Sayadi S, Vanthournhout M, and Penninckx M.J. (2003). Potent fungi for decolourisation of olive oil mill wastewaters. *Enzyme Microb. Technol.* 33: 802-809.
- Jappinen P., Haahtela T. and Liira J. (1987) Chip pile workers and mold exposure. A preliminary clinical and hygienic survey. *Allergy* 42: 545-548.
- Jaszek, M.; Grzywnowicz, K.; Malarczyk, E.; and Leonowicz, A. (2006). Enhanced extracellular laccase activity as a part of the response system of white rot fungi: *Trametes versicolor* and *Abortiporus biennis* to paraquat-caused oxidative stress conditions. *Pestic. Biochem. Physiol.* 85, 147-154.
- Jayeola A. A., Aworinde D. O., and Folorunso A.E. (2009) Use of wood characters in the identification of selected timber species in Nigeria not. Bot. Hort. Agrobot. Cluj 37 (2), 28-32
- Jennison M.W., Newcomb M.D., and Henderson R. (1955). Physiology of the wood-rotting Basidiomycetes. I. Growth and nutrition in submerged culture in synthetic media. *Mycologia*, 47, 275-304.
- Jonathan S.G., and Fasidi I.O. (2001). Effect of carbon, nitrogen and mineral sources on growth of *Psathyrenella atroumbonata* (Pegler), a Nigerian edible mushroom. *Food Chem.* 72:479-483.
- Jonathan S.G., Bawo D.D.S., Adejoye D.O. and Briyai O.F. (2009) Studies on Biomass Production in *Auricularia polytricha* collected from Wilberforce Island, Bayelsa State, Nigeria. *American Journal of Applied Sciences* 6 (1): 182-186,
- Jones C.G., Lawton J.H., and Shachak M (1994) Organisms as ecosystem engineers. *Oikos* 69:373-386
- Joo S. S., Ryu I. W., Park J., Yoo Y. M., Lee D.H., Hwang K. W., Choi H. T., Lim C. J., Lee D., and Kim K. (2008). Molecular Cloning and Expression of a Laccase from *Ganoderma lucidum*, and Its Antioxidative Properties *Mol. Cells*, 25(1): 112-118.
- Joshi, D. K., and Gold, M. H. (1994) Oxidation of dibenzo-p-dioxin by lignin peroxidase from the basidiomycete *Phanerochaete chrysosporium*. *Biochemistry* 33, 10969- 10976.
- Joshi, D. K., and Gold, M. H. (1996). Oxidative polymerization of ribonuclease A by lignin peroxidase from *Phanerochaete chrysosporium*. *Eur. J. Biochem.* 237, 45-57.
- Jourdes, M., Cardens C. L., Laskar D. D., Moinuddin S. G. A., Davin, and Lewis N. G. (2007). Plant cell walls are enfeebled when attempting to preserve native L. B lignin configuration with poly-phydroxycinnamaldehydes: evolutionary implications. *Phytochemistry*: in press.
- Jurasek L (1968) Lignolytic action of *Schizophyllum commune*. In: *Biodeterioration of materials microbiological and allied aspects*. Elsevier publishing company Ltd. New York. 740p
- Jutte S.M. and Sachs I.B. (1976). SEM observations of brown rot fungus *Poria placenta* in normal and compression wood of *Picea abies*. Pages 535-542. In: Proc. 9th Scanning Electron Microscopy Symposium, Part VII. Scanning Electron Microscopy, Plant Science Application of SEM. 5-9 April 1976, Illinois Instrumentation Technology Research Institution, Chicago IL. p. 708.
- Jutte S.M. and Zabel R.A. (1974). Initial wood decay stages as revealed by scanning electron microscopy. Pages 445-452. In: Proc. 7th Scanning Electron Microscopy Symposium, Part II. Scanning Electron Microscopy, Plant Science Application of SEM. 8-11 April 1974, Illinois Instrumentation Technology Research Institution, Chicago IL. p. 1064.
- Käärik A. (1975) Succession of microorganisms during wood decay. In: Liese W (Ed): *Biological Transformation of Wood by Microorganisms*. Springer Verlag, Berlin. Pp 39-51
- Kaimowitz D. (2003). From Rio to Johannesburg and beyond: Forest conservation and rural livelihood in the global South. XII world Forestry congress. Quebec city Canada. 10-16
- Kalmis E., Yasa I., Kalyoncu F., Pazarbas B. and Koçyigit A. (2008) Ligninolytic enzyme activities in mycelium of some wild and commercial mushrooms. *African Journal of Biotechnology*. 7 (23): 4314-4320,
- Kantelinena A., Hatakkaa A., and Viikari L. (1989). Production of lignin peroxidase and laccase by *Phlebia radiata*. *Applied Microbiology and Biotechnology* 31, 234-239.
- Karkonen, A; Koutaniemi S, Mustonen M; Syrjanen K, Brunow G, Kilpelainen I, Teeri TH; and Simola LK (2002). Lignification related enzymes in *Picea abies* suppression cultures *Physiologia Plantarum* 114(3): 343-353.
- Keilich G., Bailey P. and Liese M. (1970). Enzymatic degradation of cellulose, Cellulose derivatives and hemicelluloses in relation to the fungal decay of wood. *Wood. Sci. Technol.* 4:273-283.
- Kerrigan R.W., Royer J.G., Baller L.M., Kohli Y., Horgen P.A., and Anderson L.B. (1993). Meiotic behavior and linkage relationships in the secondarily homothallic fungus *Agaricus bisporus* *Genetics* 133: 225-236

- Kersten, P.J., Tien, M., Kalyanaraman, B., and Kirk, T.K. (1985) The ligninase of *Phanerochaete chrysosporium* generates cation radicals from methoxybenzenes. *J. Biol. Chem.* 260, 2609-2612.
- Kersten, P.J., and Kirk, T.K., (1987). Involvement of a new enzyme, glyoxal oxidase, in extracellular H₂O₂ production by *Phanerochaete chrysosporium*. *J. Bacteriol.* 169, 2195-2201.
- Kersten, P.J., Kalyanaraman, B., Hammel, K.E., Reinhammar, B. and Kirk, T.K. (1990). Comparison of lignin peroxidase, horseradish peroxidase and laccase in the oxidation of methoxybenzenes. *Biochem J* 268, 475-480.
- Khan R., Islam B., Akram M., Shakil S., Ahmad A., Manazir Ali S., Siddiqui M., and Khan A.U. (2009) Antimicrobial Activity of Five Herbal Extracts Against Multi Drug Resistant (MDR) Strains of Bacteria and Fungus of Clinical Origin. *Molecules*, 14: 586-597.
- Khara H.S. (1977a). Some stipitate *Hydniums* from North Westren Himalayas; *Ind. J. Mycol. And Pl. Pathol.* 7:127-134.
- Khara H.S. (1977b). The *Hydnaceae* of North Westren Himalayas *Indian Phytopath* 30: 94-95
- Khanongnuch, C., Wanphrut, N., Lumyong, S. and Watanabe, T. (2004). Thermotolerant wood rotting fungi isolated from northern Thailand and their potential uses in lignin degrading applications. *Fungal Diversity* 15: 187-196.
- Kim S.W., Hwang H.J., Park J.P., Cho Y.J., Song C.H., and Yun J.W. (2002). Mycelial growth and exobiopolymer production by submerged culture of various edible mushrooms under different media. *Letters in Applied Microbiology* 24: 56-61.
- Kirk T.K. (1973). The chemistry and biochemistry of decay. p. 149-181. in D. Nicholas (ed.) wood deterioration and its prevention by preservative treatments. Syracuse University press. Syracuse N.Y.
- Kirk T.K. (1975). Effect of brown rot fungus *Lenzites trabea* on lignin in spruce wood. *Holzforschung* 29:99-107.
- Kirk T.K. and Alder E. (1970). Methoxyldeficient structural elements in lignin of Sweetgum decayed by a brown rot fungus. *Acta Chem. Scand.* 24: 3379-3390.
- Kirk T.K. and Highley T.L. (1973). Quantitative changes in structural components of conifer woods during decay by white and brown rot fungi. *Phytopathology* 63: 1338 -1342.
- Kirk, T.K., and Moore, W.E (1972). Removing lignin from wood with white-rot fungi and digestibility of resulting wood. *Wood Fiber* 4:72-79.
- Kirk, T.K., and Tien M.. (1988) Biochemistry of lignin degradation by *Phanerochaete chrysosporium*. *FEMS Symp.* 43:315-332.
- Kirk, T.K. (1981). Physiology of lignin metabolism by white rot fungi. In: *Lignin Biodegradation: microbiology, chemistry and potential applications*, Vol. 2, CRC, Boca Raton: 51-56.
- Kirk, T.K. and Fenn, P. (1982). Formation and action of the ligninolytic system in basidiomycetes. In: *Frandland, Hedger, and Swift, eds. Decomposer basidiomycetes. Proceedings of British Mycological Society symposium*; Cambridge University Press: 4: 67-90.
- Kirk, T.K., and Farrell, R.L., (1987). Enzymatic 'combustion': The microbial degradation of lignin. *Annu. Rev. Microbiol.* 41, 465-505.
- Kirk T. K., Burgess R. R. and Koning J. W. (1992a). Use of fungi in pulping wood: an overview of biopulping researching: Leatham G, ed. *Frontiers in industrial mycology*, New York, New York: Routledge, Chapman and Hall. pp 99.
- Kirk T. K., Lamar R. T. and Glaser J. A. (1992b). The potential of white rot fungi in bioremediation In: *Mongkolsuks, ed. Biotechnology and Environmental science*. New York: Plenum press. pp 131-138
- Kistler H.C. and Miao V.P.W. (1992). New modes of genetic change in filamentous fungi. *Annu. Rev. Phytopathol.* 30:131-152.
- Klibansky M, Mansur M, Gutierrez Y, and Gonzalez L. (1993). Production of *Pleurotus ostreatus* mushrooms on sugar cane agrowastes. *Acta Biotechnologica* 13:69-76.
- Klotzsch J.F. (1832). *Mycologische Berichtigungen*. *Linnaea* 7: 193-204.
- Klotzsch J.F. (1833). *Fungi exoticae collectionibus britannorum*. *Linnaea* 7:478-490
- Koenings J.W. (1972). Production of extracellular hydrogen peroxide and peroxidase by wood rotting fungi. *Phytopathology* 62: 100-110.
- Koenings J.W. (1974). Hydrogen peroxide and iron: a proposed system for decomposition of wood by brown rot Basidiomycetes *Wood fiber*. 6:66-79.

- Kojimay, Tsukuday, Kawaiy, T sukamotoa, Sugiuraj. Sakaimom, and Kita,Y (1990). Cloning, sequence analysis, and expression of lignolytic phenoloxidase genes of the white-rot basidiomycete *Coriolus hirsutus*. Journal of Biological Chemistry 265, 15224-1 5230
- Kokutse A. D., Stokes A., Bailleres H., Kokou K., and Baudasse C. (2006). Decay resistance of Togolese teak (*Tectona grandis* L.f) heartwood and relationship with colour Trees 20: 219–223
- Kondo R., Daikoku C., Suhara H., and Tsutsumi Y. (2004). Characterization and expression of manganese peroxidase produced by halotolerant white-rot fungus *Phlebia* Sp. Mg-60. Proc. 9th Intl. Conf. on Biotechnol. in the pulp & paper Industry, Durban, pp. 111-112.
- Krajick K. (2001) Defending dead wood. Science 293:1579–1581.
- Kruusa K., Paloheimo M., Puranen T., Valtakaric L., Kallio J., Fagerströma R., and Vehmaanper J. (2006). Production, Purification and Characterization of Laccase Enzymes from *Thielavia arenaria*. In: Oxizymes in Oeiras, 3rd European Meeting in Oxizymes September 7-9, Oeiras, Portugal. p 75
- Kuffer N., Gillet F., senn-Irlet B., Aragon M. and Job D. (2008) Ecological determinants of fungal diversity on dead wood in European forest. Fungal diversity 30: 83-95
- Kuwahara, M, Glenn, J.K., Morgan, M.A. and Gold, M.H. (1984). Separation and characterization of two extracellular H₂O₂-dependent oxidases from ligninolytic cultures of *Phanerochaete chrysosporium*. FEBS Lett 169, 247-250.
- Kwan H.S. and Xu. H.L. (2002) Construction of a genetic linkage map of Shitake mushroom *Lentinula edodes* strain L54. J. Biochem. Mol.Bio. 35:465-471.
- Kwang-Soo, S.; Chang-Jin, K. (1998) Decolorisation of artificial dyes by peroxidase from the white-rot fungus *Pleurotus ostreatus*. Biotechnol. Lett. 20, 569– 572.
- Lacey J. and Dutkiewicz J. (1994) Bioaerosols and occupational lung diseases. *J. Aerosol. Sci.* 25: 1371–1404.
- Lal B. and Srivastava A. (2002). Plants as biopesticides. In: Plant Pest Management (ed. P.C. Trivedi), Aavishkar publishers and distributors Jaipur 100-127.
- Lankinen P. (2004). Ligninolytic enzymes of the basidiomycetous fungi *Agaricus bisporus* and *Phlebia radiata* on lignocellulose-containing media Academic Dissertation in Microbiology. Printed by Yliopistopaino, Helsinki, Finland
- Lavie D., Jaen M.K., and Snpanga-Brulth S.L. (1967). A locust phagorepellent from two *Melia* sp. Chemical communications. pp.910-911.
- Leatham, G.F., and Stahmann, M.A., (1981). Studies on laccase of *Lentinus edodes*: specificity, localization and association with the development of fruiting bodies. Journal of General Microbiology 125: 147–157.
- Leifa, F., Andra T.S., Ashok P. and Carlos R.S. (2007). Effect of nutritional and environmental conditions on production of exopolysaccharide of *Agaricus brasiliensis* by sub-merged fermentation and its antifumor activity. LWT J., 40: 30-35.
- LeMense, E. H., Corman J., Van Lanen J. M., and Langlykke A. F. (1947). Production of mold amylases in submerged culture. J. Bacteriol. 54: 149.
- Leonard, T. J. and Phillips L. E. (1973). Study of phenoloxidase activity during the reproductive cycle of *Schizophyllum commune*. Journal of Bacteriology 114, 7- 10.
- Leonowicz A, Cho N.S, Luterek J, Wilkolazka A, Wojtas-Wasilewska M, Matuszewska A, Hofrichter M, Wesenberg D, and Rogalski J. (2001). Fungal laccase: properties and activity on lignin. J. Basic. Microbiol. 41:185–227.
- Leveille J.H. (1844). Fungi in voyage dans l'Inde par Victor Jacquemont Pendant lesannees 182901932, Tome 4:179
- Leveille J.H. (1846a). Descriptions des champignons de l herbier du Museum de Paris. Ann. Sci. Nat. 3-5: 111-167.
- Leveille J.H.(1846b). Fungi. In: Gaudichaud M (ed.) Voyage autour du Monde Surla corvette La Bonite. Botanique Vol I. P. 164-204
- Levin L. Forchiassin F. and Ramos A. M. (2002). Copper induction of lignin-modifying enzymes in the white-rot fungus *Trametes trogii*. *Mycologia*, 94(3), , pp. 377–383.
- Levy J.F. (1975) Colonisation of wood by fungi. In: Liese W (Ed): *Biological Transformation of Wood by Microorganisms*,. Springer- Verlag, Berlin pp16-23.
- Lewis N.G., Razal R.A., and Yamamoto E. (1987) Lignin degradation by peroxidase in organic media: A reassessment *Proc. Natl. Acad. Sci. USA*. 84: 7925-7927.

- Liese W. (1970). Ultrastructural aspects of woody tissue disintegration . *Annu. Rev. Phytopathol* 8: 231-258
- Lilly V. G. and Barnett H. L. (1951) Physiology of fungi. Mcgrauhill, New York 464pp
- Lilly, V. G., and Barnett, H. L. (1956). The utilization of D- and L-arabinose by fungi. *Am. Jour. Bot.* 43: 709.
- Lin L C., Morrell J. J. and Krahmer R. L (1989) Fungal Colonisation of *Douglas Fir* and *Ponderosa Pine* by *Poria carbonica*, *Coriolus versicolor*, and *Chaetomium globosum*; Visuausation with Fluorescent coupled Wheat-Germ Agglutinin. *IAWA Bulletin n.s.10* (1): 71-76
- Lloyd C.G. (1915b). Synopsis of the section *Apus* of the genus *Polyporus*. *Mycol. Writ.* 4: 291-392
- Lloyd C.G. (1898-1925). *Mycological notes* N0s 1-75: 1-364: Cincinnati, Ohio.
- Lloyd C.G. (1904-1919). *Mycological Letters* 1-69, each separately paged, Cincinnati, Ohio.
- Lloyd C.G. (1910a). Synopsis of the genus *Hexagonia*, *Mycol writ.* 3: 1-46
- Lloyd C.G. (1910b) Synopsis of the section *Micropus*, *Tabacinus* and *Funalis* of the genus *Polystictus*. *Mycol. Writ.* 3: 49-70.
- Lloyd C.G. (1912). Synopsis of the stiptate polyporoids. *Mycol. Writ.* 3: 95-208 .
- Lloyd C.G. (1915a). Synopsis of the genus *Fomes* . *Mycol. Writ.* 4: 211-288
- Lobos S., Tello M., Polanco R., Larrondo L.F., Manubens A., Salas L., and Vicuna R. (2001). Enzymology and moleuclar genetics of the ligninlytic system of the basidiomycetes *Ceriporiopsis subvermispora*. *Current Science* 81(8): 992-997.
- Lobos, S., Larraín J., Salas L., Cullen D., and Vicuña R. (1994). Isozymes of manganese-dependent peroxidase and laccase produced by the lignin-degrading basidiomycete *Ceriporiopsis subvermispora*. *Microbiology* 140:1691– 1698.
- Lonsdale D, Pautasso M, and Holdenrieder O (2008). Wood-decaying fungi in the forest: conservation needs and management options. *Eur J of Forest Res* 127: 1–22
- Lorenzo, M., Moldes D. and. Sanroman M. A, (2006). Effect of heavy metals on the production of several laccase isoenzymes by *Trametes versicolor* and on their ability to decolourise to dyes. *Chemosphere*, 63: 912-917.
- Lozovaya, V. V., Lygin, A. V., Zernova, O. V., Li, S., Widholm, J. M., and Hartman, G. L. (2006). Lignin degradation by *Fusarium solani* f. sp. *glycines*. *Plant Dis.* 90:77-82.
- Luna M. L., Murace M. A., Keil G. D. and Otaño M. E. (2004) Patterns of decay caused by *Pycnoporus sanguineus* and *Ganoderma lucidum* (Aphyllophorales) in poplar wood *IAWA* 25 (4): 425–433
- Luo X.C. (1993). Biology of Artificial log cultivation of *Auricularia* mushroom. In: Chang, S. T., Buswell JA, Siu-wai Chiu (eds) mushroom biology and mushroom cultivation. Chinese University Press, Hong Kong. p. 370.
- Mabberley, D.J., (1997). *The Plant-Book*. Cambridge University Press, Cambridge, New York.
- Machado K.M.G. and Matheus D.R. (2006). Biodegradation of remazol brilliant blue R by ligninolytic enzymatic complex produced by *Pleurotus ostreatus* Braz. *J. Microbiol.* 37 (4):
- Machado K.M.G., Matheus D.R and Bononi V.L.R. (2005) Ligninolytic Enzymes Production and Remazol Brilliant Blue R Decolorization by tropical Brazilian Basidiomycetes fungi. *Brazilian Journal of Microbiology* 36:246-252
- MacNally R, Parkinson A, Horrocks G, Conole L, and Tzaros C (2001) Relationships between terrestrial vertebrate diversity, abundance and availability of coarse woody debris on south-eastern Australian Xoodplains. *Biol Conserv* 99:191–205.
- Mahier, H.R. and H.E. Cordes, (1971). *Biological Chemistry*. 2nd Edn. New York. Harper and Row
- Luo X.C. Biology of artificial log cultivation of *Auricularia* mushrooms. Chapter 13
- Maltseva, O.V., Niku-Paavola, M.L., Leontievsky, A.A., Myasoedova, N.M., and Golovleva, L.A., (1991). Ligninolytic enzymes of the white rot fungus *Panus tigrinus*. *Biotechnology and Applied Biochemistry* 13: 291–302.
- Mandryk J, Alwis KU, and Hocking A.D. (1999) Work-related symptoms and dose-response relationships for personal exposures and pulmonary function among woodworkers. *Am J Ind Med*, 35: 481-490.
- Mandryk J, Alwis KU, and Hocking A.D. (2000) Effects of personal exposures on pulmonary function and work-related symptoms among sawmill workers. *Ann Occup Hyg* 44: 281-289.
- Mansur M., Arias M. E., Copa Patino J. L., Flardh M. and Gonza'lezl A. E. (2003) The white-rot fungus *Pleurotus ostreatus* secretes laccase isozymes with different substrate specificities. *Mycologia*, 95(6):1013–1020.

- Marques de Souza C.G. and Peralta R.M. (2003). Purification and characterization of the main laccase produced by the white rot fungus *Pleurotus pulmonarius* on wheat bran solid state medium. *Journal of Basic Microbiology* 43(4) 278-286.
- Martin S.B. and Dale J.L. (1980). Biodegradation of turf thatch with wood decay fungi. *Phytopathology* 70: 297-301.
- Martinez, A.T., Camarero, S., Guillen, F., Gutierrez, A., Munoz, C., Varela, E., Martinez, M.J., Barrasa, J.M., Ruel, K., and Pelayo, M., (1994). Progress in biopulping of non woody materials: Chemical, enzymatic and ultrastructural aspects of wheat-straw delignification with ligninolytic fungi from the genus *Pleurotus*. *FEMS Microbiol. Rev.* 13, 265-274.
- Martinez, A. T. (2002). Molecular biology and structure function of lignin degrading heme peroxidases. *Enzyme Microb. Technol.* 30, 425-444.
- Marwaha, S.S.; Grover, R.; Prakash, C.; and Kennedy, J.F. (1998) Continuous biobleaching of black liquor from the pulp and paper industry using an immobilised cell system. *J. Chem. Technol. Biotechnol.* 73, 292-296.
- Marzullo L., Cannio R., Giardina P., Santini M.T., and Sannia G. (1995). Veratryl alcohol oxidase from *Pleurotus ostreatus* participates in lignin biodegradation and prevents polymerization of laccase-oxidized substrates. *J Biol Chem* 270:3823-3827.
- Massee G. (1901). *Fungi Exotici* 3. *Kew Bull.* 1901: 150-169
- Mass Geasteranus R.A. (1971). Hydneous fungi of Eastern old World; *Verhand. Kon. Nederl. Akad. Wetensch Natuurk. Ser. 2*: 1-176.
- Mathews E. (2001). Understanding the FRA 2001, Forest Briefing#1, Washington D.C, World Resources Institute
- Mayer, A.M. and Staple, R.C. (2002). Laccase: new function of an old enzyme. *Phytochemistry* 60: 551-565.
- Maziero R., Cavasson V., Luas V. and Bononia, (1999). Screening of basidiomycetes for production of exopolysaccharide and biomass production in submerged culture. *Rev. de Microbiol.*, 30: 77-84.
- McCaig, B.C., Meagher R.B, and Dean J.F.D. (2005). Gene structure and molecular analysis of the laccase like multicopper oxidase (LMCO) gene family in *Arabidopsis thaliana*. *Planta* 221(5) : 619-636.
- McDonald, B. A. (1997). The Population Genetics of Fungi: Tools and Techniques *Phytopathology*. 87 (4): 448 – 453
- Mendonça R.T., Jara J.F., González V., Elissetche J.P., and Freer J. (2008). Evaluation of the white-rot fungi *Ganoderma australe* and *Ceriporiopsis subvermispura* in biotechnological applications *J Ind Microbiol Biotechnol* 35:1323-1330
- Messner K., and Stachelberger (1984). Transmission electron microscope observations of white rot caused by *Trametes hirsute* with respect to osmophilic particles. *Trans. Br. Mycol Soc.* 83: 209-216
- Michel, F. C., Jr., Dass S. B., Grulke E. A., and Reddy C. A.. (1991). Role of manganese peroxidase and lignin peroxidase of *Phanerochaete chrysosporium* in the decolorization of kraft bleach plant effluent. *Appl. Environ. Microbiol.* 57:2368-2375.
- Mihara R. Barry K.M. Mohammed C.L. and Mitsunaga T. (2005). Comparision of antifungal and antioxidant activities of *Acacia mangium* and *A. auriculiformis* heartwood extracts. *Journal of Chemical Ecology* 31(4):789-804.
- Mikiashvili N, Wasser S, Nevo E, Chichua D, and Elisashvili V. (2004). Lignocellulolytic enzyme activities of medicinally important basidiomycetes from different ecological niches. *Int. J. Med. Mushr.* 6: 63-71.
- Minc M. (2005). Decay of oak wood provoked by fungus *Atereum hirsutum* (Wild Ex Fr.) S.F. Gray. and it's essential physiological requirements. *Biblid* 91: 179-192
- Misra J.K. and Jamil Z. (1991) Fungi in the indoor environment of flour mills in Lucknow and the allergenic behaviour of some *Aspergilli*. *Grana* 30: 398-403.
- Mishra D., Mishra M., and Tewari S.N. (1997). Toxic effects of volatiles from *Callistemon lanceolatus* on six fungal pathogens of rice. *Indian Phytopath.* 50: 103-105.
- Mitter J.H. and Tandon R.N. (1932). Fungus flora of Nainital Part I. *J. Indian Bot. Soc.* 11:178-190
- Mitter J.H. and Tandon R.N. (1938). Fungus flora of Nainital Part II. *J. Indian Bot. Soc.* 17:177-182.
- Montagne J.F.C. (1842). *Cryptogame Nilgherenses*. *Ann. Sci. Nat.* 2, 8: 12-23
- Monties, B. (1989) Lignins. In: PM Dey, JB Harborne, eds, *Methods in Plant Biochemistry: Plant Phenolics*, Vol 1. Academic Press, New York, pp 113-157

- Moore J.C., Berlow E.L., Coleman D.C., de Ruiter P.C., Dong Q., Hastings A., Johnson N.C., McCann K.S., Melville K., Morin P.J., Nadelhoffer K., Rosemond A.D., Post D.M., Sabo J.L., Scow K.M., Vanni M.J., and Wall D.H. (2004) Detritus, trophic dynamics and biodiversity. *Ecol Lett* 7:584–600.
- Morell J.J. and Zabel R.A. (1985). Wood strength and weight losses caused by soft rot fungi isolated from treated southern pine utility poles. *Wood and Fiber Sci.* 17: 132-143.
- Morohoshi, N., Shibwa, Y., Murayama, A., Katayama, Y. and Haraguchi, T. (1989). Properties of the phenoloxidases secreted by *Coriolus versicolor* in wood meal medium I. *Journal of the Japan Wood Research Society* 35, 342-347.
- Moturi B. and Charya, S.M.A. (2009) Decolourisation of Crystal Violet and Malachite Green by Fungi. *Science World Journal* 4 (4): 28-33
- Mtui G. and Nakamura Y. (2002). Continuous production of lignin-degrading enzymes by *Bjerkandera adusta* immobilized on PUF. *Biotechnol. Lett.* 24: 1743-1747.
- Mtui G. and Nakamura Y. (2008). Lignocellulosic enzymes from *Flavodon flavus*, a fungus isolated from Western Indian Ocean off the coast of Dar es Salaam, Tanzania *African Journal of Biotechnology* 7 (17): 3066-3072,
- Mtui GYS, Kivaisi AK and Masalu R (2003). Production of lignin-degrading enzymes from native Tanzanian mushrooms. *Proc. Intl. Conf. Mushrooms. Pattaya, Thailand*, pp. 163-169.
- Muhammad A., Shahnaz K., Nawazbhatti H., Shah S.A.H. and Muhammad A. (2008) Optimization of medium for decolorization of Solar golden yellow R direct textile dye by *Schizophyllum commune* IBL-06. *International biodeterioration and Biodegradation* 61 (2): 189-193
- Munoz, C.; Guillen F; Martinez A.T; and Martnez M.J (1997). Laccase isoenzymes of *Pleurotus eryngii*; characterization, catalytic properties and participation in activation of molecular oxygen and Mn 2 oxidation. *Applied and environmental microbiology* 63(6): 2166-2174.
- Muraleedharan P.K. and Bhat K.M. (1989) A techno-economic study of sawmilling industry in Kerala. *KFRI Research Report (summary)*. KFRI, Thrissur, India.
- Murmanis, L., T. L. Highley, and J. G. Palmer. 1984. An electron microscopy study of western hemlock degradation by the white rot fungus *Ganoderma applanatum*. *Holzforschung* 38:11-18.
- Murrill W.A. (1924). Kashmir fungi. *Mycologia* 16: 133.
- Murrill W.A. (1907). Polyporaceae. *North America Flora* 9:1–131.
- Nagai M.; Kawata, M; Watanabe H; Ogawa M; Saito K; Takesawa T; Kanda K; and Sato T (2003). Important role of fungal intracellular laccase for melanin synthesis: purification and characterization of an intracellular laccase from *Lentinula edodes* fruit bodies *Microbiology* 149 (9): 2455-2462.
- Nakamura Y, Mtui GYS, Sawada T, and Kuwahara M (1999). Lignin-degrading enzyme production from *Bjerkandera adusta* immobilized on PUF. *J. Biosci. Bioeng.* 88(1): 41-47.
- Narayan M.C.J., Ravichandran V. and Sullia S.B. (1982) Aeromycology of the atmosphere of Malleswaram market, Bangalore. *Acta Botanica Indica* 10: 196–200.
- Natarajan K. and Kolandavelu K. (1985). Resupinate Aphyllophorales of Tamil Nadu, India. *CAS in Botany University of Madras, Chennai*. pp 133
- Natarajan K. and Kolandavelu K. (1998). *Resupinate Aphyllophorales of Tamil Nadu, India*. *CAS in Botany University of Madras, Chennai*. pp 133.
- Nazareth, S.W. and Sampy J.D. (2003). Production and characterisation of lignocellulases of *Panus tigrinus* and their application. *International Biodeterioration and Biodegradation*. 52(4): 207-214.
- Nicolas K, Pavlo S.L. and Beatrice S. (2004) Diversity of wood-inhabiting fungi in natural beech forests in Transcarpathia (Ukraine): a preliminary survey. *Mycologia Balcanica* 1: 129–134
- Niederpruem D. J., Hobbs H., and Henry L. (1964). Nutritional studies of development in *Schizophyllum commune* *Journal of Bacteriology* 88, (6):1721-1729
- Niemelä, T. (1985). *Naturaliste Canad.* 112: 456
- Nilsson, T. (1985). Defining fungal decay types -a proposal for discussion. *International Research Group on Wood Preservation Document No. IRG/WP1264*.
- Nilsson, T. (1988). Defining fungal decay types-final proposal. *Intl. Res. Grp. Wood Pres. Doc. No. IRG/WP/1355: 1-3*.
- Nilsson, T., Daniel G., Kirk T. K. and Obst. J.R. (1989). Chemistry and microscopy of wood decay by some higher ascomycetes. *Holzforschung* 43: 11-18.
- Nitta, K; Kataoka K; and Sakurai T. (2002). Primary structure of a Japanese lacquer tree laccase as a prototype enzyme of multicopper oxidases. *Journal of Inorganic Biochemistry* 91(1): 125-131.

- Nobles M. K. (1965). Identification of cultures of Wood Inhabiting Hymenomycetes *Can. J Bot.* 43: 1097-1139.
- Nordén B. and Paltto H. (2001) Wood-decay fungi in hazel wood: species richness correlated to stand age and dead wood features *Biological Conservation* 101(1): 1-8
- Norio S., Mitsuteru A., Makoto I., Koichi Y., and Ikuo M., (2002). Wood decay ability test of different wood-destroying fungi. *Kyushu Journal of Forest Research* 55: 199-200
- Nyanhongo G. S., Gübitz G., Sukyai P., Leitner C., Haltrich D. and Ludwig R. (2007) Oxidoreductases from *Trametes* spp. in Biotechnology: A Wealth of Catalytic Activity *Food Technol. Biotechnol.* 45 (3) 250-268
- Oberai C.P. (2000) forests for new millennium. *Employment news* 24: 51
- Ohga, S.; and Royse, D.J. (2001). Transcriptional regulation of laccase and cellulase genes during growth and fruiting of *Lentinula edodes* on supplemented sawdust. *FEMS Microbiol. Lett.*, 201, 111-115,
- Okeke, B. C., Paterson A., Smith J. E., and Watson-Craik I. A. (1994). The relationship between phenol oxidase activity, soluble protein and ergosterol with growth of *Lentinus* species in oak sawdust logs. *Appl. Microbiol. Biotechnol.* 41:28-31.
- Olfat A.M., and Karimi A.N., (2005). degradation of crude oil and beech wood by *Coriolus versicolor*. *Pak. J. Biol.Sci.* 8: 1453-1456.
- Olfat A.M., Karimi A.N., and Parsapajouh D. (2007). Biological method to quantify progressive stages of decay in five commercial woods by *Coriolus versicolor*. *Pakistan Journal of Biological Science* 10(6): 1073-1077.
- Orth, A.B., and Tien, M., (1995). In: Ku' ck, U. (Ed.), *Biotechnology of Lignin Degradation. The Mycota. II. Genetics and Biotechnology*. Springer, Berlin, pp. 287-302.
- Orth, A.B., Royse, D.J. and Tien, M. (1993). Ubiquity of lignin-degrading peroxidases among various wood degrading fungi. *Appl Environ Microbiol* 59, 4017-4023.
- Otjen L. and Blanchette R.A. (1986b). A discussion of microstructural changes in wood during decomposition by white rot Basidiomycetes. *Can J. Bot.* 64: 905-911.
- Otjen, L., and Blanchette. R.A. (1985). Selective delignification of aspen wood blocks in vitro by three white rot basidiomycetes. *Appl. Environ. Microbiol.* 50:568-572.
- Otjen, L., and Blanchette R.A. (1982). Patterns of decay caused by *Inonotus dryophilus* (Aphyllphorales: Hymenochaetaceae), a white-pocket rot fungus of oaks. *Can. J. Bot.* 60:2770-2779.
- Oyagade A. O. (1994). Compatibility of some tropical hardwood species with Portland cement. *journal of tropical forest science* 6(4): 387 - 396
- Padmanabhan S. J and Naya S.T. (2004) Airborne fungal spores in a sawmill environment in Palakkad District, Kerala, India *Aerobiologia* 20: 75-81
- Palonen H.; Saloheimo M; Viikari L; Kruus K. (2003). Purification, characterization and sequence analysis of a laccase from the ascomycetes *Mauginiella* sp. *Enzyme and microbial technology* 33(6): 854-862.
- Pandey A.K., and Kori D.C. (2009) Variations in Tannin and Oxalic acid Content in *Terminalia arjuna* (Arjuna) Bark. *Phcog Mag* 5:159-64
- Pandey, K. K. and Theagarjan K. S (1997) Analysis of wood surfaces and ground wood by diffuse reflectance (DRIFT) and photoacoustic (PAS) Fourier transform infrared spectroscopic techniques *Holz als Roh und Werkstoff* 55:382-390
- Pandey R.S., Bhargava S.N., Shukla D.N and Dwivedi D.K. (1983). Control of *Pestalotia* fruit rot of guava by leaf extract of two medicinal plants. *Revista Mexicana De Fitopatologia* 2:15-16
- Pant D. and Adholeya A. (2007) Identification, Ligninolytic Enzyme Activity and Decolorization Potential of Two Fungi Isolated from a Distillery Effluent Contaminated Site. *Water, Air, & Soil Pollution* 183 (1-4): 165-176
- Paszczynski, A., Huynh V.B., and Crawford R. (1985). Enzymatic activities of an extracellular, manganese-dependent peroxidase from *Phanerochaete chrysosporium*. *FEMS Microb. Lett.* 29: 37-41
- Paszczyński, A., Huynh, V.-B. and Crawford, R. (1986). Comparison of ligninase-1 and peroxidase-M2 from the white-rot fungus *Phanerochaete chrysosporium*. *Arch Biochem Biophys* 244, 750-765.
- Peek R.D. Liese W., and Parameswaran N. (1972) Infektion und Abbau des Wurzelholzes von Fichten durch *Fomes annosus* .*Eur. J. For. Path.* 2: 237-248.

- Pelaez F, Martinez MJ, and Martinez AT (1995). Screening of 68 species of basidiomycetes for enzymes involved in lignin degradation. *Mycol. Res.* 99: 37-42.
- Penttilä, R., Lindgren, M., Miettinen, O., Rita, H. and Hanski, I. (2006). Consequences of forest fragmentation for polyporous fungi at two spatial scales. *Oikos* 114: 225 - 240.
- Perez J. Munoz-Dorado J., de la Rubia T., and Martinez J. (2002). Biodegradation and biological treatments of cellulose, hemicellulose and lignin: an overview. *Int. Microbiol* 5: 53-63.
- Perry, C. R., Matcham S. E., Wood D. A, and Thurston C. F. (1993). The structure and function of laccase protein and its synthesis by the commercial mushroom *Agaricus bisporus*. *J. Gen. Microbiol.* 139:171-178.
- Phillips, L.E. and Leonard, T.J. (1976). Extracellular and intracellular phenoloxidase activity during growth and development in *Schizophyllum*. *Mycologia* 68, 168-276.
- Pildain, M.B., Novas, M.V. and Carmarán, C.C. (2005). Evaluation of anamorphic state, wood decay and production of lignin-modifying enzymes for *Diatrypaceous* fungi from Argentina. *Journal of Agricultural Technology* 1 (1): 81-96.
- Pomaer, F., Merino F., and Rosbarcelo A. (2002) O-4-Linked coniferyl and sinapyl aldehydes in lignifying cell walls are the main targets of the Wiesner (Phloroglucinol-HCl) reaction. *Protoplasma* 220: 17-28.
- Powell MR, (2002). A model for probabilistic assessment of phytosanitary risk reduction measures. *Plant Disease* 86:552-557.
- Prasongsuka S., Lotrakula P., Imaib T., and Punnapayaka H. (2009) Decolourization of pulp mill wastewater using thermotolerant white rot fungi. *ScienceAsia* 35:37-41.
- Pratima, B. (1999). Application of enzymes in the pulp and paper industry. *Biotechnology Progress* 15: 147 - 157.
- Raghukumar C (2000) Fungi from marine habitats: application in bioremediation. *Mycol Res* 104:1222-1226
- Raghukumar C. and Rivonkar G. (2001). Decolorization of molasses spent wash by the white-rot fungus *Flavodon flavus*, isolated from a marine habitat *Appl Microbiol Biotechnol* 55:510-514
- Raghukumar C., D'souza T. M., Thorn R. G., and Reddy C. A. (1999), Lignin-Modifying Enzymes of *Flavodon flavus*, a Basidiomycete Isolated from a Coastal Marine Environment. *Applied and Environmental Microbiology*. 65 (5): 2103-2111
- Rajput K.S. and Rao K.S. (1999) Nucleated wood fibres in some members of combretaceae *IAWA journal*, 20 (1): 79-83
- Ralph J.P., Graham I.A. and Catcheside D.E.A. (1996) Extracellular oxidases and the transformation of solubilised low-rank coal by wood-rot fungi, 46 (3): 226-232
- Rangaswami G., Kandaswami T.K. and Ramaswamy K. (1975). *Pleurotus sajor-caju* (Fr.) Singer a protein rich nitrogen fixing mushroom fungus. *Curr. Sci.* 44: 403-404.
- Rangaswami G. Seshadri V.S. and Lucy Channamma K.A. (1970). Fungi of south India. *Uni. Agric. Sci. Bangalore* 193pp.
- Rask-Andersen A., Land C.J., Enlund K., and Lundin A. (1994) Inhalation fever and respiratory symptoms in the trimming department of Swedish sawmills. *Am J. Ind Med* 25: 65-67.
- Rattan S.S. (1974). *Scytinostroma* in India with notes on extralimital species. *Tras. Brit. Mycol. Soc.* 63: 1-12.
- Rattan S.S. (1977). The Resupinate Aphylloporales of North Western Himalayas; (Vaduz, Germany : J. Cramer)
- Rattan S.S. Khurana I.P.S. (1978). The Clavarias of Sikkim Himalayas (Vaduz, Germany: J. Cramer)
- Rauel K. and Bamoud F. (1985) Degradation of wood by microorganism in biosynthesis and biodegradation of wood components Ed by T. Higuchi (Academic Press Inc. Florida): 441
- Rayner A.D.M and Boddy L. (1988). Fungal decomposition of wood: its biology and ecology. Wiley, Chichester.
- Reddy C.A. (1993). An overview of the recent advances on the physiology and molecular biology of lignin peroxidases of *Phanerochaete chrysosporium*. *J Biotechnol* 30:91-107.
- Reddy C.A. and D'Souza T.M. (1994). Physiology and molecular biology of the lignin peroxidases of *Phanerochaete chrysosporium*. *FEMS Microbiol Rev* 13:137-152.
- Rehill P.S. and Bakshi B.K. (1965). Studies on Indian Thelephoraceae Indian species of *Peniophora* and *Corticium*. *Ind. For. Bull.* 242: 1-30.
- Rehill P.S. and Bakshi B.K. (1966). Studies on Indian Thelephoraceae- the genus *Stereum*; *Ind. For. Bull.* 250: 1-20.

- Rehman A.U.R. and Thurston C.F. (1992) Purification of laccase I from *Armillaria mellea* Journal of General Microbiology 138, 1251-1257
- Reid D.A.Thind K.S. and Adlakha K.L. (1958). The Thelephoraceae of Mussoorie Hills; Trans. Brit. Mycol. Soc. 41: 129-134.
- Reid D.A.Thind K.S. and Chatrath M.S. (1959). Polyporaceae of Mussoories Hills. Trans. Brit. Mycol. Soc. 42: 40-44.
- Reinhammar, B. (1984). Laccase. In Copper Proteins und Copper Enzymes, vol. 3 . pp. 2-35. Edited by R. tontie. Boca Raton: CRC Press.
- Renganathan, V., Miki, K., and Gold, M. H. (1986) Arch. Biochem. Biophys. 246, 155-161.
- Risna, R.A. and Suhirman. (2002). Ligninolytic enzyme production by Polyporaceae from Lombok, Indonesia. Fungal Diversity 9: [23-] 34.
- Robbind W.J. (1950). Asurvey of the growth requirements of some Basidiomycetes. Mycologia 42: 92-96.
- Rosewich, U. L., and McDonald, B. A. (1994). DNA fingerprinting in fungi. Methods Mol. Cell. Biol. 5:41-48.
- Ross, W.D., and Corden. M.E. (1973). Microscopic and histochemical changes in Douglas-fir bark accompanying fungal invasion. Wood Fiber 5: 129? 138.
- Rossell SE, Abbot EGM, and Levy JF (1973) Bacteria and wood. A review of the literature relating to the presence, action and interaction of bacteria in wood. *J Inst Wood Sci* 6(2): 28-35.
- Rowe J.W. and Conner A.H. (1978). Extractives in eastern hardwoods – A review; U.S. For. Serv. Gen. Tech. Rep. FLP-18. Madison Wi; for. Prof. Lab.
- Roy A. (1968a). Anatomy of India Polyporaceae I. *Trametes cingulata* Ber. and *T. persoon* Fr. Bull. Bot. Soc. Bengal 22: 45-54.
- Roy A. (1968b). Anatomy of India Polyporaceae II. *Daedalea flavida* Lev. and *D. microzona* Lev. Fr. Bull. Bot. Soc. Bengal. 22: 131-134.
- Roy A. (1969). Anatomy of India Polyporaceae III. *Polyporus adustus* Willd. Ex Fr. and *P. osteriformis* Berk. Fr. Bull. Bot. Soc. Bengal.23: 205-211.
- Roy A. (1979). Taxonomy of *Fomes durissimus*. *Mycologia* 71: 1005-1008.
- Roy A. and De A.B. (1996). Polyporaceae of India. Int. Book Dist. Dehradun 309pp.
- Roy S.K. (1953). Notes on some Hymenomycetes new to India. Sci and Cult. 19: 94-96.
- Rudman P. Da Costa E.W.B. and Gat F.J. (1967) wood quality in plus tres of teak (*Tectona grandis* L.f.) an assessment of decay and termite resistance. *Silvae genetica* 16: 102- 105.
- Ryvarden L and Johansen I, (1980). A preliminary polypore flora of East Africa Oslo Norway, pp 434, 432, 110,
- Ryvarden, L. (1991). Genera of Polypores-Nomenclature and Taxonomy, *Synopsis Fungorum* 5 *Fungi flora, OSLO*, 363p.
- Ryvarden L., (2004). Neotropical Polypores. Part 1. Introduction, Ganodermataceae & Hymenochaetaceae. *Fungiflora*, Oslo, *Synopsis Fungorum* 19: 1-228.
- Sabnis, S. D. and Amin, J. C., (1992). Eco-environmental studies of Sardar Sarovar environs. Pub. by The M.S. University of Baroda, pp 388.
- Saloheimom, Niku-paavolma., L. and knowlesj K.C. (1991). Isolation and structural analysis of the laccase gene from the lignindegarding fungus *Phlebia radiata*. Journal of General Microbiology 137, 1537-1544.
- Sambrook J., Fritsch E.F., and Maniatis T. (1989) Molecular Cloning: a Laboratory Manual, 2nd edn. Cold Spring Harbor Laboratory Press, New York..
- Samuelsson J, Gustafsson L, and Ingelög T (1994) Dying and dead trees: a review of their importance for biodiversity. Swedish Threatened Species Unit, Uppsala
- Sandermann W., Dietrichs H.H., Simatupang M.H., and Puth M. (1963) Untersuchungen fiber kautschukhaltige H61zer. *Holzforschung* 17: 161-i68
- Sankaran K.V., Bridge P.D. and Gokulapalan C.(2005) *Ganoderma* diseases of perennial crops in India – an overview. *Mycopathologia* 159: 143-152
- Santra, S.; and Nanadi, B., (1975): Microstructural and microchemical studies of wood decay of *Caseronnia exquisitifolia* by *Fomes durissimus*. Trans. British Mycol. Soc. 65 (3), 507-509.
- Sarkanen, K. V., and Ludwig C. H. (1971). Definition and nomenclature. In K. V. Sarkanen and C. H. Ludwig [eds.], *Lignins: occurrence, formation, structure and reactions*, 1-18. Wiley, New York, New York, USA.

- Sato Y, Wuli B; Sederoff R.; and Whetten R. (2001) Molecular cloning and expression of eight laccase cDNAs in loblolly pine (*Pinus taeda*). Journal of plant research 114(2): 147-155.
- Scheffer T.C. (1964). Biological observations of significance for improved preservative treatment. *Holzforschung* 18: 88-94.
- Scherer M. and Fischer R. (1998). Purification and characterization of laccase II of *Aspergillus nidulans*. *Archives of Microbiology* 170(2): 78-84.
- Schirp A. and Wolcott M. P. (2005) Influence of fungal decay and moisture absorption on Mechanical properties of extruded Wood-plastic composites. *Wood and Fiber Science*, 37(4): 643-652
- Schlosser, D., Grey R., and Fritsche W. (1997). Patterns of ligninolytic enzymes in *Trametes versicolor*. Distribution of extra- and intracellular enzyme activities during cultivation on glucose, wheat straw and beech wood. *Appl. Microbiol. Biotechnol.* 47:412-418.
- Schmidt O. and Liese W. (1980). Variability of wood degrading enzymes of *Schizophyllum commune*. *Holzforschung* 34: 67-72
- Schmidt, O. (1994). *Holz- und Baumpilze*. Springer-Verlag, Berlin, Heidelberg, New York. 246 pp.
- Schoemaker, H. E. (1990) *Recl. TraV. Chim. Pays-Bas* 109, 255-272.
- Schoemaker, H.E., Lundell, T.K., Hatakka, A.I., and Piontek, K., (1994). The oxidation of veratryl alcohol, dimeric lignin models and lignin by lignin peroxidase. The redox cycle revisited. *FEMS Microbiol. Rev.* 13, 321-332.
- Schwarze F.W.M.R (1995). Entwicklung und biomechanische Auswirkungen von holzzersetzenden Pilzen in lebenden Naumen und in vitro. Diss. Univ. Freiburg, Sk-Verlag, Erndtebruck.
- Schwarze F.W.M.R (2007). Wood decay under the microscope, *Fungal Biology Reviews*, doi:10.1016/j.fbr.2007.09.001
- Schwarze F.W.M.R and Engels J. (1998). Cavity formation and the exposure of peculiar structures in the secondary wall (S2) of trachieds and fibers by wood degrading Basidiomycetes. *Holzforschung* 52: 117-123.
- Schwarze F.W.M.R. (2004). Forest Pathology: Heart Rot and Wood Decay. In: Burley J, Evans J, Youngquist J (eds), *Encyclopedia of Forest Sciences*, Elsevier Science 4., pp. 808-816.
- Schwarze F.W.M.R., (1995). Entwicklung und biomechanische Auswirkungen von holzzersetzenden Pilzen in lebenden Ba"umen und in vitro. PhD thesis, University of Freiburg. Germany, SVK Verlag.
- Sedjo R.A. (1990) Economic wood supply – problems and oportunities: choices for Canads forest industries. *For Chron* 2: 32
- Sedlmayr M.E.S. and Beneke J.A. (1961). Stevens physiological studies on *Calvatia* Species. II. Carbon Utilization *Mycologia*, 53 (6): 558-565
- Seifert K. (1968). Zur Systematik der holzfaulen ihre chemischen and physikalischen kennzeichen. *Holz rohwerks* 26: 208-215
- Seifert. K. A. (1983) Decay of wood by the Dacrymycetales. *Mycologia* 75: 1011-1018
- Senn Irlet B, Heilmann Clausen J, Genney D, Dahlberg D. (2007) Guidance for Conservation of Macrofungi in Europe. The Directorate of Culture and Cultural and Natural Heritage Council of Europe, Strasbourg.
- Sen Menjusri (1973). Cultural diagnosis of Indian Polyporaceae III. Genera *Daedalea*, *Favolus*, *Ganoderma*, *Hexagonia*, *Irpex*, *Lenzites* *Merulius* and *Poria*. *Indian For. Rec.* (N.S.) 2(11): 277-304.
- Setliff E and Eudy W.W. (1980). Screening white rot fungi for their capacity to delignify wood. In T.K. Kirk. T. Higuchi and H. M. Chang (eds.) *Lignin Biodegradation. Microbiology, Chemistry and Practical applications* 1, Chemical Rubber Company Press Boca Raton. pp135- 149.
- Shah N.R. and Arya A. (2000). *Studies on some fungal biodeteriogens*. Bhartiya Kala Prakashan, New Delhi pp 205
- Shain L. (1971). The response of sapwood in Norway spruce to infection by *Fomes annosus*; *Phytopathology* 61: 301-307.
- Sharma D. and Datta B.K. (2001) Observations on the aeromycoflora of indoor working environments of greater Silchar. *Indian J. Aerobiol.* 14: 8-15.
- Sharma J.R.. (1995). *Hymenochaetaceae of India*. Botanical Survey of India, Calcutta. 291pp.
- Sharma J.R. (1999a). Genera of Indian polypores, Botanical Survey of India, Dehradun. 169pp
- Sharma J.R. (1999b). Indian Polyporoid fungi (in Press)
- Sharma J.R. (1996). Wood rotting fungi (Aphyllophorales) from Sikkim; *Bull. Bot. Surv. Ind.* 34: 89-99.

- Sharma J.R. (1997). Wood rotting fungi of temperate- Timberline zone; In Floristic Diversity and Conservation Strategies in India; ed. V Mudgal and P.K. Hajra, Shiva offset. Dehradun India. 151-194pp.
- Sheng, D., and Gold, M. H. (1998) Biochemistry 37, 2029-2036.
- Sheng, D., and Gold, M. H. (1999) Eur. J. Biochem. 259, 626- 634
- Shersingh (1924). The ability of Deodar to the attack of *Trametes pini* (Brot.) Fr. In Lolab, Kashmir. Indian Forester 50: 361-365.
- Shide E.G., Wuyep P.A. and Nok A.J. (2004) Studies on the degradation of wood sawdust by *Lentinus squarrosulus* (Mont.) Singer. African Journal of Biotechnology 3(8): 395-398.
- Shigo A.L. and Hillis W.E. (1973). Heartwood, discoloured wood and microorganisms in living trees. Annu. Rev. Phytopathol. 11:187-222.
- Shim J.O., Son S.G., Kim Y.H., Lee Y.S., Lee J.Y., Lee T.S., Lee S.S. and Lee M.W. (1997). The cultural conditions affecting the mycelial growth of *Grifola umbellata*. Kor. J. Mycol. 25(3): 209-218.
- Shim S.M., Oh Y.H., Lee K.R., Kim S.H., Im K.H., Kim J.W., Lee U.Y., Shim J.O., Shim M.J., Lee M.W., Ro H.S., Lee H.S. and Lee T.S. (2005) Culture Conditions Affecting the Optimal Mycelial Growth of *Cystoderma amianthinum* Mycobiology 33(1): 65-67.
- Shimada, M., and Higuchi, T., (1991). Microbial, Enzymatic and Biomimetic Degradation of Lignin. In: Hon, D.N.S., Shiraishi, N. (Eds.), Wood and Cellulosic Chemistry. Marcel Dekker, NY, pp. 557-619.
- Shortle W.C. and Cowling E.B. (1978). Interaction of living sapwood and fungi commonly found in discoloured and decayed wood. Phytopathology 68: 617-623.
- Simatupang M.H. (1964) Chemische Untersuchungen und Teakliolz (*Tectona grandis* L. F), Diss. University of Hamburg, Germany.
- Simeray J., Mandin D. and Chaumont J. P. (1997) An aeromycological study of sawmills: Effects of type of installation and timber on mycoflora and inhalation hazards for workers International Biodeterioration & Biodegradation 40 (1): 11-17
- Simoniã J.L.J., Vukojeviã J.B., Stajiã M.M., and Glamoãlija J.M. (2009) Effect of cultivation conditions on ligninolytic enzyme production by *Ganoderma Carnosum* Proc. Nat. Sci, Matica Srpska Novi Sad, 116: 289-295.
- Sin M.K.W., Hyde K.D., and Pointing S.B. (2002) Comparative Enzyme Production by Fungi from Diverse Lignocellulosic Substrates. The Journal of Microbiology. 40(3): 241-244
- Singh, B., (1966). Timber decay due to five species of fomes as new record in India. Indian Forester, 92: 653-655.
- Singh A. and Basu M. (2004). Evaluation of biofungicidal properties of some plant extracts on the growth of *Schizophyllum commune*. Science Letters. 27 (3-4): 107-109.
- Singh A. and Singh A.B. (1994) Airborne fungi in a bakery and the prevalence of respiratory dysfunction among workers. Grana 33: 349-358.
- Singh D. V., Gupta M. M., Santha Kumar T. R., Saikia D., and Khanuja, S. P. S. (2008). Antibacterial principles from the bark of *Terminalia arjuna* Current Science, 94(1): 27-29
- Singh T.G.B and Verma R.N. (1996). Studies on carbon and nitrogen nutrition of *Leetimula lateritia* (Berk.) Pegler strains from northeastern India. Mushroom biology and mushroom products. Royse (ed.) Penn State University.
- Singh, A.D.; Abdullah, N.; Vikineswary, S. (2003). Optimization of extraction of bulk enzymes from spent mushroom compost. J. Chem. Technol. Biotechnol., 78, 743-752,
- Singh, A.P., Kim, Y.S. and Wi S.G. (2002). Inhomogeneity in the composition of vesture walls in an archaeological wood. IAWA J 23(1): 77-82.
- Siripong P., Oraphin B., Sanro T. and Duanporn P. (2009) Screening of Fungi from Natural Sources in Thailand for Degradation of Polychlorinated Hydrocarbons American-Eurasian J. Agric. & Environ. Sci., 5 (4): 466-472.
- Smibert, R.M. & Krieg, N.R. (1981) General characterization. In Manual of Methods for General Bacteriology eds Gerhardt, P., Murray, R.G.E., Costilow, R.N., Nester, E.W., Wood, W.A., Krieg, N.R. and Briggs Phillips, G. Washington DC: ASM Press. pp. 409-443.
- Solomon E.I; Sundaram U.M. and Machonkin T.E. (1996). Multicopper oxidases and oxygenases Chemical reviews 96(7): 2563-2605.

- Songulashvili, G.; Elisashvili, V.; Wasser, S.P.; Nevo, E.; and Hadar, Y. (2007). Basidiomycetes laccase and manganese peroxidase activity in submerged fermentation of food industry wastes. *Enzyme Microb. Technol.* 41, 57-61.
- Sopko, R. (1968). Influence of extractives on cellulose and xylanase activities of *Schizophyllum commune*. *Biodeterioration of Materials*.
- Souza Cruz P, Freer J, SiikaAho M, Ferraz A (2004) Extraction and determination of enzymes produced by *Ceriporiopsis subvermispura* during biopulping of *Pinus taeda* wood chips. *Enzyme Microb Technol* 34:228-234
- Srinivasan, C., D'Souza T. M., Boominathan K., and Reddy C. A. (1995). Demonstration of laccase in the white rot basidiomycete *Phanerochaete chrysosporium* BKM-F1767. *Appl. Environ. Microbiol.* 61:4274-4277.
- Stajić, M.; Persky, L.; Friesem, D.; Hadar, Y.; Wasser, S.P.; Nevo, E.; and Vukojević, J. (2006). Effect of different carbon and nitrogen sources on laccase and peroxidases production by selected *Pleurotus* species. *Enzyme Microb. Technol.* 38, 65-73.
- Stalper J.A. (1978). Identification of wood inhabiting Aphyllophorales in pure culture. *Studies in mycology* no.16. Centraalbureau Voor Schimmelcultures. Baarn pp.248
- Sterjiades R; Dean J.F.D. and Eriksson K.E.L. (1992). Laccase from sycamore (*Acer pseudoplatanus*) polymerizes monolignols. *Plant Physiology* 99: 1162-1168.
- Steyaert R.L (1980). Study of Some *Ganoderma* Species. *Bull. Jard. Bot. Nat. Belg.* 50: 135-186
- Sundararaman S and Marudaranjan D. (1925). Some Polyporaceae of the Madras presidency. *Madras Agric Dept Year Book* 1924: 69-75.
- Sugihara T.F. and Humfeld H. (1954). Submerged culture of various species of mushrooms. *Appl. Microbiol.* 3: 170-172.
- Surekha M., Krishnareddi V. and Reddi S.M. (1996) Aeromycoflora of poultry shed in relation to incidence of mycotoxigenic fungi. *J. Pathol.* 32: 135-141.
- Swartz, D. (1933). Some development characters of species of Lycoperdaceae. *Am. Jour. Bot.* 20: 440.
- Swift M. J. (1978). Growth of *Stereum hirsutum* during the longterm decomposition of oak branch wood. *Soil biol. and Biochemistry* 104: 335-337
- Szklarz G. D., Antibus R. K., Sinsabaugh R. L., and Linkins A. E. (1989) Production of Phenol Oxidases and Peroxidases by Wood-Rotting Fungi *Mycologia*, 81, (2): 234-240.
- Tatken RL (1987) (Ed): *Health Effects of Exposure to Wood Dust: A Summary of the Literature*. U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control, NIOSH, Cincinnati, OH
- Teerapatsakul C, and Chitradon L (2003). Some physiological aspects of a white rot fungus, KU-alk4 on production of ligninolytic enzymes, used in biopulping of paper mulberry. In: Abstract in microbial utilization for recycling of agricultural waste, NRCTJSPS- DOST-LIPI-VCC, Mahidol University, March 7-8, 25pp
- Teerapatsakul C., Abe N., Bucke C., Kongkathip N., Jareonkitmongkol S., and Chitradon L. (2007) Novel laccases of *Ganoderma* sp. KU-alk4, regulated by different glucose concentration in alkaline media *World J Microbiol Biotechnol* 23:1559-1567
- Tekere M., Mswaka A.Y., Zvauya R. and Read J. S. (2001) Growth, dye degradation and ligninolytic activity studies on Zimbabwean white rot fungi. *Enzyme and Microbial Technology* 28 (4-5): 420-426
- Tekere M., Mswaka A.Y., Zvauya R. and Read J. S. (2001). Test Yard at New Forest, Dehra Dun According to 1976 Inspection, Their Treatability and Seasoning Characteristics. IRG/WP/3127. International Research Group on Wood Preservation, Stockholm, Sweden.
- Trigiano R. N. and Fergus C. L. (1979) Extracellular Enzymes of Some Fungi Associated with Mushroom Culture *Mycologia* 71(5): 908-917
- Terashima K., Matsumoto T., Hayashi E. and Fukumasa-Nakai Y. (2002). A genetic linkage map of *Lentinula edode* (shiitake) based on AFLP markers. *Mycol. Res.* 106: 911-917.
- Tewari, M.C. (1978). Data on Natural Durability of Timber Species (Installed in the
- Teather R. M. and Wood P. J. (1982). Use of Congo red polysaccharide interaction of cellulolytic bacteria from the bovine serum. *Appl. Environ. Microbiol.* 43: 777-780.
- Thakur R. N., Singh P., and Koshala M.K. (1989). *in vitro* studies on antifungal activities of some aromatic oils. *Indian Perfumer* 33: 257-260.
- Theissen, F. (1911). fungi aliquot Bombayenses Rev. ed. *Blatter Collecti. Ann. Mycol* 9: 153-159.

- Thind K.S. (1961). The Clavariaceae of India (Indian council of Agricultural Research, New Delhi, India.
- Thind K.S. (1973). The Aphyllophorales in India, Presidential address delivered at the 25th Annual General Body Meeting of IPS 26(1): 2-23.
- Thind. K.S. and Adlakha K.L. (1956). The Thelephoraceae of Mussoorie hill Indian J. Mycol. Rese. 2: 57-64.
- Thind. K.S. and Chatrath M.S. (1957). Polyporaceae of Mussoorie hills. II. Res. Bull. Punjab. Univ. 25: 431-442.
- Thind. K.S. and Chatrath M.S. (1960). Polyporaceae of Mussoorie Hills I. Indian Phytopath. 23: 76-89
- Thind, K.S. and R.S. Dhanda, (1980). The polyporaceae of India X. Kavaka, 8: 59-67.
- Thind K.S. and Khara H.S. (1968). The Hydneaceae of North Westren Himalayas; Indian Phytopath. Soc. Bull. 4: 25-33.
- Thind K.S. and Khara H.S. (1975). The Hydneaceae of North Westren Himalayas Indian Phytopath. 28: 57-64.
- Thind K.S. Rattan S.S. (1968). The Thelephoraceae of North Westren Himalayas Indian Phytopath. Soc. Bull. 4: 14-24.
- Thind K.S. Rattan S.S. (1973). Thelephoraceae of India. Mycologia 65: 1250-1258.
- Thom C. (1954). The colony. Mycologia 46: 1-8.
- Thormann M.N., Currah R.S., and Bayley S.E. (2002). The relative ability of fungi from *Sphagnum fuscum* to decompose selected carbon substrates Can. J. Microbiol. 48(3): 204-211
- Thurston C.F. (1994). The structural and function of fungal laccases Microbiology 140: 19-26.
- Thulasidas, P. and Bhat K. M. (2007). Chemical extractive compounds determining the brown-rot decay resistance of teak wood. HolzalsRoh-und Werkstoff 65: 121-124.
- Thurston C.F. (1994). The structure and function of fungal laccases. Microbiology 140:19-26.
- Tien M. and Kirk T.K. (1984). Lignin-degrading enzyme from *Phanerochaete chrysosporium*: purification, characterization, and catalytic properties of a unique H₂O₂-requiring oxygenase. Proc. Natl. Acad. Sci. USA. 81: 2280-2284.
- Tien M. and Kirk T. K. (1983). Lignin-degrading enzyme from the Hymenomycete *Phanerochaete chrysosporium* Burds. Science 221: 661-663.
- Tien, M., and Ma, D. (1997) J. Biol. Chem. 272, 8912-8917.
- Timells T. (1967). Recent advances in the chemistry of wood hemicelluloses. Wood Sci. Technol. 1:45-70.
- Tokimota K. and Komastu M. (1978). Biological nature of *Lentinus edodes*. In the "biology and cultivation of edible mushrooms (eds. S.T. Chang and W.A. Hayes). Academic press. Inc. New York 445-459pp.
- Tonon, F.; and Odier, E. (1988). Influence of veratryl alcohol and hydrogen peroxide on ligninase activity and ligninase production by *Phanerochaete chrysosporium*. Appl. Environ. Microbiol., 54, 466-472,
- Trigiano, R.N. and Fergus C.L. (1979). Extracellular enzymes of some fungi associated with mushroom culture. Mycologia. 71:908-917,
- Trojanowski, J. and Leonowicz A. (1962) A quantitative determination of Björkman's lignin in a solution by reaction with phloroglucinol. Ann. Univ. M. C. Skłodowska, Sectio AA., 17: 121-126.
- Tsuneda A., Koshitani H., and Furukawa I. (1987). Micromorphological patterns of incipient wood decay by *Lentinus edodes*. Rep. Tottori Mycol. Inst 25: 36-48.
- Tsuneda A. Furukawa I., and Koshitani H. (1989). Micromorphological patterns of lignin removal and cellulose microfibril degradation in *Fagus crenata* by *Lentinus edodes*. Trans. Mycol. Soc. Japan 30: 415-425.
- Tsuneda A., Maekawa N., Ohira I., and Furukawa I. (1991) Incipient decay of *Quercus serrata* sapwood by *Lentinus edodes* and its inhibition by an antagonistic hyphomycete, *Leptodontidium elatius* Can. J. Bot. 69: 2797-2805.
- Tsuneda A. Koshitani H. and Hiratsuka Y. (2002). Wood cell wall degradation of *Betula papyrifera* by *Lentinula edodes*. Rep. Tottori Mycol Inst. 40: 1-10.
- Upiani M., Matoev D., Pernek M., and Dimini D. (2009). Lignicolous fungi on Pedunculate oak in lowland forests of Central Croatia. Periodicum Biologorum 111 (4): 397-403,
- Uppal B.N., Patel M.K. and Kamat M.N. (1935). The fungi of Bombay –VIII. 1-56.

- Uyama, H.; and Kobayashi, S. (1999) Enzymatic polymerization yield useful polyphenols. *Chemtech*. October, 22–28.
- Vahid S.A. (1938). Damage of *Acacia arabica* by *Fomes pappinus* Bers. *Indian Forester*. 54: 662–664.
- Vahidi H., Mojab F. and Taghavi N. (2006) Effects of Carbon Sources on Growth and Production of Antifungal Agents by *Gymnopilus spectabilis*. *Iranian Journal of Pharmaceutical Research* 3: 219–222
- Valent B and Chumley F.G. (1991). Molecular genetic analysis of the rice blast fungus, *Magnaporthe grisea*. *Annu. Rev. Phytopathol* 29: 443–467
- Valtaud C., Larignon P., Roblin G. and Fleurat P. (2009) Developmental and Ultrastructural features of *Phaeomoniella chlamydospora* and *Phaeoacremonium aleophilum* in relation to xylem degradation in Esca Disease of the Grapevine lessard *Journal of Plant Pathology*, 91 (1), 37–51
- Vane C.H., Drage T.C. and Snape C.E., (2003). Biodegradation of Oak (*Quercus alba*) wood during growth of the Shiitake Mushroom (*Lentinula edodes*): a molecular approach, *Journal of Agriculture and Food Chemistry* 51 (4): 947–956.
- Vander Woude, M. W., Boominathan K., and Reddy C. A. (1993). Nitrogen regulation of lignin peroxidase and manganese-dependent peroxidase production is independent of carbon and manganese regulation in *Phanerochaete chrysosporium*. *Arch. Microbiol.* 160:1–4.
- Van Vliet, G.J.C.M., (1979). Wood anatomy of the Combretaceae. *Blumea* 25, 141–223.
- Varela E., Martinez A.T., Martinez M.J. (2000) Southern blot screening for lignin peroxidase and aryl-alcohol oxidase genes in 30 fungal species *Journal of Biotechnology* 83 245–251
- Varela, E., Martinez, A.T., Martinez, M.J., (1999). Molecular cloning of aryl-alcohol oxidase from *Pleurotus eryngii*, an enzyme involved in lignin degradation. *Biochem. J.* 341: 113–117.
- Vasiliauskas R, Vasiliauskas A, Stenlid J, and Matelis A (2004) Dead trees and protected polypores in unmanaged north-temperate forest stands of Lithuania. *For Ecol Manage* 193:355–370.
- Verhoeff A.P. and Burge H.A. (1997) Health risk assessment of fungi in home environments. *Ann. Allergy Asthma Immunol.* 78: 544–556.
- Vicentim M.P and Ferraz A (2007) Enzyme production and chemical alterations of *Eucalyptus grandis* wood during biodegradation by *Ceriporiopsis subvermispota* in cultures supplemented with Mn²⁺, corn steep liquor and glucose. *Enzyme Microb Technol* 40:645–652
- Vicufia R., Larraín J., Lobos S., Salas C., and Salas L. (1996). Culture conditions of *Ceriporiopsis subvermispota* determine the pattern of MnP isoenzymes. In: Srebotnik E, Messner K (eds) *Biotechnology in the pulp and paper industry. Recent advances in applied and fundamental research*. Facultas-Universitätsverlag, Vienna, pp 345–350
- Vittal B.P.R. and Glory L.A. (1985). Airborne fungal spores of a library in India. *Grana* 24: 129–132.
- Vlasenko V. A. (2009), Substrate Specialization of Wood-Decay Aphyllophoroid Fungi in the Pine Forests of the Right Riverside of the Heardwaters. *Contemporary Problems of Ecology*, 2 (6): 620–624.
- Vos P, Hogers R, Bleeker M, Reijans M, de Lee TV, Hornesol M, Frijters A, Pot J, Peleman J, Kuiper M, and Zabeau M (1995) AFLP: a new technique for DNA fingerprinting. *Nucleic Acids Res* 23:4407–4414
- Wahab R. Sudin M. and Samsi H.W. (2005). Fungal colonization and decay in tropical bamboo species. *J. Appl Sci.* 5(5): 897–902.
- Wagner W. W. and Davidson R.W. 1954. Heartrots in living trees *Bot. Rev.* 29: 61–134.
- Waldner, R., Leisola, M.S.A. and Fiechter, A. (1988). Comparison of ligninolytic activities of selected white-rot fungi. *Appl Microbiol Biotechnol* 29, 400–407.
- Wang C., Xi J.Y., Hu H.Y., and Wen X.H. (2008) Biodegradation of Gaseous Chlorobenzene by White-rot Fungus *Phanerochaete chrysosporium*. *Biomedical And Environmental Sciences* 21: 474–478
- Wang G.D, Li Q.J; Luo B; and Chen X.Y. (2004). Explant phytoremediation of trichlorophenol and phenolic allelochemicals via an engineered secretory laccase. *Nature Biotechnology* 22(7): 893–897.
- Wealth of India: (1971), *Industrial Products* part VII. CSIR, New Delhi, India, pp. 293–294.
- White N. A. and Boddy L (1992) Differential extracellular enzyme production in colonies of *Coriolus versicolor*, *Phlebia radiata* and *Phlebia rufa*: effect of gaseous regime *Journal of General Microbiology*, 138: 2589–2598

- Wheeler E.A., Wiemann M.C. and Fleagle J.G. (2007) Woods from the Miocene Bakate Formation, Ethiopia Anatomical characteristics, estimates of original specific gravity and ecological inferences. *Review of Palaeobotany and Palynology* 146 193–207
- Wilcox W.W. (1968). Changes in wood microstructure through progressive stages of decay. U.S. For. Serv. Res. Pap. FLP-70. 46pp.
- Wilcox W.W. (1993a). Comparative morphology of early stages of brown rot wood decay. *International Association of Wood Anatomists Journal* 14: 127–138.
- Wilcox W.W. (1993b). Comparison of SEM and LM for the diagnosis of early stages of brown rot wood decay. *IAWA J.* 14: 219–226.
- Wilcox, W.W. (1970). Anatomical changes in wood cell walls attacked by fungi and bacteria. *The Botanical Review.* 36:1–28.
- Wilcox. W.W. (1964a). Preparation of decayed wood for microscopical examination. U.S. Dept. Agric. For. Servo Res. Note FPL-056.
- Wilcox. W.W. (1964b). Some methods used in studying microbiological deterioration of wood. U. S. Dept. Agric. For. Servo Res. Note FPL-063.
- Wilcox. W.W. (1978). Review of literature on the effects of early stages of decay on wood strength. *Wood and Fiber* 9: 252–257.
- Williams JG, Kubelik AR, Livak J, Rafalski J and Tingey SV (1990) DNA polymorphism amplified by arbitrary primers are useful as genetic markers. *Nucleic Acid Res.* 18:6531–6535.
- Williamson, P. R., (1997). Laccase and melanin in the pathogenesis of *Cryptococcus neoformans*. *Frontiers Bioscience*, 12: 99–107.
- Willis J.C. (1973). A dictionary of the flowering plants and ferns 8th Edn., Cambridge University press. Cambridge.
- Wimander K, and Belin L (1980) Recognition of allergic alveolitis in the trimming department of a Swedish sawmill. *Eur J Respir Dis* 61(107): 163–167.
- Wood, D. A. (1980). Production, purification and properties of extracellular laccase of *Agaricus bisporus*. *J. Gen. Microbiol.* 117:327–338.
- Wood, D. A. (1985). Production and roles of extracellular enzymes during morphogenesis of basidiomycete fungi. In *Development of Higher Fungi*, pp. 375–387. Edited by D. Moore, L. A. Casselton & J. C. Frankland. Cambridge : Cambridge University Press.
- Worrell J.J., Chet I. and Hotermanan A. (1986). Association of rhizomorph formation with laccase activity in *Armillaria* spp. *Journal of General Microbiology* 132, 2527–2533.
- Worrall, J.J., Anagnost, S.E. and Zabel, R.A. (1997). Wood decay by diverse lignicolous fungi. *Mycologia* 89 :199–219.
- Xu J. and Leslie J.F. (1996). A genitic map of *Gibberella fujikuroi* mating a (*Fusarium moniliforme*). *Genetics* 143:175–189.
- Yadav M., Singh S.K., and Yadav K.D.S. (2009). Purification and Characterization of Lignin Peroxidase from *Pleurotus sajor caju* MTCC–141. *Journal of Wood Chemistry and Technology*, 29: 59–73.
- Yadav, M.; and Yadav, K.D.S. (2007) Lignocellulose Biotechnology; Future Prospects; I K International Pvt. Ltd.: New Delhi; 63–88.
- Yajie T. and Zhong, J.T. (2002). Fed batch fermentation of *Ganoderma lucidum* for hyperproduction of polysaccharides and ganoderic acid. *Enzyme Micr. Tech.*, 31: 20–28.
- Yamamoto K., Simatupang M. H., and Hashim R. (1998) Caoutchouc in teak wood (*Tectona grandis* L. f.): formation, location, influence on sunlight irradiation, hydrophobicity and decay resistance *Holz als Roh- und Werkstoff* 56: 201–209
- Yamashita S. (2010). Host preference and species richness of wood-inhabiting aphyllporaceous fungi in a cool temperate area of Japan *Mycologia*, 102 (1): 11–19.
- Yang H.H. Effland M.J. and Kirk T.K. (1979). Culture parameters influencing degradation of lignin in thermomechanical pulps by *Phanerochaete chrysosporium* *Biotechnol. Bioeng.* 21: 170–204.
- Yang, Z.H. (2000), *Mycotaxon* 74(1): 45
- Yaropolov, A.I; Skorobogatko O.V; Vartanov S.S.; and Varfolomev S.D. (1994). Laccases, properties, catalytic mechanism and applicability. *Applied Biochemistry and Biotechnology* 49: 257–280.
- Yasuhiro I.T.O. and Yanagi S.O. (1999). Discrimination of Basidiomycetes species and strains by Random Amplified Polymorphic DNA (RAPD) analysis. *JARQ* 33: 149–154

- Yaver, D. S., Xu, F. Golightly E. J., Brown K. M., Brown S. H., Rey M. W., Schneider, P. Halkier T., Mondorf K., and Dalbøge H.. (1996). Purification, characterization, molecular cloning, and expression of two laccase genes from the white rot basidiomycete *Trametes villosa*. Appl. Environ. Microbiol. 62:834–841.
- Youn, H.D., Hah, Y.C. and Kang, S.O. (1995). Role of laccase in lignin degradation by white-rot fungi. FEMS Microbiol Lett 132, 183-188.
- Yusef H.M. (1953). The requirements of some Hymenomycetes for essential metabolites. Bull. Torrey Bot. Club. 80: 43-64.
- Zadrazil F. (1975). Die Zersetzung des stroch – Zellulose – liguin – Komplexes mit *Pleurotus florida* and dessn Netzung. Z. Pflanzenern. Bodenkd 138: 263-278.
- Zakaria L., Ali N.S., Salleh and Zakaria M. (2009). Molecular analysis of *Ganoderma* species from diferent hosts in peninsula Malaysia. Journal of Biological Sciences 9(1): 12-20
- Zeller S. M. (1916) Studies in the physiology of fungi II. *Lenzites saepiaria* Fries with special reference to enzymatic activity. Ann. Mo. Bot. Garden 3: 439-512.
- Zeller, S. M., Schmitz, H. and Duggar, B. M. (1919) Studies in the physiology of the fungi. VII. Growth of wood-destroying fungi on liquid media. Ann. Missouri Botan. Garden, 6, 137-142.
- Zhen Shili et al. (1984). Nitrogenfixation in the cultivation of *Pleurotus sajor-caju*. Mush. Newsletter Tropics 5(1): 3-7.
- Zieller, S. M. (1916). Studies in the physiology of the fungi. II. *Lenzites saepiaria*, with special reference to enzyme activity. Ann. Missouri Botan. Garden, 3, 439-509.