

REFERENCES

References

- Acosta-Martinez V., Acosta-Mercado D., Sotomayor-Ramirez D., CruzRodriguez L. 2008. Microbial communities and enzymatic activities under different management in semiarid soils. *Applied Soil Ecology*, 38: 249-260.
- Adhami E., Owliaie H. R., Molavi R., Rezaei Rashti M., Esfandbod M. 2013. Effects of soil properties on phosphorus fractions in subtropical soils of Iran. *Journal of Soil Science and Plant Nutrition*, 13(1): 11-21.
- Agbenin J. O., Tiessen H. 1994. Phosphorus transformations in a toposequence of Lithosols and Cambisols from semi-arid northern Brazil. *Geoderma*, 62:345-362.
- Agrawal M., Singh J., Jha A. K., Singh J. S. 1993. Coal-based environmental problems in a low rainfall tropical region. In: R.F. Keefer & K.S. Sajwan (eds.). *Trace Elements in Coal Combustion Residues*. Lewis Publishers, Boca Raton: 27-57.
- Akbari A. D., Osanloo M., Hamidian, H. 2007. Selecting post mining land use through analytical hierarchy, processing method: case study in Sungun copper open pit mine of Iran.
- Alavi I., Akbari A., Parsaei M. 2011. Plant type Selection for Sarcheshmeh Copper Mine reclamation by FuzzyAHP method, BLOUR science and expertism magazine, Amirkabir University of Technology: 10-17.
- Alguacil M. M., Caravaca F., Roldan A. 2005. Changes in rhizosphere microbial activity mediated by native or allochthonous AM fungi in the reafforestation of a Mediterranean degraded environment. *Biology and Fertility of Soils*. 41: 59-68.
- Ali M. M., Shaheed S. M., Kubota D., Masunaga T., Wakatsuki T. 1997. Soil degradation during the period 1967–1995 in Bangladesh. II. Selected chemical characters. *Soil Sci. Plant Nutr.* 43: 879-890.
- Alloway B. J. (ed). 1990. Heavy metals in soils. Glasgow: Blackie.
- Andrieux-Loyer F., Aminot A. 2001. Phosphorus forms related to sediment grain size and geochemical characteristics in French coastal areas. *Estuarine Coastal and Shelf Science*. 52: 617-629.
- Anetor M. O., Omueti J. A. I., Yang L. Z. 2015. Organo-mineral fertilizer effects in some phosphorus-unresponsive soils of southwestern Nigeria: Effects on soil active phosphorus fractions. *Agric. Biol. J. N. Am.* 6(4): 101-107.
- Arunachalam A, Maithania K, Pandey H. N., Tripathi R. S. 1998. Leaf litter decomposition and nutrient mineralization patterns in regrowing stands of a humid subtropical forest after tree cutting. *Forest Ecology and Management*. 109: 151-161.
- Ashby W. C., Kolkar C. A., Rogers N. F. 1980. Results of 30-yeras olds plantation on surface mines in central staes. USDA For. Serv. North East. For. Exp. Sta. Gen. Tech. Rep. NE-61: 99-107.

References

- Ashby W. C., Vogel W. G. 1993. Tree planting on mine landsin the mideast: a handbook. Coal Research Centre, Southern Illinois University, Carbondale. IL.
- Aubert M., Margerie P., Trap J., Bureau F. 2010. Abovegroundbelowground relationships in temperate forests: plant litter composes and microbiota orchestrates. Forest Ecol Manag 259: 563-572.
- Ball A. B., Bradford M. A., Hunter M. D. 2008. Nitrogen and Phosphorus Release from mixed litter layers is lower than predicted from single species decay. Ecosystem. DOI: 10.1007/s10021-800-9208-2.
- Ball-Coelho B., Salcedo I. H., Tiessen H., Stewart J. W. B. 1993. Short- and long-term phosphorus dynamics in a fertilized ultisol under sugarcane. Soil Science Society of America Journal. 57: 1027-1034.
- Banerjee M. R., Burton D. L., McCaughey W. P. P., Grant C. A. 2000. Influence of pasture management on soil biological quality. Journal Range Management. 53: 127-133.
- Banerjee S. K., Mishra T. K., Singh A. K., Jain A. 2004. Impact of plantation on ecosystem development in disturbed coal mine overburden spoils. J. Trop. For. Sci. 16(3): 294-307.
- Banerjee S. K., Williums A. J., Biswas S. C., Manjhi R. B., Mishra T. K. 1996. Dynamics of natural ecorestoration in coal mine overburden of dry deciduous zone of M.P. India. Ecology, Environment & Conservation. 2: 97-104.
- Bangian A., Osanloo M. 2008. Multi attribute decision model for plant species selection in mine reclamation plants: Case study sungun copper mine. Post-Mining, February 6-8, Nancy, France: 1-11.
- Barbhuiya A. R., Arunachalam A., Nath P. C., Khan M. L., Arunachalam K. 2008. Leaf litter decomposition of dominant tree species of Namdapha National Park, Arunachal Pradesh, northeast India. J. For. Res. 13: 25-34.
- Baruah M., Mishra R. R. 1986. Effect of herbicides butachlor, 2,4-d and oxyfluorfen on enzyme activities and CO₂ evolution in submerged paddy field soil. Plant Soil. 96: 287-291.
- Beck M. A., Sanchez P. A. 1994. Soil phosphorus fraction dynamics during 18 years of cultivation on a Typic Paleudult. Soil Sci. Soc. Am. J. 58: 1424-1431.
- Beck T. H. 1971. Die Messung derKatalasen aktivität Von Böden. Zeitschrift für Pflanzernährung und Bodenkunde. 130: 68-81.
- Bell T. J., Ungar I. A. 1981. Factors affecting the establishment of natural vegetation on a coal strip mine spoil bank in southeastern Ohio. Am Midl Nat. 105: 19-31.

References

- Benckiser G., Santiago S., Neue H. U., Watanabe I., Ottow J. C. G. 1984. Effect of fertilization and exudation, dehydrogenase activity, iron-reducing populations and Fe²⁺ formation in the rhizosphere of rice (*Oryza sativa L.*) in relation to iron toxicity. *Plant Soil.* 79:305-316.
- Berg B. 1988. Dynamics of nitrogen (15N) in decomposing Scots pine (*Pinus sylvestris*) needle litter. Long term decomposition in a Scots pine forest. VI. *Canadian Journal of Botany.* 66: 1539-1546.
- Berg B., Barrau E. M. 1978. Management approaches to nitrogen deficiency in revegetation of sub alpine disturbances. Information Series. In: S.T. Kenny (ed.) *Proceedings of High Altitude Revegetation Workshop Number 3:* Colorado State University, Fort Collins, Colorado. 28: 174-181.
- Berg B., McClaugherty C. 2008. *Plant Litter - Decomposition, Humus Formation, Carbon Sequestration.* Springer, Berlin: 338.
- Bhowmik D., Chiranjib, Yadav J., Tripathi K. K., Sampath K. K. P. 2010. Herbal Remedies of *Azadirachta indica* and its Medicinal Application. *Journal of Chemical and Pharmaceutical Research.* 2: 62-72.
- Bidwell J. 1996. Reclamation of the Usibelli Coal Mine near Fairbanks, Alaska. *Restoration and Reclamation Review.* 1: Restoration Case Studies.
- Biermann B. J., Linderman R. G. 1981. Quantifying vesicular-arbuscular mycorrhizae: a proposed method towards standardization. *New Phytologist.* 87: 63-67.
- Blair J. M. 1988. Nitrogen, sulphur and phosphorus dynamics in decomposing deciduous leaf litter in the Southern Appalachians, *Soil Biol. Biochem.* 20: 693-701.
- Bloomfield J., Vogt K. A., Vogt D. J. 1993. Decay rate and substrate quality of fine roots and foliage of two tropical tree species in the Luquillo experimental forest, Puerto Rico. *Plant Soil.* 150: 233-245.
- Bockheim, J. G., Jepsen, E. A., Heisey D. M. 1991. Nutrient dynamics in decomposing leaf litter of four tree species on a sandy soil in north western Wisconsin. *Canadian Journal of Forest Research.* 21: 803-812.
- Boström B., Jansson M., Forsberg C. 1982. Phosphorus release from lake sediments. *Arch. Hydrobiol. Beih. Ergebn. Limnol.* 18: 5-59.
- Bradshaw A. D. 1996. Underlying principles of restoration. *Can. J. Fish. Aquat. Sci.* 53: 3-9.
- Brady N. C. 2000. *The nature and properties of soils*, 10th edn. PHI, New Delhi.
- Bray R. H., Kurtz L. T. 1945. Determination of total, organic, and available forms of phosphorus in soils. *Soil Science.* 59: 39-45.

References

- Bremner T. A., Douglas W. L., Ogonji G. O. 1971. Substrate-specific differences of alcohol and octanol dehydrogenases in eight species of Drosophilidae. *D. I. S.* 47: 93-94.
- Bromfield S. M. 1954. Reduction of ferric compounds by soil bacteria. *J Gen Microbiol.* 11:1-6.
- Brunhuber, N. M. W., Blanchard J. S. 1994. The biochemistry and enzymology of Amino acid dehydrogenases. *Crit. Rev. Biochem. Mol. Biol.* 29: 415-467.
- Brzezinska M., Stepniewska Z., Stepniewski W. 1998. Soil oxygen status and dehydrogenase activity. *Soil Biol Biochem.* 30:1783-1790.
- Bubb K.A., Xu Z.H., Simpson J.A., Saffigna P.G. 1998. Some nutrient dynamics associated with litterfall and litter decomposition in hoop pine plantations of southeast Queensland, Australia, *For. Ecol. Manage.* 110: 343–352.
- Buchmann N. 2000. Biotic and Abiotic Factors Controlling Soil Respiration Rates In *Picea Abies* Stands. *Soil Biol. & Biochem.* 32: 1625-1635.
- Bureau of mines. 1990.
<http://conservancy.umn.edu/bitstream/handle/11299/58698/1.4.Bidwell.pdf?Sequence=1>
- Carrick P. J., Kruger R. 2007. Restoring degraded landscapes in lowland Namaqualand: Lessons from the mining experience and from regional ecological dynamics, *Journal of Arid Environments.* 32: 52-67.
- Casida L. E., Klein D. A., Santoro T. 1964. Soil dehydrogenase activity. *Soil Science.* 98: 371-376.
- Ch'ng H. Y., Ahmed O. H., Majid, N. M. A. 2014. Improving Phosphorus Availability in an Acid Soil Using Organic Amendments Produced from Agroindustrial Wastes. *Scientific World Journal:* 1-6.
- Chadwick O. A., Derry L. A., Vitousek P. M., Huebert B. J., Hedin L. O. 1999. Changing sources of nutrients during four million years of ecosystem development. *Nature.* 397: 491-497.
- Chandra D. 1992. Jharia Coalfield. Geological Society of India, Bangalore.
- Chandra D., Singh R. M., Singh M. P. 2000. Text book of the coal (Indian context). Ist edition. Tara Book Agency, Varanasi.
- Chandra K. K, Jamaluddin. 1999. Distribution of vesicular arbuscular mycorrhizal fungi in coal mine overburden dumps. *Ind Phytopathol.* 52: 254-258.

References

- Chaney R. L., Angle J. S., Broadhurst C. L., Peters C. A., Tappero R. V., Donald L. S. 2007. Improved understanding of hyperaccumulation yields commercial phytoextraction and phytomining technologies. *Journal Environmental Quality.* 36: 1429-14423.
- Chang S. C., Jackson M. L. 1957. Fractionation of soil phosphorus. *Soil Sci.* 84: 133-144.
- Chatterjee R. S., Md. Wahiduzzaman, Shah A, Raju E. V. R., Lakhera1 R. C., Dadhwal V. K. 2007. Dynamics of coal fire in Jharia coalfield, Jharkhand, India during the 1990s as observed from space, *Current science.* 92: 61-68.
- Chaubey O. P., Bohre P., Singhal P. K. 2012. Impact of Bio-reclamation of Coal Mine Spoil on Nutritional and Microbial Characteristics - A Case Study. *International Journal of Bio-Science and Bio-Technology,* 4(3).
- Chaulya S. K., Singh R. S., Chakraborty M. K., Srivastava B. K. 2000. Quantification of stability improvement of a dump through biological reclamation. *Geotechnical and Geological Engineering.* 18: 193-207.
- Chen H., Zheng C., Zhu Y. 1998. Phosphorus: a limiting factor for restoration of soil fertility in a newly reclaimed coal mined site in Xuzhou, China. *Land Degrad. Develop.* 9: 115-121.
- Chen X., Hastings P. D., Rubin K. H., Chen H., Cen G., Stewart S. L. 1998. Child-rearing attitudes and behavioral inhibition in Chinese and Canadian toddlers: A cross-cultural study. *Developmental Psychology.* 34: 677-686.
- CIL Annual Report. 2011. www.coalindia.in/.../CIL_Annual
- Clark F. B. 1969. Endotrophic mycorrhizal infection of tree seedlings with Endogone spores. *For. Sci.* 15:134-137.
- CMPDI. 2013. Land restoration/ reclamation monitoring of 50 opencast coal mines of CIL producing more than 5 mcm (coal+ OB) based on satellite data for the year 2012-13. Ranchi.
- CMPDI-NRSA. 1999. Fire project report on Jharia Coal Field (JCF) Dhanbad.
- CNBC. India's Jharia coal field has been burning for 100 years. Robert Ferris, 2 Dec 2015.
- Coal in India. ibm.nic.in. 2012. Retrieved 23.02.2016.
- Conesa H. M., Faz Á., Arnaldos R. 2007b. Initial studies for the phytostabilization of a mine tailing from the Cartagena-La Unión Mining District (SE Spain). *Chemosphere.* 66: 38-44.
- Conesa H. M., García G., Faz Á., Arnaldos R. 2007a. Dynamics of metal tolerant plant communities' development in mine tailings from the Cartagena-La Unión Mining District

References

(SE Spain) and their interest for further revegetation purposes. *Chemosphere*. 68: 1180-1185.

Conley D. J. 2002. Terrestrial ecosystems and the global biogeochemical silica cycle. *Glob. Biogeochem. Cycles*. 16: 68-1– 68-8. doi:10.1029/2002GB001894

Cooke J. A., Johnson M. S., Ecological restoration of land with particular reference to the mining of metals and industrial minerals: A review of theory and practice. *Environmental Reviews* 10: 41-71.

Cornelissen, J. H. C., Quested H. M., Gwynn-Jones D., Van Logtestijn R. S. P., De Beus M. A. H., Kondratchuk A., Callaghan T. V., and Aerts R. 2004. Leaf digestibility and litter decomposability are related in a wide range of subarctic plant species and types. *Functional Ecology*. 18:779-786.

Couteaux M. M., Bottner P., Berg B. 1995. Litter decomposition, climate and litter quality. *Trends Ecol.Evol.* 10: 63-66.

Couteaux M. M., Bottner P., Berg B. 1995. Litter decomposition, climate and litter quality. *Tree*. 10: 63-66.

CPCB. 2000. Guidelines for developing green belts, Programme objectives series: PROBES/75/1999-2000. Central Pollution Control Board, New Delhi: 203.

Crews T. E., Kitayama K., Fownes J. H., Riley R. H., Herbert D. A., Mueller-Dombois D., Vitousek P. M. 1995. Changes in soil phosphorous fractions and ecosystem dynamics across a long chronosequence in Hawaii. *Ecology*. 76: 1407-1424.

Cross A. F., Schlesinger W. H. 1995. A literature review and evaluation of the Hedley fractionation: Applications to the biogeo-chemical cycles of soil phosphorus in natural ecosystems. *Geoderma*. 64: 197-214.

Cross A. F., Schlesinger W. H. 1995. A literature review and evaluation of the Hedley fractionation: applications to the biogeochemical cycle of soil-phosphorous in natural ecosystems. *Geoderma*. 64:197-214.

Daft M. J., Nicolson T. H. 1974. Arbuscular mycorrhizas in plants colonizing coal wastes in Scotland. *New Phytol.* 73: 1129-1138.

Daft M., Hacskeylo E. 1976. Arbuscular mycorrhizas in the anthracite and bituminous coal wastes of Pennsylvania. *Journal of Applied Ecology*. 13: 523-531.

Danielson R. 1985. Mycorrhizae and reclamation of stressed terrestrial environments. Chapter In soil reclamation processes. Ed. by Tate, R. III. and A. Klein. Marcel Dekker, Inc.: 173-201.

Das D. K., Chaturvedi O. P. 2005. Structure and function of *Populus deltoides* agroforestry systems in eastern India. *Indian Journal of Forestry*. 65: 223-230.

References

- Davis S. C., Parton W. J., Del Grosso S. J., Keough C., Marx E., Adler P., DeLucia E. H. 2012. Impacts of second-generation biofuel agriculture on greenhouse gas emissions in the corn-growing regions of the US. *Frontiers in Ecology and the Environment*. 10: 69-74.
- Dick R. P. 1997. Soil enzyme activities as integrative indicators of soil health. In: Pankhurst CE, Doube BM, Gupta VVSR (eds) *Biological indicators of soil health*. CAB International, New York: 121-156.
- Dobson A. P., Bradshaw A. D., Baker A. J. M. 1997. Hopes for the future: restoration ecology and conservation biology. *Science*. 277: 515-522.
- Down C. G. 1974. The relationship between colliery-waste particles size and plant growth. *Environ Conserv*. 1: 281-284.
- Dugaya D., Williums A. J., Chandra K. K., Gupta B. N., Banerjee S. K. 1996. Mycorrhizal development and plant growth in amended coal mine overburden. *Indian Forester*. 19: 222-226.
- Dutta R. K., Agrawal M. 2000. Reclamation of mine spoils: a need for coal industry. In: Arvind Kumar & P. K. Goel (eds.) *Industry, Environment and Pollution*. Technoscience Publications, Jaipur, India: 239-250.
- Dutta R. K., Agrawal M. 2002. Effect of tree plantations on the soil characteristics and microbial activity of coal mine spoil land. *Tropical Ecology*. 43: 315-324.
- Dutta R. K., Agrawal M. 2003. Restoration of opencast coal mine spoil by planting exotic tree species: a case study in dry tropical region. *Ecological Engineering*. 21: 143-151.
- Duvert P. R., Perrin, Plenchette C. 1990. Soil receptiveness to VA mycorrhizal association: concept and method. *Plant and Soil*. 124: 1-6.
- Elkins N. Z., Parker L. W., Aldon E., Whitford, W. G. 1984. Responses of soil biota to organic amendments in stripmine spoils in northwestern New Mexico. *J. Environ. Qual.* 13: 215-219.
- Elstner E. F., Youngman R. J., Obwald W. 1983. Superoxide dismutase. In: *Methods of Enzymatic Analysis*, vol. III. Bergmeyer H. U. (ed), Verlag Chemie, Weinheim.
- Fauteux F. W., Remus-Borel, Menzies J. G., Belanger R. R. 2005. Silicon and plant disease resistance against pathogenic fungi. *Fems Microbiology Letters*. 249: 1–6.
- Ferris R. Wednesday, 2 Dec 2015. India's Jharia coal field has been burning for 100 years. 2:26 PM ETCNBC.com

References

- Frank T., Malkomes H. P. 1993. Influence of temperature on microbial activities and their reaction to the herbicide Goltix in different soils under laboratory conditions. *Zentralblatt für Mikrobiol.* 148: 403-412.
- Fuge E. 1986. An assessment of vesicular-arbuscular mycorrhizae on lead/zinc mine tailings. Thesis. University of Minnesota.
- Furlan V., Fortin J. A. 1973. Formation of endomycorrhizas by Endogone calospora on Allium cepa under three temperature regimens. *Naturaliste canadiense.* 100: 467-477.
- Fuxu W., Ping C. 2004. Soil Enzyme Activities under Agroforestry Systems in Northern Jiangsu Province. *Forestry Studies in China.* 6 (2).
- Galstian A. S., Awungian Z. S. 1974. Significance of the enzymes in oxidation of Fe and Mn oxides in soil (in Russian). *Trans. 10th Intern. Congress Soil Sci III.* Nauka Publishing House, Moscow: 130-135.
- Ganesan V., Ragupathy S., Parthipan B., Rajini Rani D. B., Mahadevan A. 1990. Distribution of vesicular-arbuscular mycorrhizal fungi in coal, lignite, and calcite mine spoils of India. *Biol Fertil Soils.* 12: 131-136.
- Gang F. U., Zengwen L. I. U., Fangfang C. U. I. 2009. Features of soil enzyme activities and the number of microorganisms in plantations and their relationships with soil nutrients in the Qinling Mountains, China. *Front. For. China.* 4: 344-350.
- Garcia C., Hernández T. 1997. Biological and biochemical indicators in derelict soils subject to erosion. *Soil Biology & Biochemistry.* 29: 171-177.
- Garcia C., Hernandez T., Albaladejo J., Castillo V., Roldán A. 1998. Revegetation in semiarid zones: influence of terracing and organic refuse on microbial activity. *Soil Science Society of America Journal.* 62: 670-676.
- Garcia C., Hernandez T., Costa F. 1994. Microbial activity in soils under Mediterranean environmental conditions. *Soil Biology & Biochemistry.* 26: 1185-1191.
- Garcia C., Roldan A., Hernandez T. 2005. Ability of different plant species to promote microbiological processes in semiarid soil. *Geoderma.* 124: 193-202.
- Ghosh M. K. 2001. Changes in microbial number in soil dumps of coal mining areas. *Indian J. Soil Cons.* 29:53-58.
- Ghosh R., Ghosh D. N. 1990. Land Reclamation In Mining Areas-A Mode~ For Jharia Coalfield, Eastern India. *Proc. Indian natn. Sci Acad.* 56:145-152.
- Gilbert O., Bocock K. L. 1960. Changes in the leaf litter when placed on the surface of soils with contrasting humus types. II. Changes in the nitrogen content of oak and ash litter. *J. Soil Sci.* 11: 10-19.

References

- Gil-Sotres F., Trasar-Cepeda C., Leirós M. C., Seoane S. 2005. Different approaches to evaluating soil quality using biochemical properties. *Soil Biol Biochem.* 37: 877-887.
- Gitt M. J., Dollhopf, D. J. 1991. Coal waste reclamation using automated weathering to predict lime requirement. *Journal Environmental Quality.* 20: 285-288.
- Glick B. R., Patten C. L., Holguin G., Penrose D. M. 1999. Biochemical and genetic mechanisms used by plant growth-promoting bacteria. Imperial College Press, London.
- Glinski J., Stepniewski W. 1985. Soil Aeration and its Role for Plants. CRC Press, Boca Raton, Florida.
- Gould A. B., Hendrix J. W., Ferriss R. S. 1996. Relationship of mycorrhizal activity to time following reclamation of surface mine land in western Kentucky. I Propagule and spore population densities. *Canadian Journal Botany.* 74: 247-261.
- Govindarajulu M., Pfeffer P. E., Jin H., Abubaker J., Douds D. D., Allen J. W., Bucking H., Lammers P. J., Hill Y. S. 2005. Nitrogen transfer in the arbuscular mycorrhizal symbiosis. *Nature.* 453: 819-823.
- Goyal M, Sharma K, and Kiradoo V. 2008. New Vistas of Value Addition To Utilize Amla (*Emblica Officinalis*) And Ber (*Ziziphus Mauritiana*). *Fruits. J. Dairying, Foods & H. S.*, 27: 145 -147.
- Grochowski L., Xu H., White R. H. 2006. Identification of lactaldehyde dehydrogenase in *Methanocaldococcus jannaschii* and its involvement in production of lactate for F420 biosynthesis. *J. Bacteriol.* 188: 2836-2844.
- Grubb P. J. 1977. The maintenance of species richness in plant communities: the importance of the regeneration niche. *Biol. Rev.* 52: 107-145.
- Guntzer F, Keller C, Meunier J. D. 2012. Benefits of plant silicon for crops: a review. *Agron Sustain Dev.* 32(1):201–213.
- Guo F., Yost R. S. 1998. Partitioning soil phosphorus into three discrete pools of differing availability. *Soil Sci.* 163: 822-833.
- Guo F., Yost R. S., Hue N. V., Evensen C. I., Silva J. A. 2000. Changes in phosphorus fractions in soils under intensive plant growth. *Soil Sci. Soc. Am. J.* 64:1681-1689.
- Gupta B. N., Singh A. K., Bhowmik A. K., Banerjee S. K. 1994. Suitability of different tree species for copper mine overburden. *Annals of Forestry.* 2: 85-87.
- Hattenschwiler S., Tiunov A.V., Scheu S. 2005. Biodiversity and litter decomposition in terrestrial ecosystems. *Annual Review of Ecology, Evolution, and Systematics.* 36: 191-218.

References

- Haigh M. J. 1995. Soil quality standards for reclaimed coal-mine disturbed lands: A discussion paper. International Journal of Surface Mining, Reclamation and Environment. 9: 187-202.
- Handique P., Rethy P., Dutta B. K., Das A. K., Doley B. 2010. Role of bamboo resources in socio economic development of the Tribal people of Arunachal Pradesh with special reference to Nyishi tribe of Papum Pare District J. Bio sci. Res. 1: 216-226.
- Harris J. A., Birch P., Short K. C. 1989. Changes in the microbial community and physicochemical characteristics of topsoils stockpiled during opencast mining. Soil Use and Management. 5: 161-168.
- Hasanuzzaman Md., Hossain M. 2014. Leaf Litter Decomposition and Nutrient Dynamics Associated with Common Horticultural Cropland Agroforest Tree Species of Bangladesh. International Journal of Forestry Research.
- Hazarika P., Talukdar N. C., Singh Y. P. 2006. Natural colonization of plant species on coal mine spoils at Tikak Colliery, Assam. Tropical Ecology. 47: 37-46.
- Hedley M. J., Stewart J. W. B., Chauhan B. S. 1982. Changes in inorganic soil phosphorus fractions induced by cultivation practices by laboratory incubation. Soil Sci. Soc. Am. J. 46: 970-976.
- Hengchaovanich D. 1999. 15 years of bioengineering in the wet tropics from A (*Acacia auriculiformis*) to V (*Vetiveria zizanioides*). In: Proceedings of the First Asia-Pacific Conference on Ground and Water Bioengineering Erosion Control and Slope Stabilization. Manila, The Philippines. 54-63.
- Henriksen A. 2007. Estimation Of Gas Emissions From Shallow Subsurface Coal Fires In Jharia Coalfield, India, Using Flir Data And Coal Fire Gas Analysis. Geological Society of America. Abstracts with Programs, Vol. 39 (6), 298.
- Herbert D. A., Fownes J. H. 1995. Phosphorus limitation of forest leaf area and net primary production on a highly weathered soil. Biogeochemistry. 29: 223-235.
- Holstein, J. M., Hensen C. 2010. Microbial mediation of benthic biogenic silica dissolution. Geo-Marine Letters. 30: 477–492.
- Horward D. M., Horward P. J. A. 1980. Effect of species, source of litter, type of soil and climate on litter decomposition. Oikos. 34: 115-124.
- Howat D. R. 2000. Acceptable salinity, sodicity and pH values for boreal forest reclamation, Alberta Environment. Environmental Sciences Division, Edmonton Alberta.
- Hua, X. L., Jie H. S., Li L., Mei Z. Y., Qiang Z. J. 2007. Responses of soil enzymes to long-term CO₂ enrichment in forest ecosystems of Changbai Mountains. Journal of Forestry Research. 18(1): 119-122.

References

- Hüttl R. F., Bradshaw A. 2000. Aspect of reclamation ecology. *Landscape Urban Plan.* 51: 73-74.
- Iddar A., Valverde F., Assobhei O., Serrano A., Soukri A. 2005. Widespread occurrence of nonphosphorylating glyceraldehyde-3-phosphate dehydrogenase among gram-positive bacteria. *Int. Microbiol.* 8: 251-258.
- Ikegami N., Satake T., Nagayama Y., Inubushi K. 2014. Changes in silica in litterfall and available silica in the soil of forests invaded by bamboo species (*Phyllostachys pubescens* and *P. bambusoides*) in western Japan. *Soil Science and Plant Nutrition.* 60: 731–739.
- International Institute for Environment and Development. 2002. Breaking New Ground: Mining, Minerals and Sustainable Development: Chapter 9: Local Communities and Mines. Breaking New Grounds.” <http://www.iied.org/pubs/pdfs/G00901.pdf>
- International Network for Bamboo and Rattan (INBAR). Bamboo, People and The Environment. Proceedings of the Vth International Bamboo Workshop and the IV International Bamboo Congress Ubud, Bali, Indonesia 19-22 June 1995.
- Issac S. R., Nair M. A. 2005. Biodegradation of leaf litter in the warm humid tropics of Kerala, India. *Soil Biol. and Biochem.* 37: 1656-1664.
- Iyamuremye F., Dick R. P., Baham J. 1996. Organic amendments and phosphorus dynamics: II. Distribution of soil phosphorus fractions. *Soil Science.* 161: 436-443.
- Jackson M. L. 1973. Soil chemical Analysis. Prentice Hall of Englewood cliffs. New Jersey, USA.
- Jamaludheen, Kumar V., Mohan B. 1999. Litter of multipurpose trees in Kerala, India: variations in the amounts, quality, decay rates and release of nutrients. *Forest Ecology and Management.* 115: 1-11.
- Järvan M., Edesi L., Adamson A., Võsa T. 2014. Soil microbial communities and dehydrogenase activity depending on farming systems. *Plant Soil Environment.* 60 (10): 459-463.
- Jethwa R. P. 1998. Diary of Golden Days at Jharia – A Memoir & History of Gurjar Kashtriya Samaj of Kutch in Coalfields of Jharia - written by Natwarlal Devram Jethwa of Calcutta/Sinugra compiled by Raja Pawan Jethwa.
- Jha A. K., Singh J. S. 1991. Spoil characteristics and vegetation development of an age series of mine spoils in a dry tropical environment. *Vegetation* 97: 63-76.
- Jha A. K., Singh J. S. 1992. Influence of microsites on redevelopment of vegetation on coal mine spoils in a dry tropical environment. *Journal of Environmental Management.* 36: 95-116.

References

- Jiang W., Gou G., Ding Y. 2013. Influences of arbuscular mycorrhizal fungi on growth and mineral element absorption of chenglu hybrid bamboo seedlings. *Pakistan Journal of Botany*. 45: 303-310.
- Johansson J. F., Paul L. R., Finlay R. D. 2004. Microbial interactions in the mycorrhizosphere and their significance for sustainable agriculture. *FEMS Microbiology Ecology*. 48: 1-13.
- Jonsson M., Wardle D. 2008. Context dependency of litter-mixing effects on decomposition and nutrient release across a long-term chronosequence. *Oikos*. 117: 1674-1682.
- Juwarkar A. S Thawale PR, Mowade S, Moghe M, Juwarkar A1994. Reclamation of coal mine spoil dump through integrated biotechnology approach. In: Shringarpurale SB et al. (eds) Proceedings of the international symposium on environmental issues of mineral industries. VNIT, Nagpur, CSM, Oxford/IBH Pub Co Pvt Ltd., New Delhi: 121-136.
- Kabata-Pendias A., Pendias H. 1984. Trace elements in soils and plants. CRC Press, Boca Raton, Florida.
- Kandeler E. 1996. Nitrate. In: Schinner F, Öhlinger R, Kandeler E, Margesin R (eds). Methods in soil biology. Springer, Berlin Heidelberg New York: 408-410.
- Kapoor L. D. 1990. Handbook of Ayurvedic Medicinal Plants, CRC Press, BocaRaton, 149-150.
- Karaca A., Cetin S. C., Turgay O. C., Kizilkaya R. 2011. Soil enzymes as indication of soil quality. In: Shukla G., Varma A. (eds.): Soil Enzymology. Springer-Verlag, Berlin, Heidelberg: 119-148.
- Khan A. 1979. Distribution of DTPA-extractable Fe, Zn, and Cu in soil particle-size fractions. *Communications in Soil Science and Plant Analysis*. 10: 1211-1218.
- Khan A. G. 2005. Role of soil microbes in the rhizospheres of plants growing on trace metal contaminated soils in phytoremediation. *Journal of Trace Elements in Medicine and Biology*. 18: 355-364.
- Khan S., Khan N. N., Iqbal N. 1991. Studies on the effects of some organic pollutants on the heavy metal transport in an Indian Soil. *Environmental Pollution*. 70: 109-115.
- Khaziev F. Kh. 1967. Fermentativnaya aktivnost' pochv (Enzymatic Activity of Soils), Moscow: Nauka.
- Khaziev F. Kh. 1967. Enzymatic Activity of Soil. Nauka, Moscow.
- Khullar D. R. 2006. (Ed) Mineral resource in India: A Comprehensive Geography" (Ed Khullar DR): 630-659. (Kalyani Publishers: New Delhi, India).

References

- Khurana E., Singh J. S. 2001. Ecology of seed and seedling growth for conservation and restoration of tropical dry forest: a review. *Environmental Conservation*. 28: 39-52.
- Killham K. 1994. *Soil ecology*. Cambridge University Press, Cambridge.
- Kizilkaya R, Akça İ, Aşkin T, lmaz R. Y., Olekhov V., Samofalova I., Mudrykh N. 2012. Effect of soil contamination with azadirachtin on dehydrogenase and catalase activity of soil. *Eurasian Journal of Soil Science*. 2: 98-103.
- Kizilkaya R., Aşkın T., Bayraklı B., Sağlam M. 2004. Microbiological characteristics of soils contaminated with heavy metals. *European Journal of Soil Biology*. 40: 95-102.
- Kizilkaya R., Hepşen Ş. 2007. Microbiological properties in earthworm *Lumbricus terrestris* L. cast and surrounding soil amended with various organic wastes. *Communication in Soil Science and Plant Analysis*. 38: 2861-2876.
- Klotzbücher T, Leuther F, Marxen A, Vetterlein D, Horgan FG, Jahn R. 2015. Forms and fluxes of potential plant-available silicon in irrigated lowland rice production (Laguna, the Philippines). *Plant Soil*. doi:10.1007/s11104-015-2480-y
- Klotzbücher T, Marxen A, Vetterlein D, Schneiker J, Türke M, Sinh NV, Manh NH, Chien HV, Marquez L, Villareal S, Bustamante JV, Jahn R. 2014. Plant-available silicon in paddy soils as a key factor for sustainable rice production in Southeast Asia. *Basic Appl Ecol*. doi:10.1016/j.baae.2014.08.002
- Knelman J. E., Legg T. M., O'Neill S. P., Washenberger C. L., González A., Cleveland C. C., Nemergut D. R. 2012. Bacterial community structure and function change in association with colonizer plants during early primary succession in a glacier forefield. *Soil Biol Biochem*. 46: 172-180.
- Kobus J. 1995. Biologiczne procesy a kształtowanie żywotności gleby. [Biological processes determining soil fertility] *Zesz. Probl. Post. Nauk Roln.* 421(a): 209-219.
- Koch M. S., Benz R. E., Rudnick D. T. 2001. Solid-phase phosphorus pools in highly organic carbonate sediments of northeastern Florida Bay. *Estuarine, Coastal and Shelf Science*. 52: 279-291.
- Kolesnikov S. I., Gaivoronskii V. G., Rotina E. N., Kazeev Sh. K., Val'kov V. F. , 2009. Assessment of Soil Tolerance toward Contamination with Black Oil in the South of Russia on the Basis of Soil Biological Indices: A Model Experiment. *Eurasian Soil Science*, 43: 929-934.
- Kumar A., Raghuvanshi R., Upadhyay R. S. 2003. Vesicular-arbuscular mycorrhizal association in naturally revegetated coal mine spoil. *Tropical Ecology*. 44: 253-256.
- Kumar A., Raghuvanshi R., Upadhyay R. S. 2010. Arbuscular Mycorrhizal Technology in Reclamation and Revegetation of Coal Mine Spoils under Various Revegetation Models. *Engineering*. 2: 683-689.

References

- Kumar S., Chaudhuri S. Maiti S. K. 2010. Dehydrogenase activity in natural and mine soil -A review. Environment and Ecology Research.
- Kumar U., Jena S. C. 1996. Trial on integrated biotechnical approach in biological reclamation of coal mine spoil dumps in South-eastern Coalfields limited (S.E.C.L.) Bilaspur (Madhya Pradesh). Indian Forester. 122: 1085-1091.
- Kumar S., Chaudhuri S., Maiti S.K.2011.Biodiversity of Grasses and Associated Vegetation onDifferent Aged SoilDumps from Sonepur Bazari OCP, Raniganj Coalfield.International Journal of Environmental Sciences. 2: 715-722.
- Kunwar R. M., Bussmann W. R. 2006. Lyonia–J. Ecol. Appl. 11: 85-97.
- Kuo C. 2005. The Mineral Industry of India. In, 2005 Minerals Yearbook. United States Geological Survey.
- Kuruvilla T, Jijeesh C. M., Seethalakshmi K. K. 2016. Litter Production and Decomposition Dynamics of a Rare and Endemic Bamboo Species *Munrochloa Ritcheyi* of Western Ghats, India. Tropical Ecology. 57: 601-606.
- Lajtha K., Schlesinger W. H. 1988a. The biogeochemistry of phosphorus cycling and phosphorus availability along a desert soil chronosequence. Ecology. 69:24-39.
- Lawrey, J. D. 1977. The relative decomposition potential of habitats variously affected by surface coal mining. Canadian Journal of Botany. 5: 1544-1552.
- Lee B. J. 1974. Effects of mirex on litter organisms and leaf decomposition in a mixed hardwood forest in Athens, Georgia. J. Environ. Quality. 3: 305-311.
- Lee K. E., Pankhurst C. E. 1992. Soil organisms and sustainable productivity. Australian Journal of Soil Research. 30: 855-892.
- Leirós M. C., Trasar-Cepeda C., Seoane S., Gil-Sotres F. 2000. Biochemical properties of acid soils under climax vegetation (Atlantic oakwood) in an area of the European temperate humid zone (Galicia, NW Spain): general parameters. Soil Biology & Biochemistry. 32:733-745.
- Li X-L, George E., Marschner H. 1991. Extension of the phosphorus depletion zone in VA-mycorrhizal white clover in calcareous soil. Plant and Soil. 136: 41-48.
- Li Y. M., Chaney R. L., Brewer E. P., Roseberg R.J., Angle J. S., Baker A. J. M., Reeves R. D., Nelkin J. 2003. Development of a technology for commercial phytoextraction of nickel: Economic and technical considerations. Plant Soil. 249: 107-115.
- Liang Q., Chen H., Gong Y., Yang H., Fan M., Kuzyakov Y. 2014. Effects of 15 years of manure and mineral fertilizers on enzyme activities in particle-size fractions in a North China Plain soil. European Journal of Soil Biology. 60: 112-119.

References

- Li-hua Tu, Chen G., Peng Y., Hu H. L., Hu T. X., Zhang J., Li X. W., Liu L., Tang Y. 2014. Soil Biochemical Responses to Nitrogen Addition in a Bamboo Forest. *Plos One*. 9: 1-8.
- Lindemann W. C., Lindsey D. L., Fresquez P. R. 1984. Amendment of mine spoil to increase the number and activity of microorganisms. *Soil Sci. Soc. Am. J.* 48: 574-578.
- Lindsay W. L., Norwell W. A. 1978. Development of a DTPA soil test for zinc, iron, manganese and copper. *Soil Science Society of America Journal*. 42: 421-428.
- Line M. A. 1983. Catalase activity as an indicator of microbial colonization of wood. In: *Biodeterioration 5* (eds T. Oxley and S. Barry): 38-43. J. Wiley and Sons, London.
- Linquist B. A., Singleton P. W., Cassman K. G. 1997. Inorganic and organic phosphorus dynamics during a build-up and decline of available phosphorus in an Ultisol. *Soil Sci.* 162: 254-264.
- Linquist B. A., Singleton P. W., Yost R. S., Cassman K. G. 1997. Aggregate size effects on the sorption and release of phosphate in an Ultisol. *Soil Sci. Soc. Am. J.* 61: 160- 166.
- Liu R. J., Li X. L. 2000. Arbuscular mycorrhizae and its application. Science Press. Beijing. 70-71.
- Logaprabha V., Tamilselvi K. S. 2014. Arbuscular Mycorrhiza: Their distribution and association with plants in the revegetated mine spoils of India – an overview. *Research in Plant Biology*. 4(1): 36-42.
- Lukkari K. 2008. Chemical characteristics and behaviour of sediment phosphorus in the northeastern Baltic Sea. *Finnish Institute of Marine Research – Contributions No. 17*.
- Lyle E. S. Jr. 1987. Surface mining reclamation manual. Elsevier, New York.
- Ma J. F., Takahashi E. 2002. Soil, fertilizer, and plant silicon research in Japan. Elsevier, Amsterdam
- Maithani K., Tripathi R. S., Arunachalam A., Pandey H. N. 1996. Seasonal dynamics of microbial biomass C, N and P during regrowth of a disturbed subtropical humid forest in northeast India. *Appl. Soil. Ecol.* 4: 31-37.
- Maiti S. K., Reddy M. S. 2003. Nutrient accumulation in reclaimed overburden dumps of Ramagundam OCP-1, SCCL, In: Srivastava BK et al (ed) Proceedings of the environmental management in mines. Mining Engineering Department, BHU, Varanasi, India, 249–256.
- Maiti S. K. 1995. Some experimental studies on Ecological aspects of reclamation in Jharia coalfield. Ph.D. dissertation, Indian School of Mines, Dhanbad.

References

- Maiti S. K. 2003. Handbook of methods in environmental studies. Volume 2. ABD Publications, Jaipur.
- Maiti S. K. 2006. MoEF report on an assessment of overburden dump rehabilitation technologies adopted in CCL, NCL, MCL and SECL mines (No. J-15012/38/98-IA II (M). MOEF, New Delhi.
- Maiti S. K. 2007. Bioreclamation of coalmine overburden dumps- with special emphasis on micronutrients and heavy metals accumulation in tree species. *Environment Monitoring and Assessment*. 125: 111-122.
- Maiti S. K. 2010. Revegetation planning for the degraded soil and site aggregates in Dump sites. In: Bhattacharya J (ed) Project environmental clearance. Wide Publishing, Kolkata. 189-228.
- Maiti S. K., Ghose M. K. 2005. Ecorestoration of acidic coalmine overburden dumps – an Indian case studies. *Land Contam Recl*. 13: 361-369.
- Maiti S. K., Karmakar N. C., Sinha I. N. 2002. Studies into some physical parameters aiding biological reclamation of mine spoil dump – a case study from Jharia coalfield. *IME J*. 41: 20-23.
- Maiti S. K., Shee C. 2003. Status of VAM infections and spores in an afforested coalmine overburden dumps— a case study from Jharia coalfield. In: Srivastava B. K. et al (eds) *Proceedings of the environmental management in mines*. Mining Engineering Department, BHU, Varanasi: 257-262.
- Maiti S. K., Singh G. 2006. Ecorestoration status of coalmine overburden dumps in Korba, Gevra and Kusmunda area of SECL, India. In: Shringarpurale SB et al (eds) *Proceedings of the international symposium on environmental issues of mineral industries*. VNIT, Nagpur and CSM: 217-224.
- Maiti, S. K. 2013. Ecorestoration of the Coalmine Degraded lands. Springer, New Delhi; New York.
- Makdoh K., Kayang H. 2015. Soil Physico-chemical Properties in Coal mining areas of Khliehriat, East Jaintia Hills District, Meghalaya, India. *International Research Journal of Environment Sciences*. 4: 69-76.
- Makdoh K., Kayang H. 2015. Soil Physico-chemical Properties in Coal mining areas of Khliehriat, East Jaintia Hills District, Meghalaya, India. *International Research Journal of Environment Sciences*. 4: 69-76.
- Makineci E., Gungor B. S., Kumbasli M. 2011. Natural plant revegetation on reclaimed coal mine landscapes in Agacli-Istanbul. *African Journal of Biotechnology*. 10(16): 3248-3259.

References

- Makris K. C. 2003. Soil and Colloidal Phosphorus Dynamics In Three Ky Soils: Bioavailability, Transport and Water Quality Implications. (Master's Theses). University of Kentucky, Paper 408. Received from http://uknowledge.uky.edu/gradschool_theses/408
- Marschner H. 1995. Mineral nutrition of higher plant. 2nd edition. Academic Press, San Diego.
- Marti'nez-Orozco J. M., Valero-Huete F., Gonza'lez-Alonso S. 1993. Environmental problems and proposals to reclaim the areas affected by mining exploitations in the Cartagena mountains (Southeast Spain). *Landscape Urban Plan.* 23: 195-207.
- Martin J. K. 1971. Influence of Plant Species and Plant Age On The Rhizosphere Microflora. *Aust. J. Biol. Sci.*, 24: 1143-50.
- Marzadori C. 1998. Effect of lead pollution on different soil enzyme activity. *Bio. Fert. Soils.* 22: 53-58.
- Masciandaro G., Ceccanti B., Ronchi V., Bauer C. 2000. Kinetic parameters of dehydrogenase in the assessment of the response of soil to vermicompost and inorganic fertilizers. *Biology and Fertility of Soils.* 32: 479-483.
- Massey, F. P., Hartley S. E. 2009. Physical defences wear you down: progressive and irreversible impacts of silica on insect herbivores. *Journal of Animal Ecology.* 78:281–291.
- Masto R. E., Ram L. C., Verma S. K., Selvi V. A., George J., Tripathi R. C., Srivastava N. K., Mohanty D., Jha S. K., Sinha A. K., Sinha A. 2011. Rare Earth Elements in Soils of Jharia Coal Field. *World Academy of Science, Engineering and Technology.* 5: 272-277.
- McCarthy G. W., Siddaramappa R., Reight R. J., Coddling E. E., Gao G. 1994. Evaluation of coal combustion by products as soil liming materials: their influence on soil pH and enzyme activities. *Biol Fertil Soils.* 17:167-172.
- McNaughton S. J., Tarrants J. L., McNaughton M. M., Davis R. H. 1985. Silica as a defence against herbivory and a growth promoter in African grasses. *Ecology.* 66:528–535.
- McNaughton, S. J., Tarrants J. L. 1983. Grass leaf silification—natural-selection for an inducible defence against herbivores. *Proceedings of the National Academy of Sciences USA.* 80:790–791.
- McSweeney K., Jansen I. J. 1984. Soil structure and associated rooting behavior in minesoils. *Soil Sci. Soc. Am. J.* 48: 607-612.

References

- Mehlich A., Eaddy D. W., Bowling S. S. 1978. Determination of specific conductance and salt tolerance of crops by supernatant 1:2 soil:water procedure. Mimeo 5/78 Agronomic Division, North Carolina Department of Agriculture, Raleigh, N. C. 27611.
- Mehrotra V. S. 1998. Arbuscular mycorrhizal association of plants colonizing coal mine spoil in India. *Journal of Agricultural Science*. 130: 125-133.
- Meixiang G, Jingke L. I., Xueping Z. 2012. Responses of Soil Fauna Structure and Leaf Litter Decomposition to Effective Microorganism Treatments in Da Hinggan Mountains, China *Chinese Geographical Science*. 22: 647-658.
- Mengel K., Kirby E.A., 1987. Principles of Plant Nutrition. 4 th edition. Worblaufen-Bern: International Potash Institute.
- Miao L., Xu R., Ma Y., Zhu Z., Wang J., Cai R., Chen Y. 2008. Geochemistry and biogeochemistry of rare earth elements in a surface environment (soil and plant) in South China, *Environ. Geol.* 56: 225-235.
- Midgley M G., Edward Brzostek, and Richard P. Phillips. 2015. Decay rates of leaf litters from arbuscular mycorrhizal trees are more sensitive to soil effects than litters from ectomycorrhizal trees *Journal of Ecology*, 103: 1454-1463.
- Mille-Lindblom, C., Tranvik L. J. 2003. Antagonism between bacteria and fungi on decomposing aquatic plant litter. *Microbial Ecology*. 45:173-182.
- Miller R. M., Carnes B. A., Moorman T. B. 1985. Factors influencing survival of vesicular arbuscular mycorrhiza propagules during topsoil storage. *J Appl Ecol*. 22:259-266.
- Ministry of Coal, National Government of India. Estimates of coal production [Online]. <http://www.coal.nic.in/>
- Mishra R. K, Roy P. N. S, Pandey J., Khalkho A., Singh V. K. 2014. Study of coal fire dynamics of Jharia coalfield using satellite data. *International Journal of Geomatics And Geosciences*. 4: 477-484.
- Monterroso C., Macíás F., Gil-Bueno A., Val-Caballero C. 1998. Evaluation of the land reclamation Project at the As Pontes Mine (NW Spain) in relation to the suitability of the soil for plant growth. *Land Degrad. Dev.* 9: 441-451.
- Moore T. R., Trofymow J. A., Prescott C. E., Fyles J., Titus B. D. 2006. Patterns of carbon, nitrogen and phosphorus dynamics in decomposing foliar litter in Canadian forests. *Ecosystems*. 9: 46-62.
- Mosse B., Hayman D. S., Arnold D. J. 1973. Plant growth responses to vesicular-arbuscular mycorrhiza. V. Phosphate uptake by three plant species from P-deficient soils labeled with P. *New Phytologist*. 72: 809-815.

References

- Moynahan O. S., Zabinski C. A., Gannon J. E. 2002. Microbial community structure and carbon-utilization diversity in a mine tailings revegetation study. *Restoration Ecology*. 10: 77-87.
- Mtambanengwe F., Kirchman H. 1995. Litter from a tropical savanna woodland (Miombo): Chemical composition and C and N mineralization. *Soil Biol Biochem* 27: 1639-1651.
- Mukhopadhyay S, Maiti S. K. 2010a. Dehydrogenase activity in natural and mine soil- a review. *IJEP*. 30: 921-933.
- Mukhopadhyay S, Maiti S. K. 2010b. Natural Mycorrhizal Colonization In Tree Species Growing On The Reclaimed Coalmine Overburden Dumps: Case Study from Jharia Coalfields, India. *The Bioscan*. 3: 761-770.
- Mukhopadhyay S, Maiti S. K. 2011. Mine spoil reclamation due to tree plantation: a chronosequence study. *African journal of basic and applied sciences*. 3: 210-218.
- Mummey D. L., P. D. Stahl, J. S. Buyer. 2002b. Soil microbiological and physiochemical properties 20 years after surface mine reclamation: Comparative spatial analysis of reclaimed and undisturbed ecosystems. *Soil Biol. Biochem*. 34: 1717-1725.
- Mummey D. L., Stahl P. D., Buyer J. S. 2002a. Microbial biomarkers as an indicator of ecosystem recovery following surface mine reclamation. *Applied Soil Ecology*, 21: 251-259.
- Nan W. U., Hongling W., Shaoming L., Huali N., Yuanming Z. 2006. Temporal-spatial dynamics of distribution patterns of microorganism relating to biological soil crusts in the Gurbantunggut Desert. *Chinese Science Bulletin*. 51 (Supp. I):124-131.
- Nannipieri P., Ascher J., Ceccherini M. T., Landi L., Pietramellara G., Renella G. 2003. Microbial diversity and soil functions. *Eur J Soil Sci*. 54: 655-670.
- Nannipieri P., Grego S., Ceccanti B. 1990. Ecological significance of biological activity. In: Bollag J-M, Stotzky G (eds) *Soil biochemistry*. Dekker, New York. vol 6: 293-355.
- Nath A. J., Das A. K. 2011. Decomposition dynamics of three priority bamboo species of homegardens in Barak Valley, Northeast India. *Tropical Ecology*. 52: 325-330.
- Nelson D. L., Cox M. M. 2000. *Principles of Biochemistry*. Macmillan Press, London, UK.
- Newell, S. Y., D. Porter, and W. L. Lingle. 1996. Lignocellulolysis by ascomycetes (Fungi) of a saltmarsh grass (smooth cordgrass). *Microscopy Research and Technique* 33: 32-46.
- Nojiri M., Hira D., Yamaguchi K., Okajima T., Tanizawa K., Suzuki S. 2006. Crystal structures of cytochrome c(L) and methanol dehydrogenase from *Hyphomicrobium*

References

- denitrificans: structural and mechanistic insights into interactions between the two proteins. *Biochemistry*. 45: 3481-3492.
- Norland M., 1993. Soil factors affecting mycorrhizal use in surface mine reclamation. Bureau of mines information circular. United States Department of the Interior.
- Nowak J., Cholewiński A., Zakrzewska H., Lech B., Worona B. 1997. Skażenie środowiska naturalnego Pomorza Zachodniego związkami chemicznymi oraz ich wpływ na zmiany aktywności enzymatycznej gleby. [The pollution of natural environment in Pomorze Zachodnie with chemical compounds and its influence on changes in enzymatic activity in soil]. Wkład nauk rolniczych w rozwój Pomorza Zachodniego: Nauka-Gospodarce, AR w Szczecinie, Szczecin. 67-75 [in Polish].
- Nowak J., Niedźwiecki E., Nowak A., Śnieg B. 2001. Kształtowanie się właściwości biologicznych gleb uprawnych Niziny Pyrzyckiej w okresie wegetacyjnym. [Development of biological properties in cultivated soils during vegetation season at Pyrzycka Lowland.] *Folia Univer. Agricul. Stettinensis*. 221 (88): 183-200. [in Polish]
- Nowak J., Smolik B., Śnieg B. 1999. Changes in activity of selected soil enzymes induced by various doses of copper and lead salts. *Chemia i Inż. Ekolog.* 6: 892-898.
- O'Halloran I. P. 1993. Effect of tillage and fertilizer on the inorganic and organic phosphorus. *Can. J. Soil Sci.* 73: 359-369.
- Office of Coal Controller, Ministry of Coal).<http://www.coalcontroller.gov.in/>
- Ohshima T., Soda K. 1990. Biochemistry and biotechnology of amino acid dehydrogenases. *Adv. Biochem. Eng. Biotechnol.* 42: 181-209.
- Olsen S. R., Cole C. V., Watanabe F. S., Dean L. A. 1954. Estimation of available phosphorous in soils by extraction with sodium bicarbonate. Department of Agriculture, Washington, D.C., USDA Circ. 939.
- Olsen S. R., Sommers L. E. 1982. Phosphorus. In: Page AL, et al (eds), *Methods of Soil Analysis*, part 2, 2nd edn. Agron Monogr 9. ASA and ASSA, Madison WI: 403-430.
- Olson J. S., 1963. Energy storage and the balance of producers and decomposers in ecological systems. *Ecology*. 44: 322-331.
- Osanloo M., 2001. Mine Reclamation. Amirkabir University of Technology, 1: 183-193.
- Oxmann J. F., Pham Q. H., Lara R. J. 2008. Quantification of individual phosphorus species in sediment: a sequential conversion and extraction method. *European Journal of Soil Science*, 59: 1177-1190.
- Palm C. A., Sánchez P. A. 1990. Decomposition and nutrient release patterns of the leaves of three tropical legumes, *Biotropica* 22: 330-338.
- Pan J., Yu L., 2011. Effects of Cd or/and Pb on Soil Enzyme Activities and Microbial Community Structure. *Ecological Engineering*, 37, 1889-1894.

References

- Pandey S., Palni L. M. S. 2007. The rhizosphere effect in trees of the Indian Central Himalaya with special reference to altitude. *Applied Ecology and Environmental Research.* 5: 93-102.
- Pandey U., Singh J. S. 1982. Leaf litter decomposition in an oak-conifer forest in Himalaya: The effects of climate and chemical composition. *Forestry* 55: 47-59.
- Pandya S. R., M. R. Patil R. B. Kharat. 1997. Revegetation of coal spoils by flyash and pulp and paper mill waste. *Journal of Industrial Pollution Control* 13: 151-157.
- Pankhurst C. E., Hawke B. G., McDonald H. J., Kirkby C. A., Buckerfield J. C., Michelsen P., O'Brien K. A., Gupta V. V. S. R., Doube B. M. 1995. Evaluation of soil biological properties as potential bioindicators of soil health. *Aust J Exp Agric.* 35:1015-1028.
- Parkinson D. 1979. Soil microorganisms and plant roots. In: A. Burges & F. Raw (eds.) *Soil Biology.* Academic Press, New York: 449-478.
- Pastor J., Aber J. D., McClaugherty C. A., Melillo J. M. 1984. Above ground production and N and P cycling along a nitrogen mineralization gradient on Blackhawk Island, Wisconsin. *Ecology* 65, 256-68.
- Patwardhan B., Warude D., Pushpangadan P. and Bhatt N. 2005. eCAM., 2: 465-473.
- Pederson T. A., Rogowski A. S., Pennock R. 1988. Physical characteristics of some mine spoils. *Soil Science Society American Journal.* 44:131-140.
- Pedraza R. A., Williams-Linera G. 2003. Evaluation of native tree species for the rehabilitation of deforested areas in a Mexican cloud forest. *New Forest.* 26: 83-99.
- Pedziwil Z. 1995. The numbers and the fungistatic activity of actinomycetes in different soils supplementta with pesticides and organic substances. *Polish Journal of Soil Science.* 28: 45-52.
- Pellisier F., Souto X. C. 1999. Allelopathy in northern temperate and boreal seminatural woodland. *Critical Reviews in Plant Sciences.* 18: 637-652.
- Pellissier F., Souto C. 1999. Allelopathy in northern temperate and boreal semi-natural woodland. *Crit. Rev. Pl. Sci.* 18: 637-652.
- Pettersson K., Boström B., Jacobsen. 1988. Phosphorus in sediments – speciation and analysis. *Hydrobiologia.* 170:91-101.
- Pindi P. K. 2012. Mycorrhizal association of some agroforestry tree species in two social forestry nurseries. *African Journal of Biotechnology.* 10: 10425-10430.
- Pitchel J. R., Hayes J. M. 1990. Influence of fly ash on soil microbial activity and populations. *J Environ Qual.* 19:593-597.

References

- Pradhan P., Joseph L., Gupta V., Chulet R., Arya H., Verma R., Bajpai A. 2009. Saraca asoca (Ashoka): A Review. *Journal of Chemical and Pharmaceutical Research*, 1: 62-71.
- Prakash A., Kumar A., Singh K. B. 2010. Deformation due to underground coal mining-a case study. *IJEP*, 30: 681-684.
- Prasad R., Mohammad G. 1990. Effectiveness of nitrogen fixing trees (NFTs) in improving microbial status of Bauxite and Coal mined out areas. *Journal of Tropical Forestry*. 6: 86-94.
- Prasad R., Mertia R. S. 2005. Dehydrogenase activity and VAM fungi in tree rhizosphere of agroforestry systems in Indian arid zone. *Agoforestry Forum*. 63: 219-223.
- Prescott C. E. 1995. Does nitrogen availability control rates of litter decomposition in forests? *Plant Soil*. 168: 83-88.
- Prescott C. E., Vesterdal L., Preston C. M., Simard S. W. 2004. Influence of initial chemistry on decomposition of foliar litter on contrasting forest types in British Columbia. *Can. J. For. Res.* 34, 1714-1729.
- Raaimakers D., Boot R. G. A., Dijkstra P., Pot S., Pons T. 1995. Photosynthetic rates in relation to leaf phosphorus contents in pioneer versus climax tropical rainforest trees. *Oecologia*.102: 120-125.
- Rai A. K., Paul B., Singh G. 2010. Assessment of Top Soil Quality In The Vicinity Of Subsided Area In Jharia Coalfield, Dhanbad, Jharkhand. *Report and Opinion*, 2: 1-6
- Rai A. K., Paul B., Singh G. 2011. A study on physico chemical properties of overburden dump materials from selected coal mining areas of Jharia coalfields, Jharkhand, India. *International Journal of Environmental Sciences*. 1: 1350-1360.
- Rajeshkumar P. P., Hosagoudar V. B., Kumar A. C., Prajith T. M. 2012. Endomycorrhizal Association of Saraca asoca (Roxb.) W.J. de Wilde. *Bulletin of Basic and Applied Plant Biology*. 2: 1-6.
- Ramsey M., Currie W. S., Kulkarni M. V. 2001. Contrasting pattern and process in natural and rehabilitated ecosystems: The role of microtopography. *Recent Research Developments in Ecology*. 1: 129-144.
- Reddy G. B., Faza A. 1989. Dehydrogenase activity in sludge amended soil. *Soil Biol Biochem*. 21: 327.
- Richardson J. A. 1958. The effect of temperature on the growth of plants on pit heaps. *J Ecol*. 46 :357-546.
- Richart S. I., Nancy J. H., David T., John R.T., Mark S., Kothlean Z. 1987. Old field succession on a Minnesota sand plain. *Ecology*. 68: 12-26.

References

- Rimmer D. L. 1982. Soil physical conditions on reclaimed spoil heaps. *Journal of Soil Science*. 33: 567- 579.
- Riutta T., Slade E. M., Bebber D. P. Taylor, M.E., Malhi, Y., Riordan, P., Macdonald, D. W., Morecroft, M. D. 2012. Experimental evidence for the interacting effects of forest edge, moisture and soil macrofauna on leaf litter decomposition. *Soil Biology and Biochemistry*, 49: 124-131.
- Rives C. S., Bajwa M. I., Liberta A. E. 1980. Effects of topsoil storage during surface mining on the viability of VA mycorrhiza. *Soil Sci*. 129: 253-257.
- Roberts R. D., Marrs R. H., Skeffington R. A., Bradshaw A. D. 1981. Ecosystem development on naturally colonized china clay wastes. I. Vegetation changes and overall accumulation of organic matter and nutrients. *J Ecol*. 69:153-161.
- Rodrigue J. A., Burger J. A., Oderwald R. G., et al. 2002. Forest productivity and commercial value of pre-law reclaimed mined land in the eastern United States. *Northern Journal of Applied Forestry*.19: 106-114.
- Ruban V., López-Sánchez J. F., Pardo P., Rauret G., Muntau H., Quevauviller P. 1999. Selection and evaluation of sequential extraction procedures for the determination of phosphorus forms in lake sediment. *J. Environ. Monit.* 1: 51-56.
- Russell J. S. 1977. Evaluation of residual nutrients in soils. *Aust. J. Agric. Res.* 28: 461-475.
- Ruttenberg K. C. 1992. Development of a sequential extraction method for different forms of phosphorus in marine sediments. *Limnology and Oceanography*, 37, 1460-1482. ryegrass/fertilizer amendments. *J. Soil Sci*. 42: 9-15.
- Sadhu K., Adhikari K., Gangopadhyay A. 2012. Effect of mine spoil on native soil of Lower Gondwana coal fields: Raniganj coal mines areas, India. *International Journal of Environmental Sciences*. 2(3).
- Saha S., Saha B., Murmu S., Pati S., Roy P. D. 2014. Grain yield and phosphorus uptake by wheat as influenced by long-term phosphorus fertilization. *African Journal of Agricultural Research*. 9: 607-612.
- Saito R., Kato C., Nakayama A. 2006. Amino acid substitutions in malate dehydrogenases of piezophilic bacteria isolated from intestinal contents of deep-sea fishes retrieved from the abyssal zone. *J. Gen. Appl. Microbiol.* 52: 9-19.
- Sannigrahi A. K. 2009. Biodegradation of leaf litter of tree species in the presence of cow dung and earthworm. *Indian journal of biotechnology*. 8: 335-338.
- Sanyal S. K., Datta S. K. 1991. Chemistry of phosphorus transformation in soil. *Advances in Soil Science*.16: 1-120.

References

- Sanyal S. K., Dwivedi B. S., Singh V. K., Majumdar K., Datta S.C., Pattanayak S. K., Annapurna K. 2015. Phosphorus in relation to dominant cropping sequences in India: chemistry, fertility relations and management options. *Current Science*. 108: 1262-1270.
- Sarkar S., Mandal D., Haldar A. 2013. Distribution and forms of phosphorus in some red soils of Chottanagpur Plateau, West Bengal. *Agropedology*. 23: 93-99.
- Schaller J, Hines J, Brackhage C, Baucker E, Gess M.O. 2014. Silica Decouples Fungal Growth And Litter Decomposition Without Changing Responses To Climate Warming And N Enrichment. *Ecology*, 95(11): 3181-3189.
- Schaller, J., Brackhage C., Paasch S., Brunner E., Baucker E., and Dudel E. G. 2013. Silica uptake from nanoparticles and silica condensation state in different tissues of *Phragmites australis*. *Science of the Total Environment*. 442:6-9.
- Schmidt J. P., Buol S. W., Kamprath E. J. 1996. Soil phosphorus dynamics during seventeen years of continuous cultivation: Fractionation analysis. *Soil Sci. Soc. Am. J.* 60: 1168-1172.
- Schnurer J., Rosswall T., 1982. Fluorescein diacetate hydrolysis as a measure of total microbial activity in soil and litter. *Applied and Environmental Microbiology*. 6: 1256–1261.
- Selvam A., Mahadevan A. 2002. Distribution of mycorrhizas in an abandoned fly ash pond and mined sites of Neyveli Lignite Corporation, Tamil Nadu, India. *Basic Appl Ecol.* 3: 277-284.
- Sengupta C, Anshumali. 2013. The height: diameter ratio dependent ececis of native plant seedlings: Implication in restoration of overburden dumps. *The Ecoscan*. 3: 281-287.
- Sengupta C., Anshumali. 2013. The height: diameter ratio dependent ececis of native plant seedlings: Implication in restoration of overburden dumps. *The Ecoscan*. 3: 281-287.
- Sengupta N. 1980. A revision of the Geology of the Jharia Coalfield with particular reference to distribution of coal seams, Ph.D. Thesis, Indian School of Mines, Dhanbad.
- Sherene T. 2010. Mobility and transport of heavy metals in polluted soil environment. *Biological Forum — An International Journal*. 2: 112-121.
- Siddique M. T., Robinson J. S. 2003. Phosphorus sorption and availability in soils amended with animal manures and sewage sludge. *Journal of Environmental Quality*. 32:1114-1121.
- Simmons J. A., Currie W. S. 2005. Alteration of Soil Phosphorus Pools from Coal Mining and Reclamation. *Annual Proceedings of the West Virginia Academy of Science*.

References

- Singh A. 2006. Herbaceous species composition of an age series of naturally revegetated coal mine spoils on Singrauli coalfields, India. *Journal of Indian Institute of Science.* 86: 75-79.
- Singh A. N., Singh A. N. 2006. Experiments on ecological restoration of coal mine spoil using native trees in a dry tropical environment, India: a synthesis. *New Forests.* 31: 25-39.
- Singh A. N., Singh J. S., 1999. Biomass, net primary production and impact of bamboo plantation on soil redevelopment in a dry tropical region. *Forest Ecology Managing.* 119: 195-207.
- Singh E., Sharma S., Pareek A., Dwivedi J., Yadav S. and Sharma S. 2011. Phytochemistry, traditional uses and cancer chemopreventive activity of Amla (*Phyllanthus emblica*): The Sustainer. *Journal of Applied Pharmaceutical Science,* 2: 176-183.
- Singh G., Chauhan R., Ranjan R. K., Prasad M. B., Ramanathan A. L. 2015. Phosphorus dynamics in mangroves of India. *Current Science.* 108: 1874-1881.
- Singh K. P., Singh P. K., Tripathi S. K. 1999. Litterfall, litter decomposition and nutrient release patterns in four native tree species raised on coal mine spoil at Singrauli, India. *Biol. Fertil.* 29: 371-378.
- Singh S. 2006. Phosphorus mobilization by mycorrhizal fungi- Part 1. Production and detection of phosphatases. *Mycorrhiza News.* 18: 2-9.
- Singh S. K. Juwarkar A. A. 2014. Sustainable reclamation of coal mine spoil dump using microbe assisted phytoremediation technology. *International Journal of Environmental Science and Toxicology.* 2: 43-54.
- Sinha S, Masto R. E., Ram L. C., Selvi V. A., Srivastava N. K., Tripathi R. C., George J. 2009. Rhizosphere soil microbial index of tree species in a coal mining ecosystem. *Soil Biology & Biochemistry,* 41: 1824-1832.
- Smith S. E., Gianinazzi-Pearson V. 1988. Physiological interaction between symbionts in vesicular - arbuscular mycorrhizal plants. *Annual Review of Plant Physiology and Plant Molecular Biology,* 39: 221-224.
- Smolders E., Lambregts R. M., McLaughlin M. J., Tiller K. G. 1998. Effect of soil solution chloride on cadmium availability to Swiss Chard. *J. Environ. Qual.* 27: 426-431.
- Soininen E. M., Brathen K. A., Jusdado J. G. H., Reidinger S., and Hartley S. E. 2013. More than herbivory: levels of silicabased defences in grasses vary with plant species, genotype and location. *Oikos.* 122:30-41.
- Sollins P. 1998. Factors influencing species composition in tropical lowland rain forest: does soil matter? *Ecology,* 79: 23-30.

References

- Soltanmohammadi H., Osanloo M., Aghajani A. B. An analytical approach with a reliable logic and a ranking policy for post-mining land-use determination. *Land Use Policy*. 2010, 27: 364-372.
- Sommer M., Kaczorek D., Kuzyakov Y., Breuer J. 2006: Silicon pools and fluxes in soils and landscapes—a review. *J. Plant Nutr. Soil Sci.*, 169: 310–329. doi:10.1002/jpln.200521981
- Soni P., Vasistha H. B., Kumar O. 1989. Ecological approach towards reclaiming mined ecosystem. *Indian Forester*. 115: 875-883.
- Sonkar D. S., Singh A. K., Banerjee S. K. 1998. Relative suitability of different nitrogen fixing and non-nitrogen fixing tree species on coal mine overburden of Jayant, Singaruli. *Environment and Ecology*. 16: 314-317.
- Srilatha M., Sharma S. H. K. 2015. Influence of long term use of fertilizers and manures on available nutrient status and inorganic “Phosphorous” fractions in soil under continuous rice – rice cropping system. *International Journal of Advanced Research*. 3: 960-964.
- Stark N. M. 1977. Fire and nutrient cycling in a douglas fir/larch forest. *Ecology*. 58: 16-30.
- Stevenson F. J. 1986. *Cycles of soil*. John Wiley and Sons, New York.
- Stoyan H., De-Polli H., Böhm S., Robertson P., Paul A. E. 2000. Spatial heterogeneity of soil respiration and related properties at the plant scale. *Plant Soil*. 222: 203-214.
- Sturges S. 1997. The Use of Mycorrhizae in Mined Land Reclamation. *Restoration and reclamation review*. Student Online Journal. 2: 1-5.
- Subbiah B. V., Asija G. L. 1956. A rapid procedure for estimation of available nitrogen in soils. *Current Science*. 25: 259-260.
- Sun Y. J., Ma J., Sun Y. Y. 2012. The effects of different water and nitrogen managements on yield and nitrogen use efficiency in hybrid rice of China. *Field Crops Research*. 127: 85-98.
- Sundarapandian S. M., Swamy P. S. 1999. Litter production and leaf-litter decomposition of selected tree species in tropical forests at Kodayar in the Western Ghats, India, *For. Ecol. Manage.* 123: 231-244.
- Sundriyal R.C., Upreti T.C and Varuni R. 2002. Bamboo and Cane Resource utilization and conservation in the Apatani Plateau, Arunachal Pradesh, India: Implication for management. *J. Bamboo and Rattan*, 1: 205-246.
- Swift M. J., Heal O. W., Anderson J. M. 1979. *Decomposition in Terrestrial Ecosystems*. Blackwell. Oxford.

References

- Tabatabai M. A. 1994. Soil enzymes. In: Weaver, R.W., Angle, J.S., Bottomley, P.S. (Eds.), Methods of Soil Analysis: Microbiological and Biochemical Properties. Part 2. SSSA Book Ser. 5. SSSA, Madison, WI: 775-833.
- Tafi T. C., Neuman D., Wraith J. 2006. Reclamation effectiveness at three reclaimed abandoned mine sites in Jefferson County, Montana, A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Science in Land Rehabilitation. Montana State University, Bozeman, Montana.
- Talbot J. M., Treseder K. K. 2012. Interactions among lignin, cellulose, and nitrogen drive litter chemistry-decay relationships. *Ecology*. 93: 345- 354.
- Tan W., Liu J., Dai T., Jing Q., Cao W., Jiang D. 2008 Alterations in photosynthesis and antioxidant enzyme activity in winter wheat subjected to post-anthesis water-logging. *Photosynthetica*. 46: 21-27.
- Tanner E. V. J., Vitousek P. M., Cuevas E. 1998. Experimental investigation of nutrient limitation of forest growth on wet tropical mountains. *Ecol.* 79: 10-22.
- Tate K. R., Salcedo I. 1988. Phosphorus control of soil organic matter accumulation and cycling. *Biogeochemistry*. 5: 99-107.
- Tian, L., X. D. Chen, Q. P. Yang, J. C. Chen, Q. Li, and Shi L. 2012. Effect of silica dioxide particles on the evolution of biofouling by *Bacillus subtilis* in plate heat exchangers relevant to a heat pump system used with treated sewage. *Chemical Engineering Journal*. 188:47-56.
- Tiessen H., Moir J. O. 1993. Characterization of available P by sequential extraction. In M.R. Carter (ed.) Soil sampling and methods of analysis. Canada Society of Soil Science and Lewis Publishers, Boca Raton, FL.: 75-86.
- Tiessen H., Stewart J. W. B., Cole C. V. 1984. Pathways of phosphorus transformations in soils of differing pedogenesis. *Soil Sci. Soc. Am. J.* 48: 853-858.
- Tiessen H., Chacon P., Cuevas E. 1994. Phosphorus and nitrogen status in soil and vegetation along a toposequence of dystrophic rainforests on the upper Rio Negro. *Oecologia*. 99: 145-150.
- Tilston E. L., Halpin C., Hopkins D.W. 2013. Decomposition of tobacco roots with modified phenylpropanoid content by fungi with contrasting lingo-cellulose degradation strategies. *Biol Fertil Soils* 49: 305-311.
- Tordoff G. M, Baker A. J. M, Willis A. J. 2000. Current approaches to the revegetation and reclamation of metalliferous wastes. *Chemosphere*. 41: 219-228.
- Trevors J. T. 1984. Dehydrogenase activity in soil: A comparison between the INT and TTC assay. *Soil Biol. Biochem.* 16: 673-674.

References

- Tripathy D. P., Panigrahi D. C., Singh G. 2009. Determination of soil pollution index and soil Infiltration rates in some non-fire and fire areas of Jharia coalfield. <http://dspace.nitrkl.ac.in/dspace>
- Troya A, Morgan Grove J., O'Neil-Dunnea J. 2012. The relationship between tree canopy and crime rates across an urban–rural gradient in the greater Baltimore region. *Landscape and Urban Planning* 106: 262-270.
- Turner M. E., Stevens C. D. 1959. The regression analysis of causal paths. *Biometrics*. 15: 236-258.
- Tyler G. 2004. Rare earth elements in soil and plant systems – A review. *Plant Soil*. 267: 191-206.
- U.S. Environmental Protection Agency, Title 40 Code of Federal Regulations, Section 70.2. <http://www.gpo.gov/fdsys/pkg/CFR-2009-title40-vol15/xml/CFR-2009-title40-vol15-part70.xml>
- Ueda K, Ueda S. 1961. Effect of silicic acid on bamboo-growth. *Bull. Kyoto Univ. For.*, 33: 79-99. (in Japanese with English summary).
- UNEP, 1983. Guidelines for the control of the soil degradation. FAO, Rome, Italy.
- USDA NRCS. 2011. Carbon to Nitrogen Ratios in Cropping Systems. soils.usda.gov/sqi.
- USDA-NRCS. 2014. Soil Health – Bulk Density/Moisture/Aeration. Guides for Educators (May 2014)
- Van Eck G. T. M. 1982. Forms of phosphorus in particulate matter from the Hollands Diep/Haringvliet, The Netherlands. *Hydrobiologia*. 92: 665-681.
- van Huysen TL, Harmon ME, Perakis SS, Chen H. 2013. Decomposition and nitrogen dynamics of 15 N-labeled leaf, root, and twig litter in temperate coniferous forests. *Oecologia*. 173:1563-1573.
- Van Vuuren, M. M. I., R. Aerts, F. Berendse, and W. Devisser. 1992. Nitrogen mineralization in heathland ecosystems dominated by different plant species. *Biogeochemistry* 16:151-166.
- Verma J.C. and Bahadur K. N. 1980. Country report and status of bamboo resource in India, Ind.Forest. Res. (New Series. Bot), 6: 1-28.
- Verma S., Singh A. P., Devi S., Mewaram R. R., Sharma S., Dubey K. 2014. Assessment of Microbial Community and Soil EnzymeActivity of Coal Mine Dumps of Sonbhadra Uttar Pradesh, India. Proc. of the International Conference on Advances In Bio-Informatics, Bio-Technology And Environmental Engineering-ABBE 2014. doi: 10.15224/ 978-1-63248-009-5-90.

References

- Visser S., Fujikawa J., Griffiths C. L., Parkinson D. 1984. Effect of topsoil storage on microbial activity, primary production and decomposition potential. *Plant and Soil.* 82: 41-50.
- Vitousek P. M. 1984. Litterfall, nutrient cycling, and nutrient limitation in tropical forests. *Ecology.* 65: 285-298.
- Vitousek P. M., Farrington H. 1997. Nutrient limitation and soil development: experimental test of a biogeochemical theory. *Biogeochemistry.* 37: 63-75.
- Vitousek P. M., Sanford R. L. 1986. Nutrient cycling in moist tropical forest. *Annu Rev Ecol Syst.* 17: 137-167.
- Vogt K.A., Grier C.C., Vogt D.J. 1986. Production, turnover and nutrient dynamics of the above- and below-ground detritus of world forests, *Adv. Ecol. Res.* 15: 303-377.
- Wainwright, M., K. AlWajeeh, and S. J. Grayston. 1997. Effect of silicic acid and other silicon compounds on fungal growth in oligotrophic and nutrient-rich media. *Mycological Research.* 101:933-938.
- Wali M. K., 1987. The Structure Dynamics and Rehabilitation of Drastically Disturbed Ecosystems. In: Perspectives in Environmental Management, Khosloo, T.N. (Ed.). Oxford Publications, New Delhi, pp: 163-183.
- Walker T. W., Syers J. K. 1976. The fate of phosphorus during pedogenesis. *Geoderma.* 15: 19.
- Walkley A., Black I. A. 1934. An examination of the Degtjareff method for determining soil organic matter and a proposed modification of chromic acid titration method. *Soil Science.* 34: 29-38.
- Wamberg C., Christensen S., Jakobsen I., Müller A. K., Sørensen S. J. 2003. The mycorrhizal fungus (*Glomus intraradices*) affects microbial activity in the rhizosphere of pea plants (*Pisum sativum*). *Soil Biology & Biochemistry.* 35:1349-1357.
- Warrier P.K. 1996. Indian medicinal plants-A compendium of 500 species, Orient Longman Ltd., Chennai, Vol. III, 38-39.
- Watts D. B., Allen T. H., Feng Y., Prior S. A. 2010. Soil microbial community dynamics as influenced by composted dairy manure, soil properties, and landscape position *Soil Science.* 175: 474-486.
- Wei Z., Yin M., Zhang X., Hong F., Li B., Tao Y., Zhao G., Yan C. 2001. Rare earth elements in naturally grown fern *Dicranopteris linearis* in relation to their variation in soils in South-Jiangxi region (Southern China), *Environ. Pollut.* 114: 345-355.
- Whiting S. N., Reeves R. D., Richards D., Johnson M. S., Cooke J. A., Malaisse F., Paton A., Smith J. A. C., Angle J. S., Chaney R. L., Ginocchio R., Jaffré T., Johns R., McIntyre

References

- T., Purvis O. W., Salt D. E., Schat H., Zhao F. J., Baker A. J. M. 2004. Research priorities for conservation of metallophyte biodiversity and their potential for restoration and site remediation. *Restor. Ecol.* 12: 106-116.
- Wieder R. K., Carrel J. E., Rapp J. K., Kucera C. L. 1983. Decomposition of fescue (*Festuca elatior* van. *Aurndinaceae*) and cellulose litter on surface mines and tall grass prairie in central Missouri. USA. *J Appl Ecol.* 20:303-321.
- Wieder R. K., Carrel J.E., Rapp J. K., Kucera C. L. 1983. Decomposition of fescue (*Festuca elatior* van. *aurndinaceae*) and cellulose litter on surface mines and tall grass prairie in central Missouri, USA. *J Appl Ecol.* 20 :303-321.
- Wilke B. M. 1991. Effect of single and successive additions of cadmium, nickel and zinc on carbon dioxide evolution and dehydrogenase activity in a sandy Luvisol. *Biol Fertil Soils.* 11:34-37.
- Williamson J. C., Johnson D. B. 1990. Determination of the activity of soil microbial population in stored and restored soil at opencast coal sites. *Soil Biology & Biochemistry.* 22: 671-675.
- Williamson J. C., Johnson D. B. 1991. Microbiology of soils at opencast coal sites. II Population transformations occurring following land restoration and the influence of ryegrass/fertilizer amendments. *J Soil Sci.* 42: 9-15.
- Wolinska A., Stepniewska Z. (2012): Dehydrogenase activity in the soil environment. In: Canuto R.A. (ed.): Dehydrogenases. Intech, Rijeka. Available at <http://www.ebook3000.com/>
- World Coal Association. 2015. The Case for Coal India's Energy Trilemma.
- World Energy Council. 2013. World Energy Resources: Coal.
- Wyszkowska J., 2002. Effect of Soil Contamination with Treflan 480 EC on Biochemical Properties of Soil. *Polish Journal of Environmental Studies.* 11(1): 71-77.
- Xia H. P., Shu W. S. 2001. Resistance to and uptake of heavy metals by *Vetiveria zizanioides* and *Paspalum notatum* from lead/zinc mine tailings. *Acta Ecologica Sinica.* 21: 1121-1129.
- Xia L. U., Zhen H. U. 2007. Vegetation Growth Monitoring Under Coal Exploitation Stress by Remote Sensing in the Bulianta Coal Mining Area, Institute of Land Reclamation and Ecological Restoration, China University of Mining & Technology, Beijing. 17: 479-483.
- Xie W., Zhou J., Wang H., Chen X., Lu Z., Yu J., Chen X. 2009. Short-Term Effects of Copper, Cadmium and Cypermethrin on Dehydrogenase Activity and Microbial Functional Diversity In Soils After Long-Term Mineral or Organic Fertilization. *Agriculture, Ecosystems & Environment.* 129: 450-456.

References

- Yamamoto T. 1975. Coal mine spoils as a growing medium: AMAX Bellee AYR South mine, Gillette, Wyoming. Third symposium on surface mining reclamation, Kentucky. 1: 49-61.
- Yang Y. S., Guo J. F., Chen G. S., Xie J. S., Cai L. P., Lin P. 2004. Litterfall, nutrient return, and leaf-litter decomposition in four plantations compared with a natural forest in subtropical China. Ann. For. Sci. 61: 465-476.
- Yang Y.S., Li Z.W., Liu A.Q. 1993. Studies on soil fertility for natural forest of *Castanopsis kawakamii* replaced by broadleaf plantation, J. Northeast For. Univ. 21: 14–21 (in Chinese with English abstract).
- Zak J. C., Parkinson D. 1983. Effects of surface amandation of two minespoils in Alberta, Canada, on vesicular arbuscular mycorrhizal development of slender wheatgrass: a 4-year study. Canadian Journal of Botany. 61: 798-803.
- Zeng R. S., Li P. W. 1997. Allolepathic effects of *Eucalyptus exserta* and *E. urophylla*. Journal of South China Agricultural University. 18: 6-10.
- Zhang L, Zhijie WU, Chen Lijun, Jiang Yong, Dongpo LI (2009). Kinetics of catlase and dehydrogenese in main soils of northeast China under different soil moisture conditions. Agricultural Journal 4: 113-120.
- Zhang Z. S., Cao C. G., Cai M., Li C. F. 2013. Crop yield, P uptake and soil organic phosphorus fractions in response to short-term tillage and fertilization under a rape-rice rotation in central China Journal of Soil. Science and Plant Nutrition. 13: 871-882.
- Zheng Z., Simard R. R., Lafond J., Parent L. E. 2002. Pathways of soil phosphorus transformations after 8 years of cultivation under contrasting cropping practices. Soil Sci. Soc. Am. J. 66: 999-1007.
- Zhou G. Y. 1997a. Water and Heat Theories of Ecosystem and Their Applications. Beijing: Meteorology Press.
- Zhou G. Y. 1997b. Distribution of rainfall kinetic energy by canopies of artificial forest tree species, and its ecological effects. Acta Phytoecologica Sinica. 21: 250-259.
- Zipfel I. 2012. India: The Fiery Coalfields of Jharia. The Global Journal.
- Zipper C. E., Burger J. A., Jeffrey G., Skousen, Angel P. N, Barton C. D., Davis V Jennifer, Franklin A. 2011. Restoring Forests and Associated Ecosystem Services on Appalachian Coal Surface Mines. Environmental Management. 47: 751-765.