



REFERENCES

- Abd-Alla, M. H., Abdel-Wahab E. El-Enany, N. A. Nafady, D. M. Khalaf and F. M. Morsy, 2014. Synergistic interaction of *Rhizobium leguminosarum* bv. *viciae* and arbuscular mycorrhizal fungi as a plant growth promoting biofertilizers for faba bean (*Vicia faba* L.) in alkaline soil. **Microbiological Research**, **169**: 49-58
- Abdissa, T., N. Dechassa and Y. Alemayehu, 2012. Sweet potato growth parameters as affected by farmyard manure and phosphorus application at adami tulu, central rift valley of Ethiopia. **Agricultural Science Research Journal**, **2(1)**: 1-12.
- Abira, B., 2006. Efficacy of vermicomposted fruit wastes and biofertilizers on growth and yield of soyabean (*Glycine max* L. Merrill Co 1). M. Sc. Thesis. Avinashilingam University for Women, Coimbatore. Pp. 85-89.
- Abou El-Magd M. A., M. El-Bassiony and Z. F. Fawzy, 2006. Effect of organic manure with or without chemical fertilizers on growth, yield and quality of some varieties of Broccoli plants. **Journal of Applied Sciences and Research**, **2(10)**:791-798.
- Adzmi, F., H. M. Saud, M. R. Ismail, R. Othman, S. H. Habib and H. Kausar, 2014. Effect of co- inoculation of nitrogen fixing and phosphate solubilizing microorganisms in combination with chemical fertilizers on growth and development of rice. **Crop Research**, **47 (1,2 &3)**: 1-6
- Ahmad, I., A. Ahmad, S. Ahmad, A. Amjad, M. Saleem and A. Akram, 2012. Effect of various agricultural substrates on biometric and qualitative characteristics of *Ruscus hypophyllum*. **International Journal of Agriculture and Biology**, **14**: 116-120.
- Ahmad, M., M. Afzal, A. Ahmad, A. U. H. Ahmad and M. I. Azeem, 2013. Role of organic and inorganic nutrient sources in improving wheat crop production. **Cercetari Agronomice in Moldova**, **46(1)**: 15-21.
- Ahmad, R., A. Naseer, Z. A. Zahir, M. Arshad, T. Sultan and M. A. Ullah, 2006. Integrated use of recycled organic waste and chemical fertilizers for improving maize yield. **International Journal of agricultural and Biology**, **8(6)**: 840-843.
- Ainika, J. N., E. B. Amans, C. O. Olonitola, P. C. Okutu and E. Y. Dodo, 2012. Effect of organic and inorganic fertilizer on growth and yield of *Amaranthus caudatus* L. in Northern guinea Savanna of Nigeria. **World Journal of Engineering and Pure and Applied Sciences**, **2(2)**: 26-30.

-
- Akmal, M., M. S. Altaf, R. Hayat, F. U. Hassan and M. Islam, 2012. Temporal changes in soil urease, alkaline phosphatase and dehydrogenase activity in rainfed wheat field of Pakistan. **The Journal of Animal and Plant Sciences**, **22(2)**: 457-462.
- Akparobi, S. O., 2009. Effect of farmyard manures on the growth and yield of *Amaranthus cruentus*. **Agricultura Tropica Et Subtropica**, **42(1)**: 1-4.
- Ali, S and A. Bano, 2008. Leaf and nodule senescence in chickpea (*Cicer arietinum* L.) and the role of plant growth regulators. **Pakistan Journal Botany**, **40**: 2481-2492.
- Anil S. R and M. Singh, 2007. Effects of organic manures and fertilizers on organic matter and nutrients status of the soil. **Archives of Agronomy and Soil science**, **53(5)**: 519-528.
- Anju Singh and A. Vijayalakshmi, 2013. Effect of composted coirpith, composted pressmud and farmyard manure application on soil enzyme activities and leghaemoglobin content in nodules of green gram (*Vigna radiata* L.). **International Journal of Current Research**, **5(10)**: 3035-3037.
- Annadurai, B., N. Arunachalam and K. Mahalingam, 2005. Effect of tank silt and pressmud mixture amendment on the physical properties of *Theri*-soils. **Journal of Soil and Crops**, **15(1)**: 26-29.
- Anuradha, CH., R. Thatikunta, G. Swarajyalakshmi and P. Prasadini, 2011. Studies on effect of organic agricultural inputs on soil nutrient availability and plant development in green gram (*Phaseolus aureus* Wilczek). **The Journal of Research ANGRAU**, **39(1&2)**: 64-68.
- Aon, M.A and A. C. Colaneri, 2001. Temporal and spatial evolution of enzymatic activities and physico-chemical properties in an agricultural soil. **Applied Soil Ecology**, **18**: 255-270.
- Appleby, C. A and F. J. Bergersen, 1980. Preparation and experimental use of leghaemoglobin. In: **Methods for Evaluating Biological Nitrogen Fixation** (ed. Bergersen F. J.). John Wiley and Sons, Chichester, pp 315-336.
- Appleby, C. A., 1974. Leghaemoglobin. In *The Biology of Nitrogen Fixation* (Quispel, A., ed). American Elsevier Publishing Co., New York, pp- 521-544,
- Arjumand banu, S. S. A., B. A. Nag and E. T. Puttaiah, 2013. Effectiveness of farmyard manure, poultry manure and fertilizer- NPK on the growth parameters of French bean (*Phaseolus vulgaris*) in Shimoga, Karnataka. **Global Journal of Current Research**, **1(1)**: 31-35.
- Arnon, D. E., 1949. Copper enzymes in isolated chloroplast. **Plant Physiology**, **24**: 1-5 (Cited by: S. Sadasivam and A. Manickam. 1997. *Biological methods*, New Age International (Pvt.) Ltd. Publishers, New Delhi, p.7).
- Aruna, P., G. Prabhakara Reddy and G. K. Sagar, 2012. Effect of integrated nitrogen management on growth, yield, quality and post-harvest nutrient status of soil in aerobic rice (*Oryza sativa* L.). **Crop Research**, **43(1, 2 & 3)**: 1-4.

-
- Aslam, M., M. A. Khan, I. U. Awan, E. A. Khan, A. A. Khan and G. Jilani, 2011. Effect of single and combined use of various organic amendments on wheat grown over green manured soil: 1. growth and attributes. **Pakistan Journal of Nutrition**, **10(7)**: 640-646.
- Awotoye, O. O., I. S. Adebola and A. I. Mokwenye, 2014. Response of soil chemical properties to ashed and unashed agro-wates amendments. **International Journal of Environmental Sciences**, **4(5)**: 831-839.
- Ayesha Parveen, A and C. K. Padmaja, 2010. Bioconversion of Municipal Solid Waste (MSW) and Water Hyacinth (WH) into organic manure by fungal consortium. **Journal of Sustainable Development**, **3(1)**: 91-97.
- Ayesha Parveen, A., 2011. Efficacy of cellulolytic fungi and actinomycetes in converting municipal solid waste and water hyacinth into organic manure and bits influence on test crop- *Capsicum annuum* L. (chilli). A Ph.D Thesis submitted to Avinashilingam Deemed University for Women, Coimbatore, pp. 150-152.
- Ayoola . O. T and E. A. Makinde, 2014. Soil nutrient dynamics, growth and yield of green maize and vegetable cowpea with organic-based fertilizer. **Archives of Agronomy and Soil Science**, **60(2)**: 183-194.
- Ayoola, O. T and O. N. Adeniyana, 2006. Influence of poultry manure and NPK fertilizer on yield and yield components of crops under different cropping systems in south west Nigeria. **African Journal of Biotechnology**, **5**: 1386-1392.
- Ayyasamy, P. M., R. Yasodha, S. Rajakumar, P. Lakshmanaperumalsamy, S. Lee and P. K. S. M. Rahman, 2008. Impact of sugar effluent on growth and biochemical characteristics of terrestrial and aquatic plants. **Environmental Contamination and Toxicology**, **81(5)**: 449-454.
- Aziz, T., S. Ullah, A. Sattar, M. Nasim, M. Farooq and M. M. Khan, 2010. Nutrient availability and maize (*Zea mays*) growth in soil amended with organic manures. **International Journal of Agriculture & Biology**, **12(4)**: 621-624.
- Babita, B., R. Chandra and R. Shri, 2012. Long-term application of fertilizer and manure on rice productivity and soil biological properties. **International Journal of Agriculture, Environment and Biotechnology**, **5(4)**: 429-433.
- Badar, R and S. A. Qureshi, 2014. Composted rice husk improves the growth and biochemical parameters of sunflower plants. **Journal of Botany**, doi.org/10.1155/2014/427648.
- Balakrishnan, V., K. Venkatesan and K. C. Ravindran, 2007. The influence of halophytic compost, farmyard manure and phosphobacteria on soil microflora and enzyme activities. **Plant Soil Environment**, **53(4)**: 186-192.
- Banik, N. C and K. Sengupta, 2014. Production potential realization and quality enhancement of mung bean through integrated nutrient management. **Journal of Crop and Weed**, **10(2)**: 287-291.

-
- Bansal, O. P., G. Singh and P. Katiyar, 2013. Effect of untreated sewage effluent irrigation on heavy metal content, microbial population and enzymatic activities of soils in Aligarh. **Journal of Environmental Biology**, **35**: 641-647.
- Baranisrinivasan, P., 2011. Chlorophyll and nutrient content in black gram using organic manures under drought stress. **Bulletin of Environmental, Pharmacology and Life Sciences**, **1(1)**: 24-29.
- Barrena, R., F. Vázquez and A. Sánchez, 2008. "Dehydrogenase activity as a method for monitoring the composting process." **Bioresource Technology**, **99(4)**: 905-908.
- Basir, A., Z. Shah, M. Nadeem, J. Bakht and Z. H. Khan, 2008. Effect of phosphorus and farmyard manure on agronomic traits of chickpea (*Cicer arietinum* L.). **Sarhad Journal of Agriculture**, **24(4)**: 567-572.
- Baviskar, V. S., H. S. Damane, V. C. Raj and P. G. Shete, 2012. Growth, yield and quality parameters of clusterbean [*Cyamopsis tetragonoloba* (L.) Taub.] as influenced by organic fertilizers and different levels of sulphur for vegetable purpose. **Crop Research**, **43(1, 2 &3)**: 52-54.
- Bekeko, Z., 2014. Improving and sustaining soil fertility by use of enriched farmyard manure and inorganic fertilizers for hybrid maize (BH-140) production at West Hararghe zone, Oromia, Eastern Ethiopia. **African Journal of Agricultural Research**, **8(14)**: 1218-1224.
- Beringer, J. E., N. Brewin, A.W. B. Johnston, H. M. Schulman and D. A. Hopwood, 2009. "The Rhizobium-Legume Symbiosis." Proceeding of the Royal Society of London. Series B, **Biological Sciences**, **204.1155 (1979)**: 219-33. 11 Apr. 1979. Web. 05 Nov. 2009. <<http://www.jstor.org/stable/77522>>.
- Bhattacharyya, P and H. L. C. Tandon, 2002. Dictionary of biofertilizers and organic fertilizers. **Fertilizer development and consultation organization**, New Delhi. pp- 165
- Bhattacharyya, R., S. Chandra, R. D. Singh, S. Kundu, A. K. Srivastva and H. S. Gupta, 2007. Long-term farmyard manure application effects on properties of a silty clay loam soil under irrigated wheat-soyabean rotation. **Soil and Tillage Research**, **94(2)**: 386-396.
- Bhosale, P. R., S. G. Chonde, D. B. Nakade and P. D. Raut, 2012. Studies on physico-chemical characteristics of waxed and dewaxed pressmud and its effect on water holding capacity of soil. **ISCA Journal of Biological Sciences**, **1(1)**: 35-41.
- Bhuvaneshwari, B., V. Subramanian and P. Malliga, 2011. Comparative studies of cyanopith and cyanospray biofertilizers with chemical fertilizers on sunflower (*Helianthus annuus* L.). **International Journal of Environmental Sciences**, **1(7)**:1515-1525.
- Bindhu, S., 2009. Utilization of biodynamic compost on the sustainable growth and yield of soya bean (*Glycine max* L. Var.c.Soy.3) M.Sc Thesis. Avinashilingam University for Women, Coimbatore. P.36.

-
- Bitzer, J. I. B., J.T. Trevors and G. J. Boland, 2006. A polyphasic approach for assessing maturity and stability in compost intended for suppression of plant pathogens. **Applied Soil Ecology**, **34**: 65–81.
- Bohme, L., U. Langer and F. Bohme, 2005. Microbial biomass, enzyme activities and microbial community structure in two European long-term field experiments. **Agriculture, Ecosystem and Environment**, **109**: 141-152.
- Bokhtiar, S. M., G. C. Paul, M. A. Rashid and A. B. M. Rahman, 2001. Effect of pressmud and organic nitrogen on soil fertility and yield of sugarcane grown in high Ganges River Flood plain soils of Bangladesh. **Indian Sugar**, **L1**: 235-240.
- Brar, N. K., 2003. Ecological studies on nitrogen management in bed planted durum wheat (*Triticum durum* Desf.). M.Sc. Thesis, Department of Agronomy and Agrometeorology, PAU, Ludhiana.
- Brzezinska, M., W. Stepniewska, Z. Stepniewska, G. Przywara and T. Wlodarczyk, 2001. Effect of oxygen deficiency on soil dehydrogenase activity in a pot experiment. **International Agrophysics**, **15**: 145-149.
- Cambardella, C. A., T. L. Richard and A. Russell, 2003. Compost mineralization in soil as a function of composting process conditions. **European Journal of Soil Biology** (in press).
- Campo, R. J., U. B. Albino, M. Hungria, 2000. Importance of molybdenum and cobalt to the biological nitrogen fixation. In: F.O. Pedrosa, M. Hungria, G. Yates, W.E. Newton (eds.). Nitrogen Fixation: From Molecules to Crop Productivity, pp. 597-598, Springer, Netherlands.
- Cao, H., H. Sun and H. Yang, 2003. A review: Soil enzyme activity and its indication for soil quality. **Chinese Journal of Applied and Environment Biology**, **9(1)**: 105- 109.
- Carlier, E., S. Castro and A. Fabra, 2013. Production of reactive oxygen species in peanut nodules. **Communications in Plant Sciences**, **3(1-2)**: 11-14.
- Chaitanya, T., G. Padmaja and P. C. Rao, 2013. Activity of soil urease, phosphatase and dehydrogenase as influenced by integrated nutrient management in tomato (*Lycopersicon esculentum* L.) grown on alfisol. **Crop Research**, **45(1, 2 & 3)**: 210-214.
- Chaitanya, T., G. Padmaja, P. Chandrasekhar Rao and K. B. Suneetha Devi, 2011. Effect of integrated nutrient management on soil dehydrogenase activity, nutrient uptake and fruit yield of tomato (*Lycopersicon esculentum* L.). **The Journal of Research ANGRAU**, **39(4)**:63-65.
- Chang, E. H., C. H. Wang, C. L. Chen and R. S. Chung, 2014. Effects of long-term treatments of different organic fertilizers complemented with chemical N fertilizer on the chemical and biological properties of soils. **Soil Science and Plant nutrition**, **60**: 499-511.

-
- Chang, E. H., R. S. Chung and Y. H. Tsai, 2007. Effect of different application rates of organic fertilizer on soil enzyme activity and microbial population. **Soil Science and Plant Nutrition**, **53**: 132-140.
- Chang, K. L and R. H. Bray, 1951. Determination of calcium and magnesium in soil and plant material. **Soil Science**, **72**: 449 – 458.
- Charan Kumar, M. E., A. R. Gaval, P. Rathord and M. Chandregowda, 2011. Effect of organic manures and bio-fertilizers on soil chemical properties and plant nutrient uptake in *Stevia* (*Stevia rebaudiana*). **Journal of Ecobiology**, **29(3)**: 181-187.
- Chaudhari, I. A., D. M. Patel, G. N. Patel and S. M. Patel, 2013. Effect of various organic sources of nutrients on growth and yield of summer green gram [*Vigna radiata* (L.) Wilczek]. **Crop Research**, **46(1, 2 & 3)**: 70-73.
- Chesti, M. H., A. Kohli and A. K. Sharma, 2013. Effect of integrated nutrient management on yield of and nutrient uptake by wheat (*Triticum aestivum*) and soil properties under intermediate zone of Jammu and Kashmir. **Journal of the Indian Society of Soil Science**, **61(1)**: 1-6.
- Chinyere, C. G., A. E. Iroha and U. E. Amadike, 2013. Effects of altering palm oil and cassava mill effluents pH before dumping on dumpsite soils physico-chemical parameters and selected enzyme activities. **Journal of Biodiversity and Environmental Sciences**, **3(4)**: 46-58.
- Choudhary, O. P., A. S. Sosan, M. S. Bajwa and M. L. Kapur, 2004. Effect of sustained sodic irrigation and application of gypsum and farmyard manure on yield and quality of sugarcane under semi-arid conditions. **Field Crops Research**, **87**: 103-116.
- Cifuentes, R., R. De Leon, C. Porres and C. Rolz, 2013. Windrow composting of waste sugarcane and pressmud mixtures. **Sugar Tech**, **15(4)**:406-411.
- Corstanje, R., R. Schulin and R. Lark, 2007. Scale - dependent Relationships between soil organic Matter and urease Activity. **European Journal of Soil Science** **58(5)**: 1087-1095.
- Das, P and S. K. Bandyopadhyay, 2011. Nodulation study in some varieties of French bean crop (*Phaseolus vulgaris* L.). **Biological Forum**, **3(1)**: 61-66.
- Dash, D., H. Patro, R. C. Tiwari and M. Shahid, 2010. Effect of organic and inorganic sources of N on yield attributes, grain yield and straw yield of rice (*Oryza sativa*). **Research Journal of Agronomy**, **4(2)**: 18-23.
- Dashora, P and S. Gupta, 2012. Effect of integrated nutrient management on yield, nutrient uptake and changes in soil fertility under sugarcane- ratoon system in humid agro eco-system of Rajasthan. **Crop Research**, **43 (1, 2 & 3)**: 216-221.
- Datt, N., Y. P. Dubey and R. Chaudhary, 2013. Studies on impact of organic, inorganic and integrated use of nutrients on symbiotic parameters, yield, quality of French- bean (*Phaseolus vulgaris* L.) Vis-à-vis soil properties of an acid alfisol. **African Journal of Agricultural Research**, **8(22)**: 2645-2654.

-
- Dayananda, N and B. C. Mallesha, 2009. Effect of microorganisms enriched mushroom spent coirpith on growth of tomato. **Journal of Soil Biology and Ecology**, **29(1&2)**: 119-125.
- Deivasigamani, S and K. Thanunathan, 2011. Eco-farming techniques on production potential, nutrient uptake and post harvest soil nutrient status of Glori lily (*Gloriosa superba* L.). **Plant Archives**, **11(1)**: 215-218.
- Dharani, A and G. Sarojini, 2014. Composting of coir waste using bacteria (*Pseudomonas* and *Streptococci*) and fungi (*Aspergillus* and *Rhizopus*) and their effect on sugarcane plant growth. **International Journal of Advanced Research in Biological Sciences**, **1(5)**: 71-75.
- Dikshit P. R and S. K. Khatik, 2002. Influence of organic manures in combination with chemical fertilizers on production, quality and economic feasibility of soybean in typical haplustert of Jabalpur. **Legume Research**, **25(1)**: 53 –56.
- Dilly, O., J. Munch and E. M. Pfeiffer, 2007. Enzyme activities and litter decomposition in agricultural soils in northern, central and southern Germany. **Journal of Plant Nutrition and Soil science**, **170**: 197.
- Dotaniya, M. L., S. C. Datta, D. R. Biswas and K. Kumar, 2014. Effect of organic sources on phosphorus fractions and available phosphorus in typical haplustept. **Journal of the Indian Society of Soil Science**, **62(1)**: 80-83.
- Duranti, M., 2006. Review: Grain legume protein and nutraceutical properties. **Fitoterapia**, **77**: 67 – 82.
- Eifediyi, E. K., S. U. Remison and V. B. Okaka, 2010. The effect of farmyard manure on the dry matter components of two cucumber varieties. **Nature and Science**, **8(5)**: 16-22.
- Ellfolk, N., 1972. Leghaemoglobin, a plant haemoglobin. **Endeavour**, **31**: 139-142.
- Ewulo, B. S., S. O. Ojeniyi and D. A. Akanni, 2008. Effect of poultry manure on selected soil physical and chemical properties, growth, yield and nutrient status of tomato. **African Journal of Agricultural Research**, **3(9)**: 612-616.
- Feichtinger F., E. Erhart and W. Hartl, 2004. Net N-mineralisation related to soil organic matter pools. **Plant Soil and Environment**, **50**: 273–276.
- Fliebbach, A., H. R. Oberholzer, L. Gunst and P. Mader, 2007. Soil organic matter and biological soil quality indicators after 21 years of organic and conventional farming. **Agriculture Ecosystems and Environment**, **118**: 273-284.
- Frederick, O. O., A. E. Iroha and E. C. Oswald, 2014. Evaluation of the concentration of selected heavy metals and the effects on soil enzymatic activities in an abandoned cement factory Nigercem Nkalagu and its environs. **International Journal of Biochemistry Research and Review**, **4(1)**: 16-27.

-
- Fuchs, J. G., T. Kupper, L. Tamm and K. Schenk, 2008. "Compost and digestate: sustainability, benefits, impacts for the environment and for plant production," in Proceedings of the International Congress *CODIS*, p. 325, Solothurn, Switzerland.
- Gad, N., 2006. Increasing the efficiency of nitrogen fertilization through cobalt application to pea plant. **Research Journal of Agriculture and Biological Sciences**, **2(6)**: 433-442.
- Gangwar, S and M. Dubey, 2013. Impact of organic nutrient management practices on quality of Basmati rice (*Oryza sativa* L.). **Crop Research**, **46(1, 2 & 3)**: 6-10.
- Gao, Y., P. Zhou, L. Mao, Y. Zhi and W. J. Shi, 2010. Assessment of effects of heavy metals combined pollution on soil enzyme activities and microbial community structure: Modified ecological dose-response model and PCR-RAPD, **Environmental Earth Sciences**, **60**: 603-612.
- Ghosh, D. C and A. K. Das, 1998. Effects of bio-fertilizers and growth regulations on growth and productivity of potato (*Solanum tuberosum*). **Indian Agriculture**, **42**: 109-113.
- Ghosh, P. K., K. K. Bandyopadhyay, A. K. Tripathi, K. M. Hati, K. G. Mandal and A. K. Misra, 2003. Effect of integrated management of farmyard manure, phosphocompost, poultry manure and inorganic fertilizers for rainfed sorghum (*Sorghum bicolor*) in vertisols of central India. **Indian Journal of Agronomy**, **48(1)**: 48-52.
- Ghulam, S., M. J. Khan, K. Usman and Habib-ur-Rehman, 2010. Impact of pressmud as organic amendments on physico-chemical characteristics of calcareous soil. **Sarhad Journal of Agriculture**, **26(4)**: 565-570.
- Ghulam, S., M. J. Khan, K. Usman and Shakeebullah, 2012. Effect of different rates of pressmud on plant growth and yield of lentil in calcareous soil. **Sarhad Journal of Agriculture**, **28(2)**: 249-252.
- Gil, G. J. C., C. Plaza, S. P. Rovira and A. Polo, 2000. Long terms effects of municipal solid waste compost application on soil enzyme activities and microbial biomass. **Soil Biology and Biochemistry**, **32**: 1907-1913.
- Goering H. D and P. J. Van Soest, 1975. **Forage Fibre Analysis**, US Dept of Agriculture, Agricultural Research Service, Washington.
- Gopal, M and A. Gupta, 2001. Coir waste for a scientific cause. **Indian Coconut Journal**, **31(12)**: 13-15
- Goyal, S., S. K. Dhull and K. K. Kapoor, 2005. Chemical and biological changes during composting of different organic wastes and assessment of compost maturity. **Bioresource Technology**, **96**: 1584-1591.
- Graham, P. H and C. A. Parker, 1963. Leghaemoglobin and symbiotic nitrogen fixation. **Australian Journal of Science**, **23**:231.

-
- Gu, Y., P. Wang and C. H. Kong, 2009. Urease, dehydrogenase and polyphenoloxidase activities in paddy soil influenced by allelopathic rice variety. **European Journal of Soil Biology**, **45**: 436-441.
- Gupta, L. M., S. Kumar, M. Gupta and V. Sharma, 2013. Integrated nutrient management for growth and yield in Glory Lily (*Gloriosa superba* L.). **Journal of Medical Plant Research**, **7(43)**: 3197-3201.
- Gurumoorthi, P., S. S. Kumar, V. Vadivel and K. Janardhanan, 2003. Studies on Agrobotanical characters of different accessions of velvet bean collected from Western Ghats, South India. **Tropical and Subtropical Agroecosystems**, **2(3)**: 105-115.
- Hafeez-ur-Rahman, H. U., M. Rafiq, G. Nabi and A. Samad, 2007. Effect of soil media on peach seed germination and seedling growth in climate conditions of orakzai agency (FATA). **Sarhad Journal of Agriculture**, **23(3)**: 689-691.
- Haq, I., S. G. Khattak, H. Rahman, A. Ali and M. Salim, 2001. Effect of various amendments on the yield of rice crop under saline-sodic conditions in Mardan/Swabi districts. **International Journal of Agriculture and Biology**, **3(3)**: 289-291.
- Hedge, J. E and B. T. Hofreiter, 1962. Determination of total carbohydrate by anthrone method. In: **Carbohydrate chemistry**, Whistler, R.L and J. N. Bemiller (eds.), Academic Press, New York, Pp. 163 – 201.
- Hinojosa, M. B., J. A. Carreira and R. Garcla-Rulz, 2004. Soil moisture pre-treatment effects on enzyme activities as indicators of heavy metal-contaminated and reclaimed soils. **Soil Biology and Biochemistry**, **36**: 1559-1568.
- Hossain, M. A and Y. Ishimine, 2007. Effects of farmyard manure on growth and yield of turmeric (*Curcuma longa* L.) cultivated in dark-red soil, red soil and gray soil in Okinawa, Japan. **Plant Production Science**, **10(1)**: 146-150.
- Humphries, E., 1956. Mineral components and ash analysis, In: Paech, K and M. V. Tracey (eds.), **Modern methods of plant analysis**, Springer Verlag, Berlin-Gottinger-Heidelberg, pp. 468-502.
- Ibrahim, M., Anwar-ul-Hassan, M. Iqbal and E. E. Valeem, 2008. Response of wheat growth and yield to various levels of compost and organic manure. **Pakistan Journal of Botany**, **40(5)**: 2135-2141.
- Iqbal M., A. Hassan, M. Ibrahim, 2008. Effects of tillage systems and mulch on soil physical quality parameters and maize (*Zea mays* L.) yield in semi-arid Pakistan. **Biological Agriculture and Horticulture**. **25**: 311-325.
- Iqbal, S., H. Z. Khan, Ehsanullah and M. Yaseen, 2014. Impact of level and source of compost based organic material on the productivity of autumn maize (*Zea mays* L.). **Pakistan Journal of Agricultural Sciences**, **51(1)**: 41-47.

-
- Jackson, M. L., 1973. **Soil chemical Analysis**. Prentice Hall of India (Pvt.) Ltd., New Delhi, pp. 12 – 205.
- Jat, M. K., H. S. Purohit and P. Singh, 2014. Effect of farmyard manure, fertility levels and bio-fertilizers on growth, yield and quality of sorghum. **Research on Crops**, **15(1)**: 78-83.
- Jeenie, P. Sharma, V. Khanna and Kunal, 2010. Influence of fluchloralin on growth of *Rhizobium* and PBS, symbiotic parameters and grain yield in mungbean. **Journal of Food Legumes**, **23(1)**: 71-73.
- Jeyapriya, S. P and M. K. Saseetharan, 2007. Study on municipal solid waste reuse characteristic and leachate samples of Coimbatore city. **Nature Environment and Pollution Technology**, **6**: 149-152.
- Joshi, N and S. Sharma, 2010. Physico-chemical characterization of sulphidation pressmud composted pressmud and vermicomposted pressmud. **Report and Opinion**, **2(12)**: 5- 9
- Jothimani, 2002. Integrated eco-friendly management of solid wastes of viscose pulp industry, Ph.D. Thesis, Environmental Science, Tamil Nadu Agricultural University, Coimbatore. Pp.76
- Kadwe, S. B., C. N. Hatmode, R. D. Deotale, C. N. Chore and A. Thorat, 2003. Effect of different levels of fertilizers and pressmud on morpho-physiological parameters and yield of groundnut. **Journal of Soil and Crops**, **13(2)**: 305-308.
- Kalaivanan, D and K. O. Hattab, 2008. Influence of enriched pressmud compost on soil chemical properties and yield of rice. **Research Journal of Microbiology**, **3**: 254-261.
- Kang, H., S. Kang and D. Lee, 2009. Variations of soil enzyme activities in a temperate forest soil. **Ecological Research**, **24**: 1137-1143.
- Kanmani, P., P. Karuppasamy, C. Pothiraj and V. Arul, 2009. Studies on lignocelluloses biodegradation of coir waste in solid state fermentation using *Phanerocheate chrysosporium* and *Rhizopus stolonifer*. *African Journal of Biotechnology*, **8(24)**: 6880-6887.
- Kannan, J and M. Prasanthrajan, 2008. Recycling of industrial solid waste, pressmud as a manure. **Agricultural Science Digest**, **28(3)**: 192-194.
- Karanja, J., S. Nguluu and M. Gatheru, 2012. Farmyard manure reduces the virulence of *Alectra vogelii* (Benth) on cowpea (*Vigna unguiculata*). **African Journal of Plant Science**, **6(3)**: 130-136.
- Kaur, N and D. S. Benipal, 2006. Effect of crop residue and farmyard manure on K forms on soils of long term fertility experiment. **Indian Journal Crop Science**, **1(1-2)**:161-164.
- Kawashima, K., N. Suganuma, M. Tamaoki and H. Kouchi, 2014. Two types of pea leghaemoglobin genes showing different O₂- binding affinities and distinct patterns of spatial expression in nodules. **Plant Physiology**, **125**: 641-651.

-
- Kayikcioglu, H. H and N. Okur, 2011. Evolution of Enzyme Activities during composting of tobacco dust. **Journal of Waste Management and Research**, **29(11)**: 1124–1133.
- Keener, H. M., D. L. Elwell and M. J. Monnin, 2000. Procedures and equations for sizing of structures and windrows for composting animal mortalities. **Applied Engineering in Agriculture**, **16(6)**: 681-692.
- Kizilkaya, R and O. Dengiz, 2010. Variation of land use and land cover effects on some soil physico-chemical characteristics and soil enzyme activity. **Zemdirbyste-Agriculture**, **97(2)**: 15-24.
- Kosmachevskaya, O. V., K. B. Shumaev, R. Arredondo-Peter and A. F. Topunov, 2007. Influence of *tert*-butyl hydroperoxide and nitrosogluthione on *Escherichia coli* cells expressing leghaemoglobin. **Journal of Stress Physiology and Biochemistry**, **3(1)**:18-24.
- Krishnakumar, S., A. Saravanan, K. Ramesh, S. K. Natarajan, V. Veerabadran and S. Mani, 2005. Organic farming: Impact on rice (*Oryza sativa* L.) productivity and soil health. **Asian Journal of Plant Sciences**, **4(5)**: 510 – 512.
- Krishnakumar, S., A. Saravanan, S. K. Natarajan, V. Veerabadran and S. Mani, 2005. Microbial population and enzymatic activity as influenced by organic farming. **Research Journal of Agriculture and Biological Sciences**, **1(1)**: 85-88.
- Krishnasamy, R., J. Somasundaram and P. Savithri, 2002. Sewage sludge-coirpith pellets: A source of organic manure. Symposium no.57, 17thWCSS, Thailand, pp- 344-354.
- Krouma, A and C. Abdelly, 2003. Importance of iron use-efficiency of nodules in common bean (*Phaseolus vulgaris* L.) for iron deficiency chlorosis resistance. **Journal of Plant Nutrition and Soil Science**, **166 (4)**: 525-528.
- Krzywy-Gawronska, E., 2012. Enzymatic activity of urease and dehydrogenase in soil fertilized with GWDA compost with or without a PRPSOL addition. **Polise Journal of Environmental Studies**, **21(4)**: 949-955.
- Kucuk, C., 2011. Inoculation with *Rhizobium spp.* in kidney bean (*Phaseolus vulgaris* L.) varieties. **Zemdirbyste=Agriculture**, **98(1)**:49–56.
- Kumar, D and Y. S. Shivay, 2007. Green manuring: Benefits, management and constraints. **Kurukshetra**, **55(4)**: 12-15
- Kumar, J. S. A., J. Dawson, A. Kumar and K. H. Reddy, 2011. Effect of rice (*Oryza sativa* L.) to integrated nutrient management on yield attributes, yield and microbial population under system of rice intensification. **Advance Research Journal of Crop Improvement**, **2(1)**: 108-111.
- Kumar, S., S. Chaudhuri and S. K. Maiti, 2013. Soil dehydrogenase activity in natural and mine soil- A Review. **Middle-East Journal of Scientific Research**, **13(7)**: 898-906.

-
- Kumar, T., V. Kumar, G. Singh, O. P. Singh and R. G. Singh, 2007. Effect of pressmud and inorganic fertilizers on yield and nutrient uptake by rice and its residual effect on succeeding wheat and soil fertility in rainfed lowlands. **International Journal of Agricultural Sciences**, **3(1)**:220-222.
- Kumaresan, M., V. S. Shanmugasundaram and T. N. Balasubramanian, 2003. Bio-composting of organic wastes. **Agricultural Science Digest**, **23(1)**: 67-68.
- Kumarimanimuthu, V. D., 2008. Utilization of agro-industrial waste in maize mased cropping system. **Agricultural Science Digest**, **28(3)**: 195-197.
- Kun, E and L. G. Abood, 1949. Calorimetric estimation of succinic acid and dehydrogenase by triphenyl tetrazoleum chloride. **Science**, **109**: 144 – 146.
- Kussainova, M., M. Durmus, A. Erkokak and R. Kizilkaya, 2013. Soil dehydrogenase activity of natural macro aggregates in a toposequence of forest soil. **Eurasian Journal of soil Science**, **2**: 69-75.
- Lakhdar, A., R. Scelza, R. Scotti, M. A. Rao, N. Jedidi, L. Gianfreda and C. Abdelly, 2010. The effect of compost and sewage sludge on soil biologic activities in salt affected soil. **Journal of soil Science and Plant nutrition**, **10(1)**: 40-47.
- Lakshmanan, P and Bommaraju, 2003. Mushroom fungus for bio-manure production. The Hindu, December11. Pp.15.
- Latha, P., P. Thangavel, G. Rajannan and K. Arulmozhiselvan, 2013. Performance of multicut fodder sorghum as influenced by distillery industrial byproducts. **Crop Research**, **46(1,2 & 3)**: 48-54.
- Law-Ogbomo, K. E. L., A. U. Osaigbovo and I. Ekwueme, 2012. Agronomin efficacy of compost manure and NPK fertilizer on some soil chemical properties and maize production in an ultisol environment. **Journal of Applied and Natural Science**, **4(2)**: 172-177.
- Laxmaninarayana, K., K. S. John, C. S. Ravindran and S. K. Naskar, 2011. Effect of lime, inorganic and organic sources on soil fertility, yield, quality and nutrient uptake of sweet potato in alfisols. **Communications in Soil Science and Plant Analysis**, **42**: 2515-2525.
- Lazcano, C., M. G. Brandon and J. Dominguez, 2008. Comparison of the effectiveness of composting and vermicomposting for the biological stabilization of cattle manure. **Chemosphere**, **72**: 1013-1019.
- Liang, Q., H. Chen, Y. Gong, H. Yang, M. Fan and Y. Kuzyakov, 2014. Effects of 15 years of manure and mineral fertilizers on enzyme activities in a north China plain soil. **European Journal of soil Biology**, **60**: 112-119.
- Liang, Y., M. Nikolic, Y. Peng, W. Chen and Y. Jiang, 2005. Organic manure stimulates biological activity and barley growth in soil subject to secondary salinization. **Soil Biology and Biochemistry**, **37**: 1185–1195.

-
- Lindsay, W. L and W. A. Norvell, 1978. Development of a DTPA soil test for zinc, iron, manganese and copper. **Soil Science Society of America Journal**, **42**: 421–448.
- Lira-Ruan, K., G. Sarath, R. V. Klucas and R. Arreedondo-Peter, 2000. Characterization of leghaemoglobin from a mimosoid legume, *Leucaena esculenta*, root nodules. **Revista Brasileira De Fisiologia Vegetal**, **12(1)**: 37-44.
- Lodhi, A., N. N. Malik, T. Mahmood and F. Azam, 2000. Response of soil micro flora, microbial biomass and some soil enzymes to Baythroid (an insecticide). **Pakistan Journal of Biological Sciences**, **3**: 868-871.
- Lopez, M., J. A. Herrera-Cervera, C. Iribarne, N. A. Tejera and C. Lluch, 2008. Growth and nitrogen fixation in *Lotus japonicus* and *Medicago truncatula* under NaCl stress: nodule carbon metabolism. **Journal of Plant Physiology**, **165(6)**: 641-650.
- Lowry, O. H., N. J. Rosebrough, A. L. Farr and R. J. Randall, 1951. Protein measurement with folin - phenol reagent. **The Journal of Biochemistry** **193**: 265 – 275.
- Mahalakshmi Priya, A and A. Vijayalakshmi, 2001. Biometric parameters of cluster bean as influenced by sago waste and pressmud. **Journal of Phytotherapy Research** **14(1)**: 99-100.
- Mahamuni, S. V., K. K. Kulkarni, M. N. Mulik, V. S. Jadhav, K. P. Shukla, K. T. Nanaware, S. B. Deokate, M. H. Phadtare and R. J. Marathe, 2013. Quality intensification of compost prepared from agro-industrial wastes by phosphate solubilizing fungi. **International Journal of Bioassays**, **02(12)**: 1548-1552.
- Maheshbabu, H. M., R. Hunje, N. K. B. Patil and H. B. Babalad, 2008. Effect of organic manures on plant growth, seed yield and quality of soyabean. **Karnataka Journal of Agricultural Sciences**, **21(2)**: 219-221.
- Mahmoud, E., N. Abd EL-Kadar, P. Robin, N. Akkal-Corfini and L. Abd EL-Rahman, 2009. Effects of different organic and inorganic fertilizers on cucumber yield and some soil properties. **World Journal of Agricultural Sciences**, **5(4)**: 408-414.
- Mane, V. P., S. S. Patil, A. A. Syed and M. M. V. Baig, 2007. Bioconversion of low quality lignocellulosic agricultural waste into edible protein by *Pleurotus sajor – caju* (Fr.) Singer. **Journal of Zhejiang University Science B**, **8(10)**: 745 – 751.
- Manikandan, K and V. Subramanian, 2010. Integrated nutrient management for sustainable groundnut cultivation in *theri* soil. **An Asian Journal of Soil Science**, **5(1)**: 134-137.
- Manonmani, M and R. Anand, 2002. Vermicomposted an uprising fertilizers for lady's finger (*Abelmoschus esculentus*). **Kisan World**, **29**:40.
- Marino D, C. Pucciariello , A. Puppo , P. Frendo, 2009. The redox state, a referee of the legume-rhizobia symbiotic game. In: Jacquot JP, ed. **Advances in Botanical Research: Oxidative Stress and Redox Regulation in Plants** , **52**: 115–151.
-

-
- Marino, D., I. Damiani, S. Gucciardo, I. Mijangos, N. Pauly and A. Puppo, 2013. Inhibition of nitrogen fixation in symbiotic *Medicago truncatula* upon Cd exposure is a local process involving leghaemoglobin. **Journal of Experimental Botany**, **64(18)**: 5651- 5660.
- Masciandaro, G., B. Ceccanti, V. Ronchi and C. Bauer, 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.
- Masilamani, P., K. Annadurai, P. Saravanapandian and A. Bharathi, 2001. Effect of soil reaction and organic matter on germination and seedling vigour of babul (*Acacia nilotica* Linn.). **Madras Agricultural Journal**, **88(4-6)**: 287-290.
- Massoumi, A and A.H. Cornfield (1963). A rapid method for determining sulphate in water extracts of soils. **Analyst**. **88**: 321 - 322
- Mathakiya, H.V and M.B. Meisheri, 2003. Feasibility of using some solid industrial wastes on cabbage and its effect on yield, Nutrient absorption and soil properties. **Indian Journal of Agricultural Chemistry**, **36**: 141-151.
- Maunde, S. M., I. M. Haruna, A. I. Sharifai and A. H. Hassan, 2011. Productivity of soyabean/ sesame mixture as influenced by farmyard manure and plant arrangement in the northern guinea savanna ecological zone of Nigeria. **Production Agriculture and Technology Journal**, **7(2)**: 127-136.
- Meena, M. C., K. P. Patel and V. P. Ramani, 2013. Effect of FYM and sewage sludge application on yield and quality of pearl millet-mustard cropping system and soil fertility in a typical haplustept. **Journal of the Indian Society of Soil Science**, **61(1)**: 55-58.
- Meena, V. S., B. R. Maurya, R. S. Meena, S. K. Meena, N. P. Singh, V. K. Malik, V. Kumar and L. K. Jat, 2014. Microbial dynamics as influenced by concentrate manure and inorganic fertilizer in alluvium soil of Varanasi, India. **African Journal of Microbiology Research**, **8(3)**: 257-263.
- Mehdizadeh, M., E. I. Darbandi, H. N. Rad and A. Tobeh, 2013. Growth and yield of tomato (*Lycopersicon esculentum* Mill.) as influenced by different organic fertilizers. **International Journal of Agronomy and Plant Production**, **4(4)**: 734-738.
- Menon, M. V., J. Krishnankutty, T. A. Saritha, P. J. Janardhanan and M. Priyalakshmi, 2014. Nutrient source combinations on yield and nutrient contents of Foetid Cassia (*Cassia Tora*) under open and shaded conditions. **Legume Research**, **37(2)**: 230-232.
- Mgbeze, G. C and Y. Abu, 2010. The effects of NPK and farmyard manure on the growth and development of the African yam bean (*Sphenostylis stenocarpa* Hochst ex. a rich). **African Journal of Biotechnology**, **9(37)**: 6085-6090.

-
- Minchin F. R., E. K. James and M. Becana, 2008. Oxygen diffusion, production of reactive oxygen and nitrogen species, and antioxidants in legume nodules. In: Dilworth M. J., E. K. James, J. I. Sprent, W. E. Newton (Eds) Nitrogen-fixing leguminous Symbioses, Springer, Dordrecht, pp 321-362.
- Mirza, B. B., M. S. Zia, N. Szombathova and A. Zaujec, 2005. Rehabilitation of soils through environmental friendly technologies: role of *Sesbania* and farmyard manure. **Agricultura Tropica Et Suntropica**, **38(1)**:12-17.
- Mohammadi, K. G. Heidari, S. Khalesro and Y. Sohrabi, 2011. Soil management, microorganisms and organic matter interactions: A review. **African Journal of Biotechnology**, **10(84)**:19840-19849.
- Mohammadi, K., 2011. Soil microbial activity and biomass as influenced by tillage and fertilization in wheat production. **American-Eurasian Journal Agriculture and Environmental Sciences**, **10(3)**: 330-337.
- Mohammadi, K., A. Ghalavand, M. Aghaalkhani, G. Heidari, B. Shahmoradi and Y. Sohrabi, 2011. Effect of different methods of crop rotation and fertilization on canola traits and soil microbial activity. **Australian Journal of Crop science**, **5(10)**: 1261- 1268.
- Mohammadi, K., G. Heidari, M. T. K. Nezhad, S. Ghamari and Y. Sohrabi, 2012. Contrasting soil microbial responses to fertilization and tillage systems in canola rhizosphere. **Saudi Journal of Biological Sciences**, **19**: 377-383.
- Mohan, S. C and K. K. Chandaragiri, 2007. Nutrient uptake and post harvest available soil nutrients under organic farming system in cotton + blackgram intercropping system. **International Journal of Plant Sciences**, **2(1)**: 120-123.
- Mohil, P and U. Jain, 2014. Application of NPK and farmyard manure on biomass production of *Amaranthus palmeri* Wats. **Asian Journal of Plant Science and Research**, **4(2)**: 7-12.
- Moinuddin, T., A. Dar, S. Hussain, M. M. A. Khan, N. Hashmi, M. Idrees, M. Naeem and A. Ali, 2014. Use of N and P biofertilizers together with phosphorus fertilizer improves growth and physiological attributes of chickpea. **Global Journal of Agriculture and Agricultural Sciences**, **2(3)**: 168-174.
- Mondini, C., M. A. S. Monedero, T. Sinicco and L. Leita, 2006. Evaluation of extracted organic carbon and microbial biomass as stability parameters in ligno-cellulosic waste composts. **Journal of Environmental Quality**, **35**: 2313–2320.
- Muhammad, D and R. A. Khattak, 2009. Growth and nutrient concentrations of maize in pressmud treated saline-sodic soils. **Soil & Environment**, **28(2)**: 145-155.
- Mujeeb. F., Rahmatullah, A. Hannan and M. Aamer Maqsood, 2008. Response of maize to diammonium phosphate and farmyard manure application on three different soils. **Pakistan Journal of Agricultural Sciences**, **45(3)**: 13-18.

-
- Murugaragavan, R., 2002. Distillery spentwash on crop production in dryland soils. M.Sc Thesis, Tamil Nadu Agriculture University, Coimbatore.
- Muthurayar, T and M. S. Dhanarajan, 2013. Biochemical changes during composting of coir pith waste as influenced by different agro industrial wastes. **Agricultural Sciences**, **4(5B)**: 28-30.
- Nath, D. J., B. Ozah, R. Baruah, R. C. Barooah, D. K. Borah and M. Gupta, 2012. Soil enzyme and microbial biomass carbon under rice-toria sequence as influenced by nutrient management. **Journal of the Indian Society of Soil Science**, **60(1)**: 20-24.
- Nath, R. T and Y. Janardan, 2011. Influence of inorganic and organic nutrient sources on soil enzyme activities. **Journal of the Indian Society of Soil Science**, **59(1)**: 54 – 59.
- Navascues, J., C. Perez-Rontome, M. Gay, M. Marcos, F. Yang, F. A. Walker, A. Desbois, J. Abian and M. Becana, 2012. Leghemoglobin green derivatives with nitrated hemes evidence production of highly reactive nitrogen species during aging of legume nodules. **Proceedings of the National Academy of Sciences**, **109(7)**: 2660-2665.
- Navase, P. V., A. M. Bafna and K. A. Shinde, 2011. Effect of N, P, K and FYM on growth and TSS of *Stevia*. **Crop Research**, **42(1, 2 & 3)**: 131-135.
- Nawab, K., Amanullah, P. Shah, A. Rab, M. Arif, M. Azim Khan, A. Mateen and F. Munsif, 2011. Impact of integrated nutrient management on growth and grain yield of wheat under irrigated cropping system. **Pakistan Journal of Botany**, **43(4)**: 1943-1947.
- Nayak, D. C., S. K. Gangopadhyay, Sarkar, Dipak and T. K. Sen, 2002. Characteristics and classification of some acid soils' of lower Subansiri district of Arunachal Pradesh. **Agropedology**, **12**: 112-121.
- Nehra, A. S and I. S. Hooda, 2002. Influence of integrated use of organic manures and inorganic fertilizers on wheat yields and soil properties. **Research on Crops**, **3(1)**:11-16.
- Ng'etich, O. K., J. N. Aguyoh and J. O. Ogwen, 2012. Effects of composted farmyard manure on growth and yield of spider plant (*Cleome gynandra*). **International Journal of Science and Nature**, **3(3)**: 514-520.
- Nogales, R and E. Benitez, 2007. Effect of olive derived organic amendments on lead, zinc and biochemical parameters of an artificially contaminated soil. **Communication in Soil Science and Plant Analysis**, **38(6)**:795-811.
- Ofosu-Amin, J and M. Leitch, 2009. Relative efficacy of organic manures in spring barley (*Hordeum vulgare* L.) production. **Australian Journal of Crop Science**, **3(1)**: 13-19.
- Ojha, R. B., S. C. Shah, K. R. Pande and D. D. Dhakal, 2014. Residual effects of farmyard manure on soil properties in spring season, Chitwan, Nepal. **International Journal of Scientific Research in Agricultural Sciences**, **1(8)**: 165-171.

-
- Olabode, O. S., S. Ogunyemi, W. B. Akambi, G. O. Adesina and P. A. Babajide, 2007. Evaluation of *Tithonia diversifolia* (Hemsl. A. Grey) for soil improvement. **World Journal of Agricultural Sciences**, **3(4)**: 503-507.
- Oldroyd, G. E. D., J. D. Murray, P. S. Poole and J. A. Downie, 2011. The rules of engagement in the legume - rhizobial symbiosis. **The Annual Review of Genetics**, **45**: 119 – 144.
- Omotayo, O. E and K. S. Chukwuka, 2009. Soil fertility restoration techniques in sub-Saharan Africa using organic resources. **African Journal of agricultural Research**, **4(3)**: 144-150.
- Ondieki, M. J., J. N. Aguyoh and A. M. Opiyo, 2011. Fortified compost manure improves yield and growth of African Nightshades. **International Journal of science and Nature**, **2(2)**: 231-237.
- Onemli F., 2004. The effects of soil organic matter on seedling emergence in sunflower (*Helianthus annuus* L.). **Plant Soil and Environment**, **50**: 494–499.
- Ott, T., J. T. V. Dongen, C. Gunther, L. Krusell, G. Desbrosses, H. Vigeolas, V. Bock, T. Czechowski, P. Geigenberger and M. K. Udvardi, 2005. Symbiotic leghaemoglobins are crucial for nitrogen fixation in legume root nodules but not for general plant growth and development. **Current Biology**, **15(6)**: 531-535.
- Ouedraogo, E., A. Mando and N. P. Zombre, 2001. Use of compost to improve soil properties and crop productivity under low input agricultural system in West Africa. **Agriculture, Ecosystems and Environment**, **84**: 259-266.
- Oviasogie, P. O., J. O. Odewale, N. O. Aisueni, E. I. Eguagie, G. Brown and E. Okoh-Oboh, 2013. Production, utilization and acceptability of organic fertilizers using palms and shea tree as sources of biomass. **African Journal of Agricultural Research**, **8(27)**: 3483-3494.
- Padmaja, C. K and Jessy Paulose, 2011. Efficacy of water hyacinth as green manure on test crop, green gram. **International Journal of Plant Sciences**, **6(1)**: 170-173.
- Padmaja, C. K and D. Sangeeth Adlene, 2009. Impact of EM-Solid waste compost on the growth and yield of *Vigna unguiculata* (L.). **Advances in Plant Sciences**, **22(1)**: 21-24.
- Padmaja, C. K and D. Leena Lavanya, 2006. Efficacy of *Humicola grisea* Eraaen on the biodegradation of coirpith. **Asian Journal of Microbiology Biotechnology and Environmental Sciences**, **8(2)**: 259-262.
- Padmapriya, S., K. Kumanan and K. Rajamani, 2010. Studies on effect of organic amendments and bio-stimulants on morphology, yield and quality of *Gymnema sylvestre* R. Br. **African Journal of Agricultural Research**, **5(13)**: 1655-1661.
- Pandey, A., C. R. Soccol, P. Nigam, V. T. Soccol, L. P. S. Vandenberghe and R. Mohan, 2000. Biotechnological potential of agroindustrial residues. II: cassava bagasse. **Bioresource Technology**, **74(1)**: 81 – 87.

-
- Pankaj, P. K., G. K. Jadav, R. P. Singh, T. K. Singh and N. De, 2013. Conjunctive use of organic and inorganic nutrient influences on nutrient uptake and yield of rainfed rice. **An Asian Journal of Soil science**, **8(1)**: 162-166.
- Pannu, R. P. S., C. Sumesh and K. Navdeep, 2007. Effect of combined application of farmyard manure and fertilizers on the yield and growth characteristics of summer mash (*Vigna mungo*). **Agricultural Science Digest**, **27(3)**: 216-218.
- Parmar, D. K., 2014. Yield, produce quality and soil health under vegetable cropping system as influenced by integrated nutrient management in mid-hill zone of Himachal Pradesh. **Journal of the Indian Society of Soil Science**, **62(1)**: 45-51.
- Parray, B. A., A. M. Ganai and K. M. Fazili, 2007. Physicochemical parameters and growth yield of tomato (*Lycopersicon esculentum*): role of farmyard manure and neemcake. **American-Eurasian Journal of Agricultural & Environmental Sciences**, **2(3)**: 3030-307.
- Patel, D. M., G. N. Patel, J. C. Patel, S. M. Patel and J. K. Patel, 2014. Nitrogen management in fenugreek (*Trigonella foenum-graecum* L.) under organic farming. **Research on Crops**, **15(2)**: 526-531.
- Patil, A. S., A. K. Patel and N. P. Chauhan, 2014. Yield, quality and monetary returns of summer pearl millet (*Pennisetum glaucum* L.) as influenced by integrated nitrogen management and sowing methods. **Crop Research**, **47(1, 2 &3)**: 24-28.
- Perotti, E. B. R., A. Pidello, L. Leyendeker, C. Trasar-Cepeda, M. C. Leiros and F. Gil-Sotres, 2008. Behaviour of enzymatic activities and root elongation in Argiudoll soils from the Argentine humid pampa treated with biosolids. **Journal of Microbiology Argentina**, **40**: 120-123.
- Pichler, M and K. I. Knabner, 2000. Chemolytic analysis of organic matter during aerobic and anaerobic treatment of municipal solid waste. **Waste Management**, **29**:1337-1339.
- Powon, M. P., J. N. Aguyoh and V. Mwaja, 2005. Effects of inorganic fertilizers and farmyard manure on growth and tuber yield of potato. **African Crop Science Conference Proceedings**, **7**: 1089-1093.
- Prabhakaran, D and S. Manivannan, 2014. Effect of inoculating lignocellulolytic fungus on nutrient changes during different phases of composting of poultry droppings amended with bagasse. **International Journal of Current Microbiology and Applied Sciences**, **3(9)**: 582-595.
- Prakash, M and N. Hemalatha, 2013. Dynamics of microorganisms during vermistabilization of organic substrates and enhances performance of plant growth promoting *Rhizobacteria* on black gram. **International Journal of Current Microbiology and Applied Sciences**, **2(7)**: 171-187.
- Premsekhar, M and V. Rajashree, 2009. Influence of organic manures on growth, yield and quality of okra. **American-Eurasian Journal of Sustainable Agriculture**, **3(1)**: 6-8.

-
- Prince, SPM. W., S. Sivakumar, V. Ravi and V. Subburam, 2000. The effects of coirpith compost on the growth and quality of leaves of the mulberry plant *Morus alba* L. **Bioresource Technology**, **72**: 95-97.
- Punitha, B. C., T. H. Hanumantharaju, R. Jayaprakash and V. M. Shilpashree, 2012. Acetamiprid impact on urease and phosphatase activity in selected soils of southern Karnataka. **International Journal of Basic and Applied Chemical Sciences**, **2(1)**: 1-6.
- Puppo A., K. Groten, F. Bastian, R. Carzaniga, M. Soussi, M. M. Lucas, M. R. de Felipe, J. Harrison, H. Vanacker and C. H. Foyer, 2005. Legume nodule senescence: roles for redox and hormone signalling in the orchestration of the natural aging process. **New Phytologist**, **165**: 683–701.
- Quda, B. A and A. Y. Mahadeen, 2008. Effect of fertilizers on growth, yield, yield components, quality and certain nutrient contents in Broccoli (*Brassica oleracea*). **International Journal of Agriculture & Biology**, **10(6)**: 627-632.
- Radwan, S. M. A and N. M. Awad, 2002. Effect of soil amendment with various organic wastes with multi-biofertilizers on yield of peanut plants in sandy soil. **Journal of Agricultural Sciences of Mansoura University**, **27(5)**: 3129-3138.
- Rajanna, G. A., K. Murali, P. Gopakkali, P. Nayak, T. M. Sudakara and R. N. Lakshmipathy, 2012. Effect of different sources and time of application of organic manures on residual fertility and nutrient balance in aerobic rice (*Oryza sativa* L.). **Crop Research**, **43(1, 2 & 3)**: 5-9.
- Rajarajan, C., S. Sureshkumar and A. Rajkala, 2009. A Research Report from KVK, Ormelagian, Tenkasi.
- Rakib, M., M. Banerjee and G. C. Malik, 2011. Effect of integrated nutrient management on biometric parameters, yield parameters and economics of baby corn (*Zea mays* L.). **International Journal of Agriculture, Environment and Biotechnology**, **4(1)**: 21-26.
- Rakkiyappan, P., S. Thangavelu, R. Malathi and R. Radhamani, 2001. Effect of biocompost and enriched pressmud on sugarcane yield and quality. **A Sugar Tech**, **3(3)**: 92-96.
- Ralte, V., H. N. Pandey, S. K. Barik, R. S. Tripathi, S. D. Prabhu, 2005. Changes in microbial biomass and activity in relation to shifting cultivation and horticultural practices in subtropical evergreen forest ecosystem of north-east India. **International Journal of Ecology**, **28**:163-172.
- Rama Lakshmi, CH. S., P. C. Rao, T. Sreelatha, G. Padmaja, M. Madhavi, P. V. Rao and A. Sireesha, 2014. Residual effects of INM on humus fractions, micronutrient content and their uptake by rabi green gram under rice-pulse cropping system. **Research on Crops**, **15(1)**: 96-104.
- Ramesh, K., S. Gurumurthy, V. Veerabdran, S. Senthilvel and K. Shanmugasundaram, 2006. Impact of irrigation regimes, irrigation frequencies and coirpith mulching on the economic productivity of drip irrigated summer cotton SVPR-2. **Research Journal of Agriculture and Biological Sciences**, **2(6)**: 447-451.

-
- Ramesh, P., M. Singh and A. S. Rao, 2005. Organic farming: Its relevance to the Indian context. **Current science**, **88(4)**: 561-568.
- Ramesh, S., P. Santhi and K. Ponnuswamy, 2006. Photosynthetic attributes and grain yield of pearl millet (*Pennisetum glaucum* (L.) R. Br.) as influenced by the application of composted coirpith under rainfed conditions. **Acta Agronomica Hungarica**, **54(1)**: 83-92.
- Ramesh, T and G. Manjunath, 2004. Organic farming boon or bane for Indian farmers. **Kissan World**, **16** : 205-310.
- Rangaraj, T., E., Somasundaram, M. M. Amanullah, V. Thirumurugan, S. Ramesh and S. Ravi, 2007. Effect of agro-industrial wastes on soil properties and yield of irrigated finger millet (*Eleusine coracana* L. Gaertn) in coastal soil. **Research Journal of Agriculture and Biological Sciences**, **3(3)**: 153-156.
- Rangaraj, V and M. Sultana, 2014. Standardization of the optimal ratio of distillery spent wash to the pressmud windrow for effective and ecofriendly compost. **International Journal of Novel Trends in Pharmaceutical Sciences**, **4(4)**: 61-67.
- Razzaq, A., 2001. Assessing sugarcane filtercake as crop nutrients and soil health ameliorant. **Pakistan Sugar Journal**, **21(3)**: 15-18.
- Reddy, K. N., R. E. Hoagland and R. M. Zablotowicz, 2000. Effect of glyphosate on growth, chlorophyll and nodulation in glyphosate-resistant and susceptible soybean. **Journal of New Seeds**, **2(3)**: 37-52.
- Reghuvaran, A and A. D. Ravindranath, 2014. Use of coirpith compost as an effective cultivating media for ornamental, medicinal and vegetable plants. **International Journal of Biology, Pharmacy and Allied Sciences**, **3(1)**: 88 – 97.
- Reghuvaran, A and A. D. Ravindranath, 2012. Biochemical aspects and formation of phenolic compounds by coirpith degraded by *Pleurotus sajor caju*. **Journal of Toxicology and Environmental Health Sciences**, **4(1)**: 29-36.
- Reghuvaran, A and A.D. Ravindranath, 2010. Efficacy of biodegraded coir pith for cultivation of medical plants. **Journal of Scientific and Industrial Research**. **69**: 559.
- Reghuvaran, A., K. K. Jacob and A. D. Ravindranath, 2012. Isolation and characterization of nitrogen fixing bacteria from raw coirpith. **African Journal of Biotechnology**, **11(27)**: 7063-7071.
- Roy, R. N., A. Flinck, G. J. Blair and H. L. S. Tandon, 2006. Plant nutrition for food security. FAO fertilizer and plant nutrition bulletin-16. Food and Agriculture of the United Nations, Rome, pp- 34.
- Sahu, R. K., D. L. Kauraw and A. K. Rawat, 2013. Effect of resources integration on nutrient content, use efficiency and quality of rice crop vertisol of central India. **International Journal of Agricultural Sciences and Veterinary Medicine**, **1(1)**: 1-10.

-
- Saidi, N., M. Cherif, N. Jedidi, M. Mahrouk, M. Fumio, A. Boudabous and A. Hassen, 2008. Evolution of biochemical parameters during composting of various wastes composting. **American Journal of Environmental Sciences**, **4(4)**: 332-341.
- Saini, K. S and S. K. Chongtham, 2011. Effect of different residue management practices and nitrogen levels on growth, yield and economics of soyabean [*Glycine max* (L.) Merrill]. **Crop Research**, **42(1, 2 &3)**: 110-113.
- Sajjad, M. H., A. Lodhi and F. Azam, 2002. Changes in enzyme activity during the decomposition of plant residues in soil. **Pakistan Journal of Biological Sciences**, **5(9)**: 952-955.
- Salem, A. K. M., 2006. Effect of nitrogen levels, plant spacing and time of farmyard manure application on the productivity of rice. **Journal of Applied Science Research**, **2(11)**: 980-987.
- Samarta, A. K and W. Patro, 1996. Recycling of farm wastes for organic farming. **Indian Farmers Digest**, **29**: 28-33.
- Samuel, A. D., 2010. Dehydrogenase: An indicator of biological activities in a preluvosoil. **Research Journal of Agricultural Science**, **42(3)**: 306-310
- Sangeeth Adlene, A. D., 2008. Efficacy of Effective Microorganisms (EM) on biodegradation of Solid Waste (SW) into organic manure and its influence on test plants. Ph.D Thesis submitted to Avinashilingam Deemed University for Women, Coimbatore, pp. 84-105.
- Sanjeeva Rayudu, E., Dr. M. Srimurali and K. Venkaiah, 2013. Improvement in biological characteristics of alkaline soils by using pressmud. **International Journal of Civil Engineering and Technology**, **4(2)**: 316-320.
- Sanwal S. K., K. Lakminarayana, R. K. Yadav, N. Rai, D. S. Yadav and B. Mousumi, 2007. Effect of organic manures on soil fertility, growth, physiology, yield and quality of turmeric. **Indian Journal of Horticulture**. **64(4)**: 444-449.
- Saraswathy, R., R. Krishnasamy and P. Singaram, 2004. Nutrient management for rainfed green gram (*Vigna radiata*). **Madras Agricultural Journal**, **91(4-6)**: 230-233.
- Saravanan, P., K. S. Sathish and A. Ignesh, 2013. Effect of organic manures and chemical fertilizers on the yield and macronutrients concentrations of green gram. **International Journal of Pharmaceutical Science Invention**, **2(1)**: 18-20.
- Saravanan, T. S., K. Rajendran and K. Santhaguru, 2012. Selection of suitable biofertilizers for production of quality seedlings of *Casuarina Equisetifolia* (Forst.) using decomposed coirpith compost in root trainers. **Asian Journal of Experimental Biological Sciences**, **3(4)**: 752-761.
- Sarker, T. C., M. A. Mannan, P. C. Mondol, A. H. Kabir, S. M. Parvez and M. F. Alam, 2013. Physico-chemical profile and microbial diversity during bioconversion of sugarcane pressmud using bacterial suspension. **Notulae Scientia Biologicae**, **5(3)**: 346-353.

-
- Sarwar, M. A., M. Ibrahim, M. Tahir, K. Ahmad, Z. I. Khan and E. E. Valeem, 2010. Appraisal of pressmud and inorganic fertilizers on soil properties, yield and sugarcane quality. **Pakistan Journal of Botany**, **42(2)**: 1361-1367.
- Satisha, G. C and L. Devarajan, 2005. Humic substances and their complexation with phosphorus and calcium during composting of pressmud and other biodegradables. **Communications in Soil Science and Plant Analysis**, **36**: 805-818.
- Sato, T., N. Onoma, H. Fujikake, N. Ohtake, K. Sueyoshi and T. Ohyama, 2001. Changes in four leghaemoglobin components in nodules of hypernodulating soybean (*Glycine max* [L] Merr.) mutant and its parent in the early nodule developmental stage. **Plant and Soil**, **237**: 129-135.
- Satyanarayana, V., P. V. V. Prasad, V. K. K. Murthy and K. J. Boote, 2002. Influence of integrated use of farmyard manure and inorganic fertilizers on yield and yield components of irrigated lowland rice. **Journal of Plant Nutrition**, **25(10)**: 2081-2090.
- Schulz, E., 2004. Influence of site conditions and management on different soil organic matter (SOM) pools. **Archives of Agronomy and Soil Science**, **50**: 33-48.
- Sengar, S. D., C. K. Padmaja and A. Ayesha Parveen, 2009. Efficacy of *Paecilomyces variotti* and *Chaetomium globosum* on the biodegradation of sugarcane bagasse. **Pollution Research**, **28(1)**: 117-120.
- Senthilkumar, P. K and P. Sivagurunathan, 2012. Comparative effect on bacterial biofertilizers on growth and yield of green gram (*Phaseolus radiata* L.) and cow pea (*Vigna siensis* Edhl.). **International Journal of Current Microbiology and Applied Sciences**, **1(1)**: 34-39.
- Shah, Z and M. I. Ahmad, 2006. Effect of integrated use of farmyard manure and urea on yield and nitrogen uptake of wheat. **Journal of Agricultural and Biological Science**, **1(1)**: 60-65.
- Shah, Z., I. U. Haq, A. Rehman, A. Khan and M. Afzal, 2013. Soil amendments and seed priming influence nutrients uptake, soil properties, yield and yield components of wheat (*Triticum aestivum* L.) in alkali soils. **Soil Science and Plant Nutrition**, **59**: 262-270.
- Shahinrokhsar, P., H. S. Vahed and A. Haghdadi, 2008. Evaluation of some paddy soils properties on urease enzyme activity. Conference on International Research on Food Security, Natural Resource Management and Rural Development. Tropentag 2008, University of Hohenheim, October 7-9.
- Shankaraiah, C and K. N. K. Murthy, 2005. Effect of enriched pressmud cake on growth, yield and quality of sugarcane. **Sugar Tech**, **7(2&3)**: 1-4.
- Sharma, S. R. 2001. Effect of organic manure and mineral nutrients on symbiotic efficiency, growth and yield of cowpea in cowpeawheat crop sequence. Ph.D. (Ag) Thesis, RAU, Bikaner.
- Sharma, P., H. S. Sekhon, V. Khanna and G. Singh, 2007. Biological nitrogen fixation in mungbean: Facts and findings. **Acta Horticulturae (ISHS)**, **752**: 597-602.

-
- Sharma, P., V. Sardana and S. S. Kandola, 2011. Response of groundnut (*Arachis hypogaea* L.) to *Rhizobium* inoculation. **Libyan Agriculture Research Centre Journal International**, **2(3)**: 101-104.
- Sharma, S. R and S. C. Bhandari, 2002. Effect of organic manure and mineral nutrients on symbiotic efficiency in cowpea. **Indian Journal of Pulses Research**. **15**: 156-160.
- Shiferaw, B., M. C. S. Bantilan and R. Serraj, 2004. Harnessing the potential of BNF for Poor Farmers: Technological Policy and institutional constraints and research need. Symbiotic Nitrogen Fixation; prospects for enhanced application in tropical agriculture.(Ed.):R. Serraj. Oxford & IBH publishing Co. Pvt. Ltd. New Delhi. Pp.3.
- Shyamala, D. C and S. L. Belagali, 2012. Studies on variations in physico-chemical and biological characteristics at different maturity stages of municipal solid waste compost. **International Journal of Environmental Sciences**, **2(4)**: 1984-1997.
- Sidhu, A. S., S. S. Thind, N. K. Sekhon and G. S. Hira, 2007. Effect of farmyard manure and P application to potato on available P and crop yield of potato (*Solanum tuberosum*)-Sunflower (*Helianthus annuus*) sequence. **Sustainable Agriculture**, **31(2)**: 5-15.
- Singh, J., 2007. Present agricultural scenario in India. **Kurukshetra**, **55(9)**: 23 – 24.
- Singh, K. B and G. C. Aggarwal, 2000. Effect of long term cowpea green manure and farmyard manure on soil physical properties. **Indian Journal of Ecology**, **27(1)**: 38-42.
- Singh, K. J., 2014. Leghaemoglobin sub-fractional components in chickpea root nodules during extended darkness. **Journal of Plant sciences**, **2(4)**: 134-138.
- Singh, K. K., S. K. Sharma and D. K. Sharma, 2007. Effect of distillery effluent-based pressmud compost alone and in combination with inorganic fertilizer on growth and productivity of basmati rice (*Oryza sativa* L.). **International Journal of Agricultural Science**, **3(1)**: 107-109.
- Singh, K. D. N., G. K. Mishra and J. B. Ojha, 2000. Effect of sulphitation pressmud and nitrogen on yield and quality of sugarcane on a calciorthent. **RAU Journal of Research**, **10 (1)**: 78-84.
- Singh, N and N. Kataria, 2012. Role of potassium fertilizer on nitrogen fixation in chickpea (*Cicer arietinum* L.) under quantified water stress. **Journal of Agricultural Technology**, **8(1)**: 377-392.
- Singh, S. K., S. C. Varma and R. P. Singh, 2002. Integrated nutrient management in rice and its residual effect on lentil. **Indian Journal of Agricultural Research**, **36 (4)**: 286-289.
- Solaimuthu, C., S. Senthilkumar, A. Ameen, M. Devendiran, S. D. Kumar and E. N. Raj, 2014. A study of performance of bio-gas plant. **Discovery**, **12(30)**: 36-40.
- Soundarajan, M., B. Anandkrishnan, M. S. Dawood, S. Jebaraj and R. Pushpavalli, 2007. Integrated nutrient management with organic and inorganic fertilizers on productivity of sugarcane and its impact on soil properties of *Typic haplustalf*. **Sugar Technology**, **9**: 142-146.

-
- Soussi, M., M. Khadri, C. Lluch and A. Ocana, 2001. Carbon metabolism and bacteroid respiration in nodules of chick-pea (*Cicer arietinum* L.) plants grown under saline conditions. **Plant Biosystems** **135**: 157-164.
- Sowmyamala, B. V and H. T. Nagaraju, 2013. Effect of organic and inorganic fertilizers on growth and yield of *Gaillardia* (*Gaillardia pulchella* cv. D. G. S-1). **An Asian Journal of Soil science**, **8(1)**: 53-55.
- Sridevi, S and M. Venkata Ramana, 2012. Soil quality and yield sustainability of maize-onion cropping system under organic farming. **Crop Research**, **44(3)**: 261-268.
- Sridevi, Y. K and A. Vijayalakshmi, 2006. Impact of composted agroindustrial waste on Biometric & yield parameters of *dolichos lablab* (L.). **Indian Journal of Environment and Eco planning**, **12**: 241-245.
- Srinivasan, V., S. Hamza and A. K. Sadanandan, 2005. Evaluation of composted coirpith with chemical and biofertilizers on nutrient availability, yield and quality of black pepper (*Piper nigrum* L.). **Journal of Spices and Aromatic Crops**, **14(1)**: 15-20.
- Srinivasan, V and S. Hamza, 2000. Use of coir compost as a component of nursery mixture for spices. In: Ramana K V, S. J. Eapen, N. K. Babu & A. Kumar (Eds.), Spices and Aromatic Plants, Challenges and Opportunities in the New Century. Contributory Papers, Centennial Conference on Spices and Aromatic Plants, 20–23 September 2000, Kozhikode (pp.91–96), Indian Society for Spices, Kozhikode.
- Stanford, D and L. English, 1949. Use of flame photometer in rapid soil tests of K and Ca. **Agronomy Journal**, **4**: 446.
- Subbiah, B. V and G. L. Asija, 1956. A rapid procedure for estimation of available nitrogen in soils. **Current Science**, **25**: 259-260.
- Subhani, A., H. Changyong, X. Zhengmiao, L. Min and A. M. El-ghamry, 2001. Impact of soil environment and agronomic practices on microbial/dehydrogenase enzyme activity in soil- A review. **Pakistan Journal of Biological Sciences**, **4(3)**: 333-338.
- Subrahmanyam, G., G. Archana and L. S. Chamyal, 2011. Soil microbial activity and its relation to soil indigenous properties in semi-arid alluvial and estuarine soils of mahi river basin, western India. **International Journal of Soil Science**, **6(4)**: 224-237.
- Sudhira, H. S and A. Jacob, 2000. Reuse of by-products in coir industry: A case study. Deptt. of Environmental Engg. Sri. Jayachamarajendra college of Engg. Mysore, Karnataka, India. Proc. Internet conference on Material Flow Analysis of Integrated Bio systems, (Mar-Oct 2000).
- Suge, J. K., M. E. Omunyin and E. N. Omami, 2011. Effect of organic and inorganic sources of fertilizer on growth, yield and fruit quality of eggplant (*Solanum Melongena* L.). **Archives of Applied Science Research**, **3(6)**: 470-479.

-
- Sumner, J. B., 1955. Estimation of urease. In: **Methods in Enzymology** Chowick, S. P. and Kaplan, (eds.) **2**: 378 – 379.
- Sunil, C., E. T. Puttaiah, P. R. Somashekharappa and H. S. Imran Khan, 2012. Populatio dynamics of microbes in pressmud compost as influenced by different methods of composting. **Plant Archives**, **12(2)**: 1003-1006.
- Sunitha Kumari, K., R. S. Meerabai and S. N. Padmadevi, 2013a. Composting of coirpith by the mushroom- *Pleurotus florida* (FR.) Kumm and *Hypsizygus ulmarius* (Bull. FR.) Redh. **Plant Archives**, **13(1)**: 11-14.
- Sunitha Kumari, K., R. S. Meerabai and S. N. Padmadevi, 2013b. Composting of coirpith and its effect on growth and biochemical contents of *Helianthus annuus* L. **Plant Archives**, **13(1)**: 535-539.
- Suresh Kumar, R and P. Ganesh, 2012. Effect of different bio-composting techniques on physico-chemical and biological changes in coirpith. **International Journal of Recent Scientific Research**, **3(11)**: 914-918.
- Suresh Kumar, R and P. Ganesh, 2013. Biochemical analysis of groundnut VRI-2 (*Arachis hypogea*) cultivated under the influence of different coir compost mixture. **International Journal of Scientific Research**, **2(3)**: 334-335.
- Suryapani, S., A. H. Malik, O. Sareer and S. Umar, 2014. Potassium and *Rhizobium* application quantitative and qualitative traits of lentil (*Lens culinaris* Medik.). **International Journal of Agronomy and agricultural Research**, **5(3)**: 7-16.
- Sushma, A. R., P. K. Basavaraja, M. S. Badrinath and S. Sridhara, 2007. Residual effect of integrated nutrient management with coirpith compost and other organics on subsequent ragi crop yield and chemical properties of vertisols. **Journal of the Indian Society of Soil science**, **55(4)**: 500-504.
- Sylvia, D. M., P. G. Hartel, J. J. Fuhrmann and D. A. Zuberer, 2005. Principles and applications of soil microbiology. New Jersey, Pearson Prentice Hall, pp. 640.
- Tabatabai, M. A., 1982. Soil enzymes. In: **Methods of soil Analysis**, Part 2. (Page A.L., Miller, D.R. Keeney (eds.), pp. 903 - 947. Academic Press, New York.
- Tadesse, T., N, Dechassa, W. Bayu and S. Gebeyehu, 2013. Effect of farmyard manure and inorganic fertilizer application on soil physico-chemical properties and nutrient balance in rain-fed lowland rice ecosystem. **American Journal of Plant Sciences**, **4**: 309-316.
- Tagore, G. S., S. L. Namdeo, S. K. Sharma and N. Kumar, 2013. Effect of *Rhizobium* and phosphate solubilizing bacterial inoculants on symbiotic traits, nodule leghaemoglobin and yield of chickpea genotypes. **International Journal of Agronomy**, **581627**:8
- Taiwo, L.B and Oso, B.A. (2004). Influence of composting techniques on microbial succession, temperature and pH in a composting municipal solid waste. **African Journal of Biotechnology**, **3**: 239-243.

-
- Tamilarasi, A., 2006. Recycling of kitchen waste into organic manure by Effective Micro-organisms (EM) and its effect on *Vigna unguiculata* (L.) walp. M.Sc. Thesis. Avinashilingam University for Women, Coimbatore. Pp. 68-76.
- Thankamani, C. K., V. Srinivasan, S. Hamza, K. Kandiannan and P. A. Mathew, 2007. Evaluation of nursery mixture for planting material production in black pepper (*Piper nigrum* L.). **Journal of Spices and Aromatic Crops**, **16(2)**: 111-114.
- Thomas, G. V., C. Palaniswami, S. K. Prabhu, M. Gopal and A. Gupta, 2013. Co-composting of coconut coirpith with solid poultry manure. **Current Science**, **104(2)**: 245-250.
- Tiquia, S. M., 2005. Microbiological parameters as indicators of compost maturity. **Journal of Applied Microbiology**, **99(4)**: 816-828.
- Tiquia, S. M., J. H. C. Wan and N. F. Y. Tam, 2002. Dynamics of yard trimmings composting as determined by dehydrogenase activity, ATP content, arginine ammonification and nitrification potential. **Process Biochemistry**, **37**: 1057-1065.
- Tjepkema J. D and C. C. Yocum, 1974. Measurement of oxygen partial pressure within soybean nodules. **Planta**, **119**: 351-360.
- Tolanur, S. I., 2009. Effect of different organic manures, green manuring and fertilizer nitrogen on yield and uptake of macro nutrients by chickpea in vertisol. **Legume Research**, **32(4)**: 304-306.
- Tolessa, D and D. K. Friesen, 2001. Effect of enriching farmyard manure with mineral fertilizers on grain yield of maize at Bako, Western Ethiopia. Seventh Eastern and Southern Africa Regional Maize Conference. 11- 15th February, 2001. Pp. 335-337.
- Uddin, M. R., M. F. Hossain, S. M. Zaman, M. Islam and N. Ara, 2014. Effect of organic manure on growth and yield of strawberry. **Wudpecker Journal of Agricultural Research**, **3(1)**: 035-038.
- Uheda, E and K. Syono, 1982. Effect of leghaemoglobin components on nitrogen fixation and oxygen consumption. **Plant Cell Physiology**, **2(1)**:85-90.
- Uma Reddy, R and M. Suryanarayan Reddy, 2012. Influence of integrated nutrient management on dehydrogenase activity of soil in tomato-onion cropping system. **The Journal of Research ANGRAU**, **40(2)**: 75-76.
- Upadhyay, M. K., H. P. Tripathi and A. S. Yadav, 2011. Effect of integrated nutrient management on yield and yield attributes of rice-wheat cropping system. **Indian Journal of Ecology**, **38(1)**: 21-25.
- Updegroff, D. M., 1969. Semi – micro determination of cellulose in biological materials. **The Annual Review of Biochemistry**, **32**: 420 – 444.

-
- Usha Rani, I., G. Padmaja and P. Chandrasekhar Rao, 2013. Integrated effect of organic manures and inorganic fertilizers on soil dehydrogenase enzyme activity and yield of maize-spinach cropping system. **Crop Research**, **46(1, 2 &3)**: 39-43.
- Uz , I and I. E. Tavali, 2014. Short-term effect of vermicompost application on biological properties of an alkaline soil with high lime content from Mediterranean region of Turkey. **The Scientific World Journal**, doi.org/10.1155/2014/395282.
- Vahed, H. S., P. Shahinrokhsar and M. Rezaei, 2011. Influence of some soil properties and temperature on urease activity in wetland rice soils. **American-Eurasian Journal of Agricultural and Environmental Sciences**, **11(3)**: 310-313.
- Vajantha, B., K. S. Reddy and N. Ramavatharam, 2010. Effect of integrated nitrogen management on soil enzyme activities in maize. **Research on Crops**, **11(1)**: 31-36.
- Vandana, L. J., P. C. Rao and G. Padmaja, 2012. Effect of herbicides and Nutrient management on soil enzyme activity. **Journal of Rice Research**, **5(1 & 2)**: 50-58.
- Veeramani, P and K. Subrahmaniyan, 2011. Nutrient management for sustainable groundnut productivity in india- A review. **International Journal of Engineering Science and Technology**, **3(11)**:8138-8153.
- Velmourougane, K., M. V. Venugopalan, T. Bhattacharyya, D. Sarkar, D. K. Pal, A. Sahu, S. K. Ray, K. M. Nair, J. Prasad and R. S. Singh, 2013. Soil dehydrogenase activity in agro-ecological sub regions of black soil regions in India. **Geoderma**, **197-198**: 186- 192.
- Venkatakrishnan, D and M. Ravinchandran, 2007. Influence of nutrient management in growth and yield of sugarcane (var. Co 86032). **Plant Archives**, **7(1)**: 99-102.
- Verma, M. L and J. K. Chauhan, 2012. Apple productivity and soil properties under organic farming in temperate zone of Himachal Pradesh. **International Journal of Farm Sciences**, **2(1)**: 17-28.
- Verma, S. R., A. C. Shivran, R. Bhanwaria and M. Singh, 2014. Effect of vermicompost and sulphur on growth, yield and nutrient uptake of fenugreek (*Trigonella foenum-graecum* L.), **The Bioscan**, **9(2)**: 667-670.
- Viharnaa, S and T. H. Seran, 2012. Effect of cow and poultry manures as basal fertilizers on marketable fruit yield of okra (*Abelmoschus esculentus* L.). **Tropical Agricultural Research and Extension**, **16(1)**:1-3
- Vijaya, D., S. N. Padmadevi, S. Vasandha, R. S. Meerabai and P. Chellapandi, 2008. Effect of vermicomposted coirpith on the growth of *Andrographis paniculata*. **Journal of Organic Systems**, **3(2)**:51-56.
- Viji, J and P. Neelanarayanan, 2014. Earthworm mediated conversion of coirpith (*Cocos nucifera*) predigested with *Pleurotus* sp. under monoculture and polyculture conditions. **International Journal of Recent Scientific Research**, **5(1)**: 269-276.
-

-
- Vimera, K., S. P. Kanaujia, V. B. Singh and P. K. Singh, 2012. Integrated nutrient management for quality production of king chilli (*Capsicum chinense* Jackquin) in an acid alfisol. **Journal of the Indian Society of Soil Science**, **60(1)**: 45-49.
- Viridia, H. M and H. D. Mehta, 2010. Integrated nutrient management in transplanted rice (*Oryza sativa* L.). **International Journal of Agricultural Sciences**, **6(1)**: 295-299.
- Walia, S. S and D. S. Kler, 2010. Effect of organic and Inorganic sources of nutrition on growth, macro and micro nutrient uptake in maize under maize-wheat sequence. **Indian Journal of Ecology**, **37(1)**: 27-29.
- Walkley, A and C. A. Black, 1934. An examination of the degtjareff method for determining organic carbon in soils. **Soil Science**, **63**: 251-263.
- Wang, J., Y. Lu and G. Shen, 2007. Combined effects of cadmium and butachlor on soil enzyme activities and microbial community structure. **Environmental Geology**, **51**: 1093-1284.
- White, J., J. Prell, E. K. James and P. Poole, 2007. Nutrient sharing between symbionts. **Plant Physiology**, **144**: 604-614.
- Wolinska, A and R. P. Bennicelli, 2010. Dehydrogenase activity response to soil reoxidation process described as varied conditions of water potential, air porosity and oxygen availability. **Polish Journal of Environmental Studies**, **19(3)**: 651-657.
- Wyszkowska, J and M. Wyszkowski, 2003. Effect of cadmium and magnesium on enzymatic activity in soil. **Polish Journal of Environment Studies**, **12(4)**: 473-479.
- Yadav, H and B. Vijayakumari, 2003. Influence of vermicompost with organic and inorganic manures on biometric and yield parameters of chilli [*Capsicum annum* (L.) var. Plri]. **Crop Research**, **25(2)**: 236-243.
- Yadav, M. S., B. Yadav and S. Singh, 2013. Response of ashwagandha [*Withania somnifera* (L.) Dunal] to integrated nutrient management system (INMS). **Crop Research**, **45(1, 2 &3)**: 276-279.
- Yadav, S. K., S. Babu, M. K. Yadav, K. Singh, G. S. Yadav and S. Pal, 2013. A review of organic farming for sustainable agriculture in northern India. **International Journal of Agronomy**, 10.1155/2013/718145.
- Yadav, S and A. Vyas, 2013. Impact of AM fungi on dehydrogenase activity in polluted soil. **International Journal of Plant, Animal and Environmental Sciences**, **3(1)**: 114-17.
- Yaduvanshi, N. P. S., 2014. Pressmud as nutrient and amendment for sodic water irrigation in sustaining rice-wheat system. **Indian Farming**, **64(6)**: 23-24.
- Yang, L. J., T. L. Li and S. F. Fu, 2005. Effect of manure and chemical fertilizer on the dynamics of soil enzymatic activities in vegetable soil. **Chinese Journal of Soil Science**, **36(2)**: 223-226.

-
- Yang, L., T. Li, F. Li, J. Hugo Lemcoff and S. Cohen, 2008. Fertilization regulates soil enzymatic activity and fertility dynamics in a cucumber field. **Scientia Horticulturae**, **116**: 21-26.
- Yang, S. D., J. X. Liu, J. Wu, H. W. Tan and Y. R. Li, 2013. Effects of vinasse and pressmud application on the biological properties of soils and productivity of sugarcane. **Sugar Tech**, **15(2)**: 152-158.
- Yang, T., H. Xu, D. H. Fang and J. J. Zhu, 2006. Soil nutrient, microorganism and enzyme activity in *Pinus Sylvestris* var. *mongolica* forests. **Chinese Journal of soil science**, **37(2)**: 254-257.
- Yang, W. Q and K. Y. Wang, 2004. Advances in forest soil enzymology . **Scientia Silvae Sinica**, **40(2)**: 152-159.
- Yau, P. Y and R. J. Murphy, 1998. Enhanced biodegradation of coco peat by soft rot fungi, Document: International research group on wood preservation, 1998, No. IRG-WP-98-10276, 6P: 29th Annual meeting of the IRG, Maastricht, The Netherlands, 14-19, June 1998.
- Zablotowicz, R. M., S. A. Russell and H. J. Evans, 1980. Effect of the hydrogenase system in *Rhizobium japonicum* on the nitrogen fixation and growth of soyabeans at different stage of development. **Agronomy Journal**, **71**:555-559.
- Zahid L and M. F. K. Niazi, 2006. Role of Ristech material in the reclamation of saline-sodic soils. **Pakistan Journal of Water Resources**, **10**: 43-49.
- Zahoor, 2014. Influence of integrated use of chemical and organic fertilizers on yield and yield components of wheat. **International Journal of Agriculture and Crop sciences**, **7(1)**: 21-25.
- Zamanov, P., A. Albina, R. Pershayev and E. Vekilova, 2002. Soil fertility and plant productivity rise by the organic waste application. Symposium, 17th WCSS, 14-21st Aug 2002, Thailand paper. Pp.520.
- Zhang, J., G. Zeng, Y. Chen, M. Yu, Z. Yu, H. Li, Y. Yu and H. Huang, 2011. Effects of physico-chemical parameters on the bacterial and fungal communities during agricultural waste composting. **Bioresource Technology**, **102**: 2950-2956.
- Zhang, N., X. D. He, Y. B. Gao, Y. H. Li, H. T. Wang and D. Ma, 2010. Pedogenic carbonate and soil dehydrogenase activity in response to soil organic matter in *Artemisia ordosica* community. **Pedosphere**, **20(2)**: 229-235.
- Zhang, R., J. Jiang, J. D. Gu and S. Li, 2006. Long term effect of methylparathion contamination on soil microbial community diversity estimated by 16S rRNA gene cloning. **Ecotoxicology**, **15**: 523-530.
- Zodape, S. T., S. Mukhopadhyay, K. Eswaran, M. P. Reddy and J. Chikara, 2010. Enhanced yield and nutritional quality in green gram (*Phaseolus radiata* L.) treated with seaweed (*Kappaphycus alvarezii*) extract. **Journal of Scientific and Industrial Research**, **69**: 468-471.