

REFERENCES

- Abas, M.A. & Wee, S.T. 2013. Municipal Solid Waste Management in Malaysia: an Insight Towards Sustainability. *Journal of Chemical Information and Modeling.* **53**(9): 1689–1699.
- Aislabie, J. Deslippe, J.R. & Dymond, J.R. 2013. Soil microbes and their contribution to soil services. *Ecosystem services in New Zealand - conditions and trends.* (Figure 2): 143–161.
- Arusha, P.N. et al. 2016. Optimization of cellulase production for *Bacillus* sp. and *Pseudomonas* sp. soil isolates. *African Journal of Microbiology Research.* **10**(13): 410–419. <http://academicjournals.org/journal/AJMR/article-abstract/13142B457910>.
- Badgie, D. et al. 2012. Assesment of Municipal Solid Waste Composition in Malaysia : Management, Practice and Challenges. *Pollution Journal Environment Studies.* **21**(3): 593–547. http://www.nswaienvis.nic.in/Waste_Portal/Research_papers/pdf/Assessment_of_MWS_Composition.pdf.
- Ball, D.W. Hill, J.W. & Scott, R.J. 2012. *Introduction to Chemistry: General, Organic, and Biological.*
- Ben-David, A. & Davidson, C.E. 2014. Estimation method for serial dilution experiments. *Journal of Microbiological Methods.* **107**: 214–221. <http://www.sciencedirect.com/science/article/pii/S0167701214002577>.
- Bertrand, J.C. et al. 2015. *Environmental Microbiology: Fundamentals and Applications: Microbial Ecology.* Springer Netherlands. <https://books.google.com.my/books?id=2zVqBgAAQBAJ>.
- Bisaria, V.S. & Kondo, A. 2014. *Bioprocessing of Renewable Resources to Commodity Bioproducts.* Wiley. <https://books.google.com.my/books?id=AZFSAwAAQBAJ>.
- Bisswagner, H. 2011. Chapter 3: Enzyme Assays. In *Practical Enzymology.* pp. 93–264. <https://www.google.no/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=0C CMQFjABahUKEwjro4-pkO7GAhXmfHIKHXp7APE&url=http://www.researchgate.net/publictopics.PublicPostFileLoader.html?id=54d2f6fdd685ccf9728b45ef&key=5aca8666-7e63-4231-96d2-925897e69f92&ei=azqv>.
- Bot, A. & Benites, J. 2005. *The importance of soil organic matter.*
- Brown, L. et al. 2015. Through the wall: extracellular vesicles in Gram-positive bacteria, mycobacteria and fungi. *Nature Reviews Microbiology.* **13**(10): 620–630. <http://www.nature.com/doifinder/10.1038/nrmicro3480>.
- CleanMalaysia. 2016. Waste Management in Malaysia: In the Dumps. *Clean Malaysia.* <http://cleanmalaysia.com/2015/09/04/waste-management-in-malaysia-in-the-dumps/>.
- Eed, J. 2012. Factors affecting Enzyme Activity. *Essai.* **10**(10): 48–51.

- [http://dc.cod.edu/essai.](http://dc.cod.edu/essai)
- Eilers, K.G. et al. 2012. Digging deeper to find unique microbial communities: The strong effect of depth on the structure of bacterial and archaeal communities in soil. *Soil Biology and Biochemistry*. **50**: 58–65. <http://dx.doi.org/10.1016/j.soilbio.2012.03.011>.
- Farris, M.H. Ford, K.A. & Doyle, R.C. 2016. Qualitative and Quantitative Assays for Detection and Characterization of Protein Antimicrobials. *Journal of Visualized Experiments : JoVE*. (110): 53819. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4941916/>.
- Ferreira, T.F. Coelho, M.A.Z. & Rocha-Leão, M.H.M. da. 2012. Factors influencing crude oil biodegradation by *Yarrowia lipolytica*. *Brazilian Archives of Biology and Technology*. **55**(5): 785–791.
- Gautam, S.P. et al. 2012. Diversity of Cellulolytic Microbes and the Biodegradation of Municipal Solid Waste by a Potential Strain. . **2012**.
- Ghose, T.K. 1987. Measurement of cellulase activities. *Pure and Applied Chemistry*. **59**(2): 257–268. <http://www.iupac.org/publications/pac/1987/pdf/5902x0257.pdf> <http://www.degruyter.com/view/j/pac.1987.59.issue-2/pac198759020257/pac198759020257.xml>.
- Gohel, H.R. et al. 2014. A comparative study of various staining techniques for determination of extra cellular cellulase activity on Carboxy Methyl Cellulose (CMC) agar plates. *International Journal of Current Microbiology and Applied Sciences*. **3**(5): 261–266.
- Gomez, A.M. et al. 2011. Characterization of bacterial diversity at different depths in the Moravia Hill landfill site at Medellín, Colombia. *Soil Biology and Biochemistry*. **43**(6): 1275–1284.
- Gómez, M.A. et al. 2012. Aerobic microbial activity and solid waste biodegradation in a landfill located in a semi-arid region of Argentina. *Annals of Microbiology*. **62**(2): 745–752.
- Gunny, A.A.N. et al. 2015. Improvement of halophilic cellulase production from locally isolated fungal strain. *Saudi Journal of Biological Sciences*. **22**(4): 476–483. <http://dx.doi.org/10.1016/j.sjbs.2014.11.021>.
- Gupta, P. Samant, K. & Sahu, A. 2012. Isolation of cellulose-degrading bacteria and determination of their cellulolytic potential. *International Journal of Microbiology*. **2012**.
- Hansel, C.M. et al. 2008. Changes in Bacterial and Archaeal Community Structure and Functional Diversity along a Geochemically Variable Soil Profile. *Applied and Environmental Microbiology*. **74**(5): 1620–1633.
- Hoornweg, D. Bhada-Tata, P. & Joshi-Ghani, A. 2009. What a waste: A global review of solid waste management.
- Humphreys, P.N. Laws, A. & Dawson, J. 2010. A Review of Cellulose Degradation and the Fate of Degradation Products Under Repository Conditions.
- Iovieno, P. & Bååth, E. 2008. Effect of drying and rewetting on bacterial growth rates in

- soil. *FEMS Microbiology Ecology*. **65**(3): 400–407.
- Irfan, M. et al. 2012. Isolation and screening of cellulolytic bacteria from soil and optimization of cellulase production and activity. *Turkish Journal of Biochemistry*. **37**(3): 287–293.
- Khan, I.N.G. 2015. Household Solid Waste Management in Malaysia : A Legal Perspective. . (October).
- Khatiwada, P. et al. 2016. Isolation, Screening and Characterization of Cellulase Producing Bacterial Isolates from Municipal Solid Wastes and Rice Straw Wastes. *Journal of Bioprocessing & Biotechniques*. **6**(4): 4–8. <http://www.omicsonline.org/open-access/isolation-screening-and-characterization-of-cellulase-producing-bacterial-isolates-from-municipal-solid-wastes-and-rice-straw-waste-2155-9821-1000280.php?aid=72626>.
- Khokhar, I. Mukhtar, I. & Mushtaq, S. 2011. Comparative Studies on the Amylase and Cellulase Production of Aspergillus and Penicillium. *Journal of Applied Science & Environmental Management*. **14**(4): 657–661.
- Kim, Y.-K. et al. 2012. Isolation of Cellulolytic Bacillus subtilis Strains from Agricultural Environments. *ISRN Microbiology*. **2012**: 1–9.
- Kuhad, R.C. Gupta, R. & Singh, A. 2011. Microbial cellulases and their industrial applications. *Enzyme research*. **2011**: 280696. <http://europepmc.org/abstract/MED/21912738>.
- Li, H. et al. 2016. Diversity and activity of cellulolytic bacteria, isolated from the gut contents of grass carp (*Ctenopharyngodon idellus*) (Valenciennes) fed on Sudan grass (*Sorghum sudanense*) or artificial feedstuffs. *Aquaculture Research*. **47**(1): 153–164.
- Manaf, L.A. Samah, M.A.A. & Zukki, N.I.M. 2009. Municipal solid waste management in Malaysia: Practices and challenges. *Waste Management*. **29**(11): 2902–2906. <http://dx.doi.org/10.1016/j.wasman.2008.07.015>.
- Miller, G.L. 1959. Use of Dinitrosalicylic Acid Reagent for Determination of Reducing Sugar. *Analytical Chemistry*. **31**(3): 426–428.
- Okeke, B.C. & Lu, J. 2011. Characterization of a Defined Cellulolytic and Xylanolytic Bacterial Consortium for Bioprocessing of Cellulose and Hemicelluloses. : 869–881.
- Otajevwo, F.D. & Aluyi, H.S.A. 2011. Cultural conditions necessary for optimal cellulase yield by cellulolytic bacterial organisms as they relate to residual sugars released in broth medium. *Modern Applied Science*. **5**(3): 141–151.
- Pariatamby, A. 2014. MSW Management in Malaysia-Changes for Sustainability. In A. Pariatamby & M. Tanaka, eds. *Municipal Solid Waste Management in Asia and the Pacific Islands: Challenges and Strategic Solutions*. Singapore: Springer Singapore, pp. 195–232.
- Patagundi, B.I. Shivasharan, C.T. & Kaliwal, B.B. 2014. Isolation and Characterization of Cellulase producing bacteria from Soil. *Int. J. Curr. Microbiol. App. Sci.*. **3**(5): 59–69. [http://www.ijcmas.com/vol-3-5/Basavaraj I. Patagundi, et al.pdf](http://www.ijcmas.com/vol-3-5/Basavaraj%20I.%20Patagundi,%20et%20al.pdf).
- Pietikäinen, J. Pettersson, M. & Bååth, E. 2005. Comparison of temperature effects on

- soil respiration and bacterial and fungal growth rates. *FEMS Microbiology Ecology*. **52**(1): 49 LP-58.
- Pollack, R.A. 2011. *Laboratory Exercises in Microbiology*. Wiley. <https://books.google.com.my/books?id=d3YyGl1Jre8C>.
- Reid, G. & Wong, P. 2005. Soil Biology Basics - Soil bacteria. *Profitable and Sustainable Primary Industries*: 20–21.
- Sa, N. Ishak, W.M.F.W. & Makky, E.A. 2014. Comparison of Enzymes Production of Bacteria from Landfill Soil and Leachate : A Case Study-Jabor Landfill. . **5**(1): 61–64.
- Sadhu, S. et al. 2014. Optimization and strain improvement by mutation for enhanced cellulase production by *Bacillus* sp. (MTCC10046) isolated from cow dung. *Journal of King Saud University - Science*. **26**(4): 323–332. <http://www.sciencedirect.com/science/article/pii/S101836471400055X>.
- Sadhu, S. & Maiti, T.K. 2013. Cellulase Production by Bacteria : A Review. . **3**(3): 235–258.
- Saini, J.K. Arti & Tewari, L. 2012. Simultaneous isolation and screening of cellulolytic bacteria: Selection of efficient medium. *Journal of Pure and Applied Microbiology*. **6**(3): 1339–1344.
- Samira, M. Mohammad, R. & Gholamreza, G. 2011. Carboxymethyl-cellulase and Filter-paperase Activity of New Strains Isolated from Persian Gulf. *Microbiology Journal*. **1**(1): 8–16. <http://scialert.net/fulltext/?doi=mj.2011.8.16&org=10>.
- Schmid, E. Isolation and Study of Soil Bacteria. : 1–10.
- Scopes, R.K. 2002. Enzyme Activity and Assays. *Encyclopedia of Life Sciences*: 1–6. [http://www.life.illinois.edu/biochem/455/Lab exercises/B-gal/enzymology.pdf](http://www.life.illinois.edu/biochem/455/Lab%20exercises/B-gal/enzymology.pdf).
- Shaikh, N.M. et al. 2013. Isolation and Screening of Cellulolytic Bacteria Inhabiting Different Environment and Optimization of Cellulase Production. *Universal Journal of environmental research and technology*. **3**(1): 39–49.
- Sin, T.J. et al. 2013. Current practice of waste management system in Malaysia : Towards sustainable waste management. In: *1st FPTP Postgraduate Seminar “Towards Sustainable Management”*. **1106**: 1–19.
- Singh, A. et al. 2015. An efficient and improved methodology for the screening of industrially valuable xylo-pectino-cellulolytic microbes. *Enzyme Research*. **2015**(January).
- Swiontek Brzezinska, M. Burkowska, A. & Walczak, M. 2012. Microbial activity in the landfill soil. *Applied Biochemistry and Microbiology*. **48**(4): 371–376.
- Tarmudi, Z. Abdullah, M.L. & Tap, A.B.U.O. 2009. AN OVERVIEW OF MUNICIPAL SOLID WASTES GENERATION IN MALAYSIA The rapid population growth , urbanisation , economic levels and rise in the community living standards will generate a tremendous rate of municipal solid waste (MSW) across the Malaysian muni. . **51**: 1–15.
- Tommasi, R. et al. 2015. ESKAPEing the labyrinth of antibacterial discovery. *Nature Reviews Drug Discovery*. **14**(9): 662–662.

- [http://www.nature.com/doifinder/10.1038/nrd4729.](http://www.nature.com/doifinder/10.1038/nrd4729)
- Van Wyk, J.P.H. & Mohulatsi, M. 2003. Biodegradation of Waste Cellulose. *Journal of Polymers and the Environment*. **11**(1): 23–28.
- Yahaya, N. 2013. Solid waste management in Malaysia: The way forward. In *10th Annual Waste Management Conference & Exhibition, Malaysia*. p. 10. <http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:Solid+Waste+Management+in+Malaysia:+The+Way+Forward#3\nhttp://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:Solid+waste+management+in+Malaysia:+The+way+forward#3>.
- Yang, B. et al. 2011. Review: Enzymatic Hydrolysis of Cellulosic Biomass. *Biofuels*. **2**(4): 421–450.
- Zainu, Z.A. et al. 2015. Present and Future Innovations in Solid Waste Management in Malaysia. *International Conference on Waste Management, Ecology and Biological Science*: 21–27.
- Zhang, X. & Zhang, Y.P. 2013. Cellulases: Characteristics, Sources, Production and Applications. In *Bioprocessing Technologies in Biorefinery for Sustainable Production of Fuels, Chemicals, and Polymers*. John Wiley & Sons, Inc., pp. 131–146.
- Zia, H. & Devadas, V. 2007. Municipal solid waste management in Kanpur, India: obstacles and prospects. *Management of Environmental Quality: An International Journal*. **18**(1): 89–108.