

- Ahemad, M. and M. Kibret. 2014. Mechanisms and applications of plant growth promoting rhizobacteria: current perspective. *Journal of King Saud University-science*. 26(1):1-20.
- Anonim, 2020. Decanoic acid, CID=2969. National Center for Biotechnology Information.PubChemDatabase,<<https://pubchem.ncbi.nlm.nih.gov/compound/Decanoic-acid>>. Diakses 21 Januari 2020.
- Anonim, 2020. Octadecanal, CID=12533. National Center for Biotechnology Information.PubChemDatabase.<<https://pubchem.ncbi.nlm.nih.gov/compound/Octadecanal>> (Diakses 21 Januari 2020).
- Ashari, A., 2013. Kajian tingkat erodibilitas beberapa jenis tanah di Pegunungan Baturagung Desa Putat dan Nglanggeran Kecamatan Patuk Kabupaten Gunungkidul. *Informasi*. 39(2).
- Ashraf, M.P.J.C. and P.J.C. Harris. 2004. Potential biochemical indicators of salinity tolerance in plants. *Plant science*. 166(1):3-16.
- Bano, A. and M. Fatima. 2009. Salt tolerance in *Zea mays* (L). following inoculation with *Rhizobium* and *Pseudomonas*. *Biology and Fertility of Soils*. 45(4):405-413.
- Beales, N. 2003. Adaptation of microorganisms to cold temperatures, weak acid preservatives, low pH, and osmotic stress: a review. *CRIFSS*.3:1-20.
- Carmen B. and D. Roberto. 2011. *Abiotic Stress in Plants-Mechanisms and Adaption*. INTECH, Europe.
- Chen, L.Z., G.H. Wang, S. Hong, A. Liu, C. Li, and Y.D. Liu. 2009. UV-B-induced oxidative damage and protective role of exopolysaccharides in desert cyanobacterium *Microcoleus vaginatus*. *Journal of integrative plant biology*. 51(2):194-200.
- Chen, M., H. Wei, J. Cao, R. Liu, Y. Wang, and C. Zheng. 2007. Expression of *Bacillus subtilis* proBA genes and reduction of feedback inhibition of proline synthesis increases proline production and confers osmotolerance in transgenic *Arabidopsis*. *BMB Reports*. 40(3):396-403.
- Claus, D. 1992. A standardized Gram staining procedure. *World journal of Microbiology and Biotechnology*. 8(4):451-452.

- Compant, S., B. Duffy, J. Nowak, C. Clément, and E.A. Barka. 2005. Use of plant growth-promoting bacteria for biocontrol of plant diseases: principles, mechanisms of action, and future prospects. *Applied Environmental Microbiology*. 71(9):4951-4959.
- Dakora, F.D., V. Matiru, and A.S. Kanu. 2015. Rhizosphere ecology of lumichrome and riboflavin, two bacterial signal molecules eliciting developmental changes in plants. *Frontiers in Plant Science*. 6:700.
- Diana, F.M., 2012. OMEGA 3. *Jurnal Kesehatan Masyarakat Andalas*. 6(2):113-117.
- Dodd, I.C. and F. Pérez-Alfocea. 2012. Microbial amelioration of crop salinity stress. *Journal of Experimental Botany*. 63(9):3415-3428.
- DSMZ. 2007. Soil Extract Medium. [https://www.dsmz.de/microorganisms/medium/pdf/DSMZ\\_Medium12.pdf](https://www.dsmz.de/microorganisms/medium/pdf/DSMZ_Medium12.pdf). Diakses 3 April 2020.
- Egamberdieva, D. and Z. Kucharova. 2009. Selection for root colonising bacteria stimulating wheat growth in saline soils. *Biology and fertility of soils*. 45(6):563-571.
- Fernandez-Auni6n, C., T.B. Hamouda, F. Iglesias-Guerra, M. Argandoña, M. Reina-Bueno, J.J. Nieto, M.E. Aouani, and C. Vargas. 2010. Biosynthesis of compatible solutes in rhizobial strains isolated from *Phaseolus vulgaris* nodules in Tunisian fields. *BMC microbiology*. 10(1):192.
- Gill, S.S. and N. Tuteja, 2010. Reactive oxygen species and antioxidant machinery in abiotic cekamans tolerance in crop plants. *Plant physiology and biochemistry*. 48(12): 909-930.
- Grover, M., S.Z. Ali, V. Sandhya, A. Rasul, and B. Venkateswarlu. 2011. Role of microorganisms in adaptation of agriculture crops to abiotic stresses. *World Journal of Microbiology and Biotechnology*. 27(5):1231-1240.
- Guerzoni, M.E., R. Lanciotti, and P.S. Cocconcelli. 2001. Alteration in cellular fatty acid composition as a response to salt, acid, oxidative and thermal stresses in *Lactobacillus helveticus*. *Microbiology*. 147(8):2255-2264.
- Hachicho, N., A. Birnbaum, and H.J. Heipieper. 2017. Osmotic stress in colony and planktonic cells of *Pseudomonas putida* mt-2 revealed significant differences in adaptive response mechanisms. *AMB Express*. 7(1):1-7.
- Hartzell, S.R., S. Perri, A. Molini, and A.M. Porporato. 2018. Plant osmoregulation and productivity under water and salt stress. *AGUFM*. 2018:11-03.

- Hasanah, N.F., D. Pringgenies, and S.Y. Wulandari. 2012. Karakterisasi Metabolit Sekunder Bakteri Simbion Gastropoda *Conus miles* dengan Metode GC-MS Sebagai Antibakteri MDR (Multi Drug Resistant). *Journal Of Marine Research*. 1(2):197-202.
- Huang, A.C., S. Burrett, M.A. Sefton, and D.K. Taylor. 2014. Production of the pepper aroma compound, (-)-rotundone, by aerial oxidation of  $\alpha$ -guaiene. *Journal of agricultural and food chemistry*. 62(44):10809-10815.
- Jutono, S., Hartadi, J., Kabirun, S., Suhadi, S. and Soesanto, D., 1980. Pedoman praktikum mikrobiologi umum. Fakultas Pertanian UGM. Yogyakarta.
- Lauchli, A & S.R. Grattan, 2014. Plant abiotic stress: Salt. *Encyclopedia of Agriculture and Food System*. 4:313-29.
- Lennen, R.M., M.A. Kruziki, K. Kumar, R.A. Zinkel, K.E. Burnum, M.S. Lipton, S.W. Hoover, D.R. Ranatunga, T.M. Wittkopp, W.D. Marner, and B.F. Pfleger. 2011. Membrane stresses induced by overproduction of free fatty acids in *Escherichia coli*. *Appl. Environ. Microbiol.* 77(22):8114-8128.
- Liang, X., L. Zhang, S.K. Natarajan, and D.F. Becker. 2013. Proline mechanisms of stress survival. *Antioxidants & redox signaling*, 19(9):998-1011.
- Liseč, J., N. Schauer, J. Kopka, L. Willmitzer, and A.R. Fernie. 2006. Gas chromatography mass spectrometry-based metabolite profiling in plants. *Nature protocols*. 1(1):387.
- Lobb, K. and C.K. Chow. 2007. Fatty acid classification and nomenclature. *Fatty Acids in Foods and Their Health Implications*. Chow, CK:1-15.
- Lugtenberg, B.J., N. Malfanova, F. Kamilova, and G. Berg. 2013. Plant growth promotion by microbes. *Molecular microbial ecology of the rhizosphere*. 2: 561-573.
- MacWilliams, M.P., 2009. Indole test protocol. *Journal of American Society for Microbiology*. 1-9.
- Mousavi, F., B. Bojko, V. Bessonneau, and J. Pawliszyn. 2016. Cinnamaldehyde characterization as an antibacterial agent toward *E. coli* metabolic profile using 96-blade solid-phase microextraction coupled to liquid chromatography-mass spectrometry. *Journal of proteome research*. 15(3):963-975.
- Munns, R. and M. Tester. 2008. Mechanisms of salinity tolerance. *Annual Review of Plant Biology*. 59:651-681.

- Peternel, S. And R. Komel. 2010. Isolation of biologically active nanomaterial (inclusion bodies) from bacterial cells. *Microbial cell factories*. 9(1):66.
- Pradenas, G.A., W.A. Díaz-Vásquez, J.M. Pérez-Donoso, and C.C. Vásquez. 2013. Monounsaturated fatty acids are substrates for aldehyde generation in tellurite-exposed *Escherichia coli*. *BioMed research international*.
- Prawirowardoyo, S., S. Rosmarkam, M.S.D. Shieddieq, Hidayat. 1987. *Panduan Analisis Kimia Tanah*. Jurusan Tanah Fakultas Pertanian UGM. Yogyakarta.
- Purnomo, J., 2005. Meningkatkan produksi kacang tanah lahan Alfisol dengan menanam varietas toleran. *Buletin Palawija*. (10):78-84.
- Rahmadani, H. 2019. *Profil Metabolit Rhizobakteri Osmotoleran (*Enterobacter flavescens*) yang Ditumbuhkan dalam Medium Ekstrak Podsolik Merah Kuning dan Cekaman Aluminium*. Universitas Gadjah Mada. Skripsi.
- Roostalu, J., A. Jõers, H. Luidalepp, N. Kaldalu, and T. Tenson. 2008. Cell division in *Escherichia coli* cultures monitored at single cell resolution. *BMC microbiology*. 8(1): 68.
- Sarma, B.K., S.K.Yadav, D.P. Singh, and H.B. Singh. 2012. Rhizobacteria mediated induced systemic tolerance in plants: prospects for abiotic stress management. In *Bacteria in agrobiolology: stress management*. 225-238.
- Schmidt K, 1994. *Mikrobiologi Umum*. Yogyakarta: Gadjah Mada University Press.
- Smirnoff, N. and Q.J. Cumbes. 1989. Hydroxyl radical scavenging activity of compatible solutes. *Phytochemistry*. 28(4):1057-1060.
- Subardja, D., S. Ritung, M. Anda, Sukarman, E. Suryani, dan R.E. Subandiono. 2016. *Petunjuk Teknis Klasifikasi Tanah Nasional*. Edisi Ke-2. Balai Besar Penelitian dan Pengembangan Sumberdaya Lahan Pertanian, Badan Penelitian dan Pengembangan Pertanian, Bogor.
- Tan, K.H., 2000. *Inorganic soil constituents*. Environmental soil science. Marcel Dekker Inc. New York. 28-79.
- Tan, Kim. H. 2000. *Soil Sampling, Preparation and Analysis*. Marcel Dekker, Inc. New York.
- Taylor, W.I. and D. Achanzar. 1972. Catalase test as an aid to the identification of *Enterobacteriaceae*. *Applied microbiology*. 24(1):58-61.
- Wahid, A. and T.J. Close. 2007. Expression of dehydrins under heat stress and their relationship with water relations of sugarcane leaves. *Biologia Plantarum*. 51(1):104-109.

- Walley, J.W., S. Coughlan, M.E.Hudson, M.F. Covington, R. Kaspi, G. Banu, S.L. Harmer, and K. Dehesh. 2007. Mechanical cekamans induces biotic and abiotic cekamans responses via a novel cis-element. *PLoS genetics*. 3(10).
- Wijanarko, A., S. Sudaryono, and S. Sutarno. 2007. Karakteristik Sifat Kimia dan Fisika Tanah Alfisol di Jawa Timur dan Jawa Tengah. *Iptek Tanaman Pangan*. 2(2).
- Yuwono, T., D. Handayani & J. Soedarsono. 2005. The role of osmotolerant rhizobacteria in rice growth under different drought conditions. *Australian journal of agricultural research*. 56(7):715-721.
- Zainuddin, M., Setyati, W.A. and Renta, P.P., 2017. Zona Hidrolisis dan Pertumbuhan Bakteri Proteolitik dari Sedimen Ekosistem Mangrove *Rhizophora mucronata* Telukawur–Jepara. *Akuatik: Jurnal Sumberdaya Perairan*. 11(2):31-35.
- Zhang, H., C. Murzello, Y. Sun, M.S. Kim, X. Xie, R.M. Jeter, J.C. Zak, S.E. Dowd, and P.W. Paré, 2010. Choline and osmotic-stress tolerance induced in *Arabidopsis* by the soil microbe *Bacillus subtilis* (GB03). *Molecular plant-microbe interactions*. 23(8):1097-1104.
- Złoch, M., D. Thiem, R. Gadzała-Kopciuch, and K. Hryniewicz. 2016. Synthesis of siderophores by plant-associated metallotolerant bacteria under exposure to Cd<sup>2+</sup>. *Chemosphere*. 156:312-32.