

DAFTAR PUSTAKA

- Abdullah, M. dan Khairurrijal. 2009. Review: Karakterisasi Nanomaterial. *Jurnal Nanosains and Nanoteknologi*, 2 : 1.
- Abul, F. Q., Sajjad, M. A. K., Ahmad, I., dan Safar, A. A., 2019. Potential of Nanoparticles in Combating Candida Infections. *Letters in Drug Design and Discovery*. 16 (5). 478-491.
- Ahmed, E. M., 2015. Hydrogel: Preparation, Characterization, and Applications: a Review. *Journal of Advance Research*. 6 : 105-121.
- Akmaz, S., Adiguzel, E.D., Yasar, M., dan Erguven, O. 2013. The Effect of Ag Content of the Chitosan-Silver Nanoparticle Composite Material on the Structure and Antibacterial Activity. *Advances in Materials Science and Engineering*. 3, 1-3.
- Al-Nemrawi N. K., Alsharif, S. S. M., Dave R. H., 2018. Preparation Of Chitosan-TPP Nanoparticles: The Influence Of Chitosan Polymeric Properties And Formulation Variables, *International Journal of Applied Pharmaceutics*, 10 (5), 60-65.
- Alves, C. D. S., Martins, M. S., Avinash, P. I., Gupta, I., Galdiero, S., Galdiero, M., Gade, A., dan Rai, M., 2014. Silver Nanoparticles : Therapeutical Uses, Toxicity, and Safety Issues. *Journal of Pharmaceutical Sciences Wiley Online Library (Mini Review)*, 1-14.
- Anggraeni, N.H. 2008. Analisis SEM (*Scanning Electron Microscopy*) dalam Pemantauan Proses Oksidasi Magnetit Menjadi Hematit, *Seminar Nasional VII Rekayasa dan Aplikasi Teknik Mesin*, ISSN: 1693-3168.
- Ariyanti, S. D., dan Nuri, Y. F., 2006. Kitosan Oligosakarida : Produksi dan Proteksinya sebagai Antibakteri. *Balai Besar Riset Pengolahan Produk dan Bioteknologi Kelautan dan Perikanan*. 1 : 1.
- Arjunan, N., Kumari, H. L. J., Singaravelu, C. M., Kandasamy, R. & Kandasamy, J., 2016. Physicochemical Investigations of Biogenic Chitosan-Silver Nanocomposite as Antimicrobial and Anticancer Agent. *International Journal of Biological Macromolecules*, 92 : 77-87.
- Asharani, P.V., Mun, G.I.K., Hande, M.P., dan Valiyaveetil, S. (2009). Cytotoxicity and Genotoxicity of Silver Nanoparticles in Human Cells. *ACS Nano*, 3 (2).
- Berger, J., Reist, M., Mayer, J. M., Felt, O., Peppas, N. A., dan Gurny, R., 2004. Structure and Interactions Covalently and Ionically Crosslinked Chitosan Hydrogels for Biomedical Application. *European Journal of Pharmaceutics and Biopharmaceutics*, 57 (1) : 19-37.
- Bhumkar, D. K., dan Pokharkar, V. B., 2006. Studies on Effect of pH on Crosslinking of Chitosan with Sodium Tripolyphosphate : A Technical Note. *American Association of Pharmaceutical Scientists*. 7 (2) : 50.

- Brooks, G. F., Butel, J. S., dan Morse, S. A., 2005, "Jawetz, Melnick & Adelbergh's: Mikrobiologi Kedokteran". Buku I, Edisi I, Alih bahasa: Bagian Mikrobiologi, FKU Unair. Jakarta : Salemba Medika.
- Brooks G.F., Carroll K.C., Butel J.S., Morse S.A., & Mietzner T.A., 2013. *Jawetz, Melnick, & Adelberg's Medical Microbiology. 26th ed.* New York: Mc Graw-Hill.
- Budi, E. 2011. Kaidah Difraksi Sinar X dalam Analisis Struktur Kristal KBr, *Jurnal Fisika dan Aplikasinya*, 11, 35-40.
- Burton, G. R. W., dan Engelkirk P. G., 2004. *Microbiology for The Health Sciences 7th Edition*, USA : Crawfordsville.
- Cappucino, J. G.. Sherman, N., 2014. *Manual Laboratorium Mikrobiologi*. Jakarta : EGC.
- Cheung, R. C. F., Ng, T. B., Wong, J. H., dan Chan, W. Y., 2015. Chitosan : An Update on Potential Biomedical and Pharmaceutical Application. *Marine Drugs*. Vol. 13 : 5156-5186.
- Chopra, S. and Meindl, P., 2007. *Supply Chain Management : Strategy Planning and Operation, Third Edition*. New Jersey : Pearson Prentice Hall.
- Croisier F., dan Jerome C., 2013. *Chitosan-Based Biomaterials for Tissue Engineering. European Polymer Journal*. 49 : 780-792.
- Dompeipen, E., J., 2017. Isolasi dan Identifikasi Kitin dan Kitosan dari Kulit Udang Windu (*Penaeus monodon*) dengan Spektroskopi Inframerah. *KEMENPERIN Majalah BIAM*. 1 : 31-41.
- Dutrow, B.L and Christine M.C. 2012. X-Ray Powder Diffraction (XRD). [online]. http://serc.carleton.edu/research_education/geochemsheets/techniques/XRD.html. Diakses tanggal 12 Maret 2020.
- Dumilah, S. S., 1992. *Candida albicans dan Kandidiasis pada Manusia*. Jakarta : FKUI.
- Dwidjoseputro, D., 1978. *Pengantar Mikologi*. Bogor : Penerbit Alumni.
- Dwidjoseputro, D. (1990). *Dasar - Dasar Mikrobiologi*. Jakarta: Djambatan. Hal. 187-192.
- Edward, J. D., Kaimudin, M., Riardi, P. D. Isolation of Chitin and Chitosan From Waste of Skin Shrimp. *Balai Riset dan Standarisasi Industri Ambon*. 1 : 32-38.
- Efriza, S., Satriananda, & Amalia, Z. (2019). Sintesa Bioadsorben Hybrid Kitosan-Bentonit Beads untuk Menyerap Zat Warna Anionik dan Kationik. *Jurnal Reaksi (Journal of Science and Technology)*.
- Freire, P. L., Albuquerque, A. J., Farias, I. A., Da Silva, T. G., Aguiar, J. S., Galembeck, A., Flores, M. A., Sampaio, F. C., Stamford, T. C. M. & Rosenblatt, A., 2016. Antimicrobial and Cytotoxicity Evaluation of Colloidal Chitosan-Silver Nanoparticles-Fluoride Nanocomposites. *International Journal of Biological Macromolecules*, 93 : 896-903.
- Fardiaz, S., 1993. *Mikrobiologi Pengolahan Pangan Lanjut*. Bogor : IPB.

- Ferreira, A. T., Sobral de Carvalho, S. M., Cardoso, R. B., Silva, S. M. L., Antonio, M. S. G., Gilson, A. B., dan Vinicius, M. L. F., 2018. Ionically Crosslinked Chitosan Membranes Used as Drug Carriers for Cancer Therapy Application. *Materials*. 11 : 2051.
- Fernandez, L. L., Resender, C. X., Tavares, D. S., Soares, G. A., Castro, L. O., dan Granjeiro, J. M., 2010. Cytocompatibility of Chitosan and Collagen-Chitosan Scaffolds for Tissue Engineering. *Polimeros*. 21 (1) : 1-6.
- Ganiswarna, S., 1995, *Farmakologi dan Terapi Edisi IV*. Jakarta : Bagian Farmakologi Fakultas Kedokteran Universitas Indonesia.
- Ghasemzadeh, H., Sheikahmadi, M., dan Nasrollah, F., 2016. Full Polysaccharide Crosslinked-Chitosan and Silver Nano Composites for Use as an Antibacterial Membrane. *Chinese Journal of Polymer Science*. 34 (8) : 949-964.
- Ghaffari-Moghaddam, M. dan Eslahi, H., 2014, Synthesis, Characterization and Antibacterial Properties of a Novel Nanocomposite Based on Polyaniline/Polyvinyl Alcohol/Ag. *Arabian Journal of Chemistry*, 7, 846-855.
- Hafdani, F. Nejadi and Sadheginia, N. 2011. A Review on Application of Chitosan as a Natural Antimicrobial. *International Journal of Pharmacological and Pharmaceutical Science*, 5 (2), 46-50.
- Hannula J., 2000. Clonal Types of Oral Yeasts in Relation to Age, Health and Geography. *Disertasi*. Finland : Institute of Dentistry, Department of Periodontology, University of Helsinki
- Harjanti, R. S. 2014. Kitosan dari Limbah Udang sebagai Bahan Pengawet Ayam Goreng. *Jurnal Rekayasa Proses*. Vol. 8 (1) : 12-19.
- Harmita, dan Radji, M. 2008. *Buku Ajar Analisis Hayati, Edisi 3*. Jakarta: EGC.
- Hariyadi, R. D., dan Cynthia, 2014. Inaktivasi Bakteri Patogen Planktonik dan Biofilm oleh Sanitaiser Komersial. *Jurnal Mutu Pangan*, 1(2): 110-117.
- Hend, E. S., Gamal, R. S., dan Magdy, W. S., 2016. Synthesis, Characterization, and Biological Activity of Crosslinked Chitosan Biguanidine Loaded with Silver Nanoparticles. *Journal of Biomaterials Science Polymer Edition*. 27 (18) : 1880-1898.
- Herchline, T. E., 2011. Staphylococcal Infections. [online].
<https://www.emedicine.medscape.com/article/228816-overview>
- Hosseinnejad M., Jafari S. M., 2016. Evaluation of Different Factors Affecting Antimicrobial Properties of Chitosan. *International Journal of Biological Macromolecule*. 85 : 467-475.
- Hutasoid, S., I Ketut, S., I Gede, K. T., 2013. Uji Aktivitas Antijamur Ekstrak Beberapa Jenis Biota Laut Terhadap *Aspergillus flavus* dan *Penicillium sp.* *E-Journal Agroekoteknologi Tropika*. 2 (1) : 27-38.

- Ikram, S., Ahmed S., dan Mudassir, A. 2014. Chitosan : A Natural Antimicrobial Agent-A Review. *Journal of Applicable Chemistry*, 3(2), 493-503.
- Iptita D. F. dan Manik R. W., 2018. Aktivitas Daya Hambat Ekstrak Jahe (*Zingiber officinale var rubrum*) Terhadap Pertumbuhan Kuman *Staphylococcus aureus*. *Journal of Vocational Health Studies*. 1 : 113-116.
- Islam, S., Bhuiyan, M.A.R. dan Islam, M.N. 2017. Chitin and Chitosan: Structure, Properties and Applications in Biomedical Engineering. *Journal of Polymers and the Environment*. 25 (3), 854-866.
- Iswadi. 2016. Fage Litik Spesifik *Escherichia coli* Pada Limbah Cair Pasar Tradisional di Kota Banda Aceh. *Jurnal Biotik*, 4(2): 95-99.
- Jawetz, Adelberg, dan Melnick, 2010. *Medical Microbiology Edisi 23*. Jakarta : Penerbit Buku Kedokteran EGC.
- Jin, X., Wang, J., dan Jie, B., 2009. Synthesis and Antimicrobial Activity of The Schiff Base From Chitosan and Citral. *Journal of Carbohydrate Res*. 344 (6) : 9-825.
- Kalaivani, R., Maruthupandy, M., Muneeswaran, T., Hameedha, B. A., Anand, M., Ramakritinan C. M., Kumaraguru, A. K., 2018. Synthesis of Chitosan Mediated Silver Nanoparticles (Ag NPs) for Potential Antimicrobial Applications. *Frontier in Laboratory Medicine*. 2 : 30-35.
- Karta, I. W., dan Burhannuddin. 2017. Uji Aktivitas Antijamur Ekstrak Akar Tanaman Bama (*Plumbago zeylanica*) terhadap Pertumbuhan Jamur *Trychophyton mentagrophytes* Penyebab Kurap pada Kulit. *Jurnal Media Sains*. Vol. 1 (1) : 23-31.
- Komariah dan Ridhawati S., 2012. Kolonisasi *Candida* dalam Rongga Mulut. *Majalah Kedokteran Parasitologi FK UI*. 27 (1) : 39-47.
- Kumalasari, E., dan Sulistyani, N. 2011. Aktivitas Antifungi Ekstrak Etanol Batang Binahong (*Anredera cordifolia* (Tenore) Steen.) terhadap *Candida albicans* serta Skrining Fitokimia. *Jurnal Ilmiah Kefarmasian*. Vol. 1 (2) : 51-62.
- Kumar, A., Behl, T., Chadha, S., 2020. Synthesis of Physically Crosslinked PVA/Chitosan Loaded Silver Nanoparticles with Tunable Mechanical Properties and Antibacterial Effects. *International Journal of Biological Macromolecules*. 149 : 1262-1274.
- Kurniasih, M., Purwati, Dewi, R. S., dan Fatimah, Susi. 2018a. Uji Aktivitas Antioksidan N-Metil Kitosan Berkelarutan tinggi. *ALCHEMY Jurnal Penelitian Kimia*. Vol. 14 (1) : 107-118.
- Kurniasih, M., Kapti, R., Tien, S., Ira, S., 2018b. Adsorpsi Ion Ni (II) Menggunakan Crosslink Kitosan Tripolifosfat. *Jurnal Rekayasa Kimia dan Lingkungan*. 13 (2) : 174-181.
- Kurniasih, M., Purwati, Dewi, R. S., Hermawan, D., & Vaulina, E. (2019). Carboxymethyl Chitosan as A Homemade Sausage Preservative. *J. Pure App. Chem. Res.*, 96-108.

- LaRee, A., Tracy, J. P., Furuno, Anthony, D., Harris, Mary S., Patricia L., Mary C. R., 2011. *Staphylococcus aureus* Infections in US Veterans, Maryland, USA, 1999-2008. *Emerging Infectious Diseases (CDC)*. 17 (3) : 441-576.
- Lima, D.d.S., Gullon, B., Cardelle-Cobas, A., Brito, L.M., Rodrigues, K.A., Quelemes, P.V., Ramos-Jesus, J., Arcanjo, D.D., Plácido, A., Batziou, K., 2017. Chitosan-Based Silver Nanoparticles: A Study of The Antibacterial, Antileishmanial and Cytotoxic Effects. *Journal Bioactive Compatible Polymers*. 32 (4) : 397-410.
- Liu N., Chen X. G., dan Park H. J., 2005. *Effect of MW and Concentration of Chitosan on Antibacterial Activity of Escherichia coli*. *Journal of Carbohydrate Polymer*. Vol. 64 : 60-65.
- Lowy, D., Franklin, 1998. Staphylococcus aureus Infection. *The New England Journal of Medicine*. 339 (8) : 520-532.
- Mahmud, M. (2001). *Teknik Penyimpanan dan Pemeliharaan Mikroba*. Bogor: Balai Penelitian Bioteknologi Tanaman Pangan.
- Madappa T., dan Bronze M. S., 2014. *Escherichia coli* Infections Medication. *Medscape*. <https://www.emedicine.medscape.com/article/217485-medication>. Diakses 9 Juni 2020.
- Maksum, R., Anglia, P., dan Atiek, S., 2010. Deteksi Cepat Bakteri *Escherichia coli* dalam Sampel Air dengan Metode Polymerase Chain Reaction Menggunakan Primer 16E1 dan 16E2. *Makara Sains Farmasi UI*. 14 (1) : 39-43.
- Malvern Instruments Limited, 2012. A Basic Guide to Particle Characterization. (<http://www.malvern.com> diakses tanggal 25 Juli 2020).
- Marcott, 1986. *Material Characterization Hand Book Volume 1 Infrared Spectroscopy*. USA : ASM International.
- Masuda, Y., dan Kato, K. (2008). Liquid-Phase Patterning and Microstructure of Anatase TiO₂ Films on SnO₂: F Substrates Using Superhydrophyllic Surface. *Chemistry of Material*, 20, 1057-1063.
- Matei P. M., Martín R. P., Sánchez B. M., 2015. Synthesis of Chitosan Oligomers/Propolis/Silver Nanoparticles Composite Systems and Study of Their Activity Against *Diplodia seriata*. *International Journal of Polymer Science*, 2015:1-11.
- Mourya, V., Inamdar, N. N., 2008. Chitosan-Modifications and Applications : Opportunities Galore. *Reactive and Functional Polymer*. 68 : 1013-1051.
- Mudatsir M., 2007. *Faktor-Faktor yang Mempengaruhi Kehidupan Mikroba dalam Air*. *Jurnal Kedokteran Syiah Kuala*. 7 : 1.
- Muliawati, D.N., dan Yulianti, E. (2018). Uji Aktivitas Antimikroba Nanopartikel Perak dari Limbah Perak Hasil Penyepuhan Terhadap Bakteri *S. aureus* dan Fungi *C. albicans*. *Jurnal Prodi Biologi*, 2 (7). 1-4
- Mulyadi, M., Wuryanti, Purbowatiningrum, R. S., 2017. *Konsentrasi Hambat Minimum (KHM) Kadar Sampel Alang-Alang (Imperata cylindrica) dalam Etanol*

- Melalui Metode Difusi Cakram. Jurnal Kimia Sains dan Aplikasi.* 20 (3) : 130-135.
- Mundi, N., 2018. Karakterisasi Profil Resistensi Antibiotik Pada *Escherichia coli* yang Diisolasi dari Daging Ayam yang Dijual di Beberapa Pasar di Surabaya *Thesis*. Surabaya : Fakultas Kedokteran Hewan Universitas Airlangga.
- Mutiawati, V. K. 2016. Pemeriksaan Mikrobiologi pada *Candida albicans*. *Jurnal Kedokteran Syah Kuala*. Vol 16 (1) : 53-63.
- Nabel, A. N., Hassan, H. H. H., Ali, A., Emad, A. B., Maram, T. H. A. K., 2020. Advancement on Modification of Chitosan Biopolymer and it's Potential Applications. *Journal of Biological Macromolecules*.
- Nester, E. W., Anderson, D. G., Roberts, C. E., and Nester, M. T. 2009. *Microbiology A Human Perspective*. New York : McGraw-Hill.
- Nkechinyere, 2014. Preparation and Characterization of Porous Chitosan Trypolyphosphate Gel Bead. *Thesis of Master Science in Chemistry*. Eastern Mediterranean University.
- Nugroho, A. C. S. dan Linggar, A. O., 2017. Sintesis dan Karakterisasi Bioplastik dari Kitosan-Pati Ganyong (*Canna edulis*). *Jurnal Kimia dan Pendidikan Kimia*. 2 : 1.
- Pelczar, Michael, J., dan Chan, E. C. S. 2008. *Dasar-Dasar Mikrobiologi*. Jakarta : UI Press.
- Pratiwi, S. T. 2008. Mikrobiologi Farmasi. Jakarta : Erlangga.
- Prasad, S.B., 2013. Current Understanding of Synthesis and Pharmacological Aspects of Silver Nanoparticles. *American Journal of Phytomedicine and Clinical Therapeutics*. 1 (7) : 536-547.
- Purkan, B., Azizah, A. Baktir, dan Sumarsih, S., 2014. Eksplorasi Bakteri Proteolitik dari Sampah Organik : Isolasi dan Karakterisasi Enzim Protease. *Jurnal Molekul*. 9 : 128-135.
- Radji M., 2011. Buku Ajar Mikrobiologi : Panduan Mahasiswa Farmasi dan Kedokteran. Jakarta : EGC.
- Rawle, A. (2010). Basic Principles of Particle Size Analysis. *Technical Paper of Malvern Instruments*. Worchestershire, United Kingdom.
- Regiel-Futyra, A., Kus-Liśkiewicz, M., Sebastian, V., Irusta, S., Arruebo, M., Kyzioł, A., Stochel, G., 2017. Development of noncytotoxic silver–chitosan nanocomposites for efficient control of biofilm forming microbes. *RSC Adv*. 7 (83), 52398–52413.
- Roberts, G. A. F., 1992 . *Preparation of Chitin and Chitosan*. London : Macmillian Press Ltd.
- Rohaeti, E., 2009. Karakterisasi Biodegradasi Polimer, *Prosiding Seminar Nasional Penelitian, Pendidikan dan Penerapan MIPA*, Universitas Negeri Yogyakarta, 16 Mei 2009, K-248-257.

- Rudiyansyah, A. I., Nur, E. W., Endang, K., 2015. Pengaruh Suhu, Kelembaban, dan Sanitasi Terhadap Keberadaan Bakteri *Escherichia coli* dan *Salmonella* di Kandang Ayam Pada Peternakan Ayam Broiler Kelurahan Karanggeneng Kota Semarang. *Jurnal Kesehatan Masyarakat UNDIP*. 3 (2) : 196-201.
- Rumengan, I. F. M., Suptijah, P., Salindeho, N., Wullur, S., Luntungan, A. H., 2018. *Nanokitosan dari Sisik Ikan : Aplikasinya sebagai Pengemas Produk Perikanan*. Manado : Lembaga Penelitian dan Pengabdian Kepada Masyarakat Universitas Sam Ratulangi.
- Ryan, C., Alcock, E., Buttimer, F., Schmidt, M., Clarke, D., Pemble, M., dan Bardosova, M., 2017. Synthesis and Characterization of Crosslinked Chitossan Composites Functionalised with Silver and Gold Nanoparticles for Antimicrobial Applications. *Science and Technology of Advanced Materials*. 18 (1) : 528-540.
- Sarwono, 2010. Pemanfaatan Kitin/Kitosan sebagai Bahan Antimikroba. *Jurnal Kimia Terapan Indonesia*. 12 (1).
- Sastrohamidjojo, H. 2007. *Spektroskopi*, Yogyakarta: Liberty.
- Savant, Vivek, D., dan Torres, J. A., 2000. Chitosan-Based Koagulating Agents for Treatment of Cheddar Chees Whey. *Biotechnology Progress*. 16 (pp) : 1091-1097.
- Sarwar, M.S., Niazi, M.B.K., Jahan, Z., Ahmad, T., Hussain, A., 2018. Preparation and Characterization of PVA/Nanocellulose/Ag Nanocomposite Films for Antimicrobial Food Packaging. *Journal Carbohydrate Polymer*. 184 : 453-464.
- Scully, C., El-Kabir, M., Lakshman, P. S., 1994. *Candida* and Oral Candidosis : A Review. *Critical Reviews in Oral Biology and Medicine*. 5(2) : 125-157.
- Setyaningsih, N. E., Muttaqin, R., Mar'ah, I. (2017). Optimalisasi Waktu Pelapisan Emas-Palladium pada Bahan Komposit Alam untuk Karakterisasi Morfologi dengan Scanning Electron Microscopy (SEM) - Energy Dispersive X-Ray Spectroscopy (EDX). *Physics Communication*, 1 (2), 36-40.
- Shahidi, F., Janak, K. V., dan Yon J. J., 1999. *Food Application of Chitin Chitosans*. Canada : University of Newfoundland.
- Sharah, A., Karnila, R., Desmelati, 2015. Pembuatan Kurva Pertumbuhan Bakteri Asam Laktat Yang Diisolasi Dari Ikan Peda Kembang (*Rastrelliger sp.*). JOM, <https://media.neliti.com/media/publications/203144-none.pdf>. 1-19
- Sileikaite A., Igoris P., Judita P., Algimantas J., dan Asta G., 2006. Analysis of silver nanoparticles produced by chemical reduction of silver salt solution. *Journal of Material Science*. 12: 287-291.
- Silverstein, R. M. 1986. *Penyidikan Spektrometrik Senyawa Organik Edisi 4*. Jakarta: Erlangga.
- Smallman, R. E. dan Bishop, R. J., 2000, *Metalurgi Fisik Modern dan Rekayasa Material*, Edisi Keenam. Jakarta : Erlangga.
- Sreekumar S., Goycoolea F. M., Moerschbacher B. M., Rivera-Rodriguez G. R., (2018), Parameters Influencing the Size of Chitosan-TPP Nano and Microparticles, *Scientific Reports*, 8(1),1-11.

- Stuart, B., 2004. *Infrared Spectroscopy : Fundamentals and Applications*. New York : John Wiley and Sons Inc.
- Sudarmadji, S., Haryono, B., dan Suhardi, 1989. *Analisis untuk Bahan Makanan dan Pertanian*. Yogyakarta : Liberty Press.
- Sugita, 2009. *Kitosan: Sumber Biomaterial Masa Depan*. Bogor: IPB Press.
- Sun, D., Turner, J., Jiang, N., Zhu, S., Zhang, L., Falzon, B. G., McCoy, C. P., Maguire, P., Mariotti, D., Sun, D., 2019. Atmospheric Pressure Microplasma for Antibacterial Silver Nanoparticle/Chitosan Nanocomposites with Tailored Properties. *Journal of Composites Science and Technology*. 186 : 4-5.
- Sutton, S., 2011. Determination of Inoculum for Microbiological Testing. *Summer Journal*. 15 : 49-53.
- Tjampaksari, C. R., Karakteristik *Candida albicans*. *Cermin Dunia Kedokteran*. 151 : 33-36.
- Tolaimatea, A., Desbrieres, J., Rhazi, M., dan Alagui, A., 2003. *Contribution to The Preparation of Chitins and Chitosans with Controlled Physico-Chemical Properties*. *Journal of Polymer*. 44 : 7939-7952.
- Udochukwu, O. A., Louis, H., Chigoziem, O. A., dan Akpan, E. E., 2019. Facile Fabrication of pH-Responsive and Swellable Slow Release Microparticles of Chlorpheniramine Maleate with Chitosan-Starch Matrices and Their Crosslinks. *International Journal of Polymeric Materials and Polymeric Biomaterials*. 1 : 5.
- Vakili, M., Rafatullah, M., Salamatinia, B., Abdullah, A. Z., Ibrahim, M. H., Tan, K. B., Amouzgar, P., (2014). Application of Chitosan and Its Derivatives as adsorbent for Dye Removal from Water and Wastewater: A review. *Carbohydrate Polymers*, 115-130.
- Vladislava, Z., Donna, R. W., Bayden, R. W., James, T. P., Keith, R. B., Jane, M. B., 2015. Importance of Tissue Preparation Methods in FTIR Micro-Spectroscopical Analysis of Biological Tissues: 'Traps for New Users'. *Research Article*.
- Wahyuningsih, N., dan Zulaika, E., 2018. Perbandingan Pertumbuhan Bakteri Selulolitik Pada Media *Nutrient Broth* dan *Carboxy Methyl. Cellulose*. *Jurnal Sains dan Seni ITS*. 7(2) : E36-E38.
- Waluyo, L., 2004. *Mikrobiologi Umum*. Malang : Universitas Muhammadiyah.
- Xing, Y., Xu, Q., Li, X., Chen, C., Ma, L., Li, S., Che, Z., dan Lin, H., 2018. Chitosan-Based Coating With Antimicrobial Agents: Preparation, Property, Mechanism, and Application Effectiveness on Fruits and Vegetables. *International Journal of Polymer Science*, 1-24.
- Yuliani, R., Peni, I., dan Sriandita, S.R., 2011. Aktivitas Antibakteri Minyak Atsiri Daun Jeruk Purut (*Citrus hystrix*) Terhadap *Staphylococcus aureus* dan *Escherichia coli*. *Pharmakon*. 12 (2) : 50-54.
- Yulina, I.K. (2011). Aktivitas Antibakteri Kitosan Berdasarkan Perbedaan Derajat Deasetilasi dan Bobot Molekul. *Skripsi*. IPB. Bogor.