

Daftar pustaka

- Aidara-Kanea, A., Andremont, A., Collignonc, P., 2013, “Antimicrobial resistance in the food chain and the AGISAR initiative”, *J. Infect. Public Health*, 6 : 162-165.
- Allocati, N., Masulli, M., Alexeyev, M.F, Di Lio, 2013, “Review : *Escherichia coli* in Europe: An Overview”, *Int. J. Environ. Res. Public Health*, 10 : 6235-6254
- Alo, M.N., Anyim, C., Igwe, J.C., and Elom M., 2009, “Presence of extended spectrum β -lactamase (ESBL) *E. coli* and *K. pneumoniae* isolatd from blood cultures of hospitalized patients”, *Adv. Appl. Sci. Res.*, 3 (4) : 295-299.
- Anderson, D.M., 2007, *Dorland's Illustrated Medical Dictionary*, 31st ed. Philadelphia: Saunders. Anderson, P., Blackwood.
- Awean, G.Z.A., Salameh, K., Elmohamed, H., Alshmayt, H., Omer, M.R.B., 2019 “Prevalence of ESBL urinary tract infection in children”, *J. Adv. Pediatr. Child. Health*, 2 : 004-007.
- BPOM RI, 2014, *Persyaratan Mutu Obat Tradisional*, Peraturan Kepala Badan Pengawas Obat dan Makanan Republik Indonesia, Indonesia.
- Backhed, F., Soderhall, M., Ekman, P., Normark, S., Richter-Dahfors, A., 2001, “An Induction of innate immune responses by *Escherichia coli* and purified lipopolysaccharide correlate with organ-and cell-specific expression of Toll-like receptors within the human urinary tract”, *Cell. Microbiol.* , 3 (3) : 153-158.

- Bajpai, T., Pandey, M., Varma, M., Bhatambare, G.S., 2017, “Prevalence of TEM, SHV, and CTX-M Beta-Lactamase genes in the urinary isolates of a tertiary care hospital”, *Avicenna J Med.*, 7(1):12-16
- Baraniak, A., Fiett, J., Mroćwka, A., Walory, J., Hryniewicz, W., Gniadkowski, M., 2005, “Evolution Of TEM Type Extended-Spectrum-Lactamases In Clinical *Enterobacteriaceae* Strains In Poland”, *Antimicrob. Agents Chemother.*, 4(5) : 1872–1880.
- Beauduy, C.E & Winston, L.G., 2018. Beta Lactam and Other Cell Wall Membrane Active Membrane. In Katzung, B.G. Basic & Clinical Pharmacology, Fourteenth Edition. New York: McGraw Hill Education.
- Begum, N., Shamsuzzaman, S.M., 2016, “Emergence of CTX-M-15 producing *E. coli* O25b-ST131 clone in a tertiary care hospital of Bangladesh”, *Malay. J. Pathol.*, 38(3) : 241-249.
- Benner, K.W., Pharm, D., Prabhakaran, P., 2014, “Epidemiology of Infections Due to Extended-Spectrum Beta-Lactamase–Producing Bacteria in a Pediatric Intensive Care Unit”, *J. Pediatr. Pharmacol. Ther.*, 19(2).
- Blomberg, B., 2000, “High rate of fatal cases of pediatric septicemia caused by gram negative bacteria with extended-spectrum beta-lactamase in Dar es Salam, Tanzania”, *J. Clin. Microbiol.*, 43(2) : 745-9.
- Braide, W., Madu, L.C., Adeleye, S.A., Korie, M.C., Akobundu, C.I., 2018, "Prevalence of Extended Spectrum Beta Lactamase Producing *Escherichia coli* and *Pseudomonas aeruginosa* Isolats from Clinical Samples”, *Int. J. Sci.*, 7(2) : 89-93.

Brooks, G.F., Carroll, K.C., Butel, J.S., Morse, S.A., Mietzner, T.A., 2011. Jawetz, Melnick & Adelberg's. Medical Microbiology. 25th ed. Mc Graw Hill, Lange.

Brown, E., Hardwidge, P., 2007, "Biochemical characterization of the enterotoxigenic *Escherichia coli* LeoA protein". *Microbiology*, 153 (11) : 3776-3784.

Bush, K., Jacoby, G.A. 2010, "Updated Functional Classification of β -Lactamases", *Antimicrob. Agents Chemother.*, 54 (3) : 969–976.

Chong, Y., Ito, Y., Kamimura, T., 2011, "Genetic evolution and clinical impact in extended-spectrum b-lactamase-producing *Escherichia coli* and *Klebsiella pneumoniae*", *Infect. Genet. Evol.*, 11,1499–1504

Cleary J, Lai L, Shaw R, Straatman-Iwanowska, A., Donnenberg, M.S., Frankel, G., *et al.*, 2004, "Enteropathogenic *Escherichia coli* (EPEC) adhesion to intestinal epithelial cells: role of bundle-forming pili (BFP), EspA filaments and intimin", *Microbiology*, 150(3) :527-538.

Clements, A., Young, JC., Constantinou, N., Frankel, G., 2012, "Infection strategies of enteric pathogenic *Escherichia coli*", *Gut Microbes.*, 3(2) : 71–87

Clinical Laboratory Standart Institute, 2017, Performance Standards for Antimicrobial Susceptibility Testing. Twenty-seventh Information (Supplement) : M100, Wayne PA USA.

Dallenne, C., Da Costa, A., Decre, D., Favier, C., Arlet, G., 2010, "Development of a set of multiplex PCR assays for the detection of genes encoding important β -lactamases in Enterobacteriaceae", *J. Antimicrob. Chemother.*, 5 :490–495.

Davies, J., Davies, D., 2010, “Microbiology and Molecular Biology Review : Origins and Evolusion of Antibiotic Resistance”, *ASM.*, 74 (5): 417-433.

Díaz-Agero Pérez, C., López-Fresneña, N., Rincon Carlavilla, A.L., Hernandez Garcia, M., Ruiz-Garbajosa, P., Aranaz-Andres, J.M., *et al.*, 2019, “ Local prevalence of extendedspectrum beta-lactamase (ESBL) producing Enterobacteriaceae intestinal carriers at admission and co-expression of ESBL and OXA-48 carbapenemase in Klebsiella pneumoniae: a prevalence survey in a Spanish University Hospital”, *BMJ.* 9:e024879.

Dortet, L., Poirel, L., Nordmann, P., 2015, “Rapid Detection of ESBL-Producing Enterobacteriaceae in Blood Culture”, *J. Emerg. Infect. Dis.*, 21(3) : 504-507.

Drieux, I., Brossier, F., Sougakoff, W., 2008, “Phenotypic detection of extended-spectrum- β -lactamase production in Enterobacteriaceae : review and bench guide”, *Clin. Microbiol. Infect.*, 14(1) : 90-103

Emody, L., Kerenyi, M., Nagy, G., 2003, “Virulence factors of uropathogenic *Escherichia coli*”, *Int. J. Antimicrob. Agents*, 22 : 29-33.

Forbes, B., Sahm, D., Weissfeld, A., 2007, Bailey W. Bailey & Scott's diagnostic microbiology. St. Louis, Mo.: Elsevier Mosby.

Gallagher, J.C. & MacDougall, C., 2018. Antibiotic Simplified. 4th ed. Jones & Bartlett Learning

Garrec, H., Drieux-Rouzet, L., Goldmar, J.L., 2011, “Comparison of Nine Phenotypic Methods for Detection of Extended-Spectrum β -lactamase Production”, *J. Clin. Microbiol.*, 49(3) :1048-1057.

- Geser, N., Stephan, R., Hachler, 2012, “Occurrence and characteristics of extended-spectrum β -lactamase (ESBL) producing Enterobacteriaceae in food producing animals, minced meat and raw milk”, *BMC*, 8 (12).
- Ghafourian, S., Sadeghifard, N., Soheili, S., Sekawi, Z., 2015, “ Extended Spectrum Beta-lactamases”, *Curr. Issues Mol. Biol*, 17, 11-22.
- Ghane, M & Adham, F 2020, ‘Frequency of TEM and PER Beta-Lactamase Genes in Urinary Isolates of *Escherichia Coli* Producing Extended-Spectrum Beta-Lactamases,’ *J. Arak Uni. Med. Sci.*, 22(6): 218-229
URL: <http://jams.arakmu.ac.ir/article-1-6064-en.html>
- Goering, R., Dockrell, H., Zuckerman, 2013, *Mim’s Medical Microbiology*. 5th ed. Elsevier Mosby.
- Groisman, E., 2001, *Principles of bacterial pathogenesis*. San Diego, Calif.: Academic Press.
- Guenther, S., Ewer, C., Wieler, L.H., 2011, “Extended-spectrum beta-lactamases producing *E. coli* in wildlife, yet another form of environmental pollution?”, *Front. Microbiol.*, 2: 246.
- Hajakwa, K., Gattu, S., Marchaim, D., 2013, “Epidemiology and Risk Factors for Isolation of *Escherichia coli* Producing CTX-M-Type Extended-Spectrum - Lactamase in a Large U.S. Medical Center”, *Antimicrob. Agents Chemother.*, 57(8) : 4010 – 4018.
- Haji, S.H., Jalal, S.T., Omer, SA & Mawlood, A.H., 2018, “Molecular detection of SHV-Type ESBL in *E. coli* and *K.pneumoniae* and their antimicrobial resistance profile”, *J. Med. Sci.*, 22(2).

Harada, Y., Morinaga, Y., Yamada, K., Migiyama, Y., Nagaoka, K., Nakamura, S., Imamura, Y., Miyazaki, T., Hasegawa, H., Izumikawa, K., Takeya, H., Yanagihara, K. and Kohno, S., 2013, “Clinical and Molecular Epidemiology of Extended-Spectrum β -lactamase-Producing *Klebsiella pneumoniae* and *Escherichia coli* in a Japanese Tertiary Hospital”, *Journal of Medical Microbiology and Diagnosis*, vol. 2 : 127.

Hassuna, N.A., Khairalla, A.S., Farahat, E.M., and Abdel-Fatah, M., 2020, “Molecular characterization of Extended-spectrum β lactamase- producing *E. coli* recovered from community-acquired urinary tract infections in Upper Egypt”, *Int. J. Sci. Rep.*, 10 : 2772.

Huang, S., Wan Z., Chen Y., Jong A., Kim K., 2001, “Further characterization of *Escherichia coli* brain microvascular endothelial cell invasion gene *ibeA* by deletion, complementation, and protein expression”, *J. Infect. Dis.*, 183(7):1071—1078

Hudault, S, Guignot, J, Servin, A.L., 2001. “*Escherichia coli* strains colonizing thegastrointestinal tract protect germ-free mice againts *Salmonella typhimurium* infection”, *Gut.*, 49: 47-55.

Ivana, D., Petrikos, G., Dimitrijević, V., Charvalos, E., 2011, “Multidrug resistance and integrons in *Escherichia coli* isolatd from chicken in Greece”, *Acta Veterin.* 61(5-6):575-584.

Jacoby, G.A., 2000, “AmpC β -Lactamases”, *Clin. Microbiol*, 22 :161-182

Karanika, S., Karantanos, T., Arvanitis, M., Gigoras, C., Mylonakis, E., 2016, “Fecal colonization with Extended-spectrum beta-lactamases producing *Enterobacteriaceae* and risk factors among healthy individuals : a system review and meta analysis”, *Clin. Infect. Dis.*, 63:310-8.

Karim, A., Poirel, L., Nagarajan, S., and Nordmann, P., 2001, “Plasmid-mediated extended-spectrum betalactamase (CTX-M-3 like) from India and gene association with insertion sequence ISEcp1”, *FEMS Microbiol. Lett.*, 201 (2) : 237-41.

Katzung, B.G., Masters, S.B., dan Trevor, A.J., 2014, Farmakologi Dasar dan Klinik Terjemahan. Jakarta: Penerbit Buku Kedokteran EGC.

Kaur, M., & Aggarwal, A., 2013, “Occurrence of the CTX-M, SHV and the TEM Genes Among the Extended Spectrum β -Lactamase Producing Isolats of *Enterobacteriaceae* in a Tertiary Care Hospital of North India”, *JCDR*, 7(4) : 642–645.

Kuhnert, P., Boerlin, P., Frey, J., 2000, “Target genes for virulence assessment of *Escherichia coli* isolats from water, food and the environment”, *FEMS Microbiol. Rev.*, 24(1) :107-117.

Kuntaman, Mertiasih, N.M., Hadi, U., 2006, “Multiresistance pattern of extended spectrum β -lactamase (ESBL)-*Escherichia coli* and *Klebsiella pneumoniae* strains”, *Folia Med. Indones.*, 42(1):40-46.

Kuntaman, K., Santoso, S., Wahjono, H., Mertaniasih, N.M., Lestari, E.S., Farida, H., Hapsari, R., Firmanti, S.C., Noorhamdani, A.S, Santosaningsih, D., Purwono, P.B., Kusumaningrum, D., 2011, “The Sensitivity Pattern of Extended Spectrum

Beta Lactamase-Producing Bacteria Against Six Antibiotics that Routinely Used in Clinical Setting”, *J. Indon. Med. Assoc.*, 2(61).

Lan, R., Alles, M., Donohoe, K., Martinez, M., and Reeves, P.R., 2004, “Molecular evolutionary relationships of enteroinvasive *Escherichia coli* and *Shigella spp.*”, *Infect. Immun.*, 72(9) :5080-5088.

Le, H.V., Kawahara, R., Khong, D.T., Tran, H.T., Nguyen, T.N., Ngoc Pham, K., Jinnai, M., Kumeda, Y., Nakayama, T., Ueda, S. and Yamamoto, Y., 2015, “Widespread dissemination of Extended-Spectrum β -Lactamase Producing, multidrug-resistant *Escherichia coli* in live stock and fishery products in Vietnam”, *Int.J of Food Cont*, 2(7).

Le, Q.P., Ueda, S., Nguyen, T.N.H., Dao, T.V.K., Hoang, T.A.V., Tran, T.T.N., Hirai, I., Nakayama, T., Kawahara, R., Do, T.H., Vien, Q.M. and Yoshimasa, Y., 2015, “Characteristics of Extended-Spectrum β -Lactamase-Producing *Escherichia coli* in Retail Meats and Shrimp at a Local Market in Vietnam”, *Foodborne Pathog. Dis.*, 12(8) : 719-725

Lee, D.Y., Kim, H.E., Lee, J.S., Kim, K.S. and Cho, Y.S., 2016, “Comparative Evaluation of Selective Chromogenic Media for Coliforms Bacteria Isolated from Food”, *J. Food Hyg. Saf*, 31(3): 222–225.

Leverstein-van Hall, M.A., Dierikx, C.M., Stuart, J.C., Voets, G.M., van den Munckhof, M.P., van Essen-Zandbergen, A., Platteel, T., Fluit, A.C., van de Sande-Bruinsma, N., Scharinga, J., Bonten, M.J.M., Mevius, D.J. and National ESBL surveillance group, 2011, “Dutch patients, retail chicken meat and poultry share the same ESBL genes, plasmids and strains”, *Clin. Microbiol. Infect.*, 17(6) : 873-880.

- Lewis, M. T., Yamaguchi, K., Biedenbach, D. J., and Jones, R. N. 1999. *In vitro* evaluation of cefepime and other broad-spectrum beta-lactams in 22 medical centers in Japan: a phase II trial comparing two annual organism samples. The Japan Antimicrobial Resistance Study Group. *Diagn. Microbiol. Infect. Dis.*, 35, 307–315.
- Liakopoulos , A, Mevius, D., Ceccarelli, D., 2017, “A Review of SHV Extended-Spectrum β -Lactamases: Neglected Yet Ubiquitous”, *Front. Microbiol.*, vo 7 :1374.
- Li, J., Ji, X.L., Ohuideng, X., Zhou, Y., Ni, X., Liu, X.A., 2015, “Detection of the SHV genotype polymorphism of the extended-spectrum β -lactamase-producing Gram-negative bacterium”, *Biomed. Rep.*, 3 : 261-265.
- Lim, K.T., Yasin, R., Yeo, C.C., Puthucheary, S., and Thong, K.L., 2009, “Characterization of Multidrug Resistant ESBL-Producing *Escherichia coli* Isolats from Hospitals in Malaysia” *J. Biomed. Biotechnol.*, 165637.
- Lubote, R., Shahada, F., Matemu, A., 2014, “Prevalence of *Salmonella* spp. And *Escherichia coli* in raw milk value chain in Arusha, Tanzania”, *American J. Res. Communicat.*, 2(9): 1-13.
- Madigan, M., Martinko, J., Brock, T., 2006, *Brock biology of microorganisms*. Upper Saddle River, N.J. Pearson/Prentice Hall.
- Magray, M.S.U.D., Kumar, A., Rawat, A.K., Srivastava, S., 2011, “Identification of *Escherichia coli* through analysis of 16S rRNA and 16S-23S rRNA internal transcribed spacer region sequences”, *Bioinformation*, 6(10): 370-371

Mahon, C.R., Lehman, D.C., Manuselis, G., 2015, Textbook of Diagnostic Microbiology. 5th ed. Elsevier. Missouri.

Manges, A.R, Johnson,J.R., 2012, “Food-Borne Origins of *Escherichia coli* Causing Extraintestinal Infections”, *Clin. Infect. Dis.*, 55(5) :712-719.

Manyi-Loh, C., Mamohweli, S., Meyer, E., Okoh, A., 2018, “Antibiotic Use in Agriculture and Its Consequential Resistance in Environmental Sources: Potential Public Health Implications”, *Molecules*, 30(4): 795.

Mathai, D., Rhomberg, P. R., Biedenbach, D. J., and Jones, R. N., 2002, “Evaluation of the in vitro activity of six broad-spectrum beta-lactam antimicrobial agents tested against recent clinical isolates from India: a survey of ten medical center laboratories”, *Diagn. Microbiol. Infect. Dis.*, 44 (4) : 367-77.

Mbanga, J., Ncube, V., Magumura, A., 2016, “Detection of extended-spectrum β -lactamase producing *Escherichia coli* in retail chicken meat and humans in Bulawayo, Zimbabwe”, *Am. J. Res. Commun.*, 4(9) : 190-207.

Mukti, A., Rastina, A., Harris, Ismail, Darniati, Masyitha, D., 2017, “Resistensi *Escherichia coli* terhadap Antibiotik dari Daging Ayam Broiler di Pasar Rukoh”, *Jimvet.*, 1 : 492-498.

Murray, P.R., Rosenthal, K.S., Pfaller, M.A., 2013, Medical Microbiology. 7th ed. Elsevier Sunders. Philadelphia.

Masruroh CA., Sudarwanto MB., Latif H., 2016, “The Occurance of Extended Spectrum B-Lactamase-Producing *Escherichia coli* from Broiler Feces in Bogor”, *JSV.*, 34 (1).

- Naelasari, D.N., Dewanti, L., Sulistiawati, Sarassari, R., Kuntaman, K., 2018, "The Prevalence Of Extended Spectrum β -Lactamase (ESBL) Producing Gut Bacterial Flora Among Patients in Dr. Soetomo Hospital And Primary Health Center In Surabaya", *Folia Med.*, 54(4) : 256-262.
- Nahar, A., Awasthi, A.P., Hatanaka, N., Okuno, K., Hoang, P.H., Hassan, J., Hineyo, A., Yamasaki, S., 2018, "Prevalence and characteristics of extended-spectrum β -lactamase-producing *Escherichia coli* in domestic and imported chicken meats in Japan", *J. Vet Med. Sci.*, 80(3): 510–517.
- Nasa, P., Juneja, D., Singh, O., Dang, R., and Singh, A., 2012, "An observational study on bloodstream extended-spectrum beta-lactamase infection in critical care unit: incidence, risk actors and its impact on outcome", *Eur. J. Intern. Med.*, 23 (2) :192-5.
- Nguyen, D.P., Nguyen D, T.A., Le, T.H., 2016, "Dissemination of Extended-Spectrum β -Lactamase- and AmpC β -Lactamase-Producing *Escherichia coli* within the Food Distribution System of Ho Chi Minh City, Vietnam", *BMC*, 1 : 1-9.
- Oelschlaeger, T., Dobrindt, U., Hacker, J., 2002, "Virulence factors of uropathogens", *Current opinion in urology*, 12(1) : 33—38.
- Odwar, J.A., Kikuvu, G., Kariuki, J. N., Kariuki, S., 2014, "A cross-sectional study on the microbiological quality and safety of raw chicken meats sold in Nairobi, Kenya", *BMC research notes*, 7(1) : 627.
- Overdevest, I., Willemsen, I., Rijnsburger, M., 2011, "Extended-Spectrum β -Lactamase Genes of *Escherichia coli* in Chicken Meat and Humans, The Netherland", *Emerg. Infect. Dis.*, 17(7) :1216–1222.

Paterson, D., Bonomo, R., 2005, “Extended-Spectrum -Lactamases: a Clinical Update”,
Clin. Microbiol. Rev., 18(4) : 657-686.

Palzkill, T., 2018, ” Structural and Mechanistic Basis for Extended-Spectrum Drug-Resistance Mutations in Altering the Specificity of TEM, CTX-M, and KPC β -lactamases”, *Front. Mol. Biosci.* 5:16.

Pistiwan, A.H., Khadija, K.M., 2019, Prevalence of *bla*TEM, *bla*SHV, and *bla*CTX-M Genes among ESBL-Producing *Klebsiella pneumoniae* and *Escherichia coli* Isolates from Thalassemia Patients in Erbil, Iraq”, *Mediterr. J. Hematol. Infect. Dis.*, 11(1): e2019041

Pratama, A.S., Djide, M.N., Massi, M.N., 2019, “Identifikasi Genotip CTX-M pada *Escherichia coli* Penghasil Extended Spectrum Beta Lactamase (ESBL) yang Resistensi pada Cephalosporin Generasi III di RSUP Wahidin Sudirohusodo Makassar”, *MFF*, 23(1):5-9

Puspandari, N., Sunarno, S., Febrinati, T., Febriyana, D., Sarawati, R.D., Rooslamiaty, I., Amalia, N., Nursufiah, S., Hartoyo, Y., Herna, H., Marsina, M., Muna, F., Aini, N., Risniati, Y., Dhewantara, P.W., Allamanda, P., Wicaksana, D.N., Sukoco, R., Efadeswari, Nelwan, E.J., Cahyarini, Haryanto, B., Sihombing, B., Magalhaes, S., Kakkar, M., Setiawaty, V., Matheu, J., 2021, “Extended spectrum β -lactamase-producing *Escherichia coli* surveillance in the human, food chain, and environment sectors: Tricycle project (pilot) in Indonesia”, *One Health*, 13; 100331

Rawat D., Nair D., 2010, “Extended-spectrum β -lactamases in Gram Negative Bacteria”,
J. Glob. Infect. Dis., 2(3):263-74.

Rezai, M.S., Salehifar, E., Rafiel, A., Langae, T., Rafati, M.A., Shafahi, K., Eslami, G., 2015, "Characterization of Multidrug Resistant Extended-Spectrum Beta-Lactamase-Producing *Escherichia coli* among Uropathogens of Pediatrics in North of Iran", *Biomed Res. Int.*, 309478-7.

Safitri DW., Cicilia R., Bintari IG., Hermawan, I.P., Effendi, M.H., Ernawati, R., et al., 2017, Detection Of Encoding Gene Extended Spectrum Beta Lactamase On *Escherichia Coli* Isolats From Broiler Chicken Meat In Traditional Market Surabaya", *IJDR*, 7(11) :17354-17357

Salah, M., Azab, M., Halaby, H., Hanora, A., 2016, "Mutations in β -lactamases detected in multidrug resistant gram negative bacteria isolates from community acquired urinary tract infections in Assiut, Egypt", *J. Microbiol. Res.*, 10(46) : 1938-1943.

Salvatore, S., Salvatore, S., Cattoni, E., Siesto, G., Serati, M., Sorice, P., Torella, M., 2011, "Urinary tract infections in women", *Eur. J. Obstet. Gynecol. Reprod. Biol.*, 156(2) : 131-136

Salyers, A., Whitt, D., 2002, Bacterial pathogenesis. Washington, D.C.: ASM Press.

Samira, J., Mujahidah, Farida, H., 2020, "The Agreement Between of Vitek 2 and HybriSpot 24 in Identification of SHV-Type ESBLs and CTX-M-Type ESBLs from ESBL Producing Enterobacteriaceae Isolates", *IJAST*, 29 (05) : 505- 514.

Sankar, S., Narayanan, H., Kuppanan, S., and Nandagopal, B., 2012, "Frequency of extended spectrum beta-lactamase (ESBL)-producing Gram-negative bacilli in a 200-bed multi-specialty hospital in Vellore district, Tamil Nadu", *India. Infection*, 40 (4) : 425-9.

Shahada, F., Chuma, T., Kosugi, G. Kusumoto, Iwata, T., Akiba, M., 2013, “Distribution of extended-spectrum cephalosporin resistance determinants in *Salmonella enterica* and *Escherichia coli* isolatd from broilers in southern Japan”, *Poult. Sci.*, 92(6) :1641-9.

Shaikh, S., Fatima, J., Shakil, S., Rivzi, S.M.D., Kamal, M.A., 2011, “Antibiotic resistance and extended spectrum β -lactamases : Types, epidemiology and treatment”, *Saudi J. Biol. Sci.*, 22 : 90-101

Singleton, P., 2004, *Bacteria in Biology, Biotechnology and Medicine*, 6th ed. Wiley.

Siswandono. 2016. *Kimia Medisinal*, Edisi Kedua, Surabaya Airlangga University Press.

Slavchev, G., Pisareva, E., Markova, N., 2009, “Virulence Of Uropathogenic *Escherichia Coli*”, *J. Cult. Collect.*, 6 : 3-9.

Smet, A., Martel, A., Persoons, D., Dewulf, J., Heyndrickx, M., Catry, B., Herman L., Haesebrouck, F., Butaye, P., 2008, “Diversity of extended-spectrum beta-lactamases and class C beta-lactamases among cloacal *Escherichia coli* Isolates in Belgian broiler farms. *Antimicrob Agents Chemother*”, 52(4): 1238-43.

Soltani, R., Ehsanpoor, M., Khorvash, F., Shokri, D., 2014, “Antimicrobial susceptibility pattern of extended-spectrum β -lactamase-producing bacteria causing nosocomial urinary tract infections in an Iranian referral teaching hospital”, *J. Res. Pharm. Pract.*, 3(1):6–11.

Suardana, I.W., 2014, “Analysis of Nucleotide Sequences of the 16S rRNA Gene of Novel *Escherichia coli* Strains Isolatd from Feces of Human and Bali Cattle”, *J. Nucleic Acids*. 2014:475754.

- Sudarwanto, M., Akineden, O., Odenthal, S., Gross, M., Usleber, E., 2015, “Extended-Spectrum β -Lactamase (ESBL)-Producing *Klebsiella pneumoniae* in Bulk Tank Milk from Dairy Farms in Indonesia”, *Foodborne Pathog. Dis.*, 12 (7) : 585-90.
- Tabar, M.M., Mirkalantari, S., Amoli, R.I., 2016, “Detection of ctx-M gene in ESBL-producing *E. coli* strains isolated from urinary tract infection in Semnan, Iran”, *Electron. Physician*, 8(7) : 2686-2690.
- Talaro, K.P. 2008. Foundation In Microbiology. 6th ed. McGraw-Hill. Boston.
- Tham, J., Walder, M., Melander, E., Odenholt, I., 2012, “Prevalence of extended-spectrum β -lactamase producing bacteria in food”, *Infect. Drug Resist.*, 5 :143–147.
- Tham, J, Odenholt, I, Walder, Brolund, A., Ahl, J., Melander, M., 2010, “Extended-Spectrum β -Lactamase *Escherichia coli* in patient with travellers diarrhoea”, *Scand J Infect Dis.* 42, 275-80.
- Tille, P.M. 2014. Bailey 7 Scott’s Diagnostic Microbiolog. 13th ed. Elsevier Mosby. Missouri.
- Tотора, G.J., Funke, B.R., Case, C.L., 2007, Microbiology an introduction, 9th ed. Pearson Benjamin Cumming, San Francisco.
- Wardhana, D.K., Haskito, A.E.P., Purnama, M.T.E., Safitri, D.A., Annisa, S., 2021, “Detection of microbial contamination in chicken meat from local markets in Surabaya, East Java, Indonesia”, *Vet World.*, 14(12):3138-3143.

Who.int. WHO | Enterohaemorrhagic Escherichia coli (EHEC) [Internet], 2011, [cited 25 October 2014]. Available from:

<http://www.who.int/mediacentre/factsheets/fs125/en/>

Winn, W., Allen, S., Janda, W., Koneman, E., Procop, G., Schreckenberge, P., Wood, G., 2005, Koneman's Color atlas and Textbook of Diagnostic Microbiology, 6th, Lippincott Williams & Wilkins, Philadelphia.

Wolsen, T.D., 2011, "Comparative evaluation of chromogenic agar CM1046 and mFC agar for detection of E. coli and thermotolerant coliform bacteria from water samples", *Appl. Microbiol.*, 53 : 155-160.

Yaita, K., Aoki, K., Suzuki, T., Nakahara, K., Yoshimura, Y., Harada, S., Ishii, Y., Tachikawa, N., 2014, "Epidemiology of Extended-Spectrum b-Lactamase Producing *Escherichia coli* in the Stools of Returning Japanese Travelers, and the Risk Factors for Colonization", *PLOS ONE*, 16,9(5):e98000.