

DAFTAR PUSTAKA

- Aarestrup FM, 2015. The Livestock Reservoir For Antimicrobial Resistance: A Personal View On Changing Patterns Of Risks, Effects Of Interventions And The Way Forward. Review. Philos Trans R Soc Lond B Bio Sci 2015 Juni 5;370 (1670), pp. 1 – 13.
- Alimsardjono L, Purwono PB, Endraswari P, Kusumaningrum D, Mertaniasih NM, 2017. *Buku Ajar Pemeriksaan Mikrobiologi pada Penyakit Infeksi*, Cetakan 3, Fakultas Kedokteran Universitas Airlangga, Sagung Seto, Jakarta.
- Amelia A, Nugroho A, dan Harijanto PN, 2016. Diagnosis and Management of Infections Caused by Enterobacteriaceae Producing Extended-Spectrum β -Lactamase. Acta Medica Indonesiana -The Indonesian Journal of Internal Medicine. Volume 48, Number 2, April 2016, pp. 156-166.
- Analisis Kesehatan Indonesia, 2011. Kumpulan Informasi Seputar Analisis Kesehatan dan Laboratorium Klinik, Identifikasi Bakteri Gram Positif dan Gram Negatif. Diunduh pada tanggal 5 Januari 2019, jam 15.00 wib, <<http://analiskesehatan-indonesia.blogspot.com>>.
- Araque M, and Labrador I, 2018. Prevalence of Fecal Carriage of CTX-M-15 Beta-Lactamase-Producing *Escherichia coli* in Healthy Children From A Rural Andean Village In Venezuela. Osong Public Health and Research Perspectives 2018;9(1):9 –15.
- Atterby C, Osbjør K, Tepper V, Rajala E, Hernandez J, Seng S, Holl D, Bonnedahl J, Borjesson S, Magnusson U, and Jarhult JD, 2019. Carriage Of Carbapenemase- And Extended- Spectrum Cephalosporinase-

- Producing *Escherichia Coli* And *Klebsiella Pneumoniae* In Humans And Livestock In Rural Cambodia; Gender And Age Differences And Detection Of *Bla_{oxa-48}* In Humans. Wiley. Zoonoses Public Health. 2019;66:603–617.
- Bacanli M and Başaran N, 2019. Importance of antibiotic residues in animal food. Food and Chemical Toxicology 125 (2019). Review. Elsevier. pp. 462–466.
- Badan Pusat Statistik. Populasi Sapi Perah Menurut Provinsi, 2009-2018. Peternakan. Tabel Dinamis, diunduh pada 29 December 2019, jam 11.00 WIB. (<https://www.bps.go.id/linkTableDinamis/view/id/1018>).
- Bertrand S, Weill FX, Cloeckaert A, Vrints M, Mairiaux E, Praud K, Dierick K, Wildemaue C, Godard C, Butaye P, Imberechts H, Grimont PAD, and Collard JM, 2006. Clonal Emergence of Extended-Spectrum β -Lactamase (CTX-M-2)-Producing *Salmonella enterica* Serovar Virchow Isolates with Reduced Susceptibilities to Ciprofloxacin among Poultry and Humans in Belgium and France (2000 to 2003). Journal of Clinical Microbiology, 2006 Aug, 44(8), 2897 – 2903.
- Bevan ER, Jones AM, and Hawkey PM, 2017. Global Epidemiology Of CTX-M B-Lactamases: Temporal And Geographical Shifts In Genotype. Journal of Antimicrobial Chemotherapy, Editor's Choice. Volume 72, Issue 8, August 2017, pp. 2145–2155.
- Black JG, 2012. *Microbiology Principles and Exploration*, 8th edn, Virginia, John Wiley & Sons, Inc.

- Bozcal E and Dagdeviren M, 2017. Toxicity of β -Lactam Antibiotics: Pathophysiology, Molecular Biology and Possible Recovery Strategies, Chapter 5, in Malangu N (ed), Poisoning - From Specific Toxic Agents to Novel Rapid and Simplified Techniques for Analysis, Intech.
- Bradford FA, 2001. Extended-Spectrum β -Lactamase In The 21st Century : Characterization, Epidemiology, and Detection of Important Resistance Threat, *Clinical Microbiology Reviews*, Oct 2001, p.933-951
- Brolund A, 2014. Overview of ESBL-producing *Enterobacteriaceae* From A Nordic Perspective. Review, *Infection Ecology & Epidemiology, The One Health Journal* 2014, 4 : 24555.
- Canton R, Gonzalez-Alba JM, and Galan JC, 2012. CTX-M Enzymes: Origin and Diffusion. *Frontiers in Microbiology*. Review Article. April 2012; Volume 3: Article 110, pp : 1-19.
- Carattoli A, 2009. Resistance Plasmid Families in *Enterobacteriaceae*. *Antimicrobial Agents And Chemotherapy*, Mini Review, June 2009, Vol. 53, No. 6, pp. 2227–2238.
- Carattoli A, 2011. Plasmids In Gram Negatives : Molecular Typing of Resistance Plasmids. *International Journal of Medical Microbiology*. Mini Review. Abstract. Elsevier. Volume 301, Issue 8, December 2011, pages 654-658.
- Carroll KC, Morse SA, Mretzner T, Miller S, 2016. *Jawetz, Melnick & Adelberg's Medical Microbiology*, 27th edn, Mcgraw Hill Education, Lange Medical Books, pp.351-360.

- Clinical Laboratory Standard Institute, 2018. *M100 Performance Standards for Antimicrobial Susceptibility Testing*, 28th edn, Clinical Laboratory Standard Institute, pp. 98 – 100.
- Dahms C, Hubner NO, Kossow A, Mellmann A, Dittmann K, Kramer A, 2015. Occurance of ESBL-Producing *Escherichia coli* in Livestock and Farm Workers in Mecklenburg-Western Pomerania, Germany, Plos One, November 25, 2015.
- Dandachi I, Chabou S, Daoud Z, and Rolain JM, 2018. Prevalence and Emergence Of Extended-Spectrum Cephalosporin, Carbapenem and Colistin-Resistant Gram Negative Bacteria Of Animal Origin In The Mediterranean Basin. *Frontiers In Microbiology*. Review. 1 September 2018, Volume 9, Article 2299, pp. 1 – 26.
- De A, 2013. Extended Spectrum Beta-Lactamase Infections, In : Parthasarathy A, Kundu R, Agrawal R, Choudhury J, Shastri DD, Yewale VN, Shah AK, Uttam KG, *Textbook of Pediatric Infectious Diseases*, IAP, National Publication House, Jaypee Brothers Medical Publishers (P) LTD, New Delhi.
- Doi Y, Lovleva A, and Bonomo RA, 2017. The Ecology of Extended-Spectrum- β -Lactamase (ESBLs) In The Developed World. *Reviews, Journal of Travel Medicine*, Volume 24, Suppl 1, S44-S51.
- Dubey RC, 2014. *A Textbook of Biotechnology with Biotechnology Practicals for Class XII*. Revised edition. S. Chand & Company PVT. LTD. Ram Nagar. New Delhi. pp.

- Ekhariri M, Hamza D, Elhelw R, and Dorgham SM, 2017. Extended- spectrum beta- lactamase- producing *Pseudomonas aeruginosa* in camel in Egypt: potential human hazard. *Annals of Clinical Microbiology and Antimicrobials* (2017) 16:21, pp. 1 – 6.
- Ferreira CM, William AF, Almeida NCOdS, Naveca FG, Barbosa MdGV. 2011. Extended Spectrum Beta Lactamase Producing Bacteri Isolated From Hematologic Patients In Manaus, State of Amazonas, Brazil. *Brazilian Journal of Microbiology* 42: 1076-1084.
- Farajnia S, Azhari F, Alikhani MY, Hosseini MK, Peymani A, Sohrabi N, 2013. Prevalence of PER and VEB Type Extended Spectrum Betalactamases among Multidrug Resistant *Acinetobacter baumannii* Isolates in North-West of Iran. *Iranian Journal of Basic Medical Sciences*, Vol. 16, No. 6, Jun 2013. pp : 751 – 755.
- Ghasemian A, Mobarez AM, and Doust RH, 2018. Klebsiella Oxytoca: Clinical Significance, Virulence Factors And Developed Antimicrobial Resistance. *Romanian Archives Of Microbiology And Immunology*, April-June, 2018 Volume 77, Issue 2, pp. 104-109
- Hadioetomo RS, 2012. *Mikrobiologi Dasar dalam Praktek: Teknik dan Prosedur Dasar Laboratorium*, PT Gramedia, Jakarta.
- Hart CA, 2006. *Klebsiella, Citrobacter, Enterobacter, and Serratia spp*, In : Gillespie, SH and Hawkey PM (ed), *Principles and Practice of Clinical Bacteriology*, 2nd edn, John Wiley & Sons Ltd.
- Kementerian Kesehatan Republik Indonesia, 28 Nopember 2018. Pengendalian Resistensi Antimikroba Jadi Perhatian Dunia, Rilis Berita, diunduh pada

30 Januari 2019, jam 20.00 wib

<<http://www.depkes.go.id/article/view/18112900002/pengendalian-resistensi-antimikroba-jadi-perhatian-dunia.html>>.

Kementerian Kesehatan RI, 2010. Standard Operating Procedures Identifikasi Molekuler Virus Influenza, Edisi Ketiga, Laboratorium Virologi Balitbangkes, Puslitbang Biomedis dan Farmas. Kemeterian Kesehatan RI, Jakarta.

Kumar S, 2012. *Textbook of Microbiology*, 1st edn, Jaypee Brothers Medical Publishers LTD, New Delhi.

Kumar R, Yadav BR, and Singh, RS. 2010. Genetic determinants of antibiotic resistance in *Staphylococcus aureus* isolates from milk of mastitic crossbred cattle. *Curr. Microbiol.* 60:379–386.

Kuralayanapalya SP, Patil SS, Hamsapriya S, Shinduja R, Roy P, and Amachawadi RG, 2019. Prevalence of extended-spectrum beta-lactamase producing bacteria from animal origin: A systematic review and meta-analysis report from India. *Plos One*. Pp. 1 – 15.

Lakshmi R, Nusrin KS, Ann GS, Sreelakshmi KS, 2014. Role of Beta Lactamase In Antibiotic Resistance : A Review, *International Research Journal Of Pharmacy* 2014, 5 (2). ISSN 2230 – 8407.

Laudy AE, Rog P, Smolinska-Krol K, Cmiel M, Sloczynska A, Patzer J, Dzierzanowska D, Wolinowska R, Starosciak B, and Tyski S, 2017. Prevalence of ESBL-producing *Pseudomonas aeruginosa* isolates in Warsaw, Poland, Detected by Various Phenotypic and Genotypic Methods. *PLos One*. June 2017, pp. 1 – 15.

- Livermore DM, 2003. Bacterial Resistance: Origins, Epidemiology, And Impact. *Clinical Infectious Diseases*, Volume 36, Issue Supplement_1, January 2003, pp. S11–S23.
- Lohar PS, 2015, Textbook of Biotechnology. MJP Publishers. Chennai. pp : 38 – 39.
- Luvsansharav UO, Hirai I, Nakata A, Imura K, Yamauci K, Niki M, Komalamisra C, Kusolsuk T, and Yamamoto Y, 2012. Prevalence of and Risk Factors Associated With Faecal Carriage of CTX-M β -Lactamase-producing *Enterobacteriaceae* In Rural Thai Communities, *Journal Antimicrobial Chemotherapy* 2012 ; 67 : 1769 – 1774.
- Madigan MT, Martinko JM, Bender KS, Buckley DH, Stahl DA, 2015. *Brock Biology of Microorganism*, 14th edn, Pearson Education Inc.S.
- Maharjan A, Bhetwal A, Shakya S, Satyal D, Shah S, Joshi G, Khanal PR, and Parajuli NP, 2018. Ugly Bugs In Healthy Guts! Carriage Of Multidrug-Resistant And ESBL-Producing Commensal *Enterobacteriaceae* In The Intestine Of Healthy Nepalese Adults. *Infection and Drug Resistance*. Dove Press Journal. 2018;I, pp. 547 – 554.
- Murray PR, Rosenthal KS and Pfaller MA, 2016. *Medical Microbiology*, 8th edn, Elsevier Inc, Philadelphia, pp.348-355.
- Nicolas-Chanoine MH, Blanco J, Ve´ronique Leflon-Guibout V, Demarty R, Alonso MP, Maria Manuela Canic MM, Park YJ, Lavigne JP, Johann Pitout J and Johnson JR, 2008. Intercontinental Emergence of *Escherichia coli* Clone O25:H4-ST131 Producing CTX-M-15. *Journal of Antimicrobial Chemotherapy* (2008) 61, 273 – 281.

- Nurhayati, IS dan Martindah, E. 2015. Pengendalian Mastitis Subklinis Melalui Pemberian Antibiotik Saat Periode Kering Pada Sapi Perah. *Wartazoa* Vol 25, No. 2, Tahun 2015. Halaman : 065 – 074.
- Olsen RH, Bisgaard M, Lohren U, Robineau B, and Christensen H, 2014. Extended – Spectrum Beta-Lactamase-Producing *Escherichia coli* Isolated From Poultry : A Review of Current Problems, Illustrated With Some Laboratory Findings. *Avian Pathology*. Vol. 43, No. 3, pp. 199–208.
- Paterson DL and Bonomo RA, 2005. Extended Spectrum β -Lactamases : a Clinical Update. *Clinical Microbiology Reviews*. Oct. 2005, Vol. 18, No. 4, pp. 657–686.
- Pemerintah Kabupaten Pasuruan, 2016. Situs Resmi Pemerintah Kabupaten Pasuruan : Kabupaten Pasuruan Punya SPR Sapi Perah Pertama Di Indonesia, diunduh 4 Nopember 2018, jam 11.00 WIB <<https://www.pasuruankab.go.id/>>.
- Pemerintah Kabupaten Pasuruan, 2018. Situs Resmi Pemerintah Kabupaten Pasuruan : Gambaran Umum, diunduh 28 Nopember 2018, jam 20.00 WIB <<https://www.pasuruankab.go.id/>>.
- Rolain JM, 2013. Food and human gut as reservoirs of transferable antibiotic resistance encoding genes. *Frontiers. Microbiology. Review*. June 2013, Volume 4, Article 173, pp. 1 – 10.
- Rousham EK, Unicomb L, and Islam MA, 2018. Human, Animal And Environmental Contributors To Antibiotic Resistance In Low-Resource Settings: Integrating Behavioural, Epidemiological And One Health

- Approaches. The Royal Society Publishing. Review. Proc Biol Sci. 2018 Apr 11;285 (1786):20180332, pp. 1-9.
- Rossolini GM, D'Andrea MD, and Mugnaioli C, 2008. The spread of CTX-M-type extended-spectrum β -lactamases. Journal Compilation 2008 European Society of Clinical Microbiology and Infectious Diseases, CMI. Review. 14 (Suppl. 1), pp. 33–41.
- Rozwandowicz M, brouwer MSM, Fisher J, Wagenaar JA, Gonzalez-Zorn B, Guerra B, Mevius DJ, and Hordijk J, 2018. Plasmids carrying antimicrobial resistance genes in Enterobacteriaceae. Journal of Antimicrobial Chemotherapy, Volume 73, Issue 5, May 2018, pp. 1121–1137.
- Rupp ME and Fey PD, 2003. Extended Spectrum β -Lactamase (ESBL)-Producing *Enterobacteriaceae* Considering for Diagnosis, Prevention, and Drug Treatment, Journal Drugs, 2003 :63(4) : 353-365.
- Sagar Aryal, 2018. Microbenotes, MacConkey Agar, diunduh pada tanggal 20 Desember 2018, jam 10.00 wib, <<https://microbenotes.com/macconkey-agar/>>.
- Sah SK and Hemalatha S, 2014. Extended Spectrum Beta Lactamase (ESBL) Mechanism of Antibiotic Resistance and Epidemiology, International Journal of PharmTech Research, vol. 7, no. 2, pp 303-309.
- Sasaki T, Hira I, Niki M, Nakamura T, Komalamisra C, Maipanich W, Kusolsuk T, Sa-nguankiat S, Pubampen S, and Yamamoto Y, 2010. High Prevalence of CTX-M β -Lactamase Producing *Enterobacteriaceae* In Stool Specimen Obtained From Healthy Individual In Thailand, J. Antimicrob Chemother, 65 : pp. 666-668.

- Schreckenberger P and Rekasius V, 2007. Procedure Double Disk Diffusion Confirmation of ESBL. Layola University Medical Center. pp 1 – 7.
- Shaikh S, Fatima J, Shakil S, Rizvi SMD, Kamal MA, 2014. Antibiotic Resistance And Extended Spectrum β -Lactamase : Types, Epidemiology And Treatment, Saudi Journal of Biological Science.
- Subronto, 2008. Ilmu Penyakit Ternak (Mamalia). Edisi ke-3. Yogyakarta. Gadjah Mada University Press.
- Sun Q, Tärnberg M, Zhao L, Lundborg CS, Song Y, Grape M, Nilsson M, Tomson G, Nilsson L, 2014. Varying High Levels of Faecal Carriage of Extended-Spectrum Beta-Lactamase Producing Enterobacteriaceae in Rural Villages in Shandong, China: Implications for Global Health. Plos One, November 18, 2014.
- Tawfick MM, El-Moghazy AN, Hassan MA, 2016. PCR-Based Molecular Detection of ESBLs Encoding Genes *bla_{TEM}*, *bla_{CTX-M}*, and *bla_{SHV}* Among MDR *Escherichia coli* Isolates From Diarrhoea Stool Cultures In Cairo, Egypt, International Journal of Research Studies In Microbiology and Biotechnology (IJRSMB), volume 2, issue 3, 2016, pp. 7-14.
- Tsering DC, Das S, Adhiakari L, Pal R,¹ and Singh TSK, 2009. Extended Spectrum Beta-lactamase Detection in Gram-negative Bacilli of Nosocomial Origin. Journal of Global Infectious Diseases 2009 Jul-Des 1(2) : 87 - 92
- Werbony O, and Kaczorowski T, 2016, Plasmid pEC156, a Naturally Occurring *Escherichia coli* Genetic Element That Carries Genes of the EcoVIII Restriction-Modification System, Is Mobilizable among Enterobacteria. Plos One. February 2016, pp. 1 – 19.

- Worthington RJ and Melander C, 2013. Overcoming Resistance to β -Lactam Antibiotics, *J Org Chem.* 2013 May 3; 78(9): 4207–4213. doi:10.1021/jo400236f.
- Ye Q, Wu Q, Zhang S, Zhang J, Yang G, Wang J, Xue L, and Chen M, 2018. Characterization of Extended-Spectrum β -Lactamase-Producing *Enterobacteriaceae* From Retail Food in China. *Frontiers in Microbiology* August 2018, volume 9, article 1709.
- Woerther PL, Burdet C, Chachaty E, and Andremont A, 2013. Trends in Human Fecal Carriage of Extended- Spectrum β -Lactamases in The Community : Toward The Globalization of CTX-M. *Clinical Microbiology Reviews.* Volume 26, Number 4, October 2013, pp. 744-758.
- Zhang H, Zhou Y, Guo S, and Chan W, 2015. High prevalence and risk factors of fecal carriage of CTX-M type extended-spectrum beta-lactamase-producing *Enterobacteriaceae* from healthy. *Frontiers in Microbiology.* March 2015, Volume 6, Article 239, pp. 1 – 5.