

DAFTAR PUSTAKA

- Abe, T., J. Saburi, T. Hasebe, T. Nakagawa, T. Nade, S. Misumi, H. Nakajima, N. Shoji, M. Kobayashi, and E. Kobayashi. 2009. Novel mutations of the *fasn* gene and their effect on fatty acid composition in japanese black beef. *Biochem. Genet.* 7:397-411.
- Aberle, E.D., J.C. Forrest, H.B. Hedrick, M.D. Judge, and R.A. Merkel. 2001. *Principles of Meat Science*. W.H. Freeman and Co., San Fransico.
- Abubakar, H. Budi, Kuswandi, dan T.B. Murdiati. 2001. Karakteristik karkas dan kualitas daging sapi po yang mendapatkan pakan mengandung probiotik. Seminar Nasional Teknologi Peternakan dan Veteriner.
- Alvarado, C. and S. McKee. 2007. Marination to improve functional properties and safety of poultry meat. *J. Appl. Poultry Res.* 16:113-120.
- Andersen H.J., N. Oksbjerg, J.F. Young, and M. Therkildsen. 2005. Feeding and meat quality – a future approach. *Meat Sci.* 70: 543-554.
- Anonim. 2008. Bibit Sapi Peranakan Ongole (PO). Badan Standarisasi Nasional (BSN). SNI 7356:2008.
- Anonim^b. 2015. Ciri Khas Sapi Peranakan Ongole (PO). <http://www.situs-peternakan.com/2012/10/ciri-khas-sapi-peranakan-ongole-po.html>. Diakses tanggal 9 Agustus 2017.
- Asturias, F.J., J.Z. Chadick, and I.K. Cheung. 2005. Structure and molecular organization of mammalian fatty acid synthase. *Nat Struct Mol Biol.* 12: 225–232.
- Astuti, M. 2004. Potensi dan Keragaman Sumberdaya Genetik Sapi Peranakan Ongole (PO). Lokakarya Nasional Sapi Potong 2004. Fakultas Peternakan. Universitas Gadjah Mada, Yogyakarta.
- Berndt, J., P. Kovacs, K. Ruschke, N. Kloting, M. Fasshauer, M. R. Schon, A. Korner, M. Stumvoll, and M. Bluher. 2007. Fatty acid synthase gene expression in human adipose tissue: Association with obesity and type 2 diabetes. *Diabetologia.* 50:1472–1480.
- Bhuiyan, M. S. A., [S. L. Yu](#), [J. T. Jeon](#), [D. Yoon](#), [Y. M. Cho](#), [E. W. Park](#), [N. K. Kim](#), [K. S. Kim](#), and [J. H. Lee](#). 2009. DNA polymorphisms in *sreb1* and *fasn* genes affect fatty acid composition in korean cattle (hanwoo). *J. Anim. Sci.* 22: 765-773.
- Bouton, P.E., P.V. Harris, and W.R. Shorthose. 1971. Effect of ultimate pH upon the water-holding capacity and tenderness of mutton. *J. Food Sci.* 36: 435-439.
- Bouton, P.E., and P.V. Harris. 1972. The effect of cooking temperature and time on some mechanical properties of meat. *J. Food Sci.* 97: 140-144.

- Bouton, P.E., P.V. Harris, and W.R. Shorthose. 1976. Factors influencing cooking losses from meat. *J. Food Sci.* 41: 475-478.
- Buckle, K.A., R.A. Edwards, G.H. Fleet, dan W. Wooton. 2007. Ilmu Pangan. Penerjemah: Hari Purnomo dan Adono. International Development Program of Australian Universities and Colleges, UI Press.
- Carvalho, M.D.C.D., Soeparno, dan N. Ngadiyono. 2010. Pertumbuhan dan produksi karkas sapi peranakan ongole dan simmental peranakan ongole jantan yang dipelihara secara feedlot. *Buletin Peternakan.* 34: 38-46.
- Cecchi, L.A., D.L. Huffman, W.R. Egbert and W.R. Jones. 1988. Chuck muscle: Effect of electrical stimulation, hot boning and high temperature aging. *J. Food Sci.* 53: 411.
- Chambaz, A., M. R.L. Scheeder, M. Kreuzer, and P.A. Dufey. 2003. Meat quality of angus, simmental, charolais, and limousin steers compared at the same intramuscular fat. *Meat Sci.* 63: 491-500.
- Christensen M., P. Ertbjerg, S. Failla, C. Sañudo, R.I. Richardson, G.R. Nute, J.L. Olleta, B. Panea, P. Albertí, M. Juárez, J.F. Hocquette, and J. Williams. 2011. Relationship between collagen characteristics, lipid content and raw and cooked texture of meat from young bulls of fifteen European breeds. *Meat Sci.* 87: 61–65.
- Collier, K.J.D., R.E. Hickson, N.M. Schreurs, N.P. Martin, P.R. Kenyon, and S.T. Morris. 2015. Growth rate and carcass characteristics of simmental-and angus-sired steers born to angus and angus-cross-dairy cows. *Proceedings of the New Zealand Society of Animal Production.* 75: 15-19.
- Crisa, A., C. Marchitelli, L. Pariset, G. Contarini, F. Signorelli, F. Napolitano, G. Catillo, A. Valentini, and B. Moioli. 2010. Exploring polymorphisms and effects of candidate genes on milk fat quality in dairy sheep. *J. Dairy Sci.* 93 :3834–3845.
- Dewi A. M., I. B. N. Swacita, and N. K. Suwiti. 2016. The effect of muscle type and longer storage to the nutrition value of bali cattle. *Buletin Veteriner Udayana.* 8: 135-144.
- Dinas Pertanian dan Peternakan Kabupaten Kebumen. 2011. Laporan Tahunan. Distannak. Kebumen.
- Ditjennak. 2016. Statistik Peternakan dan Kesehatan Hewan. Direktorat Jenderal Peternakan dan Kesehatan Hewan Kementerian Pertanian RI. Jakarta.
- Elrod, S. dan W. Stanfield. 2007. *Genetika.* Erlangga, Jakarta.
- Fiems, L.O., S. de Campeneere, S. de Smet, G. van de Voorde, J.M. Vanaker, and Ch.V. Boucque. 2000. Relationship between fat depots in carcasses

of beef bulls and effect on meat colour and tenderness. *Meat Sci.* 56: 41-47.

Forrest, J.C., E.D. Aberle, H.B. Hendrick, M.D. Judge and R.A. Merkel. 1975. *Principle of Meat Science*. W.H. Freeman and Company. San Francisco.

Hafid, H., Nuraini, dan Herman. 2013. Karakteristik karkas dan bagian-bagian karkas sapi peranakan ongole jantan dan betina pada peternakan rakyat di provinsi sulawesi tenggara. *Seminar Nasional Teknologi Peternakan dan Veteriner*. 116-121.

Haile, A. B., W. Zhang, W. Wang, D. Yang, Y. Yi, and J. Luo. 2016. Fatty acid synthase (FASN) gene polymorphism and early lactation milk fat composition in xinong saanen goats. *Small Rumin. Res.* 138: 1-11.

Hamm, R. 1963. The Water Holding Capacity of Meat. In.: *Carcass Composition and Appraisal of Meat Animals*. CSIRO., Melbourne, Victoria, Australia.

Hardjosubroto, W. 1994. *Aplikasi Pemuliaan Ternak di Lapangan*. PT. Gramedia Widiasarana. Jakarta.

Harris, H. 1994. *Dasar-Dasar Genetika Biokemis Manusia*. Edisi ketiga. Gadjah Mada University Press, Yogyakarta.

Hidayat, M.A., Kuswati, dan T. Susilawati. 2015. Pengaruh lama istirahat terhadap karakteristik karkas dan kualitas fisik daging sapi brahman cross steer. *Jurnal Ilmu-Ilmu Peternakan*. 25: 71-79.

Irwanto, M. A. 2016. Sambutan Bupati Kebumen Pada Upacara Bendera 17-an Bulan Februari Tahun 2016. Dishubkominfo Kabupaten Kebumen.

Jamhari, E.Suryanto, dan Rusman. 2007. Pengaruh temperatur dan lama pemasakan terhadap keempukan dan kandungan kolagen daging sapi. *Buletin Peternakan*. 31: 94-100.

Jones S. F. and J. R. Infante. 2015. Molecular pathways: fatty acid synthase. *Clin. Cancer Res.* 21: 5434-5438.

Judge, M.D., E.D. Aberle, J.C. Forrest, H. B. Hedrick and R.A. Merkel. 1989. *Principles of Meat Science*. 2nd ed. Kendall/Hunt Publishing Co.

Karolyi, D., M. Đikić, K. Salajpal, V. Č. Čurik, and I. Jurić. 2006. Carcass traits of baby beef Simmental cattle. *Originalni Znanstveni Rad.* 7: 346-350.

Katili, A.S. 2009. Struktur dan fungsi protein kolagen. *Jurnal Pelangi Ilmu*. 2: 19-29.

Khasrad, Sarbaini, Arfa`l, dan Rusdimansyah. 2016. Perbandingan kualitas kimia (kadar air, kadar protein dan kadar lemak) otot biceps femoris pada beberapa bangsa sapi. *Seminar Nasional Inovasi IPTEKS Perguruan Tinggi Untuk Meningkatkan Kesejahteraan Masyarakat*. 366-371.

- Khasrad, Sarbaini, Arfa`l, dan Rusdimansyah. 2017. Effect of cattle breeds on the meat quality of longissimus dorsi muscles. Pak J Nutr. 16: 164-167.
- Knipe, C.L., R.E. Rust, and D.G. Olson. 1992. Some physical parameter involved in the addition of inorganic phosphates to reduced-sodium meat emulsions. J. Food Sci. 55: 23.
- Kumar and B. Rajendra. 2012. DNA Representation. In : DNA Sequencing – Methods and Applications. Intech. Croatia.
- Kusuma, W.A., I.M. Tasma., A. Buono., M. Hidayat dan H. Rijzaani. 2014. Pengembangan System Identifikasi dan Analisis *Single Nucleotide Polymorphism* (SNP) untuk Pemuliaan Tanaman Kedelai. Laporan Hasil Penelitian KKP3N. Institut Pertanian Bogor.
- Langga, I.F., M.R. Restu dan T. Kuswinanti. 2012. Optimalisasi suhu dan lama inkubasi dalam ekstraksi DNA tanaman bitti (*vitex cofassus reinw*) serta analisis keragaman genetik dengan teknik RAPD-PCR. Jurnal Sains dan Teknologi. 12: 265-276
- Lawrie, R.A. 2003. Ilmu Daging (Terjemahan). UI press. Jakarta.
- Li, C., [D. Sun](#), [S. Zhang](#), [S. Yang](#), [M. A. Alim](#), [Q. Zhang](#), [Y. Li](#), and [L. Liu](#). 2016. Genetic effects of *FASN*, *PPARGC1A*, *ABCG2* and *IGF1* revealing the association with milk fatty acids in a chinese holstein cattle population based on a post genome-wide association study. BMC Genet. 17: 110-126.
- Locker, R.H. 1985. Cold-induced toughness of meat. In : A. M. Pearson & T. R. Dutson (Eds.). Electrical Stimulation Adv. In Meat Research, The Avi Publishing Company, Inc., Westport, Connecticut. 1: 1-44.
- Lonergan, E. H., T. Mitsuhashi, D.D. Beekman, F.C. Parish, D.G. Olson, and R. M. Robson. 1996. Proteolysis of specific muscle structural proteins by μ -calpain at low pH and temperature is similar to degradation in postmortem bovine muscle. J. Anim Sci. 74: 993-1008.
- Lukman, D.W., A.W. Sanjaya, M. Sudarwanto, R.R. Soejoedono, T. Purnawarman, dan H. Latif. 2007. Higiene Pangan. Fakultas Kedokteran Hewan, Institut Pertanian Bogor. Bogor.
- Maharani, D. 2012. Candidate gene studies for fatty acid composition in livestock. Disertasi. Chungnam National University.
- Maharani, D., Y. Jung, W.Y. Jung, C.Jo, S.H. Ryoo, S.H. Lee, S.H. Yeon, and J.H. Lee. 2012. Association of five candidate genes with fatty acid composition in korean cattle. Mol. Biol. Rep. 39: 6113-6121.
- Maharani, D., D.W. Seo, D. Won, N.R. Choi, S. Jin, M. Cahyadi, C. Jo, and J.H. Lee. 2013. Association of FASN and SCD genes with fatty acid composition in broilers. Korean J. Agric. Sci. 40:215-220.

- Mignone F., C. Gissi and S. Liuni. 2002. Untranslated regions of mRNAs (Review). *Genome Biol.* 3:1-10.
- [Miller M.F.](#), M.A. Carr, C.B. Ramsey, K.L. Crockett, and L.C. Hoover. 2001. Consumer thresholds for establishing the value of beef tenderness. *J Anim Sci.* 79: 3062-3068.
- Morris, C.A., N.G. Cullen, B.C. Glass, D.L. Hyndman, T.R. Manley, S.M. Hickey, J.C. McEwan, W.S. Pitchford, C.D. Bottema, and M.A. Lee. 2007. Fatty acid synthase effects on bovine adipose fat and milk fat. *Mamm. Genome.* 18:64–74.
- Munshi, A. 2012. DNA Sequencing – Methods and Applications. In Tech. Rijeka, Croatia.
- National Institute of Health. 2017. Talking Glossary of Genetic Terms: *Polymerase Chain Reaction* (PCR). National Human Genome Research Institute. <https://www.genome.gov/glossary/index.cfm?id=159>. Diakses tanggal 10 Agustus 2017.
- Ngadiyono, N., G. Murdjito, A. Agus, dan U. Supriyana. 2008. Kinerja produksi sapi peranakan ongole jantan dengan pemberian dua jenis konsentrat yang berbeda. *J. Indon. Trop. Anim. Agric.* 33: 282-289.
- Nicholas, R.A., W.M. Shafer, and J.P. Folster. 2010. Molecular mechanisms of antibiotic resistance expressed by the pathogenic *neisseria*. Pages 245–270 in Genco CA, Wetzler L, editors. *Neisseria: Molecular Mechanisms of Pathogenesis*. Caister Academic Press; Norfolk, UK: 2010.
- Ninu, A.Y. 2008. Produktivitas karkas dan mutu daging sapi bali di timor barat nusa tenggara timur. Tesis. Sekolah Pascasarjana. Institut Pertanian Bogor, Bogor.
- Nugraha, I.H. 2014. Sapi Peranakan Ongole (PO) Kebumen, Si Mutiara dari Selatan. <http://disnakkeswan.jatengprov.go.id/read/sapi-peranakan-ongole-po-kebumen-si-mutiara-dari-selatan->. Diakses tanggal 30 Januari 2019.
- Nuraini dan H. Hafid. 2006. Karakteristik kualitas daging sapi peranakan ongole yang berasal dari otot longissimus dorsi dan gastrocnemius. *Jurnal Ilmiah Ilmu-Ilmu Peternakan.* 9: 250-257.
- Pearson, A. M. and T. R. Dutson. 1985. Scientific basis for electrical stimulation. In : A. M. Pearson & T. R. Dutson (Eds.). *Electrical Stimulation Adv.* Pages 185-218 in *Meat Research Vol. 1*. The Avi Publishing Company, Inc., Westport, Connecticut.
- Perrin B.J. and Huttenlocher A. 2002. Calpain. *Int. J. Biochem Cell Biol.* 34: 722-725.

- Pesonen, M., M. Honkavaara, and A. Huukonen. 2012. Effect of breed on production, carcass traits, and meat quality of aberdeen angus, limousin, and aberdeen angusxlimousin bulls offered a grass silage-grain-based diet. *Agr. Food Sci.* 21: 361-369.
- Purbowati, E., C.I. Sutrisno, E. Baliarti, S.P.S. Budhi, dan W. Lestariana. 2006. Karakteristik fisik otot longissimus dorsi dan biceps femoris domba lokal jantan yang dipelihara di pedesaan dengan bobot potong yang berbeda. *Protein.* 13: 146-152.
- Purnomo, H., D. Rosyidi dan H. Erwan. 2000. Substitusi tepung lupin (*lupinus sp*) dalam pembuatan bakso daging sapi. *Prosiding Seminar Industri Pangan. Perhimpunan Ahli Teknologi Indonesia.*
- Rasyid, A., Y. Adinata, Yunizar, dan L. Affandhy. 2017. Karakteristik fenotip dan pengembangan sapi aceh di propinsi Nanggroe Aceh Darussalam. *Jurnal Madu Ranch.* 2:1-12.
- Rempel, L.A., E. Casas, S.D. Shackelford, and T.L. Wheeler. 2012. Relationship of polymorphisms within metabolic genes and carcass traits in crossbred beef cattle. *J. Anim. Sci.* 90:1311–1316.
- Rhee, K.S., T.R. Dutson, G.C. Smith, R.L. Hostetler and R. Reiser. 1982. Cholesterol content of raw and cooked beef longissimus muscles with different degrees of marbling. *J. Food Sci.* 41:718.
- Rosyidi, D., A. Susilo, dan I. Wiretno. 2010. Pengaruh bangsa sapi terhadap kualitas fisik dan kimiawi daging. *Jurnal Ilmu dan Teknologi Hasil Ternak.* 5: 11-17.
- Rusman. 1997. Karakteristik karkas dan daging lima bangsa sapi yang dipelihara secara feedlot. Tesis S-2. Pascasarjana Ilmu Peternakan. Universitas Gadjah Mada, Yogyakarta.
- Rusman, Soeparno, Setiyono, and A. Suzuki. 2003. Characteristics of biceps femoris and longissimus thoracis muscles of five cattle breeds grown in a feedlot system. *J. Anim. Sci.* 74: 59-65.
- Schleinitz, D., N. Kloting, A. Korner, J. Berndt, M. Reichenbacher, A. Tonjes, K. Ruschke, Y. Bottcher, K. Dietrich, B. Enigk, M. Filz, M. R. Schon, J. Jenkner, W. Kiess, M. Stumvoll, M. Bluher, and P. Kovacs. 2010. Effect of genetic variation in the human fatty acid synthase gene (*FASN*) on obesity and fat depot-specific mRNA expression. *Obesity (Silver Spring).* 18: 1218–1225.
- Setiyono, A.H.A. Kusuma, dan Rusman. 2017. Pengaruh bangsa, umur, jenis kelamin terhadap kualitas daging sapi potong di Daerah Istimewa Yogyakarta. *Buletin Peternakan.* 41: 176-186.
- Singhal, R.S., P. K. Kulkarni, and D.V. Reg. 1997. *Handbook of Indices of Food Quality and Authenticity.* Cambridge, England.

- Soeparno. 2005. Ilmu dan Teknologi Daging. 4th ed. Gadjah Mada University Press, Yogyakarta.
- Soeparno. 2009. Ilmu dan Teknologi Daging. 5th ed. Gadjah Mada University Press, Yogyakarta.
- Soeparno. 2011. Ilmu Nutrisi dan Gizi Daging. Gadjah Mada University Press, Yogyakarta.
- Subiharta dan P. Sudrajad. 2013. Keragaan bobot lahir pedet sapi lokal (peranakan ongole/po) kebumen dan potensinya sebagai sumber bibit sapi po yang berkualitas. Seminar Nasional: Menggagas Kebangkitan Komoditas Unggulan Lokal Pertanian dan Kelautan Fakultas Pertanian Universitas Trunojoyo Madura. 292-299.
- Sudoyo, H. 2004. Polimorfisme DNA mitokondria dan kedokteran forensik dalam mitochondrial medicine. Lembaga Biologi Molekul Eijkman. Jakarta. 43-55.
- Sulandari, S., dan M. S. A. Zein. 2003. Panduan Praktis Laboratorium DNA. Bidang Zoologi. Pusat Penelitian Biologi Lembaga Ilmu Pengetahuan Indonesia. Bogor.
- Supartini, N. dan H. Darmawan. 2014. Profil genetik dan peternak sapi peranakan ongole sebagai strategi dasar pengembangan desa pusat bibit ternak. Buana Sains. 14: 71-84.
- Suryanto, E., Bulkaini, Soeparno, I. W. Karda. 2017. Kualitas karkas, *marbling*, kolesterol daging dan komponen non karkas sapi bali yang diberi pakan kulit buah kakao fermentasi. Buletin Peternakan. 41: 72-78.
- Suryati, T., M. Astawan, dan T. Wresdiyati. 2004. Sifat fisik daging domba yang diberi perlakuan stimulasi listrik voltase rendah dan injeksi kalsium klorida. Media Peternakan. 27: 101-106.
- Suryati, T. dan I.I. Arif. 2005. Pengujian Daya Putus Warner Bratzler, Susut Masak dan Organoleptik Sebagai Penduga Tingkat Keempukan Daging Sapi yang Disukai Konsumen. Laporan penelitian. Fakultas Peternakan. Institut Pertanian Bogor, Bogor.
- Thu D.T.N., 2008. Meat Quality: Understanding of Meat Tenderness And Influence of Fat Content Meat Flavor. University of Technology, Vietnam National University. Ho Chi Minh.
- Tillman, D.A., Hartadi, H., Soedomo, R., Soeharto, dan Soekanto, L. 1998. Ilmu Makanan Ternak Dasar. Cetakan ke lima. Gadjah Mada University Press. Yogyakarta.
- Warwick, E.J., J. M. Astuti. dan W. Hardjosubroto. 1990. Pemuliaan Ternak. Universitas Gadjah Mada Press. Yogyakarta.

- Wello, B. 1999. Katabilitas Edible Meat Karkas Belakang Sapi Brahman Cross Dengan Lama Penggemukan yang Berbeda. Fakultas Peternakan Universitas Hasanuddin. Makassar.
- Winarno. 1980. Pengantar Teknologi Pangan. PT. Gramedia. Jakarta.
- Xie, X., Q. Meng, Z. Cui, and L. Ren. 2012. Effect of cattle breed on meat quality, muscle fiber characteristics, lipid oxidation and fatty acids in China. *J. Anim Sci.* 25: 824-831.
- Yeon, S.H., S.H. Lee, B.H. Choi, H.J. Lee, G.W. Jang, K.T. Lee, K.H. Kim, J.H. Lee, and H.Y. Chung. 2013. Genetic variation of FASN is associated with fatty acid composition of hanwoo. *Meat Sci.* 94: 133-138.
- Yuwono, T. 2006. Biologi Molekuler. Erlangga. Jakarta.
- Zhang, S., T.J. Knight, J.M. Reecy, and D.C. Beitz. 2008. DNA polymorphisms in bovine fatty acid synthase are associated with beef fatty acid composition. *Anim. Genet.* 39:62–70.