

## DAFTAR PUSTAKA

- Abdullah, A. 2011. Analisis pola pertumbuhan sapi perah fries holland (FH) betina sampai kawin pertama. Skripsi. Fakultas Peternakan, Institut Pertanian Bogor. Bogor.
- Abeygunawardena H, Dematawewa C. 2004. Prepartum and postpartum anestrus in tropical Zebu cattle. *Anim Reprod Sci*, 82:83, 373-387.
- Adi, L. L. N., A. Agus, Panjono, B. P. Widyobroto, I. G. S. Budisatria, Ismaya, S. Bintara dan T. Hartatik. 2019. Phenotypic characteristics of Belgian Blue x Brahman Cross and Wagyu x Brahman Cross crossbred population. *IOP Conf. Series: Earth and Environmental Science* 387.
- Albrecht, E., F. Teuscher, K. Ender, J. Wegner. 2006. Growth and breed related changes of muscle bundle structure in cattle. *J. Anim. Sci.* 2959-2964.
- Allrich, R.D. Estrous behavior and detection in cattle. 1993. *Vet. Clin. North Am.* 9: 249-262
- Anggraeny, Y.Y. Mariyono, dan P.W. Prihandi. 2010. Kinerja reproduksi sapi Brahman Cross di tiga provinsi di Indonesia: studi kasus di Provinsi Jawa Timur, Jawa Tengah dan Kalimantan Selatan. Seminar Nasional Teknologi Peternakan dan Veteriner.
- Arifiani, N., T.S. M. Widi, dan T. A. Kumastuti. 2018. Evaluasi Pembiakan Sapi Brahman Cross Dan Sapi Bali Yang Terintegrasi Perkebunan Sawit Di PT. Sulung Ranch, Kalimantan Tengah. Skripsi. Fakultas Peternakan Universitas Gadjah Mada.
- Armstrong, Pamela. 2018. Wagyu Breeders Handbook. Maple Row Stock Farm. <http://www.wagyuipedia.com>. Diakses 23 Januari 2020.
- Arthur, P.F., M. Makarechian, M. A. Price, and R. T. Berg. 1989. Heterosis, maternal and direct effects in double-muscled and normal cattle: I. Reproduction and growth traits. *Journal of Animal Science*. 67. 902-10.
- Badan Penelitian dan Pengembangan Pertanian. 2019. Peluang Pengembangan Sapi Belgian Blue di Indonesia. [www.litbang.pertanian.go.id](http://www.litbang.pertanian.go.id). Diakses 23 Januari 2020.
- Badan Pusat Statistik. 2018. Distribusi Perdagangan Komoditas Daging Sapi Di Indonesia Tahun 2018. Jakarta Pusat : Badan Pusat Statistik.
- Badan Standar Nasional. 2011. Bibit Sapi Potong Bagian 1: Brahman Indonesia. Jakarta.
- Bailey and G.J. Mears. 1990. Birth weight in calves and its relation to growth rates from birth to weaning and weaning to slaughter. *Anim. Sci.* 70: 157-173.
- Barlow, R., K. Ellis, P. Williamson, P. Costigan, P. Stephenson, G. Rose, and P. Mears. 1988. Dry-matter intake of Hereford and first-cross cows measured by controlled release of chromic oxide on three pasture systems. *The Journal of Agricultural Science*, 110(2), 217-231.

- Bath, D.L., F.N. Dickerson., H.A. Tucker, and R.D. Applemen. 1985. Dairy Cattle Principles Practice, Problem, Profile. 2 end. Lea and Febiger Philadelphia.
- Bauman, D. E., and W. B. Currie. 1980. Partitioning of nutrients during pregnancy and lactation: A review of mechanisms involving homeostasis and homeorhesis. *J. Dairy Sci.* 63:1514–1529.
- Bell, A. W. 1995. Regulation of organic nutrient metabolism during transition from late pregnancy to early lactation. *J. Anim. Sci.* 73:2804–2819.
- Bennett, G.L., R.M. Thallman, W.M. Snelling, and L. A. Kuehn. 2008. Experimental selection for calving ease and postnatal growth in seven cattle populations. II. Phenotypic differences. *J. Anim. Sci.* 86:2103–2114.
- Bentley, J. and B., Ryan. 2016. Calving Process and Assistance. Iowa State University Extension and Outreach. <https://www.extension.iastate.edu>. Diakses dari : 18 Juli 2021.
- Berry, D. P., Wall, E., & Pryce, J. E. 2014. Genetics and genomics of reproductive performance in dairy and beef cattle. *Animal*, 8(SUPPL. 1), 105–121.
- Bintara, S., Ismaya., Kustono., D.T. Widayati dan W. Asmarawati. 2014. Bahan Ajar ilmu lingkungan ternak. Fakultas peternakan, Universitas Gadjah Mada, Yogyakarta.
- Blakely, J. dan D.H. Bade. 1992. Pengantar Ilmu Peternakan. Penerjemah: B. Srigandono. Cet. ke-2. Gadjah Mada University Press. Yogyakarta.
- Blein-Nicolas, M., W.Albertin, T.da Silva, B.Valot, T.Balliau, I.Masneuf-Pomarède, M.Bely, P.Marullo, D.Sicard, C.Dillmann, et al. 2015. A systems approach to elucidate heterosis of protein abundances in yeast. *Mol. Cell. Proteomics.* 14:2056–2071.
- Boonprong, S., A. Choothesa, and C. Sribhen. 2008. Productivity of Thai Brahman and Simmental-Brahman crossbred (Kabinburi) cattle in central Thailand. *Int J Biometeorol* 52, 409–415.
- Bugiwati, A.R.S. 2009. Pengaruh Genetik dan Lingkungan Terhadap Sifat Karkas Sapi Jepang Coklat. *Jurnal Bionatura*, Vol. 11, No. 2, Juli 2009 : 155-165
- Bunning, H., Wall, E., Chagunda, M. G. G., Banos, G., & Simm, G. 2019. Heterosis in cattle crossbreeding schemes in tropical regions: Meta-analysis of effects of breed combination, trait type, and climate on level of heterosis. *Journal of Animal Science*, 97(1), 29–34.
- Bunter K.L., D.J. Johnston, M. L. Wolcott, G. Fordyce. 2013. Factors associated with calf mortality in tropically adapted beef breeds managed in extensive Australian production systems. *Animal Production Science* 54, 25-36.
- Buske, B., Szydlowski, M., Verkenne, C., & Gengler, N. 2011. Estimating myostatin gene effect on milk performance traits using estimated gene content for a large number of non-genotyped cows. *Animal*, 5(1), 43–47. <https://doi.org/10.1017/S1751731110001643>
- Camargo, L. S. A., Viana, J. H. M., Ramos, A. A., Serapião, R. V., de Sa, W. F., Ferreira, A. M., Guimarães, M. F. M., & do Vale Filho, V. R. 2007. Developmental competence and expression of the Hsp 70.1 gene in oocytes

obtained from *Bos indicus* and *Bos taurus* dairy cows in a tropical environment. *Theriogenology*, 68(4), 626–632.

Casas, E., R. M. Thallman, and L.V. Cundiff. 2011. Birth and weaning traits in crossbred cattle from Hereford, Angus, Brahman, Boran, Tuli, and Belgian Blue sires. *J Anim Sci.* (4):979-87. PMID: 21148778.

Casas, E., R. M. Thallman, and L.V. Cundiff. 2012. Birth and weaning traits in crossbred cattle from Hereford, Angus, Norwegian Red, Swedish Red and White, Wagyu, and Friesian sires. *J Anim Sci.* (9):2916-20. PMID: 22785167.

Cervantes, I., Gutiérrez, J. P., Fernández, I., & Goyache, F. (2010). Genetic relationships among calving ease, gestation length, and calf survival to weaning in the Asturiana de los Valles beef cattle breed1. *Journal of Animal Science*, 88(1), 96–101.

Chang, Y.M., Andersen-Ranberg, I.M., Heringstad, B., Gianola, D., Klemetsdal G. 2006. Bivariate analysis of number of services to conception and days open in Norwegian red using a censored threshold-linear model. *J Dairy Sci*;89(2):772-8.

Chantalakhana, C. 1998. Role of exotic breeds in dairy and beef improvement in Asia. *Proceedings of 6th World Congress on Genetics Applied to Livestock Production*, 11–16 January 1998, Volume 25, 213–222, Armidale, Australia.

Chewning, J. J., A. H. Brown, Z. B. Johnson, and C. J. Brown. 1990. Breed means for average daily gain, feed conversion and intake of beef bulls during postweaning feedlot performance tests. *Journal of Animal Science*. Volume 68. Issue 6. Pages 1500–1504.

Choumei, Y., A.K. Kahi, and H. Hirooka. 2006. Fit of Wood's function to weekly records of milk yield, total digestible nutrient intake and body weight changes in early lactation of multiparous Holstein cows in Japan *Livest. Sci.* 104. pp. 156-164.

Chud, T. C. S., Caetano, S. L., Buzanskas, M. E., Grossi, D. A., Guidolin, D. G. F., Nascimento, G. B., Rosa, J. O., Lôbo, R. B., & Munari, D. P. 2014. Genetic analysis for gestation length, birth weight, weaning weight, and accumulated productivity in Nellore beef cattle. *Livestock Science*, 170, 16–21.

Chupin, D. Analysis Of Reproduction Problems In Double Muscle Females.1982. In *Muscle Hypertrophy of Genetic Origin and Its Use to Improve Beef Production*; King, J.W.B., Menissier, F., Eds.; Martinus Nijhoff Publishers: The Hague. The Netherlands. pp. 575–584.

Ciccioli N.H., R.P. Wettemann, L.J. Spicer, C.A. Lents, F.J., White, and D.H. Keisler. 2003. Influence of body condition at calving and postpartum nutrition on endocrine function and reproductive performance of primiparous beef cows. *J Anim Sci.* 2003 Dec;81(12):3107-20.

Coffey, E. L., Horan, B., Evans, R. D., & Berry, D. P. 2016. Milk production and fertility performance of Holstein, Friesian, and Jersey purebred cows and their respective crosses in seasonal-calving commercial farms. *Journal of Dairy Science*, 99(7), 5681–5689.

- Cooke, R. F., Cardoso, R. C., Cerri, R. L. A., Lamb, G. C., Pohler, K. G., Riley, D. G., & Vasconcelos, J. L. M. 2020. Cattle adapted to tropical and subtropical environments: Genetic and reproductive considerations. *Journal of Animal Science*, 98(2), 1–14.
- Cooke, R.F., J. D. Arthington, C. R. Staples, W. W. Thatcher, and G. C. Lamb. 2007. Effects of supplement type on performance, reproductive, and physiological responses of Brahman-crossbred females. *Journal of Animal Science*. Volume 85. Issue 10. Pages 2564–2574,.
- Coopman, F., 2008. Morphometric assessments in the double-musled Belgian Blue beef breed. Dissertation. Ghent University. Faculty of Veterinary Medicine. Merelbeke. Belgium.
- Crowder, L.V. 2015. Genetika Tumbuhan. Gadjah Mada University Press. Yogyakarta.
- Crowe, M. A., Diskin, M. G., & Williams, E. J. 2014. Parturition to resumption of ovarian cyclicity: Comparative aspects of beef and dairy cows. *Animal*, 8(SUPPL. 1), 40–53.
- Cundiff L.V., R.M. Thallman. 2002. Reproduction And Maternal Performance Of Angus, Hereford, Norwegian Red, Swedish Red And White, Friesian, And Wagyu Sired F1 Females. 7th World Congress On Genetics Applied To Livestock Production, Montpellier, France.
- Cundiff, V.L., R. Núñez-Dominguez, G. E. Dickerson, K. E. Gregory, M. Robert, and Koch. 1992. Heterosis for lifetime production in Hereford, Angus, shorthorn, and crossbred cows. *Journal of Animal Science*. Volume 70. Issue 8. Pages 2397–2410.
- Cushman, R.A., M.F. Allan, R.M. Thallman, and L.V. Cundiff. 2007. Characterization of biological types of cattle (Cycle VII): influence of postpartum interval and estrous cycle length on fertility. *J Anim Sci*. 85(9):2156-62. PMID: 17504970.
- De Mulder, T., P. Nico, V. Leen, R. Tom, D.C. Sam, V.W. Tom, and G. Karen. 2018. Impact of breed on the rumen microbial community composition and methane emission of Holstein Friesian and Belgian Blue heifers, *Livestock Science*. Volume 207. Pages 38-44.
- Dinkel, C. A. and M. A. Brown. 1978. An evaluation of the ratio of calf weight to cow weight as an indicator of cow efficiency. *J. Anim. Sci*. 46:614.
- Direktorat Pangan dan Pertanian. 2011. Strategi dan Kebijakan dalam Percepatan Pencapaian Swasembada Daging 2014. Info Kajian BAPPENAS. Vol.8. No. 2.
- Direktorat Pembinaan SMK Kementrian Pendidikan dan Kebudayaan. 2013. Buku Dasar-dasar Pakan Ternak. Halaman 394.
- Disnakeswan Prov. NTB. Dinas Peternakan Dan Kesehatan Hewan Provinsi Nusa Tenggara Barat. 2008. Blue Print Nusa Tenggara Barat Sejuta Sapi. 2009-2013. Mataram.

- Disnakeswan Prov. NTB. Dinas Peternakan Dan Kesehatan Hewan Provinsi Nusa Tenggara Barat. 2008. Blue Print Nusa Tenggara Barat Sejuta Sapi.2009-2013. Mataram.
- Diwyanto, K., & Inounu, D. I. 2009. *Dampak Crossbreeding Dalam Program Inseminasi Buatan Terhadap Kinerja Reproduksi Dan Budidaya Sapi Potong*. 93–102.
- Djanuar, R. 1985. Fisiologi Reproduksi dan Inseminasi Buatan pada sapi. Gadjah Mada University Press. Yogyakarta.
- Do, C., Wasana, N., Cho, K., Choi, Y., Choi, T., Park, B., & Lee, D. 2013. The effect of age at first calving and calving interval on productive life and lifetime profit in Korean holsteins. *Asian-Australasian Journal of Animal Sciences*, 26(11), 1511–1517.
- Dohoo, I.R. 1983 The effects of calving to first service interval on reproductive performance in normal cows and cows with postpartal disease. *Can Vet J*. 24(11):343-346.
- Du, M., J. Tong, J. Zhao, K. R. Underwood, M. Zhu, S. P. Ford, and P. W. Nathanielsz. 2010. Fetal programming of skeletal muscle development in ruminant animals. *J. Anim. Sci.* 88:E51–60.
- El-Din. Zain, T. Nakao, M. A. Raouf, M. Moriyoshi, K. Kawata, Y. Moritsu. 1995. Factors in the resumption of ovarian activity and uterine involution in postpartum dairy cows. *Animal Reproduction Science*. Volume 38. Issue 3. Pages 203-214.
- Eniolorunda, E. Fashina, and Aro. 2009. Adaptive physiological response to load time stress during transportation of cattle in Nigeria. *Journal of Archive Zootechnology*, 58 (222): 223-230.
- Ernst and Young. 2018. Beef consumption and preferences in Indonesia. Liability limited by a scheme approved under Professional Standards Legislation 26925 – DAWR.
- Ervandi, M., M.N. Ihsan, S. Wahjuningsih, A. P. A. Yekti, And T. Susilawati. 2019. Reproductive Performance Of Brahman Cross Cows On Difference Time Intervals Of Artificial Insemination. *Asian Jr. of Microbiol. Biotech. Env. Sc.* Vol. 21, No. (4) : 915-919.
- Falconer, D.S., T.F. Mackay, R.Frankhm. 1996 Introduction to quantitative genetics, 4th edn. Longman, Burnt Mill, Harlow, UK.
- Fattah, S., Y.U.L. Sobang, S.Y.F.G. Dillak, J.J.A. Ratuwaloe, and Y.L. Henuk. 2010. Response of Brahman crossbred cows and their calves kept under semiintensive and fed them on local-fodder supplement in East Sumba Regency, East Nusa Tenggara Province. In *Proceedings of The 5<sup>th</sup> International Seminar on Tropical Animal Production Community Empowerment and Tropical Animal Industry*.Yogyakarta, Indonesia.
- Fiems, L., S. De Campeneere, W. Van Caelenbergh and C.V. Boucqué. 2001. Relationship between dam and calf characteristics with regard to dystocia in Belgian Blue double-muscled cows. *Animal Science* 72. 389–394.



- Fiems, L.O and D.L. De Brabander. 2009. Optimum growth rate of Belgian Blue double-muscled replacement heifers. *South African Journal of Animal Science*.
- Fiems, L.O. 2012. Double Muscling in Cattle: Genes, Husbandry, Carcasses and Meat. *Animals* 2012, 2, 472-506.
- Fiems, L.O., and B. Ampe. Importance of dam BW change and calf birth weight in double-muscled Belgian Blue cattle and its relationship with parity and calving interval. 2015. *Animal*. Volume 9. Pages 94-103.
- Fiems, L.O., J.L. De Boever, J.M. Vanacker, dan S.D. Campeneere. 2015. Maintenance energy requirements of double-muscled Belgian Blue beef cpws. *Animals*. 5: 89-100.
- Fontes, P. L. P., Oosthuizen, N., Ciriaco, F. M., Sanford, C. D., Canal, L. B., Pohler, K. G., Henry, D. D., Mercadante, V. R. G., Timlin, C. L., Ealy, A. D., Johnson, S. E., DiLorenzo, N., & Lamb, G. C. 2019. Impact of fetal vs. maternal contributions of *Bos indicus* and *Bos taurus* genetics on embryonic and fetal development<sup>1</sup>. *Journal of Animal Science*, 97(4), 1645–1655.
- Fordyce, G., L. A. Fitzpatrick, T. J. Mullins, N. J. Cooper, D. J. Reid and K. W. Entwistle. 1997. Prepartum supplementation effects on growth and fertility in *Bos indicus*-cross cows. *Australian Journal of Experimental Agriculture*, 1997, 37, 141–9.
- Fouz, R., F. Gandoy, M.L. Sanjuán, E. Yus, F.J. Diéguez. 2013. The use of crossbreeding with beef bulls in dairy herds: effects on calving difficulty and gestation length. *Animal* Volume 7. Issue 2. Pages 211-215.
- Frank, D., Ball, A., Hughes, J., Krishnamurthy, R., Piyasiri, U., Stark, J., Watkins, P., & Warner, R. 2016. Sensory and flavor chemistry characteristics of Australian beef: Influence of intramuscular fat, feed, and breed. *Journal of Agricultural and Food Chemistry*, 64(21), 4299–4311.
- Freetly, H. C., Kuehn, L. A., Thallman, R. M., & Snelling, W. M. 2020. Heritability and genetic correlations of feed intake, body weight gain, residual gain, and residual feed intake of beef cattle as heifers and cows. *Journal of Animal Science*, 98(1), 1–6.
- Freetly, H.C., and L.V. Cundiff. 1998. Reproductive performance, calf growth and milk production of first-calf heifers sired by seven breeds and raised on different levels of nutrition. *Journal of Animal Science* 76. 1513–1522.
- Freetly, H.C., L.A. Kuehn, and L.V. Cundiff. 2011. Growth curves of crossbred cows sired by Hereford, Angus, Belgian Blue, Brahman, Boran, and Tuli bulls, and the fraction of mature body weight and height at puberty. USDA, ARS, US Meat Animal Research Center, Clay Center. *J. Anim. Sci.* 89:2373-2379.
- Gantner, V., P. Mijić, K. Kuterovac, D. Solić, and R. Gantner. 2011. Temperature humidity index values and their significance on the daily production of dairy cattle. *Mljekarstvo*. 61: 56–63.
- Gaur, G.K., Garg, R.C. & Singh, K. 2005. Experiences of crossbreeding cattle in India. VIII National Conference on Animal Genetics and Breeding, Indian

Society of Animal Genetics and Animal Breeding, Mathrua, India, 8–10 March 2005

- Gemilang, I. 2019. Kinerja Pertumbuhan Hasil Persilangan Sapi Wagyu X Brahman cross dan Brahman cross umur 1 sampai 1,5 tahun. Skripsi. Fakultas Peternakan. Universitas Gadjah Mada.
- Godden, S. M., Lombard, J. E., and Woolums, A. R. 2019. Colostrum Management for Dairy Calves. *Veterinary Clinics of North America: Food Animal Practice*. 35(3), 535–556.
- Godfrey, R.W., S.D. Smith, M.J. Guthrie, R.L. Stanko, D.A. Neuendorff, and R.D. Randel. 1991. Physiological responses of newborn *Bos indicus* and *Bos indicus* x *Bos taurus* calves after exposure to cold. *J Anim Sci*. 258-63. PMID: 2005021.
- González-Recio, O., Alenda, R. 2005. Genetic parameters for female fertility traits and a fertility index in Spanish dairy cattle. *J Dairy Sci*. 88(9):3282-9.
- González-Recio, O., Pérez-Cabal, M.A., Alenda, R. 2004. Economic value of female fertility and its relationship with profit in Spanish dairy cattle. *J Dairy Sci*. 87(9):3053-61.
- Gotoh, T.N., K. Takanori, M. Keigo, Hideyuki. 2018. The Japanese Wagyu beef industry: current situation and future prospects a review. *Asian-Australas J Anim Sci* 31:933-950.
- Grogan, A., 2000. Progeny and Calving Evaluations. Irish Cattle Breeding Federation Society.
- Guidolin, D. G. F., Buzanskas, M. E., Ramos, S. B., Venturini, G. C., Lbo, R. B., Paz, C. C. P., Munari, D. P., & Oliveira, J. A. 2012. Genotypeenvironment interaction for post-weaning traits in Nellore beef cattle. *Animal Production Science*, 52(11), 975–980.
- Hadi, P.U. dan N. Ilham. 2002. Problem dan prospek pengembangan usaha pembibitan sapi potong di Indonesia. *Jurnal Litbang Pertanian* 21(4): 148—157.
- Hafez, B. 2000. *Reproduction in Farm Animal* Seventh edition. Philadelphia. Lippincott Williams and Wilkins.
- Haile, A., Joshi, B. K., Ayalew, W., Tegegne, A., & Singh, A. 2011. Genetic evaluation of Ethiopian Boran cattle and their crosses with Holstein Friesian for growth performance in central Ethiopia. *Journal of Animal Breeding and Genetics*, 128(2), 133–140.
- Hanzen, Ch., Y. Laurent and W.R. Ward. 1994. Comparison of reproductive performance in Belgian dairy and beef cattle. *Theriogenology*. Volume 41. Issue 5. Pages 1099-1114.
- Hardjopranjoto, S. 1995. Ilmu Kemajiran pada Ternak. Airlangga University Press. Surabaya
- Hardjosubroto, W. 1994. Aplikasi Pemuliaan Ternak di Lapangan. PT Gramedia Widiasarana Indonesia. Jakarta

- Hartatik, T., A. Fathoni, S. Bintara, Ismaya, Panjono, B.P. Widyobroto, A. Agus , I.G.S. Budisatria, and P. Leroy. 2020. Short Communication: The Genotype Of Growth Hormone Gene That Affects The Birth Weight And Average Daily Gain In Crossbred Beef Cattle. *Biodiversitas*. Volume 21.Number 3. Pages: 941-945.
- Hasriati, E. 2001. Performa pedet sapi perah yang dilahirkan dari sapi dara dan laktasi akibat penyuntikan Pregnanti Mare Serum Gonadotropin (PMSG). Tesis. Fakultas Peternakan, Universitas Diponegoro. Semarang.
- Hearnshaw, H., D.W. Hennessy, P.L. Greenwood, G.S. Harper and S. Morris. 2015. Gestation length, birth traits and preweaning growth of Wagyu, Piedmontese and Angus sired calves. *Proc. Assoc. Advmt. Anim. Breed. Genet*. Vol 14:337 .
- Heins, B.J., L.B. Hansen, A.J. Seykora. 2006. Calving Difficulty and Stillbirths of Pure Holsteins versus Crossbreds of Holstein with Normande, Montbeliarde, and Scandinavian Red. *Journal of Dairy Science*. Volume 89. Issue 7.Pages 2805-2810.
- Hermadi, H.A., Hariadi, M. and Susilowati, S. 2017.The Ovarian Hypofunction: A Case in Cow Management. *Therapy*. Vol. 5. Atlantis Press: Advances in Health Sciences. Research, Pakistan
- Herpin, P., F. Wosiak, J. Le Dividich, and R. Bertin. 1998. Effects of acute asphyxia at birth on subsequent heat production capacity in newborn pigs. *Res. Vet. Sci*. 66:45–49.
- Herring, A.D. 2014. Beef Cattle Production Systems. Department of Animal Science: Texas A&M University. Texas (USA): CAB International.
- Herviyanto, Doni, Kuswati, H. Nugroho, And T. Susilawati. 2015. Weight And Length Of Brahman Cross Steer Carcass At Different Butt Shape . *Animal Husbandry Faculty Brawijaya University*.
- Hirayama, T. and K. Katoch. 2004. Effect of heat exposure and restricted feeding on behavior, digestibility and growth hormone secretion in goats. *Asian-Aust, J. Anim Sci*. 17(5): 655-658.
- Horii, M.S. Yumi, K. Yoshihiro, K. Katsumi, A. Tsutomu, K. Masazaku, Y. Makio, H. Masayuki, H. Kyoko. 2009. Relationship between Japanese beef marbling Standard numbers and intramuscular lipid in M. longissimus thoracis of Japanese Black steers from 1996 to 2004. *Anim Sci J* 2009;80:55-61
- Irikura, N., M. Uematsu, G. Kitahara, T. Osawa and Y. Sasaki. 2018. Effects of service number on conception rate in Japanese Black cattle. *Reprod Dom Anim*. 53: 34– 39.
- Irikura, N., Uematsu, M., Kitahara, G., Osawa, T., & Sasaki, Y. 2018. Effects of service number on conception rate in Japanese Black cattle. *Reproduction in Domestic Animals*, 53(1), 34–39.
- Jainudeen, M.R., Wahid and E.S.E. Hafez. 2000. *Reproduction in Farm Animal*. 7 th ed. Lippincott & Wilkins, Philadelphia.



- Jardstedt, M., A. Hessle, P. Nørgaard, L. Frendberg, and E. Nadeau. 2018. Intake and feed utilization in two breeds of pregnant beef cows fed forages with high-fiber concentrations. *Journal of animal science*, 96(8), 3398–3411.
- Johanson, J.M. and P.J. Berger. 2003. Birth weight as a predictor of calving ease and perinatal mortality in Holstein cattle. *J. Dairy Sci.*, 86: 3745-3755.
- Johnston, D. J., Barwick, S. A., Fordyce, G., Holroyd, R. G., Williams, P. J., Corbet, N. J., & Grant, T. 2014. Genetics of early and lifetime annual reproductive performance in cows of two tropical beef genotypes in northern Australia. *Animal Production Science*, 54(1), 1–15.
- Keane, M.G. and M.J. Drennan. 2008. A comparison of Friesian, Aberdeen Angus x Friesian and Belgian Blue x Friesian steers finished at pasture or indoors. *Livestock Science* 115:268-298.
- Khan, M. R. K., J. Uddin, and M.R. Gofur. 2015. Effect of age, parity and breed on conception rate and number of service per conception in artificially inseminated cows. *Bangladesh livestock journal*. 2015. 1: 1-4.
- King, J.M., Parsons, D.J., Turnpenny, J.R., Nyangaga, J., Bakari, P. & Wathes, C.M. 2006. Modelling energy metabolism of Friesians in Kenya smallholdings shows how heat stress and energy deficit constrain milk yield and cow replacement rate. *Anim. Sci.* 82: 705–716.
- Koger, M., F. M. Peacock, W. G. Kirk and J. R. Crockett. 1975. Heterosis effects on weaning performance of Brahman-Shorthorn calves. *J. Anita. Sci.* 40:826
- Kolkman, I., Opsomer, G., Aerts, S., Hoflack, G., Laevens, H., & Lips, D. 2010. Analysis of body measurements of newborn purebred Belgian Blue calves. *Animal : an international journal of animal bioscience*, 4(5), 661–671.
- Komatsu, M. dan A.E.O. Malau-Aduli. 2014. Japanese Beef Production. In *beef Cattle Production and Trade*. Cottle, D. dan L. Kahn. (ed). CSIRO Publishing. Collingwood. Australia.
- Kumar, A., Mandal, A., Gupta, A. K., & Ratwan, P. 2016. Genetic and environmental causes of variation in gestation length of Jersey crossbred cattle. *Veterinary World*, 9(4), 351–355.
- Kurniawan, F.A. 2018. Performa Sapi Hasil Silangan Brahman Cross (BX) Di PT. Lembu Jantan Perkasa (PT LJP). Tesis. Institut Pertanian Bogor.
- Laidre, M.E. dan R.A. Johnstone. 2014. Animal signal. *Curr. Biol.* 23(18): R830.
- Landaeta, A.J., O. Rae, T. Olson, M.J. Ferrer, Barboza, and L.B.M. Archbald. 2004. Pre-Weaning Traits Of Brahman Calves Under A Dual-Purpose Management System In The Tropics. *Universidad del Zulia. Facultad de Ciencias Veterinarias. Maracaibo. Venezuela. Revista Científica. FCV-LUZ / Vol. XIV. N° 4, 344 – 353.*
- Linden, D. R., Titgemeyer, E. C., Olson, K. C., & Anderson, D. E. 2014. Effects of gestation and lactation on forage intake, digestion, and passage rates of primiparous beef heifers and multiparous beef cows. *Journal of Animal Science*, 92(5), 2141–2151.
- Liu, T., Mays, A. R., Turner, K. E., Wu, J. P., & Brown, M. A. 2015. Relationships

of milk yield and quality from six breed groups of beef cows to preweaning average daily gain of their calves. *Journal of Animal Science*, 93(4), 1859–1864.

Ljungdahl and A. Sonesson. 1995. Belgian Blue and White Cattle. Swedish University. Ultuna.

Lodish, H., A. Berk, S.L. Zipursky, P. Matsudaira, D. Baltimore, and J. Darnell. 2000. *Molecular Cell Biology*. 4th edition. Chapter 8.1, Mutations: Types and Causes. New York: W. H. Freeman Section.

Lopes, F. B., Magnabosco, C. U., Paulini, F., da Silva, M. C., Miyagi, E. S., & Lôbo, R. B. 2013. Genetic Analysis of Growth Traits in Polled Nellore Cattle Raised on Pasture in Tropical Region Using Bayesian Approaches. *PLoS ONE*, 8(9), 1–6.

Lu, C.D. 2002. Boer goat production: Progress and perspective. Vice Chancellor of Academic Affairs, University of Hawai'i Hilo, Hawai. <http://www.uhh.hawaii.edu/uhh/vcaa/>. Diakses 28 januari 2020.

Lucila S.T., Branco, R.H. Bonilha, S.F.M. Bonilha, A.M. Castilhos, L.A.Figueiredo, A.G. Razook, and M.E.Z. Mercadante. 2011. Residual feed intake and relationships with performance of Nellore cattle selected for post weaning weight. *Revista Brasileira de Zootecnia*, 40(4), 929-937.

Luthfi, M., Y.N. Anggraeny dan Darminto. 2011. Perbedaan Performan Reproduksi Sapi PO dan Brahman Cross Di Berbagai Lokasi Di Jawa Tengah dan Jawa Timur. Seminar Nasional Teknologi Peternakan Dan Veteriner 2.

Mackey, D. R., Wylie, A. R. G., Sreenan, J. M., Roche, J. F., & Diskin, M. G. 2000. The effect of acute nutritional change on follicle wave turnover, gonadotropin, and steroid concentration in beef heifers<sup>1</sup>. *Journal of Animal Science*, 78(2), 429–442.

MacNeil, M. D., Mokolobate, M. C., Scholtz, M. M., Jordaan, F. J., & Neser, F. W. C. 2017. Alternative approaches to evaluation of cow efficiency. *South African Journal of Animal Sciences*, 47(2), 118–123.

Manzi, M., J. O. Junga, C. Ebong and R.O. Mosi. 2012. Factors affecting pre and post-weaning growth of six cattle breed groups at Songa Research station in Rwanda. *Livestock Research for Rural Development*. Volume 24, Article 68.

McGuirk, B.J., R. Forsyth, H. Dobson. 2007. Economic cost of difficult calvings in the United Kingdom dairy herd. *Vet. Rec.* 161. pp. 685-687.

Mee, J.F., F. Buckley, D. Ryan, P. Dillon. 2009. Pre-breeding ovaro-uterine ultrasonography and its relationship with first service pregnancy rate in seasonal-calving dairy herds. *Reprod Domest Anim* ;44(2):331-337.

Menezes, L.F.G. and J. Restle. 2005. Performance of steers of advanced generations of the alternative cross between the Charolais and Nellore breeds in feedlot. *Brazilian Journal of Animal Science*. V.34, n.6, p.1927-1937.

Ménissier, F. 1982. General Survey of the Effect of Double Muscling on Cattle Performance. In: King J.W.B., Ménissier F. (eds) *Muscle Hypertrophy of*

Genetic Origin and its use to Improve Beef Production. Current Topics in Veterinary Medicine and Animal Science, vol 16. Springer.

- Mercadante, Lôbo, R. B., & De Oliveira, H. N. 2000. Estimativas de (Co)Variâncias entre Características de Reprodução e de Crescimento em Fêmeas de um Rebanho Nelore. *Revista Brasileira de Zootecnia*, 29(4), 997–1004.
- Mercadante, P. M., Waters, K. M., Mercadante, V. R. G., Lamb, G. C., Elzo, M. A., Johnson, S. E., Rae, D. O., Yelich, J. V., & Ealy, A. D. 2013. Subspecies differences in early fetal development and plasma pregnancy-associated glycoprotein concentrations in cattle. *Journal of Animal Science*, 91(8), 3693–3701.
- Meyer, K., and Tier, B. 2012. Estimates of variances due to parent of origin effects for weights of Australian beef cattle. *Animal Production Science* **52**, 215-224.
- Meyer, K., and Tier, B. 2012. Estimates of variances due to parent of origin effects for weights of Australian beef cattle. *Anim Prod. Sci.* 52 215–224.
- Micke, G. C., Sullivan, T. M., Soares Magalhaes, R. J., Rolls, P. J., Norman, S. T., & Perry, V. E. A. 2010. Heifer nutrition during early- and mid-pregnancy alters fetal growth trajectory and birth weight. *Animal Reproduction Science*, 117(1–2), 1–10.
- Miguel-Pacheco, G.G., L.D. Curtain, C. Rutland, L. Knott, S.T. Norman, N.J. Phillips, V.E.A. Perry. 2017. Increased dietary protein in the second trimester of gestation increases live weight gain and carcass composition in weaner calves to 6 months of age. *Animal*. Volume 11. Issue 6. Pages 991-999.
- Mlagiu and Birtoiu. 2013. Effects Of Deficient Nutrition On The Reproduction Of The Milk Cows. scientific works. series c. veterinary medicine., lix(1), 110–117.
- Montano-Bermudez, M., M. K. Nielsen, and G. H. Deutscher. 1990. Energy requirements for maintenance of crossbred beef cattle with different genetic potential for milk. *J. Anim. Sci.* 68:2279–2288.
- Moraes, J. C. F., Souza, C. J. H. De, Brauner, C. C., Pimentel, M. A., Benavides, M. V., & Sterman, J. B. 2013. *Utilização do escore de condição corporal pós-parto na identificação de vacas de corte mais férteis criadas em sistemas extensivos Use of postpartum body condition score to identify the most fertile beef cows raised in extensive conditions.* 21, 149–155.
- Morris, C.A., D.C.Smeaton, A.B.Pleasants. 2004. The effect of precalving and postcalving nutritional regimes on calf birth weight and preweaning growth. *Proceedings of the New Zealand Society of Animal Production* 64: 36-38.
- Morrison, D.G., P. E. Humes and K.L. Koonce. 1988. Comparisons Of Brahman And Continental European Crossbred Cows For Calving Ease In A Subtropical Environment. *J. Anim. Sci.* 1989.67:1722-1731.
- Mukasa-Mugerwa, E., 1989. A Review of Reproductive Performance of Female *Bos indicus* (Zebu) Cattle. ILCA Monograph 6, International Livestock Centre for Africa, Nairobi, Kenya.

- Murphy B. M., M. J. Drennan, F. P. O'Mara, and M. McGee. 2008. Performance and feed intake of five beef suckler cow genotypes and pre-weaning growth of their progeny. *Irish J. Agric. Food Res.* 47:13–25
- Noakes, D. E., Parkinson, T., & England, G. 2002. Arthur's Veterinary Reproduction and Obstetrics. *Journal of Equine Veterinary Science*, 22(2), 72.
- Notter, D. R., B. Scherf, and I. Hoffmann. 2013. Breeding of Animals. In: S. A. Levin, editor. *Encyclopedia of biodiversity*. 2nd ed. Elsevier, New York. p. 636–649
- Novianti, J., Purwanto, B. P., & Atabany, A. 2017. Efisiensi Produksi Susu dan Kecernaan Rumput Gajah (*Pennisetum purpureum*) pada Sapi Perah FH dengan Pemberian Ukuran Potongan yang Berbeda. *Jurnal Ilmu Produksi Dan Teknologi Hasil Peternakan*, 2(1), 243-250.
- NRC. 1976. *Nutrient Requirements of Beef Cattle*, 5th rev. ed. National Academy of Sciences. Washington. D.C.
- NRC. 1984. *Nutrient Requirements of Beef Cattle* (6th Edition). National Academy Press, Washington, D.C.
- NRC. 2000. *Nutrient Requirements of Beef Cattle* (7th Edition). National Academy Press, Washington, D.C.
- Nuhung, I.A. 2015. Kinerja, Kendala, dan Strategi Pencapaian Swasembada Daging Sapi. *Forum Penelitian Agro Ekonomi*, Vol. 33 No. 1:63-80.
- Okaraonye, C. C., and J.C. Ikewuchi. 2009. Nutritional and antinutritional components of *Pennisetum purpureum* Schumacher. *Pakistan Journal of nutritional* 8(1):32-34
- Olivares, R., C. Chicco, C.F. Redriguez, R. Hernandez, and O. Verde. 1987. Parturition and postpartum supplements for Brahman heifers. *Memoria. Asociacion Latino americana tie Production A.* 16:48.
- Pane, Ismed. 1986. *Pemuliabiakan Ternak Sapi*. PT. Gramedia, Jakarta.
- Panjono. 2012. *Bangsa-bangsa Sapi*. PT. Citra Aji Parama. Yogyakarta.
- Paputungan, U., & Makarechian, M. (2000). The Influence of Dam Weight, Body Condition and Udder Scores on Calf Birth Weight and Preweaning Growth Rates in Beef Cattle. *Asian-Australasian Journal of Animal Sciences*, 13(4), 435–439. <https://doi.org/10.5713/ajas.2000.435>
- Parakkasi, A. 1999. *Ilmu Nutrisi dan Makanan Ternak Ruminan*. Cetakan Pertama Penerbit UP. Jakarta.
- Pardede, B.P., B.Tamba, Sutrisnak, I.K. K. Wisana, H. B. Rahardjo, M. Agil, and T. L. Yusuf. 2018. Production Trait of Crossbreed Cattle and Reproductive Disorders in Brahman Cross (BX) Breeding Program at PT Lembu Jantan Perkasa. In proceedings of the 20th FAVA Congress & The 15<sup>th</sup> KIVNAS PDHI, Bali.
- Peters, A.R., 1984. Reproductive activity of the cow in the post-partum period. I. Factors affecting the length of the post-partum acyclic period. *Brit. Vet. J.* 140, 76–84.

- Phillips, C., 2002. *Cattle Behaviour & Welfare*, second ed. Blackwell Publishing, Oxford, UK.
- Poli, J.L.E.H., F.H.S. Osorio and A. S. Becker. 1976. Weaning beef calves at 12 weeks old (called early). *Anuario Tecnico de Instituto de Pesquisas Zootecnicas "Francisco Osorio"*, 3 : 169-184.
- Poncheki, J. K., Canha, M. L. S., Viechnieski, S. L., & de Almeida, R. (2015). Analysis of daily body weight of dairy cows in early lactation and associations with productive and reproductive performance. *Revista Brasileira de Zootecnia*, 44(5), 187–192.
- Pradana, W., M.D. Rudyanto dan I.K. Suada. 2014. Hubungan Umur, Bobot dan Karkas Sapi Bali Betina yang Dipotong di Rumah Potong Hewan Temesi. *Indonesia Medicus Veterinus* 3 (1) : 37-42.
- Priyadarshini, L., Yadav, A. K., Singh, H. S., Mishra, A., Jain, A. K., & Ahirwar, M. K. (2015). Role of leptin in physiology of animal reproduction-A review. *Agricultural Reviews*, 36(3), 235.
- Priyadi, D. A., Panjono, S. Bintara, and, T. Hartatik. 2017. Genotype of Brahman dan Brahman Cross Cattle based on SNP in Insulin-like Growth Factor Binding Protein-3 (IGFBP-3) gene sequence. *Biodiversitas*. 18:795-800.
- Purchas, R.W., S.T. Morris and D.A. Grant. 1992. A comparison of characteristics of the carcasses from Friesian, Piedmontese x Friesian, and Belgian Blue x Friesian bulls. *New Zealand Journal of Agricultural Research* 35: 401-409.
- Rahardja, D.P. 2005. Relationship between nutrition and reprpduvive function in ruminants: review. *Buletin Ilmu Peternakan*
- Rehak, D., Barton, L., Vodkova, Z., Kubešová, M., Volek, J., & Rajmon, R. (2012). Relationships among body condition score , milk yield and reproduction in Czech Fleckvieh cows. *Czech Journal of Animal Science*, 57(9), 274–282.
- Reksen, O., Gro, Y. T., & Havrevoll, O. S. 2001. Influence of Concentrate Allocation and Energy Balance on Postpartum Ovarian Activity in Norwegian Cattle. *1060*, 1060–1068.
- Rianto dan Endang. 2010. Meningkatkan produksi ternak potong di Indonesia. Pidato pengukuhan upacara penerimaan jabatan guru besar dalam ilmu ternak potong fakultas peernakan universitas Dipenogoro. Badan penerbit Universitas Dipenogoro, Semarang.
- Riley, D. G., C. C. Chase Jr., T. A. Olson, S. W. Coleman, and A. C. Hammond. 2004. Genetic and nongenetic influences on vigor at birth and preweaning mortality of purebred and high percentage Brahman calves. *J. Anim. Sci.* 82:1581–1588.
- Robichaud, M. V., D.L. Pearl, S.M. Godden, S.J. LeBlanc, and D.B. Haley. 2017. Systematic early obstetrical assistance at calving: I. Effects on dairy calf stillbirth, vigor, and passive immunity transfer. *Journal of Dairy Science*. Volume 100. Issue 1. Pages 691-702.
- Rocha, J. F., Martínez, R., López-Villalobos, N., & Morris, S. T. 2019. Tick



- burden in *Bos taurus* cattle and its relationship with heat stress in three agroecological zones in the tropics of Colombia. *Parasites and Vectors*, 12(1), 1–11.
- Rodney, R. M., Celi, P., Scott, W., Breinhild, K., Santos, J. E. P., & Lean, I. J. 2018. Effects of nutrition on the fertility of lactating dairy cattle. *Journal of Dairy Science*, 101(6), 5115–5133.
- Rodrigues, P. F., Menezes, L. M., Azambuja, R. C. C., Suñé, R. W., Barbosa Silveira, I. D., & Cardoso, F. F. 2014. Milk yield and composition from Angus and Angus-cross beef cows raised in southern Brazil. *Journal of Animal Science*, 92(6), 2668–2676.
- Santos, J. E. P. 2008. Nutrition and Reproduction in Dairy Cattle. 352, 1–12. Tri-State Dairy Nutrition Conference. 22-23 April 2008.
- Sartika, D.A.R. 2008. Pengaruh Asam Lemak Jenuh, tidak Jenuh dan Asam Lemak Trans terhadap Kesehatan. *Jurnal Kesehatan Masyarakat Nasional* Vol. 2, No. 4.
- Sartori, R., & Barros, C. M. 2011. Reproductive cycles in *Bos indicus* cattle. *Animal Reproduction Science*, 124(3–4), 244–250.
- Sartori, Roberto, Gimenes, L. U., Monteiro, P. L. J., Melo, L. F., Baruselli, P. S., & Bastos, M. R. 2016. Metabolic and endocrine differences between *Bos taurus* and *Bos indicus* females that impact the interaction of nutrition with reproduction. *Theriogenology*, 86(1), 32–40.
- Sasaki, Y., M. Uematsu, G. Kitahara, and T. Osawa. 2016. Reproductive performance of Japanese Black cattle: Association with herd size, season, and parity in commercial cow-calf operations. *Theriogenology*. 2156-2161.
- Sasser, R. G., R. J. Williams, R. C. Bull. C. A. Ruder and D. G. Falk. 1989. Postpartum reproductive performance in crude protein restricted beef cows: return to estrus and conception. *J. Anim. Sci.* 66:3033
- Sato, K., and T. Fujita. 2010. Elucidation of genes involved in the conception rates of cows decrease. *B Oita Pref Anim Ind Exp Sta*;39: 17–9.
- Savc, M., Kenny, D. A., & Beltman, M. E. 2016. The effect of parturition induction treatment on interval to calving, calving ease, postpartum uterine health, and resumption of ovarian cyclicity in beef heifers. *Theriogenology*, 85(8), 1415–1420.
- Schiermister, L. N., Thallman, R. M., Kuehn, L. A., Kachman, S. D., & Spangler, M. L. 2015. Estimation of breed-specific heterosis effects for birth, weaning, and yearling weight in cattle1. *Journal of Animal Science*, 93(1), 46–52.
- Schoeman, S. J., J. G. E. van Zyl, and R. de Wet. 1993. Direct and maternal additive and heterotic effects in crossbreeding Hereford, Simmentaler and Afrikaner cattle. *S. Afr. J. Anim. Sci.* 23:61–66.
- Schottler, F.H., and W.T. Williams. 1975. The effect of early weaning of Brahman cross calves on calf growth and reproductive performance of the dam. *Australian Journal of Experimental Agriculture and Animal Husbandry*: Volume 15.
- Segura-Correa, J. C., Magaña-Monforte, J. G., Aké-López, J. R., Segura-Correa,

- V. M., Hinojosa-Cuellar, J. A., & Osorio-Arce, M. M. 2017. Breed and environmental effects on birth weight, weaning weight and calving interval of zebu cattle in southeastern Mexico. *Tropical and Subtropical Agroecosystems*, 20(2), 297–305.
- Shimada, K., N. Takenouchi, K. Ohshima And M. Takahashi. 1994. Changes in direct and maternal heritabilities for preweaning growth traits in Japanese Black cattle (Wagyu). *Proc. 5th World Congr. Genet. Appl. Livest. Prod.*, 17: 237-240.
- Shimada, K., Y. Izaike, O. Suzuki, A. Okano, N. Takenouchi, K. Ohshima, T. Oishi, M. Kosugiyama, M. Takahashi. 1993. Research On Milk Yield And Nursing Ability In Japanese Black (Wagyu) Cows. *Bull. Chugoku Natl. Agric. Exp. Stn.* 12. 57-123.
- Shimada, K., Y. Izaike, O. Suzuki, and M. Kosugiyama. 1989. Relationship Between Daily Milk Yield And Suckling Behavior In Beef Cattle. *Jpn. J. Zootech. Sci.* 60. 1071-1075.
- Shrestha, H. K., Nakao, T., Suzuki, T., Higaki, T., & Akita, M. 2004. Effects of abnormal ovarian cycles during pre-service period postpartum on subsequent reproductive performance of high-producing Holstein cows. *Theriogenology*. 61(7-8). 1559–1571.
- Smith, S.B. 2015. The Production of High Quality Beef with Wagyu Cattle. Project: Production of healthful marbling. Department of Animal Science. Texas A&M University.
- Snelling, W. M., Kuehn, L. A., Thallman, R. M., Bennett, G. L., & Golden, B. L. 2019. Genetic correlations among weight and cumulative productivity of crossbred beef cows. *Journal of Animal Science*, 97(1), 63–77..
- Spitzer, J. C., Morrison, D. G., Wettemann, R. P., Faulkner, L. C. 2019. Reproductive responses and calf birth and weaning weights as affected by body condition at parturition and postpartum weight gain in primiparous beef cows. *Journal of Animal Science*. Volume 73. Issue 5. Pages 1251–1257.
- Titterington, F. M., F.O. Lively, S. Dawson, A. W.Gordon, and S. J. Morrison. 2017. The effects of breed, month of parturition and sex of progeny on beef cow fertility using calving interval as a measure. *Advances in Animal Biosciences*. 8. s67-s71.
- Toelihere, M. 1981. *Fisiologi Reproduksi pada Ternak*. Angkasa. Bandung.
- Trail, J.C.M., K. E. Gregory, H.J.S. Marples and J. Kakonge. 1985. Comparison of Bos taurus-Bos indicus breed crosses with straightbred Bos indicus breeds of cattle for maternal and individual traits. *J. Anim. Sci.* 60:1181.
- Tulung, Y.L.R., A.F. Pendong, B. Tulung. 2020. Evaluasi nilai biologis pakan lengkap berbasis tebon jagung dan rumput campuran terhadap kinerja produksi sapi Peranakan Ongole (PO). *Zootec* 40(1): 363 – 379
- Uchida, H., K. Jin, I. Tatsushi, S. Keiichi, and O. Takuro. 2002. Current Level of Reproductive Performances in Japanese Black Cows. *Asian-Aust. J. Anim. Sci.* 2002. Vol 15, No. 8 : 1098-1102.

- Vaca, L.A., Galina, S.Fernandez-Baca, F.J. Escobar and B. Ramirez. 1983. Progesterone Level and its relationship with diagnosis of a corpus luteum by rectal palpation during the estrous cycle in Zebu cows. *Theriogenology*. 20:67.
- VanRaden, P.M. & Sanders, A.H. 2003. Economic merit of crossbred and purebred US dairy cattle. *J. Dairy Sci.*, 86: 1036–1044
- Vasseur, E., J. Rushen, A.M. de Passillé. 2009. Does a calf's motivation to ingest colostrum depend on time since birth, calf vigor, or provision of heat. *Journal of Dairy Science*, Volume 92. Issue 8. Pages 3915-3921. ISSN 0022-0302.
- Ventorp, M., Michanek, P. 1991. Cow-calf behaviour in relation to first suckling. *Research in Veterinary Science*. Volume 51. Issue 1. Pages 6-10.
- Vermunt, J.J. 2008. The caesarean operation in cattle: A review. *Iran. J. Vet. Surg.* 3 Suppl. 1, 82–100
- Walmsley B. J., S. J. Lee, P. F. Parnell, W. S. Pitchford. 2016. A review of factors influencing key biological components of maternal productivity in temperate beef cattle. *Animal Production Science*. 58. 1-19.
- Weller, M. M. D. C. A., Fortes, M. R. S., Marcondes, M. I., Rotta, P. P., Gionbeli, T. R. S., Valadares Filho, S. C., Campos, M. M., Silva, F. F., Silva, W., Moore, S., & Guimarães, S. E. F. 2016. Effect of maternal nutrition and days of gestation on pituitary gland and gonadal gene expression in cattle. *Journal of Dairy Science*, 99(4), 3056–3071.
- Whitworth, W.A., C.R. Stark, and T.G. Montgomery. 2006. A Case Study of the Cow Size and Production Efficiency Relationship. Department Report Animal Science Arkansas. University of Arkansas System. Research Series 545.
- Wiggans, G. R., VanRaden, P. M., and Cooper, T. A. 2011. The genomic evaluation system in the United States: past, present, future. *J. Dairy Sci.* 94, 3202–3211
- Wiley, J. S., M. K. Petersen, R. P. Ansotegui, R. A. Bellows. 1991. Production From First-Calf Beef Heifers Fed a Maintenance or Low Level Of Prepartum Nutrition and Ruminally Undegradable or Degradable Protein Postpartum. *Journal Of Animal Science*. Volume 69. Issue 11. Pages 4279–4293.
- Williams, A.R., C.T. Parsons, J.M. Dafoe, D. L. Boss, J. G. P. Bowman, and T. Del Curto. 2018. The influence of beef cow weaning weight ratio and cow size on feed intake behavior, milk production, and milk composition. *Translational Animal Science*. Volume 2. Pages S79–S83.
- Williamson, G. dan W.J.A. Payne. 1993. Pengantar Peternakan di Daerah Tropis (Diterjemahkan oleh S.G.N.D. Darmadja). Gadjah Mada University Press. Yogyakarta.
- Wiltbank, J.N., E.J. Warwick, E.H. Vernon, and B.M. Priode. 1961. Factors Affecting Net Calf Crop in Beef Cattle. *Journal of Animal Science*. Volume 20. Issue 3. Pages 409–415.

- Winda. 2015. Performans Reproduksi Pada Sapi Brahman Cross Yang Di Inseminasi Buatan Di Pt. Lembu Betina Subur Kota Sawahlunto. Thesis.
- Winugroho, M. 2002. Strategi pemberian pakan tambahan untuk memperbaiki efisiensi reproduksi induk sapi. Jurnal litbang pertanian. 21;19-23.
- Wodzicka T., M.T.D. Chaniago, and I.K. Utama. 1988. Reproduction in relation to animal production in Indonesia. Institut Pertanian Bogor-Australia Project. Bogor.
- Zachut, M., & Moallem, U. (2017). Consistent magnitude of postpartum body weight loss within cows across lactations and the relation to reproductive performance. Journal of Dairy Science, 100(4), 3143–3154.
- Zaki, M.F. 2009. Efisiensi reproduksi sapi Brahman cross ex-impor dan Peranakan Ongole (PO) di Kabupaten Ngawi. Thesis, Universitas Brawijaya.