



## DAFTAR PUSTAKA

- Abidin, Z. 2002. Penggemukan Sapi Potong. Agro Media Pustaka, Jakarta
- Ahola JK, Seidel Jr GE, Whitteir JC. 2009. Use gonadotropin releasing hormone at fixed time artificial insemination at eighty or ninetyseven hours post prostaglandin F2 alfa in beef cows administered the long term melengestrol acerate select synch. *The Professional Animal Scientist* (25): 256-261.
- Anonim. 2010. Penyusunan Review Rencana Program Investasi Jangka Menengah (RPIJM) Kabupaten Brebes. Brebes: PU/ Cipta Karya Kabupaten Brebes
- Anonim. 2012. Keputusan Menteri Pertanian Nomor 2842/Kpts/LB.430/8/2012 Tentang Penetapan Rumpun Sapi Jabres. Jakarta: Kementerian Pertanian
- Anonim. 2022. Data Populasi Ternak Kabupaten Brebes. Brebes: Dinas peternakan dan Kesehatan Hewan Kab. Brebes
- Apriem, F., Ihsan, N., dan Poetro, S. B. 2012. Penampilan Reproduksi sapi Peranakan Onggole Berdasarkan Paritas di Kota Probolinggo Jawa Timur. Fakultas Peternakan. Universitas Brawijaya. Malang.
- Arroyo-Rebollar, R., López-Villalobos, N., García-Martínez, A., Arriaga-Jordán, C.M. and Albarrán-Portillo, B., 2021. Relationship between calving interval and profitability of Brown Swiss cows in a subtropical region of Mexico. *Tropical Animal Health and Production*, 53(3), pp.1-8.
- Aryogi. Romjali, Endang. 2006. Potensi, Pemanfaatan dan Kendala Pengembangan Sapi Potong Lokal sebagai Kekayaan Plasma Nutfah Indonesia. Pasuruan: Loka Penelitian Sapi Potong.
- Ball, P.J.H. and Peters, A.R. 2004. *Reproduction in Cattle*. Third edition. Blackwell Publishing.
- Bartolome, J. A., Silvestre, F. T., Arteche, A. C. M., Kamimura, S., Archbald, L. F. and Thatcher, W. W. (2002) *The Use of Ovsynch and Heatsynch for Resynchronization of Cows Open at Pregnancy Diagnosis by Ultrasonography*. *J. Dairy Sci.* 81: 390-342.
- Bartolome, J. A., Sozzi, A., McHale, J., Swift, K., Kelbert, D., Archbald, L. F. and Thatcher, W. W. (2004) *Resynchronization of Ovulation and Timed Insemination in Lactating Dairy Cows Using the Ovsynch and Heatsynch Protocol Initiated 7 Days Before Pregnancy Diagnosis on Day 30 by Ultrasonography*. *Reprod. Fertil. Develop.* 16 (2): 126-127.
- Bearden, H.J. and J. Fuguay. 1984. *Applied Animal Reproduction*. 2<sup>nd</sup> Ed. Reston Publishing Company, inc. Aprentile-Hall Company. Reston. Virginia.



- Borchardt, S. L. Schüller, L. Wolf, C. Wesenauer., W. Heuwieser. 2017. *Comparison of pregnancy outcomes using either an Ovsynch or a Cosynch protocol for the first timed AI with liquid or frozen semen in lactating dairy cows*. Theriogenology 107 (2018) 21-26
- Caraba, I. V. and S. Velicevici, 2013. *Using Ovsynch Protocol versus Cosynch Protocol in Dairy Cows*. Anim. Sci.Biotecnol., 56: 63-65.
- Dalton, J.C., S. Nadir, J.H., Bame, M., Noftsinger, R.L., Nebel, and R. G. Saacke, 2001. *Effect of time of insemination on number of accessory sperm, fertilization rate, and embryo quality in nonlactating dairy cattle*. J. Dairy Sci. 84: 2413–2418.
- Dransfield, M.G.B., Nebel, R.L., Pearson, R.E., Warnick, L.D. 1998. *Timing of insemination for dairy cows identified in estrus by a radiotelemetric estrus detection system*. J Dairy Sci 81: 1874–82.
- Dwiyanto, K. 2005. Pokok-Pokok Pemikiran Pengelolaan berkelanjutan Plasma Nutfah Peternakan. Makalah dalam Lokakarya Plasma Nutfah Peternakan. Puslitbangnak dan Balitnak. Bogor, 29 Desember 2005.
- Fanani, S., Subagyo , Y.B.P., dan Lutojo. 2013. Kinerja Reproduksi Sapi Perah Peranakan Friesian Holstein (PFH) di Kecamatan Pudak, Kabupaten Ponorogo. Fakultas Pertanian. Universitas Sebelas Maret. Surakarta.
- Fortune, J.E. 1993. *Follicular Dynamics during the bovine oestrus cycle : a limiting factor in improvement of fertility*. Anim Reprod Sci. 33 : 111-198.
- Frandsen, R.D., 1996, Anatomi dan Fisiologi Ternak, Edisi ke-7. Diterjemahkan oleh Srigandono, B. dan Praseno, K. Gadjah Mada University Press, Yogyakarta.
- Fricke, P.M. and Wiltbank, M.C., 2022. Symposium review: The implications of spontaneous versus synchronized ovulations on the reproductive performance of lactating dairy cows. *Journal of Dairy Science*.
- Garcia, A.G.C., Van Der Wijdam, B., Coleembrander. M.M. Bevers. 1999. *Monitoring follicular development in cattle by real time Ultrasonography*. J. Veterinary Record 145 : 334-340.
- Geary, T.W., Whittier, J.C., Halford, D.M. and Macneil, M.D. 2001. *Calf removal improves conception rates to the Ovsynch and Co-synch protocols*. Journal Animal Science 79 : 1-4.
- Gordon I. 1996. *Controlled reproduction in cattle and buffaloes*. Cab International, Wallingford UK.
- Hare, E.H.D.N., Norman, H.D. and Wright, J.R., 2006. Trends in calving ages and calving intervals for dairy cattle breeds in the United States. *Journal of dairy science*, 89(1), pp.365-370.



- Hafez, E.S.E. 1993. *Hormones, growth factor, and reproduction. In : The Reproduction in Farm Animal.* 6 Edition. Lea and Fibiger Philadelphia.
- Hafez, E.S.E., and Hafez, B. 2000. *Reproduction in Farm Animals*, 76 Ed. Lippincott Williams and Wilkins, Philadelphia
- Hafez, E.S.E and Hafez, B. 2008. *Reproduction in Farm Animals*. 7ed. Lippincott Williams & Wilkins. Philadelphia.
- Hamid, M., Abduraman, S. and Tadesse, B., 2021. Risk Factors for the Efficiency of Artificial Insemination in Dairy Cows and Economic Impact of Failure of First Service Insemination in and around Haramaya Town, Oromia Region, Eastern Ethiopia. *Veterinary medicine international*, 2021.
- Hariadi, M., Broomfield, D. and Wright, P. J. (1998) *The Synchrony of Prostaglandin-Induced Estrus in Cows was Reduced by Pretreatment with HCG. Theriogenology* 49: 967-974.
- Hariadi, M., S. Hardjopranjoto, Wurlina, H.A. Hermadi, B. Utomo, Rimayanti.,I.N. Triana dan H. Ratnani. 2011. Ilmu Kemajiran pada Ternak. Cetakan 1. Airlangga University Press. Surabaya.
- Hanifah, M.A., Wurlina, Hidajati, N., Hariadi, M., Samik, A., Restiadi, T.I., 2018. Hubungan Antara Umur dengan Calving Interval, Days Open, dan Service Per Conception Sapi Friesian Holstein (FH). *Ovozoa* Vol. 8, No. 2, Oktober 2019
- Hawk, H.W. 1987. *Transport and fate of spermatozoa after insemination of cattle. J. Dairy Sci.* 70: 1487 – 1503.
- Heuwieser, W., Oltenacu, P.A., Lednor, A.J., and Foote, R.H. 1997. *Evaluation of different protocols for prostaglandin synchronization to improve reproductive performance in dairy herds with low estrus detection efficiency. J. Dairy Sci.* 80 : 2766–2774.
- Hoesni, F. 2015. Pengaruh keberhasilan inseminasi buatan (IB) antara sapi bali dera dengan sapi bali yang pernah beranak di Kecamatan Pemayung Kabupaten Batanghari. *J. Ilmiah Universitas Batanghari Jambi*. 15(4): 20-27.
- Hoque MN, Talukder AK, Kamal MM, Jha AK, Bari FY, Shamsuddin M. *Ovulation synchronization in water buffaloes guided by milk progesterone assay. J Embry Trans* 2011; 26: 105–109.
- Hunter, R.H.F. and Greve, T. 1997. *Could artificial insemination of cattle be more fruitful, penalties associated with ageing eggs. Reprod Dom Anim.* 32 : 137-141.
- Hyland, J.H and F. Bristol.1979. *Synchronization of oestrus and timed insemination of mares. J Reprod. Fertil. Suppl.* (27):251-255.



- Iswoyo dan Widyaningrum, P. 2008. Performans Reproduksi Sapi Peranakan Simmental (Psm) Hasil Inseminasi Buatan di kabupaten Sukoharjo Jawa Tengah. *Jurnal Ilmiah Ilmu-ilmu Peternakan*. 11(3): 125-133.
- Jainudeen, M.R. and Hafez. E.S.E. 2000. Pregnancy diagnosis, dalam Hafez, E.S.E and Hafez, B. 2000. *Reproduction in Farm Animals*. 7ed. Lippincott Williams & Wilkins. Philadelphia.
- Jamsawat, V., Felomino, V., Mamuad and Venturina, V. 2015. Effects of PGF<sub>2α</sub> and GnRH on reproductive performance of cattle and buffaloes in Thailand and Philippines. *J. Agr. Tech* 11(8) : 2273-2281.
- Junaidi A, Putro PP, Achmad P. 1992. *The use of luprostiol and dinoprost tromethamine for oestrus synchronization in dairy cattle*. *Journal Title Bulletin FKH-UGM*. 11(1-2): 55-59.
- Kasimanickam, J., Currin, J. C., Hall, J. B. and Whittier, D. W. (2006) *Sire effect on the pregnancy outcome in beef cows synchronized with progesterone based Ovsynch and CO-Synch protocols*. Animal Reproduction Science 104 (2008) 1–8.
- Khan, M.R.K., Uddin, J. and Gofur, M.R., 2015. Effect of age, parity and breed on conception rate and number of service per conception in artificially inseminated cows. *Age (year)*, 2(3), p.19.
- Kinder, J.E., Kojima, F.N., Bergfeld, E.G.M, Wehrman, M.E. and Fike, K.E. 1996. *Progestin and estrogenregulation of pulsatile LH release and development of persisten ovarian follicles in cattle*. *J. Animal Science* 74 : 1424-1440.
- Larsson B. Distribution of spermatozoa in the bovine genital tracts after artificial insemination. Ph.D. Thesis. Department of obstetrics and Gynaecology; College of Veterinary Medicine, Uppsala, Sweden. 1988.
- Lee. C.N.M.S., E. Murice, M.S.R.L.Ax., J.A. Pennington, W.F. Hoffman., M.D. Brown. 1990. Efficacy of gonadotropin releasing hormone administered at the of artificial insemination of heifers and postpartum and repeat breeder dairy cows. *Am.J.Vet.Res*, Vol.44. No.11.
- Lestari, C.M.S., Purbowati, E., Dartosukarno., Rianto, E. 2014. Sistem Produksi dan Produktivitas Sapi Jawa-Brebes dengan Pemeliharaan Tradisional. *Jurnal Peternakan Indonesia* Vol 16(1):8-14.
- Lewis, G.S., Caldwell, D.W. and Rexroad, C.E. 1990. Effect of GnRH and HCG on pregnancyrate in dairy cattle. *J. Dairy Sci*. 73: 66-72.
- Matsuda, 1997. Body Condition Score in Dairy Cattle. Balai Embrio Ternak. Cipelang. Bogor



- Mee, O.M., J.S. Stevenson and R.K. Scoby. 1990. *Influence of gonadotropin releasing hormone and timing of insemination relative to estrus on pregnancy rate of dairy cattle at first service*. Journal Dairy Svience 73 : 1500-1507.
- Mee, O.M., J.S. Stevenson, B.M. Alexander and R.G. Sasser. 1993. Administration of GnRH Influence of gonadotropin releasing hormone and timing of insemination relative to estrus on pregnancy rate of dairy cattle at first service. Journal Dairy Svience 73: 1500-1507.
- Milvae RA. 2000. Inter-relationships between endothelin and prostaglandinf2 $\alpha$  in korpus luteum function. J Reprod Fertil. 5:1-5.
- Munadi. 2009. Profil Sistem Produksi Peternakan Sapi Lokal Jawa Khas Brebes (Jabres) dan Strategi Pengembangannya. <http://pascapeternakan.unsoed.ac.id/en/biblio/author/27>.
- Nasr, M.A., Hussein, M.A., Alkhedaide, A.Q., El-Tarabany, M.S. and Roushdy, E.M., 2021. Reproductive Performance and Culling Rate of Purebred Holstein Cows and Their Crosses With Fleckvieh and Brown Swiss Cows Under Subtropical Conditions. *Frontiers in Veterinary Science*, 8.
- Nebel, R.L., Dransfield, M.G., Jobst, S.M., Bame, J.H. 2000. *Automated electronic systems for the detection of oestrus and timing of AI in cattle*. Anim Reprod Sci 60 : 713–723.
- Noakes, D. 2001. *Arthur's Veterinary Reproduction and Obstetrics*. Eight Edition. Elsevier. England.
- Noakes, D.E., Parkinson. T.J., England, G.C.W. 2009. *Veterinary Reproduction and Obstetrics*. ninth ed. Edinburgh London Elsevier Sci : 399–408.
- O'Connor, M.L. 1993. *Heat detection and timing of insemination for cattle*. extension circular 402. College of Agricultural Sciences Agricultural Research and Cooperative Extension. The Pennsylvania State University.
- Patterson, D. J., Smith, M. F., and Scafer, D. J. (2005) *New Opportunities to Synchronize Estrus and Facilitate Fixed-Time AI*, Division of Animal Sciences, University of Missouri-Columbia.
- Peters, A.R. and P.J.H. Ball. 1995. *Reproduction in Cattle*. 2nd Ed. Blakwell Science Ltd. Oxford London, Australia.
- Prasojo, G., I. Arifiantini, dan K. Mohamad. 2010. Korelasi Anatara Lama Kebuntingan, Bobot Lahir dan Jenis Kelamin Pedet Hasil Inseminasi Buatan pada Sapi Bali. Jurnal Veteriner. 11(1):41-45.
- Pursley, J.R., Silcox, R.W., and Wiltbank, M.C. 1998. *Effect of time of artificial insemination on pregnancy rates, calving rates, pregnancy loss, and gender*



*ratio after synchronization of ovulation in lactating dairy cows. J. Dairy Sci.* 81: 39–44.

PIHPS [ Pusat Informasi Harga Pangan Strategis]. 2021. <https://hargapangan.id/tabelharga/pasar-tradisional/komoditas> [website]. PIHPS. Jakarta.

Putro, P. P. 2010. Teknik Sinkronisasi Estrus Pada Sapi. Buku Ajar. Bagian Reproduksi dan Obstetri. Fakultas Kedokteran Hewan. Universitas Gdjah Mada. Yogyakarta.

Rabiee, A. R., Lean, I. J. and Stevenson, M. A. (2005) *Efficacy of Ovsynch Program on Reproductive Performance in Dairy Cattle: a Meta-Analysis. J. Dairy Sci.* 88: 2754-2770.

Riyanto, J., Lutojo dan D. M. Barcelona. 2015. Kinerja Reproduksi Induk Sapi Potong pada Usaha Peternakan Rakyat di Kecamatan Mojogedang. Sains Peternakan, 13(2), 73-79.

Saacke, R.G. 2008. Insemination factors related to timed AI in cattle. *Theriogenology* 70 : 479–484.

Salisbury, G.W. and N.L. Vandemark. 1961. *Physiology Reproduction and Artificial Insemination of Cattle, Fisiologi Reproduksi dan Inseminasi Buatan pada Sapi*. Alih Bahasa oleh Djanuar. 1985. Gajah Mada University Press.Yogyakarta.

Saputra, R., Hartono, M. and Suharyati, S., 2021. CONCEPTION RATE PADA SAPI KRUI DI KECAMATAN PESISIR SELATAN KABUPATEN PESISIR BARAT. *Jurnal Riset dan Inovasi Peternakan (Journal of Research and Innovation of Animals)*, 5(1), pp.8-13.

Schmitt, E.J.P., Diaz, T., Drost, M. and Thatcher, W.W. 1996. *Use of Gonadotropin-releasing hormone agonist or human chorionic gonadotropin for timed insemination in cattle. J. Animal Science* 74 : 1084-1091.

Senger, Philip L. 2003. *Pathways to pregnancy and parturition. Second revised edition*. Washington. USA.

Sihombing, D.T.H. 2000. Teknologi Peternakan dan Kelestarian Lingkungan. Bahan Ajar Pelatihan Revitalisasi Keterpaduan Usaha Ternak dalam Sistem Usaha Tani. Bogor dan Surakarta, 20 Februari – 8 Maret 2000. Puslitbang Peternakan. Bogor.

Siregar,S.B. dan A.K. Rays. 1992. Dampak jarak beranak sapi Jawa Brebes induk terhadap pendapatan peternak sapi Jawa Brebes. Ilmu dan Peternakan No 1 : 11-15.



- Skarzynski, D.J., M.J. Siemieniuch, W. Pilaeski, I.W. Potocka, M.M. Bah, M. Majewska, and J.J. Jaroszewski. 2009. In vitro assesment of progesterone and prostaglandin E2 production by the corpus luteum in cattle following pharmacological syncronization of estrus. *J. Reproduct. Developm.* 55(2):170-176.
- Soeroso dan E. Kurnianto. 2006. Karakteristik fenotif warna bulu pada Sapi Jawa. *Jurnal Agrisains*, 7 (1): 52-58
- Sonjaya, Abustam E, Pali MD, Tolleng L, Sudirman. 2007. Bahan ajar mata kuliah ilmu reproduksi ternak. Makassar (Indonesia): Fakultas Peternakan, Universitas Hasanuddin.
- Sonmez, M., E. Demirci, G. Turk, and S. Gur. 2005. *Effect of season on some fertility parameters of dairy and beef cows in Elazý Province*. Turk. J. Vet. Anim. Sci. 29:821-828.
- Spicer, L.J. and Echternkamp, S.E. 1986. *Ovarian follicular growth, function and turnover in cattle: A Review*. Journal of Animal Science 62 : 428-451.
- Sukandar, A. (2008). Pertumbuhan, *Body Condition Score* dan Produksi Susu Sapi. Jawa Brebes Friesian-Holstein Betina pada Peternakan Rakyat di Cilumber KPSBU Lembang-Bandung. Skripsi Fakultas Peternakan Institut Pertanian Bogor. Bandung.
- Sung, M.K., Lee, S.C., Jeong, J.K., Choi, I.S., Moon, S.H., Kang, H.G. and Kim, I.H., 2016. Effect of age at first calving on productive and reproductive performance in dairy cattle. *Journal of Veterinary Clinics*, 33(2), pp.93-96.
- Suwignyo, B. and Kusumastuti, T.A., 2021, June. Analysis of factors affecting to the income of Bali cattle farmers in Barru Regency, South Sulawesi Province, Indonesia. In *IOP Conference Series: Earth and Environmental Science* (Vol. 788, No. 1, p. 012201). IOP Publishing.
- Suzana, R., Udin, Z., dan Hendri. 2019. Penggunaan Metode Sinkronisasi Estrus terhadap Respon Estrus pada Kerbau Rawa (*b. Bubalis carabauensis*) di Kabupaten Padang Pariaman. *JPI Vol. 22 (2)*: 176-183
- Stevenson, S.J., Edward, D. Call, and R.K. Scoby. 1990. Double insemination and gonadotropin releasing hormone treatment of repeat breeding dairy cattle. *J. Dairy sci.* 73: 1766-1772.
- Sturman, H.E., A.B. Oltenacu and R.H. Foote. 2000. *Importance of insemination only cows in estrus*. *Theriogenology* 53 : 1657-1667.
- Thohari, M. 2000. Pemanfaatan Plasma Nutfah Ternak Lokal dalam Sistem Usaha Tani Terintegrasi. Bahan Ajar Pelatihan Revitalisasi Keterpaduan Usaha Ternak dalam Sistem Usaha Tani. Bogor: Puslitbang Peternakan.



Toelihere, M.R., 1983. Fisiologi Reproduksi Pada Ternak. Penerbit Angkasa Bandung.

Williams, S. W., Stanko, R. L., Amstalden, M. and Williams, G. L. (2002) *Comparison of Three Approaches for Synchronization of Ovulation for Timed Artificial Insemination in Bos indicus-Influenced Cattle Managed on the Texas Gulf Coast. J. Anim. Sci.* 80: 464 - 470.

Zahedi, V., Zeynodini, S., Yousefi, A.R., Baghshahi, H., Moradi-Shahrabak, M., Zhandi, M., Asad Rad, M. and Fouladi-Nashta, A.A., 2021. Trends in Reproductive Status of Holstein Dairy Herds in Iran. *Iranian Journal of Applied Animal Science*, 11(3), pp.497-505

Zainudin, M., M. NurIhsan, dan Suyadi. 2014. Efisiensi Reproduksi Sapi Perah PFH pada Berbagai Umur di CV. Milkindo Berka Abadi Desa Tegal sari Kecamatan Kepanjen Kabupaten Malang. *Jurnal Ilmu-ilmu Peternakan* 24(3): 32-37.

Zavadilová L, Štípková M. 2013, Effect of age at first calving on longevity and fertility traits for Holstein cattle. *Czech J Anim Sci*; 58: 47-57.