

DAFTAR PUSTAKA

- Amer, H. A., A. O. Hegab. and S. M. Zaabal. 2008. Effects of ovarian morphology on oocyte quantity and quality, granulosa cells, *in vitro* maturation, and steroid hormone production in buffaloes. *Anim Reprod.* 5:55-62.
- Arie, F., A. S. Mohamad. dan W. K. K. Ni. 2015. Tingkat fertilisasi oosit domba dari ovarium yang disimpan pada suhu dan waktu yang berbeda secara *In Vitro*. *Jurnal Kedokteran Hewan.* IPB, Bogor.
- Bacha, W.J. and L. M. Bacha. 2012. *Color Atlas of Veterinary Histology.* 3rd ed. New Jersey; Wiley-Blackwell.
- Badan Pusat Statistik. 2019. Data Populasi Ternak Kerbau di Indonesia. <http://bps.go.id>. Diakses 28 Agustus 2020. Pukul 13.50 WIB.
- Bagg, M. A., M. B. Nottle, D. T. Armstrong, and C. G. Gruppen. 2007. Relationship between follicle size and oocyte developmental competence in prepubertal and adult pigs. *Reprod. Fertil Dev.* 19(7): 797-803.
- Bilodeau-Goeseels, S. and P. Panich. 2002. Effects of oocyte quality on development and transcriptional activity in early bovine embryos. *Anim.*
- Boediono A, Y Rusiantono, K Mohamad, I Djuwita, dan Y Sukra. 1999. Produksi embrio kambing dengan teknologi maturasi, fertilisasi dan kultur *in vitro*. *Prosiding Seminar Nasional Peternakan dan Veterinar* 258-263.
- Boediono, A. dan M. A. Stiadi. 2006. Tingkat Pematangan Inti Oosit Domba dari Ovarium dengan Status Reproduksi dan Medium Maturasi yang Berbeda. *Hayati J. Biosci.* 13; 131-136.
- Clarke, A. 2003. Costs and consequences of evolutionary temperature adaptation. *Trends Ecol Evol.* 18:573-581.
- Das, G. K., G. C. Jain., V. S. Solanki. and V. N. Tripathi. 1996. Efficacy of various collection methods for oocyte retrieval in buffalo. *Theriogenology.* 46:1403-1411.
- Dellmann's. 2006. *Textbook of Veterinary Histology.* 6th ed. US Wiley: Blackwell.
- Evencen, M., U. Cirit., K. Demir., E. Karaman., A. I. Hamzaoglu. and G. Bakirer. 2009. Developmental competence of domestic cat oocytes from ovaries stored

at various durations at 4 degrees C temperature. Anim. Reprod. Sci. 116 (12): 169-172.

Edson, M. A., A. K. Nagaraja. and M. M. Matzuk. 2009. The mammalian ovary from genesis to revelation. Endocr Rev. 30:624-712.

Febretrisiana, A., M. A. Setiadi. and N. W. K. Karja. 2015. Nuclear maturation rate of sheep oocyte *in vitro*: Effect of storage duration and ovary temperature. J Indonesian Trop Anim Agric. 40:93-99.

Febrianto, Y. H., T. W. Pangestiningih., A. Hanna., P. Astusi., C. M. Airin., A. Asyhari., N. Anindito., K. Rachmawati., Kurniawan. dan P. Y. Wibowo. 2008. Kuantitas dan kualitas sel telur anjing lokal dari berbagai stadium estrus. Jurnal Sains Veteriner.

Ferreira, M., A. Brasil., J. Silva., E. Andrade., A. Rodrigues. and J. Figueiredo. 2001. Effects of storage time and temperature on atresia of goat ovarian preantral follicles held in M199 with or without indole-3-acetic acid supplementation. *Theriogenology*. 55(8):1607-1617.

Findlay, J. K., J. B. Kerr., K. Britt., S. H.Liew., E. R. Simpson., D. Rosairo. and A. Drummond. 2009. Ovarian physiology: Follicle development, oocyte and hormone relationships. Anim Reprod. 6:16-19.

Fortune, J. E., Rivera, G. M., Evans, A. C. O. and A. M. Turzillo. 2001. Differentiation of dominant versus subordinate follicles in cattle. Biol Reprod 65:648-654.

Gandolfi, F. 1997. The *in vitro* developmental competence of bovine oocytes can be related to the morphology of the ovary. *Theriogenology* 48:1153-1160.

Gardner, K. D. A., C. W. Weissman., Howles. and Z. Shokam. 2001. Textbook of Assisted Reproductive Techniques. Martin Dunitz Ltd London.

Gordon, I. 2003. Laboratory Production of cattle embryos. 2nd ed. Wallingford (UK): CABI Publishing.

Gustina, S., H. Hasbi., W. K. K. Ni., A. S. Mohamad. dan S. Iman. 2017. Kualitas Oosit Kerbau dari Status Reproduksi Ovarium yang Berlainan. Fakultas Kedokteran Hewan, Universitas Gajah Mada. Yogyakarta. JSV. 35 (2). Desember 2017.

- Hafez, B. and E. S. E. Hafez. 2000. Reproduction in farm animal. 7th ed. Hafez B, Hafez ESE, editors. Philadelphia (US): Lippincott Williams & Wilkins.
- Hammad, M. E., S. A. Gabr., I. T. El-Ratel. and M. A. Gad. 2014. Efficacy of different collection techniques on yield and quality of Egyptian buffalo oocytes. *J Anim Poult Prod Mansoura Univ.* 5:413-422.
- Handarini, R., D. Sudrajat., and D. Hardiansyah. 2014. The quality of oocytes from ovaries of ongole crossbreed on follicular and luteal phases *Jurnal Pertanian.* 5 (2): 89-94.
- Hanna, C., Long., K. Hinricchs., M. Westhusin. and D. Kraemer. 2008. Assessment of cannie oocyte viability after transportation and storage under different condition. *Anim. Reprod. Sci.* 105 (3-4); 451-6.
- Hazeleger, N. L., Hill, D. J., Stubbings, R. B. and J. S. Walton. 1995. Relationship of morphology and follicular fluid environment of bovine oocytes to their developmental potential *in vitro.* *Theriogenology* 43:509522.
- Hennet, M.L. and C. M. H. Combelles. 2012. The antral follicle: a microenvironment for oocytes differentiation. *Int. J. Dev. Biol.* 56:819-831.
- Hoque, S. A. M., S. K. Kabiraj., M. A. M. Yahia Khandoker., A. Mondal. and K. M. A. Tareq. 2011. Effect of collection techniques on cumulus oocyte complexes (COCs) recovery, *in vitro* maturation and fertilization of goat oocytes. *African J Biotechnol.* 10:9177-9181.
- Jaswandi., Boediono, A. and M. A. Setiadi. 2001. *In vitro* maturation and fertilization of ovine oocytes in system with absence of 5% CO₂. *Reprotech* 1:19-22.
- Kakkassery, M. P., L. F. Anand., V. Rijaryakumaran. and T. Sreekumaran. 2010. *In vitro* maturation of *Bos indicus* oocytes: Effect of cumulus oocyte complex morphology. *Vet Anim Sci.* 6:247-249.
- Karadjole, M., I. Getz., M. Samardžija., N. Maćešić., M. Mario., Z. Makek., T. Karadjole., G. Bačić., T. Dobranić. and M. Poletto. 2010. The developmental competence of bovine immature oocytes and quality of embryos derived from slaughterhouse ovaries or live donors by ovum pick up. *Vet Arh.* 80:445-454.
- Karja, N. W. K., T. Otoi., M. Murakami., M. Fahrudin. and T. Suzuki. 2002. *In Vitro* maturation, fertilization and development of domestic cat oocytes recovered

from ovaries collected at three stages of the reproductive cycle. *Theriogenology*. 57: 2289-2298.

- Kim, H. J., S. H. Choi., D. S. Son., S. R. Cho., C. Y. Choe., Y. K. Kim., M. H. Han., I. S. Ryu., I. C. Kim. and I. H. Kim., *et al.* 2006. Effect of exposure duration of ovaries and oocytes at ambient temperature on parthenogenetic development of porcine follicular oocytes. *J Reprod Dev.* 52:633-638.
- Kochar, H. P., B. Wu., L. H. Morris., B. C. Buckrell., J. W. Pillard., P. K. Basrul. and W. A. King. 2002. Maturation status, protein synthesis and development competence of oocytes derived from lambs and ewes. *Reprod. Domes. Anim.* 37: 19-25.
- Kor, N. M. 2014. The effect of corpus luteum on hormonal composition of follicular fluid from differend sized follicles and their relationship to serum concentrations in dairy cows. *Asian Pac. J. Trop. Med.* 7: S282-S288.
- Li, H., R. Chian. 2017. Development of in vitro maturation for human: Follicular development and oocyte growth oocytes. Gewerbestrasse (Switzerland): Springer International Publishing AG.
- Manjunatha, B.M., P. S. P. Gupta., J. P. Ravindra., M. Devaraj., H. S. Ramesh. and S. Nandi. 2007. In Vitro Developmental Competence of buffalo oocytes collected at various stages of the estrous cycle. *Theriogenology*. 68: 882-888.
- McGee, E. A. and A. J. W. Hsueh. 2000. Initial and cyclic recruitment of ovarian follicles. *Endocrinol Rev* 21:200-214.
- Misra, A. K. and S. Tyagi. 2007. In vitro embryo production in buffalo: present and perspectives. *Ital. J. Anim. Sci.* 6: 74-91.
- Mutha, R. M. and M. Y. Uma. 2012. Efficacy of different harvesting techniques on oocyte retrieval from buffalo ovaries. *Buffalo Bull.* 31(4):209-213.
- Neglia, G., A. Natale., G. Esposito., F. Salzillo., L. Adinolfi., L. Zicarelli. and M. Francillo. 2007. Follicular dynamics in *synchronized Italian Mediterranean buffalo cows*. *Italian J. Anim. Sci.* 6: 611-614.
- Ondho, Y. S. 1998. Pengaruh penambahan FSH, estradiol-17^β dan kultur sel tuba fallopi ke dalam TCM-199 untuk meningkatkan pematangan oosit dan perkembangan embrio domba dalam program fertilisasi In Vitro. *Disertasi*. Pascasarjana IPB. Bogor.

- Pawshe, C. H., Totey, S. M. and S. K. Jain. 1994. A comparison of three method of recovery of goat for in vitro maturation and fertilization. *Theriogenology*. 42:117-125.
- Raghu, H.M., S. Nandi. and S. M. Reddy. 2002. Recovery rate and developmental potential in vitro of buffalo oocytes depend on age of the animal. *Indian J. Anim. Sci.* 72: 57-8.
- Rao, M. M. and Y. U. Mahesh. 2012. Efficacy of different harvesting techniques on oocyte retrieval from buffalo ovaries. *Buffalo Bull.* 31:209-213.
- Richards, J. S. and S. A. Pangas. 2010. The ovary: Basic biology and clinical implications. 120:963-972.
- Rosadi, B., M. A. Setiadi., D. Sajuthi. dan A. Boediono. 2011. Preservasi Ovarium dan Pengaruhnya Terhadap Morfologi Folikel Domba. *J Vet Indones.* 2:91-97.
- Saleh, W. M. 2016. Role of Epididymal Spermatozoa In Vitro Fertilization and Embryo transfer in Iraqi Sheep. Thesis submitted to the Council of the collage of vet. medicine, University of Baghdad in partial fulfillment of the requirement for the degree of doctor of Philosophy in Vet. Med. *Theriogenol.*
- Saleh, W. M. 2017. Assessment of different methods of bovine oocytes collection, maturation and *in vitro* fertilization of abattoir specimens. *Iraqi Journal of Veterinary Sciences.* 31: 55-65.
- Sani, H. 2010. Pengaruh lama waktu transportasi setelah pemotongan terhadap status inti oosit sapi yang dimatangkan secara *in vitro*. Tesis. Program Pasca Sarjana. Universitas Andalas. Padang.
- Santos, R. R., C. Amorim., S. Cecconi., M. Fassbender., M. Imhof., J. Lornage., M. Paris., V. Schoenfeldt. and B. M. Madrid. 2010. Cryopreservation of ovarian tissue: An emerging technology for female germline preservation of endangered species and breeds. *Anim Reprod Sci.* 122:151-163.
- Senger, P. L. 1999. Pathway to pregnancy and parturition. Washington DC (US): Current Conceptions Inc.
- Senger, P.L. 2003. Pathways to Pregnancy and Parturition. 2nd revision edition. Washington State University Research and Technology Park. Current Conceptions Inc., Washington. Halaman : 210–230

- Sianturi, R. G., M. Thein., H. Wahed. and Y. Rosnina. 2002. Effect of collection technique on yield of bovine oocytes and the development potential of oocytes from different grades of oocytes. *JITV*. 7(3):188-193.
- Silva, J., C. Lucci., F. Carvalho., S. Bao., R. Santos. and J. Figueiredo. 2000. Effect of coconud water and Braun-Collins solution at different temperatures and incubation times on the morphology of goat preantal follicles preserved in vitro *Theriogenology*. 54 (5): 809-822.
- Sirad, MA, Richard F, Blondin P, Robert C. 2006. Contribution of the oocytes to embryo quality. *Theriogenology*. 65:126-136.
- Sonjaya, H., E. Abustam., M. D. Pali., L. Tolleng and Sudirman. 2007. Bahan Ajar Mata Kuliah Ilmu Reproduksi Ternak. Fakultas Peternakan Universitas Hasanuddin, Makassar.
- Subianto. 2010. Populasi Kerbau Semakin Menurun. Publikasi Budidaya Ternak Ruminansia, Publikasi Budidaya Ternak Ruminansia Edisi I Tahun 2010 dalam: http://ditjennak.go.id/buletinartikel_3_Pdf. Diakses 2 November 2014.
- Sudjana, 2005. Metode Statistika. Bandung: Tasito.
- Tas, M., M. Evecen., O. B. Ozdas., U. Cirit., K. Demir., S. Birler. and S. Pabuccuoglu. 2006. Effect of transport and storage temperature of ovaries on in vitro maturation of bitch oocytes. *Anim Reprod Sci*. 96(1-2):30-4.
- Taylor, C., Rajamahendran R. 1991. Follicular dynamics and corpus luteum growth and function in pregnant versus nonpregnant dairy cows. *J.Dairy Sci*. 74: 115-123.
- Taylor MJ. 2007. Biology of cell survival in the cold: The basis for biopreservation of tissues and organs. In: Baust JG, Baust JM, editors. *Advances in biopreservation*. Boca Raton (US): CRC Press. p. 15-62.
- Telfer, D. J. and R. S. Sharpley. 2008. *Tourisme and Development in The Development in The USA and Canada* by Routledge, 270 Madison Ave, New York.
- Toelihere, M. R. 2006. Pokok-pokok pikiran tentang perkembangan (bio) teknologi reproduksi dimasa lalu, masa kini, dan masa yang akan datang dalam menunjang pembangunan peternakan di Indonesia. Seminar Nasional Peranan

Bioteknologi Reproduksi dalam Pembangunan Peternakan di Indonesia. Prosiding; 2006 April 8; Bogor. P. 1-12.

Tulake, K., Y. Yanagawa., Y. Takahashi., S. Katagiri., S. Higaki., K. Koyama., X. Wang. and H. Li. 2014. Effects of ovarian storage condition on in vitro maturation of Hokkaido Sika deer (*Cervus nippon yesoensis*) oocytes. *Jpn J Vet Res.* 62:187-192.

Wang, Z., Y. Song-dong. And X. Zi-rong. 2007. Effects of collection methods on recovery efficiency, maturation rate and subsequent embryonic developmental competence of Oocytes in Holstein cow. *Asian Aust J Anim Sci.* 20(4):496–500.

Wattimena, J. 2011. Pematangan oosit domba secara *in vitro* dalam berbagai jenis serum. *J. Agrinimal* 1: 22-27.

Widyastuti, R., C. Khoirinaya, M. R., Ridlo, M. R. and A. A. Syamsunarno. 2017. Perbandingan Viabilitas Oosit Pasca Vitrifikasi Pada Dua Tingkat Konsentrasi Sukrosa Yang Berbeda. *Majalah Kedokteran Bandung.* 49(4):2.

