Estimasi Parameter Genetik Sifat Reproduksi dan Polimorfisme Gen BMP-15 pada Kambing Boerka di Loka
Penelitian Kambing Potong
ALFIAN DESTOMO, Prof. Ir. Dyah Maharani, S.Pt., M.P., Ph.D., IPM ; Prof. Ir. Diah Tri Widayati, S.Pt., M.P., Ph.D., I
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

DAFTAR PUSTAKA

Abdalla, S.A., I.A. Ishag, and M.A. Ahmed. 2015. Genetic and Environmental Factors Affecting Reproduction of Saanen Goats Raised Under Sudan Conditions. Am. J. Agric. Sci. 2(3):75–79.

Abdel-Rahman, S.M., Y.A. Mustafa, E. Abd, A.A. El-Hanafy, and A.M. Elmaghraby. 2013. Polymorphism in BPM-15 gene and its association with litter size in Anglo-Nubian goat. Biotechnol. Anim. Husb. 29(4):675–683.

Abdoli, R., P. Zamani, S.Z. Mirhoseini, N. Ghavi Hossein-Zadeh, and S. Nadri. 2016. A review on prolificacy genes in sheep. Reprod. Domest. Anim. 51(5):631–637.

Abdoli, R., P. Zamani, S.Z. Mirhoseini, N.G. Hossein-Zadeh, and M. Almasi. 2019. Genetic parameters and trends for litter size in Markhoz goats. Rev. Colomb. Ciencias Pecu. 32(1):58–63.

Abdurrahman, A.M. 2019. Effect of Growth Rates and Age at First Calving of Dairy Heifer on Subsequent Lactation Performance. Cakrawala J. Litbang Kebijak. 13(2):196–204.

Abuzahra, M., L.A. Eid, M.H. Effendi, I. Mustofa, M. Lamid, and S. Rehman. 2023. Polymorphism studies and candidate genes associated with litter size traits in Indonesian goats. a systematic review. F1000Research 12(61):1–15.

Adhianto, K., N. Ngadiyono, and K. Kustantinah. 2017. Lama kebuntingan, litter size, dan bobot lahir kambing boerawa pada pemeliharaan perdesaan di Kecamatan Gisting Kabupaten Tanggamus. J. Penelit. Pertan. Terap. 12(2):131–136.

Adu, I.F., V. Buvanendran, and C.A.M. Lakpini. 1979. The Reproductive Performance Of Red Sokoto Goats In Nigeria. J. Agric. Sci. 93(3):563–566.

Agung, P.P., S. Anwar, W.P.B. Putra, and S. Said. 2017. Keragaman gen Growth Hormone (GH) pada Beberapa Rumpun Sapi Lokal Indonesia. Pros Sem Nas Masy Biodiv Indon 3(3):304–308.

Agustina, N.I., and B. Waluyo. 2017. Keragaman karakter morfo-agronomi dan keanekaragaman galur-galur cabai besar (Capsicum annuum L.). J. Agro 4(2):120–130.

Ahlawat, S., R. Sharma, M. Roy, M.S. Tantia, and V. Prakash. 2015. Association analysis of novel SNPs in BMPR1B, BMP15 and GDF9 genes with reproductive traits in Black Bengal goats. Small Rumin. Res. 132:92–98.

Ahlawat, S., R. Sharmaa, M. Roy, S. Mandakmale, V. Prakash, and M.S. Tantia. 2016. Genotyping of novel SNPs in BMPR1B, BMP15, and GDF9 genes for association with prolificacy in seven Indian goat breeds. Anim. Biotechnol. 27(3):199–207.

Ahuya, C.O., J.M.K. Ojango, R.O. Mosi, C.P. Peacock, and A.M. Okeyo. 2009. Performance of Toggenburg dairy goats in smallholder production systems of

UNIVERSITAS GADJAH MADA
Estimasi Parameter Genetik Sifat Reproduksi dan Polimorfisme Gen BMP-15 pada Kambing Boerka di Loka Penelitian Kambing Potong
ALFIAN DESTOMO, Prof. Ir. Dyah Maharani, S.Pt., M.P., Ph.D., IPM ; Prof. Ir. Diah Tri Widayati, S.Pt., M.P., Ph.D., I
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

the eastern highlands of Kenya. Small Rumin. Res. 83(1–3):7–13.

Analla, M., A. Muñoz-Serrano, and J.M. Serradilla. 1997. Analysis of the genetic relationship between litter size and weight traits in Segureña sheep. Can. J. Anim. Sci. 77(1):17–21.

Antonius, A., A. Jayanegara, K.G. Wiryawan, S.P. Ginting, A.A. Samsudin, and E. Wina. 2022. Effect of Addition of Gambir (Uncaria gambir) Leaf Extract to the Diets on Some Productive Traits and Meat Quality of Goats. J. Anim. Heal. Prod. 10(4):515–521.

Anwar, S., P.P. Agung, A.S. Wulandari, A. Sudiro, S. Said, and B. Tappa. 2015. Deteksi polimorfisme gen growth hormone (GH) pada sapi Sumba Ongole (SO). Pages 398–403 in Seminar Nasional Masyarakat Biodiversity Indonesia.

Aprily, N.U., P. Sambodho, and D.W. Harjanti. 2016. Evaluasi kelahiran pedet sapi perah di Balai Besar Pembibitan Ternak Unggul dan Hijauan Pakan Ternak Baturraden. J. Peternak. Indones. (Indonesian J. Anim. Sci. 18(1):36.

Arefnejad, B., Y. Mehdizadeh, A. Javanmard, M.J. Zamiri, and A. Niazi. 2018. Novel single nucleotide polymorphisms (SNPs) in two oogenesis specific genes (BMP15, GDF9) and their association with litter size in Markhoz Goat (Iranian Angora). Iran. J. Appl. Anim. Sci. 8(1):91–99.

Atashi, H., A. Asaadi, and M. Hostens. 2021. Association between age at first calving and lactation performance, lactation curve, calving interval, calf birth weight, and dystocia in Holstein dairy cows. PLoS One 16(1):1–13.

Atoui, A., M.J. Carabaño, and S. Najari. 2018. Evaluation of a local goat population for fertility traits aiming at the improvement of its economic sustainability through genetic selection. Spanish J. Agric. Res. 16(2).

Atoui, A., Z. Hajejji, M. Abdennebi, A. Gaddour, and S. Najari. 2017. Environmental factors affecting birth weight of Tunisian local goat population kids. J. New Sci. 38(1):2069–2076.

Awalia, R.S., S.A. Santosa, and P. Yuwono. 2019. Pendugaan nilai repitabilitas dan MPPA (most probable producing ability) bobot lahir kambing saanen di BPTU-HPT baturraden. J. Anim. Sci. Technol. 1(1):48–56.

Ayied, A.Y., A.J. Jadoa, and A.J. Abdulrada. 2011. Heritabilties and Breeding Values of Production and Reproduction Traits of Holstein Cattle In Iraq. J. Basrah Res. 37(4):66–70.

Azrai, M. 2016. Pemanfaatan Markah Molekuler dalam Proses Seleksi Pemuliaan Tanaman. J. AgroBiogen 1(1):26–37.

Baehaki, P.M., S.B. Komar, and P. Edianingsih. 2016. Nilai Pemuliaan Domba Garut Berdasarkan Bobot Lahir Menggunakan Metode Paternal Half-sib di UPTD BPPTD Margawati. Students e-Journal 5(4):1–8.

Estimasi Parameter Genetik Sifat Reproduksi dan Polimorfisme Gen BMP-15 pada Kambing Boerka di Loka
Penelitian Kambing Potong
ALFIAN DESTOMO, Prof. Ir. Dyah Maharani, S.Pt., M.P., Ph.D., IPM ; Prof. Ir. Diah Tri Widayati, S.Pt., M.P., Ph.D., I
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

Bagnicka, E., E. Wallin, M. Łukaszewicz, and T. Ådnøy. 2007. Heritability for reproduction traits in Polish and Norwegian populations of dairy goat. Small Rumin. Res. 68(3):256–262.

Batubara, A. 2018. Myostatin Gene Expression and Its Application on Goat Breeding Programme. Indones. Bull. Anim. Vet. Sci. 27(2):89–94.

Batubara, A., M. Doloksaribu, and B. Tiesnamurti. 2006. Potensi keragaman sumber daya genetik kambing lokal Indonesia. Pages 206–2014 in Lokakarya Nasional Pengelolaan dan Perlindungan Sumber Daya Genetik di Indonesia: Manfaat Ekonomi untuk Mewujudkan Ketahanan Nasional.

Batubara, A., S. Elieser, and C. Sumantri. 2018. Study of BMP15 gene polymorphism in Boer, Kacang, and Boerka goats. J. Ilmu Ternak dan Vet. 21(4):224–230.

Berry, D.P., S. Conroy, T. Pabiou, and A.R. Cromie. 2017. Animal breeding strategies can improve meat quality attributes within entire populations. Meat Sci. 132:6–18.

Beyleto, V., Sumadi, and T. Hartatik. 2010. Estimasi parameter genetik sifat pertumbuhan kambing Boerawa di Kabupaten Tanggamus Propinsi Lampung. Bul. Peternak. 34(3):138–144.

Bibinu, B.S., A. Yakubu, S.B. Ugbo, and N.I. Dim. 2016. Computational Molecular Analysis of the Sequences of BMP15 Gene of Ruminants and Non-Ruminants. Open J. Genet. 06(02):39–50.

Bormann, J.M., and D.E. Wilson. 2010. Calving day and age at first calving in Angus heifers. J. Anim. Sci. 88(6):1947–1956.

Browning R., J., and M.L. Leite-Browning. 2011. Birth to weaning kid traits from a complete diallel of boer, kiko, and spanish meat goat breeds semi-intensively managed on humid subtropical pasture. J. Anim. Sci. 89(9):2696–2707.

Budiarsana, I.-G.M., B. Wibowo, and D. Priyanto. 2016. Produktivitas dan Rantai Pasok Ternak Kambing dan Domba (KADO) Studi Kasus di Kabupaten Tegal. J. Ilmu ternak 16(2):35–42.

Castañeda-Bustos, V.J., H.H. Montaldo, G. Torres-Hernández, S. Pérez-Elizalde, M. Valencia-Posadas, O. Hernández-Mendo, and L. Shepard. 2014. Estimation of genetic parameters for productive life, reproduction, and milk-production traits in US dairy goats. J. Dairy Sci. 97(4):2462–2473.

Chu, M.X., C.L. Jiao, Y.Q. He, J.Y. Wang, Z.H. Liu, and G.H. Chen. 2007a. Association between PCR-SSCP of bone morphogenetic protein 15 gene and prolificacy in Jining Grey goats. Anim. Biotechnol. 18(4):263–274.

Chu, M.X., Z.H. Liu, C.L. Jiao, Y.Q. He, L. Fang, S.C. Ye, G.H. Chen, and J.Y. Wang. 2007b. Mutations in BMPR-IB and BMP-15 genes are associated with litter size in Small Tailed Han sheep (Ovis aries). J. Anim. Sci. 85(3):598–603.

UNIVERSITAS GADJAH MADA
Estimasi Parameter Genetik Sifat Reproduksi dan Polimorfisme Gen BMP-15 pada Kambing Boerka di Loka Penelitian Kambing Potong
ALFIAN DESTOMO, Prof. Ir. Dyah Maharani, S.Pt., M.P., Ph.D., IPM ; Prof. Ir. Diah Tri Widayati, S.Pt., M.P., Ph.D., I
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

Daru, T.P., A. Yulianti, and E. Widodo. 2014. Potensi Hijauan Di Perkebunan Kelapa Sawit Sebagai Pakan Sapi Potong Di Kabupaten Kutai Kartanegara. Pastura J. Trop. Forage Sci. 3(2):94–98.

Das, A., M. Shaha, M. Das Gupta, A. Dutta, and O.F. Miazi. 2021. Polymorphism of fecundity genes (BMP15 and GDF9) and their association with litter size in Bangladeshi prolific Black Bengal goat. Trop. Anim. Health Prod. 53(230):1–8.

Demars, J., S. Fabre, J. Sarry, R. Rossetti, H. Gilbert, L. Persani, G. Tosser-Klopp, P. Mulsant, Z. Nowak, W. Drobik, E. Martyniuk, and L. Bodin. 2013. Genome-Wide Association Studies Identify Two Novel BMP15 Mutations Responsible for an Atypical Hyperprolificacy Phenotype in Sheep. PLoS Genet. 9(4):1–13.

Desire, S., S. Mucha, M. Coffey, R. Mrode, J. Broadbent, and J. Conington. 2018. Pseudopregnancy and aseasonal breeding in dairy goats: Genetic basis of fertility and impact on lifetime productivity. Animal 12(9):1799–1806.

Destomo, A., A. Febretrisiana, and S. Elieser. 2018. Physiological Response, productivity, and Behaviour of Boerka Goat on different Grazing Time. Pages 153–163 in Proceeding of International Seminar on Livestock Production and Veterinary Technology 2018.

Destomo, A., M. Syawal, and A. Batubara. 2020. Kemampuan Reproduksi Induk Dan Pertumbuhan Anak Kambing Peranakan Etawah, Gembrong, Dan Kosta. J. Peternak. 17(1):31–38.

Dewi, R., and I. Wardoyo. 2018. Keunggulan Relatif Kambing Persilangan Boer Dan Kacang. J. Ternak 9(1):13.

Drouilhet, L., C. Mansanet, J. Sarry, K. Tabet, P. Bardou, F. Woloszyn, J. Lluch, G. Harichaux, C. Viguié, D. Monniaux, L. Bodin, P. Mulsant, and S. Fabre. 2013. The Highly Prolific Phenotype of Lacaune Sheep Is Associated with an Ectopic Expression of the B4GALNT2 Gene within the Ovary. PLoS Genet. 9(9):1–12.

Dubey, P.P., C. V. Singh, and R.B. Prasad. 2006. Relationship between sire's estimated breeding values for first lactation and life time traits and ranking of sires in Sahiwal and its cross. Indian J. Anim. Sci. 76(10):824–828.

Egena, S.S.A., G.N. Akpa, I.C. Alemede, and A. Aremu. 2012. Genetic and Non-Genetic Factors Affecting Litter Size and Birth Weight of Rabbit in Minna , Niger State , Nigeria. Anim. Prod. 14(3):160–166.

Einion, A. 2017. Hormonal physiology of childbearing: Evidence and implications for women, babies and maternity care. Pract. Midwife 20(4):31–34.

Elieser, S. 2016. Proposal Penelitian Pembentukan Bibit Kambing Unggul. North Sumatera.

Elieser, S., B. Aron, I.G.S. Budisatria, A.P.Z.N.L. Sari, D.N.H. Hariyono, and D. Maharani. 2019. Detection of polymorphisms of growth differentiation factor 9 (GDF9) gene in Indonesian goats. J. Anim. Breed. Genomics 3(1):37–44.

UNIVERSITAS GADJAH MADA
Estimasi Parameter Genetik Sifat Reproduksi dan Polimorfisme Gen BMP-15 pada Kambing Boerka di Loka Penelitian Kambing Potong
ALFIAN DESTOMO, Prof. Ir. Dyah Maharani, S.Pt., M.P., Ph.D., IPM ; Prof. Ir. Diah Tri Widayati, S.Pt., M.P., Ph.D., I
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

Elieser, S., and A. Destomo. 2017. Sebaran Warna Kambing Boerka Hasil Persilangan Kambing Boer dengan Kacang. Pages 315–321 in Prosiding Seminar Nasional Teknologi Peternakan dan Veteriner 2017 Salah.

Elieser, S., M. Doloksaribu, and A. Batubara. 2014. Beberapa Faktor yang Mempengaruhi Kinerja Produksi Induk Kambing. Pages 355–362 in Seminar Nasional Teknologi Peternakan dan Veteriner Seminar Nasional Teknologi Peternakan dan Veteriner.

Elieser, S., Sumadi, G.S. Budisatria, and Subandriyo. 2012. Productivity comparison between boer and kacang goat dam. J. Indones. Trop. Anim. Agric. 37(1):15–21.

Falconer, D.S., and T.F.C. Mackay. 1996. Introduction to Quantitative Genetics. Fourth Edition. 4th ed. Longman Group Ltd, Malaysia.

Farag, I.M., D.M. Aboelhassan, I.S. Ghaly, H.R. Darwish, A.M. Darwish, and G. Mariam. 2018. Effect of genetic polymorphism of BMP15 gene on improving twin production in Egyptian small ruminants. Res. J. Anim. Vet. Sci. 10(1):6–14.

Farhadi, A., V. Genualdo, A. Perucatti, S.H. Hafezian, G. Rahimi-Mianji, L. De Lorenzi, P. Parma, L. Iannuzzi, and A. Iannuzzi. 2013. Comparative FISH mapping of BMPR1B, BMP15 and GDF9 fecundity genes on cattle, river buffalo, sheep and goat chromosomes. J. Genet. 92(3):595–597.

Faruque, S., S. Chowdhury, N. Siddiquee, and M. Afroz. 2010. Performance and genetic parameters of economically important traits of Black Bengal goat. J. Bangladesh Agric. Univ. 8(1):67–78.

Fatet, A., M. Pellicer-rubio, and B. Leboeuf. 2011. Reproductive cycle of goats &. Anim. Reprod. Sci. 124(3–4):211–219.

Febriana, A., Sutopo, and E. Kurnianto. 2017. Identification of BMP15 Exon 2 for fecundity traits by PCR-RFLP and nucleotide sequencies in Kejobong goat. J. Indones. Trop. Anim. Agric. 42(4):220–226.

Feng, T., M.X. Chu, G.L. Cao, D.W. Huang, R. Di, Q.Y. Liu, Z.Y. Pan, M. Jin, and Y.J. Zhang. 2014. Screening for S32G mutation of BMP15 gene in 18 goat breeds. Turkish J. Vet. Anim. Sci. 38(5):463–468.

Firdausa, A.R.I., W. Wardoyo, and R.K. Dewi. 2021. Perbandingan Nilai Heritabilitas Berat Lahir, Sapih dan Umur Satu Tahun pada Sapi Peranakan Ongole (PO) dengan Sapi Simmental di Sekolah Peternak Rakyat (SPR) Maju Bersama Kedungadem Bojonegoro. Int. J. Anim. Sci. 4(02):58–64.

Furqon, A., I. Athif, W. Septian, C. Nugraha, and R. Putri. 2019. Pengaruh paritas yang berbeda terhadap produktivitas induk kambing kacang di Desa Sawohan Kecamatan Buduran Kabupaten Sidoarjo. Pages 538–543 in Prosiding Seminar Nasional Teknologi Peternakan dan Veteriner 2019.

Estimasi Parameter Genetik Sifat Reproduksi dan Polimorfisme Gen BMP-15 pada Kambing Boerka di Loka
Penelitian Kambing Potong
ALFIAN DESTOMO, Prof. Ir. Dyah Maharani, S.Pt., M.P., Ph.D., IPM ; Prof. Ir. Diah Tri Widayati, S.Pt., M.P., Ph.D., I
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

Galloway, S.M., S.M. Gregan, T. Wilson, K.P. McNatty, J.L. Juengel, O. Ritvos, and G.H. Davis. 2002. Bmp15 mutations and ovarian function. Mol. Cell. Endocrinol. 191(1):15–18.

Galloway, S.M., K.P. McNatty, L.M. Cambridge, M.P.E. Laitinen, J.L. Juengel, T.S. Jokiranta, R.J. McLaren, K. Luiro, K.G. Dodds, G.W. Montgomery, A.E. Beattie, G.H. Davis, and O. Ritvos. 2000. Mutations in an oocyte-derived growth factor gene (BMP15) cause increased ovulation rate and infertility in a dosage-sensitive manner. Nat. Genet. 25(3):279–283.

García-Peniche, T.B., H.H. Montaldo, M. Valencia-Posadas, G.R. Wiggans, S.M. Hubbard, J.A. Torres-Vázquez, and L. Shepard. 2012. Breed differences over time and heritability estimates for production and reproduction traits of dairy goats in the United States. J. Dairy Sci. 95(5):2707–2717.

Gautam, L., H.A.W. Nagda, and R. Kumar. 2018. Evaluation of the reproductive characteristics of Sirohi goats from Udaipur India. J. Entomol. Zool. Stud. 6(3):13–17.

Gebreselassie, G., H. Berihulay, L. Jiang, and Y. Ma. 2020. Review on genomic regions and candidate genes associated with economically important production and reproduction traits in sheep (Ovies aries). Animals 10(1):1–12.

Ghoreishi, H., S. Fathi-Yosefabad, J. Shayegh, and A. Barzegari. 2019. Identification of mutations in *BMP15* and *GDF9* genes associated with prolificacy of Markhoz goats. Arch. Anim. Breed. 62(2):565–570.

Ginting, S.P., and F. Mahmilia. 2008. Kambing ‘ Boerka ’: Kambing tipe pedaging hasil persilangan Boer x Kacang. Wartazoa 18(3):115–126.

Hagan, B.A., J.K. Nyameasem, A. Asafu-Adjaye, and J.L. Duncan. 2014. Effects of non-genetic factors on the birth weight, litter size and pre-weaning survivability of West African Dwarf goats in the Accra Plains. Livest. Res. Rural Dev. 26(1):1–9.

Hakim, F. 2019. Estimasi Parameter Genetik Sifat Pertumbuhan dan Reproduksi serta Identifikasi Polimorfisme Gen BMP-15 Kambing Peranakan Etawah di BPTU-HPT Pelaihari, Kalimantan Selatan. Gadjah Mada University,.

Haldar, A., P. Pal, M. Datta, R. Paul, S.K. Pal, D. Majumdar, C.K. Biswas, and S. Pan. 2014. Prolificacy and its relationship with age, body weight, parity, previous litter size and body linear type traits in meat-type goats. Asian-Australasian J. Anim. Sci. 27(5):628–634.

Hamdani, M.D.I. 2015. Perbandingan berat lahir, persentase jenis kelamin anak dan sifat prolifik induk kambing peranakan etawah pada paritas pertama dan kedua di Kota Metro. J. Ilm. Peternak. Terpadu 3(4):245–250.

Handarini, R., D. Sudrajat, and A. Prasetyo. 2016. Performa domba lokal yang diberi konsentrat berbasis limbah agroindustri selama masa kebuntingan. Pages 133–142 in Seminar Nasional dan Gelar Produk.

Estimasi Parameter Genetik Sifat Reproduksi dan Polimorfisme Gen BMP-15 pada Kambing Boerka di Loka
Penelitian Kambing Potong
ALFIAN DESTOMO, Prof. Ir. Dyah Maharani, S.Pt., M.P., Ph.D., IPM ; Prof. Ir. Diah Tri Widayati, S.Pt., M.P., Ph.D., I
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

Haque, M.N., S.S. Husain, M.A.M.Y. Khandoker, M.M. Mia, and A.S. Apu. 2013. Selection of Black Bengal Buck Based on Some Reproductive Performance of Their Progeny at Semi-Intensive Rearing System. J. Agric. Sci. 5(8):142–152.

Hardjosubroto, W. 1994. Aplikasi Pemuliabiakan Ternak Di Lapangan. Grasindo, Jakarta.

Hardyta, G., D.T. Widayati, and D. Maharani. 2020. Association of SNP T125A on KiSS1 gene with reproduction hormone levels in Kaligesing goat. J. Indones. Trop. Anim. Agric. 45(4):253–260.

Hariyono, D.N.H. 2022. Aplikasi Marker Mikrosatelit untuk Analisis Keragaman Genetik Sapi Lokal Indonesia. Indones. Bull. Anim. Vet. Sci. 32(2):105–118.

Haryanto, B., and A. Thalib. 2009. EMISI METANA DARI FERMENTASI ENTERIK : KONTRIBUSINYA SECARA NASIONAL DAN FAKTOR-FAKTOR YANG :157–165.

Hasan, J., J.U. Ahmed, and M. Alam. 2014. Reproductive performances of Black Bengal goat under semi- intensive and extensive conditions at rural areas in Bangladesh. J. Adv. Vet. Anim. Res. 1(4):196–200.

He, Y., X. Ma, X. Liu, C. Zang, and J. Li. 2010. Candidate Genes Polymorphism and Its Association to Prolificacy in Chinese Goats. J. agricuktural Sci. 2(1):90–94.

Heikal, H.S.M., and W.S.H.A. El Naby. 2017. Genetic Improvement of Litter Size in Four Goat Breeds in Egypt Using Polymorphism in Bone Morphogenetic Protein 15 Gene. Adv. Anim. Vet. Sci. Genet. 5(10):410–415.

Herawati, M. 2018. Pengaruh Sistem Pengawinan (Inseminasi Buatan Dan Alami) Dan Paritas Induk Babi Terhadap Litter Size Di Usaha Peternakan Babi Pt. Adhi Farm, Solo. Wahana Peternak. 1(2):29–35.

Herumawati, W.L., E. Kurnianto, and I.K.G.Y. Mas. 2015. Pendugaan keunggulan pejantan kambing peranakan ettawa berdasarkan bobot lahir dan bobot sapih cempe di satker sumberejo kendal. Anim. Agric. J. 4(2):219–224.

Hidayat, R.A., S.N. Depamede, and M. Maskur. 2019. Identifikasi Mutasi FecX Pada Gen BMP15 dan Pengaruhnya Terhadap Sifat Prolifik pada Kambing Lokal di Kabupaten Lombok Barat. J. Ilmu dan Teknol. Peternak. Indones. 1(1):1–10.

Honparkhe, M., A.K. Ahuja, and P.D. 9. 2017. Premature Kidding Due to Goitrogenic Plant Intoxicationin Beetal Goat : A Special Case. Int. J. Sci. Environ. 6(4):2303 – 2306.

Hoque, M.A., M.R. Amin, and D.H. Baik. 2002. Genetic and non-genetic causes of variation in gestation length, litter size and litter weight in goats. Asian-Australasian J. Anim. Sci. 15(6):772–776.

Hua, G.H., S.L. Chen, J.T. Ai, and L.G. Yang. 2008. None of polymorphism of ovine fecundity major genes FecB and FecX was tested in goat. Anim. Reprod. Sci.

UNIVERSITAS GADJAH MADA
Estimasi Parameter Genetik Sifat Reproduksi dan Polimorfisme Gen BMP-15 pada Kambing Boerka di Loka Penelitian Kambing Potong
ALFIAN DESTOMO, Prof. Ir. Dyah Maharani, S.Pt., M.P., Ph.D., IPM ; Prof. Ir. Diah Tri Widayati, S.Pt., M.P., Ph.D., I
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

108(3–4):279–286.

Iloeje, M.U., and L.D. van Vleck. 1978. Genetics of Dairy Goats: A Review. J. Dairy Sci. 61(11):1521–1528.

Ismail, M. 2009. Onset dan Intensitas Estrus Kambing Pada Umur yang Berbeda. J. Agrol. 16(2):180–186.

Jainudeen, M.R., H. Wahid, and E.S.E. Hafez. 2006. Sheep and goats.

Jalbani, M.A., H.A. Kaleri, A. Hameed Baloch, N. Bangulzai, A.G. Bugti, F. Ashraf, R.R. Kaleri, M. Jan, G.A. Bugti, and A.N. Khosa. 2017. Study of BMP15 gene Polymorphisim in Lehri Goat Breed of Balochistan. J. Appl. Environ. Biol. Sci 7(2):84–89.

Jameela, H., A.N. Sugiharto, and A. Soegianto. 2012. Keragaman Genetik dan Heritabilitas Karakter Komponen Hasil pada Populasi F2 Buncis (Phaseolus vulgaris L.) Hasil Persilangan Varietas Introduksi dengan Varietas Lokal. Produksi Tanam. 2(4):324–329.

Jembere, T., T. Dessie, B. Rischkowsky, K. Kebede, A.M. Okeyo, and A. Haile. 2017. Meta-analysis of average estimates of genetic parameters for growth, reproduction and milk production traits in goats. Small Rumin. Res. 153:71–80.

Kartiko, G.W., M.D.I. Hamdani, D. Kurniawati, and K. Adhianto. 2021. Perbandingan Nilai Indeks Produktivitas Induk Kambing Saburai dan Kambing Peranakan Etawa pada Bobot Sapih di Unit Pelaksanaan Teknis Daerah Negeri Sakti, Provinsi Lampung. J. Ris. dan Inov. Peternak. 5(3):151–156.

Kaunang, D., Suyadi, and S. Wahjuningsih. 2014. Analisis Litter Size, Bobot Lahir dan Bobot Sapih Hasil Perkawinan Kawin Alami dan Inseminasi Buatan Kambing Boer dan Peranakan Etawah (PE). J. Imu-Ilmu Peternak. 23(3):41–46.

Kebede, T., A. Haile, H. Dadi, and T. Alemu. 2012. Genetic and phenotypic parameter estimates for reproduction traits in indigenous Arsi-Bale goats. Trop. Anim. Health Prod. 44(5):1007–1015.

KEMENTAN. 2020. Peraturan Menteri Pertanian no 08/KPTS/PK.040/M/1/20201–7.

Khan, A.U., M.S. Khan, P. Akhtar, and K.Z. Gondal. 2002. Genetic, Phenotypic and Residual Correlations Among Various Performance Traits in Teddy Goats. Pak. Vet. J. 22(3):128–130.

Khan, S., M.A. Jamal, I.M. Khan, I. Ullah, A. Jabbar, N.M. Khan, and Y. Liu. 2023. Factors a ecting superovulation induction in goats (Capra hericus): An analysis of various approaches. Front. Vet. Sci. 10:1–12.

Khandoker, M.A.M.Y., N. Afini, and A. Azwan. 2018. Productive and reproductive performance of Saanen goat at AZZahra farm of Sandakan in Malaysia.

UNIVERSITAS GADJAH MADA
Estimasi Parameter Genetik Sifat Reproduksi dan Polimorfisme Gen BMP-15 pada Kambing Boerka di Loka Penelitian Kambing Potong
ALFIAN DESTOMO, Prof. Ir. Dyah Maharani, S.Pt., M.P., Ph.D., IPM ; Prof. Ir. Diah Tri Widayati, S.Pt., M.P., Ph.D., I
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

Bangladesh J. Anim. Sci. 47(1):1–12.

Kostaman, T., and S. Sopiyana. 2017. Penggunaan marker mikrosatelit dalam studi keragaman genetik antar populasi itik lokal Indonesia di pulau Jawa. Pages 439–451 in Prosiding Seminar Teknologi dan Agribisnis Peternakan V: Teknologi dan Agribisnis Peternakan untuk Mendukung Ketahanan Pangan.

Kurnianto, E. 2009. Pemuliaan Ternak. Graha Ilmu, Yogyakarta.

Kurniasih, N.N., A.M. Fuah, and R. Priyanto. 2013. Karakteristik reproduksi dan perkembanga populasi kambing peranakan etawah di lahan pasca galian pasir. J. Ilmu Produksi dan Teknol. Peternak. 1(3):132–137.

Kuthu, Z.H., K. Javed, M.E. Babar, A. Sattar, and M. Abdullah. 2017. Estimation of genetic parameters forpre-weaning growth traits in teddy goats. J. Anim. Plant Sci. 27(5):1408–1414.

Lasley, J.. 1978. Genetics of Livestock Improvement 3rd Edition. 3rd ed. Prentice Hall Inc.,.

Li, L., and D.J. Brown. 2016. Estimation of genetic parameters for lambing ease, birthweight and gestation length in Australian sheep. Anim. Prod. Sci. 56(5):934–940.

Lianou, D.T., N.G.C. Vasileiou, C.K. Michael, I. Valasi, V.S. Mavrogianni, M. Caroprese, and G.C. Fthenakis. 2022. Patterns of Reproductive Management in Sheep and Goat Farms in Greece. Animals 12(24):1–17.

Lopez, B.I., K.G. Santiago, K. Seo, T. Jeong, J.E. Park, H.H. Chai, W. Park, and D. Lim. 2020. Genetic parameters of birth weight and weaning weight and their relationship with gestation length and age at first calving in Hanwoo (Bos Taurus Coreanae). Animals 10(6):1–10.

LPKP. 2020. Laporan Kinerja Loka Penelitian Kambing Potong 2020.

Machado, M.A., I. Schuster, M.L. Martinez, and A.L. Campos. 2003. Genetic Diversity of Four Cattle Breeds Using Microsatellite Markers :93–98.

Maesya, A., and R. Supardi. 2018. Prospek Pengembangan Usaha Ternak Kambing dan Memacu Peningkatan Ekonomi Peternak. J. Sos. Ekon. dan Kebijak. Pertan. 7(2):135–148.

Maharani, D., S. Elieser, I.G.S. Budisatria, A. Baturabara, A.P.Z.N.L. Sari, and D.N.H. Hariyono. 2019. Polymorphism study of BMP15 gene in Indonesian Goats. Pages 1–4 in IOP Conference Series: Earth and Environmental Science.

Mahmilia, F., Alwiyah, and A. Destomo. 2020. Keragaman Gen IGF-1 Exon 4 pada Kambing Gembrong , Samosir dan Kosta di Loka Penelitian Kambing Potong Sumatra Utara. Pages 329–337 in Prosiding Seminar Nasional Teknologi Peternakan dan Veteriner Virtual.

UNIVERSITAS
GADJAH MADA
Estimasi Parameter Genetik Sifat Reproduksi dan Polimorfisme Gen BMP-15 pada Kambing Boerka di Loka Penelitian Kambing Potong
ALFIAN DESTOMO, Prof. Ir. Dyah Maharani, S.Pt., M.P., Ph.D., IPM ; Prof. Ir. Diah Tri Widayati, S.Pt., M.P., Ph.D., I
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

Mahmilia, F., and M. Doloksaribu. 2010. Keunggulan Relatif Anak Hasil Persilangan antara Kambing Boer dengan Kacang pada Priode Prasapih. J. Ilmu Ternak dan Vet. 15(2):124–130.

Mahmilia, F., M. Doloksaribu, S. Elieser, and F.A. Pamungkas. 2005. Tingkat Produktivitas Induk Kambing Persilangan (Kambing Kacang dan Kambing Boer) Berdasarkan Total Bobot Lahir, Total Bobot Sapih, Litter Size dan Daya Hidup. Pages 680–684 in Seminar Nasional Teknologi Peternakan dan Veteriner 2005.

Mahmilia, F., and S. Eleiser. 2008. Korelasi Lama Bunting Dengan Bobot Lahir , Litter Size Dan Daya Hidup Kambing Boerka-1. Pages 391–394 in Seminar Nasional Teknologi Peternakan dan Veteriner.

Mahmilia, F.M., S. Nasution, and M. Hasibuan. 2009. Reproduksi awal kambing Kacang dan Boerka-1 di loka penelitian kambing potong. Pages 367–372 in Seminar Nasional Teknologi Peternakan dan Veteriner.

Makgahlela, M.L., C.B. Banga, D. Norris, K. Dzama, and J.W. Ngamb. 2008. Genetic Analysis of Age at First Calving and Calving Interval in South African Holstein Cattle. Asian J. Anim. Vet. Adv. 3(4):197–205.

Mansur, M., A.T.B.A. Mahmud, M.I.A. Dagong, L. Rahim, R.S.R.A. Bugiwati, and dan S. Baco. 2016. Keragaman Genetik Sapi Bali di Kabupaten Barru Berdasarkan Karakteristik Fenotipe dan DNA Penciri Mikrosatelit. JITP 15(1):165–175.

Margawati, E.T. 2013. Peningkatan produksi pangan asal ternak melalui pendekatan teknologi molekuler. Pengemb. Inov. Pertan. 6(2):18.

Mathius, I.W., D. Sastradipradja, T. Sutardi, A. Natasasmita, A L Sofyan, and D.T.H. Sihombing. 2002. Studi Strategi Kebutuhan Energi-Protein untuk Domba Lokal :. J. Ilmu ternak 7(3):166–179.

Mberato, Y., P.B. Lakiu, and H. Mongi. 2019. Staf Pengajar Program Studi Peternakan Fak. Pertanian Universitas Sintuwu Maroso. J. AgroPet 16(1):34–38.

Menéndez-Buxadera, A., G. Alexandre, N. Mandonnet, M. Navès, and G. Aumont. 2003. Direct genetic and maternal effects affecting litter size, birth weight and pre-weaning losses in Creole goats of Guadeloupe. Anim. Sci. 77(3):363–369.

Menezes, L.M., W.H. Sousa, E.P. Cavalcanti-Filho, and L.T. Gama. 2016. Genetic parameters for reproduction and growth traits in Boer goats in Brazil. Small Rumin. Res. 136:247–256.

Meza-Herrera, C.A., A. Menendez-Buxadera, J.M. Serradilla, N. Lopez-Villalobos, and F. Baena-Manzano. 2019. Estimates of genetic parameters and heterosis for birth weight, one-month weight and litter size at birth in five goat breeds. Small Rumin. Res. 174(May 2017):19–25.

Estimasi Parameter Genetik Sifat Reproduksi dan Polimorfisme Gen BMP-15 pada Kambing Boerka di Loka
Penelitian Kambing Potong
ALFIAN DESTOMO, Prof. Ir. Dyah Maharani, S.Pt., M.P., Ph.D., IPM ; Prof. Ir. Diah Tri Widayati, S.Pt., M.P., Ph.D., I
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

Mia, M.M., S.S. Husain, and M.O. Faruque. 2013. Estimation of Genetic and Phenotypic Parameters of Some Reproductive Traits of Black Bengal Does. Iran. J. Appl. Anim. Sci. 3(4):829–837.

Mirella, A.A., M. Mudawamah, and S. Sumartono. 2022. Estimation of repeatability and the most probable producing ability (MPPA) based on birth weight and weaning weight for ranking of sapudi sheep. J. Sain Peternak. Indones. 17(2):82–86.

Mishra, C., M. Rout, S.P. Mishra, S.S. Sahoo, G. Nayak, and R.C. Patra. 2017. Genetic Polymorphism of Prolific Genes in Goat-a Brief Review. Explor. Anim. Med. Res. 7(2):132–141.

Moghadaszadeh, M., M. Mohammadabadi, and A.E. Koshkoieh. 2015. Association of exon 2 of BMP15 gene with the litter size in the Raini Cashmere goat. Genet. Third Millenn. 13(3):4062–4067.

Mohammadi, H., M.M. Shahrebabak, and H.M. Shahrebabak. 2012. Genetic parameter estimates for growth traits and prolificacy in Raeini Cashmere goats. Trop. Anim. Health Prod. 44(6):1213–1220.

Mokhtari, M.S., M. Asadi Fozi, J.P. Gutierrez, and D.R. Notter. 2019. Genetic and phenotypic aspects of early reproductive performance in Raeini Cashmere goats. Trop. Anim. Health Prod. 51(8):2175–2180.

Montaldo, H.H., G. Torres-Hernández, and M. Valencia-Posadas. 2010. Goat breeding research in Mexico. Small Rumin. Res. 89(2–3):155–163.

Moretti, R., R. Bozzi, C. Maltecca, F. Tiezzi, S. Chessa, D. Bar, and S. Biffani. 2016. Daily rumination time in Italian Holstein cows: Heritability and correlation with milk production. J. Anim. Sci. 94(1):187–188.

Morris, C.A., M. Wheeler, and M. Lanuzel. 2006. Genetic trend and parameter estimates for milk yield traits and kidding date in a Saanen goat herd in New Zealand. New Zeal. J. Agric. Res. 49(2):175–181.

Mourad, M. 2001. Estimation of repeatability of milk yield and reproductive traits of Alpine goats under an intensive system of production in Egypt. Small Rumin. Res. 42(1):1–4.

Mudawamah, M., G. Ciptadi, and I.D. Retnaningtyas. 2021. The Prolific Variation, Body Morphometrics, and Breeding Value of Indonesian Local Etawah Goat Based in East Java. Anim. Prod. 23(32):54–61.

Mudawamah, I.D. Retnaningtyas, M.F. Wadjdi, Badriyah, S. Susilowati, Aulanni'am, and G. Ciptadi. 2014. Analysis of Genetic Similarity between PE Goats Derived from Natural Service and Artificial. J. Kedokt. Hewan 8(2):2006–2009.

Mulyono, R.H., C. Sumantri, R.R. Noor, and D.A. Astuti. 2018. Profil Hormon Progesteron dan Gen Fekunditas terhadap Sifat Kembar Kambing PE Betina Calon Induk. J. Ilmu Produksi dan Teknol. Has. Peternak. 06(1):19–26.

Estimasi Parameter Genetik Sifat Reproduksi dan Polimorfisme Gen BMP-15 pada Kambing Boerka di Loka
Penelitian Kambing Potong
ALFIAN DESTOMO, Prof. Ir. Dyah Maharani, S.Pt., M.P., Ph.D., IPM ; Prof. Ir. Diah Tri Widayati, S.Pt., M.P., Ph.D., I
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

Mulyono, R.H., C. Sumantri, R.R. Noor, J. Jakaria, and D.A. Astuti. 2019. Association of BMP15, BMPR1B, and KISS1 Genes with Fecundity Traits on Etawah-Grade does. J. Ilmu Pertan. Indones. 24(2):83–92.

Murdjito, G., I.G.S. Budisatria, Panjono, N. Ngadiyono, and E. Baliarti. 2012a. Kinerja Kambing Bligon Yang Dipelihara Peternak Di Desa Giri Sekar, Panggang, Gunungkidul. Bul. Peternak. 35(2):86–95.

Murdjito, G., I.G.S. Budisatria, P. Panjono, N. Ngadiyono, and E. Baliarti. 2012b. Kinerja Kambing Bligon Yang Dipelihara Peternak Di Desa Giri Sekar, Panggang, Gunungkidul. Bul. Peternak. 35(2):86–95.

Nafiu, L.O., M.A. Pagala, and S.L. Mogiye. 2020. Karakteristik Produksi Kambing Peranakan Etawa Dan Kambing Kacang Pada Sistem Pemeliharaan Berbeda Di Kecamatan Toari, Kabupaten Kolaka. J. Ilmu Produksi dan Teknol. Has. Peternak. 08(30):91–96.

Nawaz, A., M. Ellahi Babar, T. Hussain, A. Nadeem, F. Bilal, K. Javed, and K. Muhammad. 2013. Identification of Molecular Markers in Bmp15 Gene of Pakistani Goat Breeds. Int. J. Adv. Res. 1(8):62–68.

Nawito, M.F., A.R. Abd, E. Hameed, A.S.A. Sosa, and K.G.M. Mahmoud. 2016. Impact of pregnancy and nutrition on oxidant⁄antioxidant balance in sheep and goats reared in South Sinai , Egypt. Vet. World 9(1):801–805.

Nova, T.D., Y. Yurnalis, and A.K. Sari. 2016. Keragaman genetik gen hormon pertumbuhan (GH|MboII) pada itik Sikumbang Janti menggunakan penciri PCR-RFLP. J. Peternak. Indones. 18(1):44.

Nuraini, Asmarhansyah, and Z. Hidayat. 2016. Karakteristik Sifat Kualitas dan Kuantitatif Kmabing Boerka yang Dipelkihara di KP Petaling Kepulauan Bangka Belitung. Pages 1604–1610 in Prosiding Seminar Nasional Agroinovasi Spesifik Lokasi Untuk Ketahanan Pangan Pada Era Masyarakat Ekonomi ASEAN.

Nurfaridah, A. 2022. Evaluasi genetik bobot lahir dan bobot sapih domba Garut di UPTD-BPPTD Margawati Garut. J. Sumber Daya Hewan 3(2):6–12.

Nurgiartiningsih, V.M.A. 2011. Evaluasi Genetik Pejantan Boer Berdasarkan Performans Hasil Persilangan dengan Kambing Lokal. J. Ternak Trop. 12(1):82–88.

Odubote, I.K. 1994. Genetic analysis of the reproductive performance of West African Dwarf goats in the humid tropics. Small Rumin. Res. Dev. Africa 1:1–7.

Osinowo, O.A., B.Y. Abubakar, and A.R. Trimnell. 1993. Genetic and phenotypic relationships between gestation length, litter size and litter birth weight in Yankasa sheep. Anim. Reprod. Sci. 34(2):111–118.

Paneto, J.C.C., J.B.S. Ferraz, J.C.C. Balieiro, J.F.F. Bittar, M.B.D. Ferreira, M.B. Leite, G.K.F. Merighe, and F.V. Meirelles. 2008. Bos indicus or Bos taurus

UNIVERSITAS GADJAH MADA
Estimasi Parameter Genetik Sifat Reproduksi dan Polimorfisme Gen BMP-15 pada Kambing Boerka di Loka Penelitian Kambing Potong
ALFIAN DESTOMO, Prof. Ir. Dyah Maharani, S.Pt., M.P., Ph.D., IPM ; Prof. Ir. Diah Tri Widayati, S.Pt., M.P., Ph.D., I
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

mitochondrial DNA - comparison of productive and reproductive breeding values in a Guzerat dairy herd. Genet. Mol. Res. 7(3):592–602.

Parasmawati, F., Suyadi, and S. Wahyuningsih. 2013. Performan reproduksi pada persilangan Kambing Boer dan Peranakan Etawah (PE). J. Ilmu-Ilmu Peternak. 23 23(1):11–17.

Patil, S.J., S.D. Mandakmale, T.R. Walkunde, and D.K. Kamble. 2008. Heritability estimate of different traits in Osmanabadi goat under scarcity zone of Maharashtra. Asian J. Anim. Sci. 3(2):142–144.

Pirchner, F. 1969. Population Genetics in Animal Breeding. W.H. Freeman and Company, San Fransisco.

Pirdania, I.A.Y., I. Harris, M. Dima, and I. Hamdani. 2014. Seleksi induk kambing Boerawa berdasarkan nilai pemuliaan bobot sapih di Kecamatan Gisting Kabupaten Tanggamus. J. Ilm. Peternak. Terpadu 2(1):25–28.

Polley, S., S. De, S. Batabyal, R. Kaushik, P. Yadav, J.S. Arora, S. Chattopadhyay, S. Pan, B. Brahma, T.K. Datta, and S.L. Goswami. 2009. Polymorphism of fecundity genes (BMPR1B, BMP15 and GDF9) in the Indian prolific Black Bengal goat. Small Rumin. Res. 85:122–129.

Pramod, R.K., S.K. Sharma, A. Singhi, S. Pan, and A. Mitra. 2013. Differential ovarian morphometry and follicular expression of BMP15 , GDF9 and BMPR1B influence the prolificacy in goat. Reprod. Domest. Anim. 809:803–809.

Pratama, A.G., A. Dakhlan, S. Sulastri, and M.D.I. Hamdani. 2020. Seleksi induk kambing Saburai berdasarkan nilai most probable pproducing ability bobot lahir dan bobot sapih. J. Ilm. Peternak. Terpadu 8(1):33.

Pribadi, L.W., S. Maylinda, M. Nasich, and S. Suyadi. 2015. Reproductive efficiency of Bali cattle and it's crosses with Simmental breed in the lowland and highland areas of West Nusa Tenggara Province, Indonesia. Livest. Res. Rural Dev. 27(2):1–10.

Pribadi, L.W., R.A. Suhardiani, T. Hidjaz, M. Ashari, H. Poerwoto, R. Andriati, and L.A. Zaenuri. 2022. Jurnal Biologi Tropis Pre-Weaning Growth Performance of Boerka (Boer Kids in the Difference Genotype and Birth Types Kacang) Crossbred. J. Biol. Trop. Orig. 22(2):1008–1017.

Prihatin, K.W., Z. Suharyanta, Bernad Winarto, and I. Kurniawan. 2021. Evaluasi keberhasilan inseminasi buatan serta penerapannya pada kambing betina dara dan induk. Pages 24–25 in Prosiding Seminar Teknologi dan Agribisnis Peternakan VIII.

Prud'hon, M., A. Desvignes, and I. Denoy. 1970. Results of six years ' breeding of Aries Merino ewes on the Merle estate . IV . Duration of pregnancy and birth weight of lambs .. Ann. Zootech. 19(2663):2663.

Purwanti, D., E.T. Setiatin, and E. Kurnianto. 2019. Morfometrik tubuh kambing

Estimasi Parameter Genetik Sifat Reproduksi dan Polimorfisme Gen BMP-15 pada Kambing Boerka di Loka
Penelitian Kambing Potong
ALFIAN DESTOMO, Prof. Ir. Dyah Maharani, S.Pt., M.P., Ph.D., IPM ; Prof. Ir. Diah Tri Widayati, S.Pt., M.P., Ph.D., I
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

Peranakan Ettawa pada berbagai paritas di balai Pembibitan dan Budidaya Ternak Terpadu Kabupaten Kendal. J. Ilmu-Ilmu Peternak. 29(1):15–23.

Putra, W.P.B., and R. Indriastuti. 2018. Leptin Gene as Potential Gene for Molecular Selection on Cattle in Indonesia. Indones. Bull. Anim. Vet. Sci. 27(3):105–116.

Rahayu, S. 2011. Identifikasi polimorfisme gen GDF-9 dan BMP-15 pada kambing Kacang. Nat. B 1(2):116–119.

Ramírez, A.A., J.A. Ledezma, R.M. Pérez, R.Z. Bustillos, L. Fernando, N. Sierra, and H.M. Sevilla. 2014. Short communication : Estrus synchronization using progestogens or cloprostenol in tropical hair sheep. Trop. Anim. Health Prod. 46:1515–1518.

Ran, X., J. Lin, Z. Du, C. Qing, and J. Wang. 2010. Diversity of BMP15 and GDF9 genes in White Goat of Guizhou Province and evolution of the encoded proteins. Zool. Res. 30(6):593–602.

Rasad, S.D. 2009. Evaluasi Penampilan Reproduksi Sapi Perah (Studi Kasus Di Perusahaan Peternakan Sapi Perah KUD Sinarjaya). Agripet 9(1):43–49.

Ray, S., S.K. Dash, S.K. Dhal, G.D. Nayak, and A.K. Parida. 2016. Genetic studies on reproductive performance of indigenous goats in Northern Odisha. Explor. Anim. Med. Res. 6(2):192–198.

Reader, K.L., D.A. Heath, S. Lun, C.J. McIntosh, A.H. Western, R.P. Littlejohn, K.P. McNatty, and J.L. Juengel. 2011. Signalling pathways involved in the cooperative effects of ovine and murine GDF9+BMP15-stimulated thymidine uptake by rat granulosa cells. Reproduction 142(1):123–131.

Renda, S.B., and A.A. Dethan. 2018. Pengaruh Level Dosis Prostaglandin (PGF2a) pada Ternak Babi Peranakan yang Diinseminasi Buatan terhadap Persentase Estrus, Persentase Kebuntingan, Litter Size dan Berat Lahir. J. Anim. Sci. 3(3):32–34.

Ribeiro, A.., J.. Lui, S.. Queiroz, S.D.. Ribeiro, and K.. Resende. 2000. Genetic and environmental effects on the age at first kidding and kidding interval in a Saanen goat herd. ARS Vet. 16(3):192-197 (abstract).

Ridha, M., Hidayati, and T. Adelina. 2007. Analisis faktor-faktor yang mempengaruhi jarak beranak (calving interval) sapi Bali. J. Ilm. Peternak. Terpadu 4(2):65–69.

Rismawati, Y. Duma, and P. Hamid. 2018. Produktivitas induk kambing Kacang di Desa Dolago Kabupaten Parigi Mautong. Agrisains 19(1):35–40.

Rohmat, N., M.Y. Sumaryadi, and A. Susanto. 2021. Hubungan antara litter size dengan karakteristik reproduksi induk dan anak yang dilahirkan pada domba Batur. Pages 24–25 in Prosiding Seminar Teknologi dan Agribisnis Peternakan VIII–Webinar.

Roy, R., A. Mandal, and D.R. Notter. 2008. Estimates of (co)variance components

Estimasi Parameter Genetik Sifat Reproduksi dan Polimorfisme Gen BMP-15 pada Kambing Boerka di Loka
Penelitian Kambing Potong
ALFIAN DESTOMO, Prof. Ir. Dyah Maharani, S.Pt., M.P., Ph.D., IPM ; Prof. Ir. Diah Tri Widayati, S.Pt., M.P., Ph.D., I
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

due to direct and maternal effects for body weights in Jamunapari goats. Animal 2(3):354–359.

Rusdiana, S., U. Adiati, and R. Hutasoit. 2018. Analisis Ekonomi Usaha Ternak Sapi Potong Berbasis Agroekosistem di Indonesia. J. Sos. Ekon. dan Kebijak. Pertan. 7(2):176–187.

Rydhmer, L., N. Lundeheim, and L. Canario. 2008. Genetic correlations between gestation length, piglet survival and early growth. Livest. Sci. 115:287–293.

Sahusilawane, A.M. 2019. Woman and Sheep (Woman Participation in Farming Sheep). AGRILAN J. Agribisnis Kepul. 7(3):265–277.

Santoso, Amrozi, B. Purwatara, and Herdis. 2014. Gambaran ultrasonografi ovarium kambing Kacang yang disinkronisasi dengan hormon prostaglandin F2 alfa (Pgf2A) dosis tunggal. J. Kedokt. Hewan - Indones. J. Vet. Sci. 8(1):38–42.

Sari, E.M., M.A.N. Abdullah, and C. Hasnani. 2016. Estimasi Nilai Heritabilitas Sifat Kuantitatif Sapi Aceh. J. Agripet 16(1):37.

Sartika, T. 2012. Ketersediaan Sumberdaya Genetik Ayam Lokal Dan Strategi Pengembangannya Untuk Pembentukan Parent Dan Grand Parent Stock (The Availability of Indonesian Native Chicken Genetic Resources and Its Development Strategy for Establishing Parent and Grand Parent). Pages 15–23 in Workshop Nasional Unggas Lokal 2012.

Sasi, R., R. Kanakkaparambil, and A. Thazhathuveettil. 2020. Polymorphism of fecundity genes, BMPR1B, BMP15 and GDF9, in tropical goat breeds of Kerala. Gene Reports 21(September):100944.

Seno, L.. O., H. Tonhati, V.L. Cardoso, L. El Faro, R.C. Sesana, R.R. Aspilcueta-Borquis, and G.M.F. de Camargo. 2007. Genetic parameters for milk yield, age at first calving and interval between first and second calving in milk buffaloes. Ital. J. Anim. Sci. 6(2):397–400.

Shaat, I., and A. Mäki-Tanila. 2009. Variation in direct and maternal genetic effects for meat production traits in Egyptian Zaraibi goats. J. Anim. Breed. Genet. 126(3):198–208.

Shaha, M., G. Miah, A. Lima, O.F. Miazi, M. Das Gupta, and A. Das. 2022. Identification of polymorphisms in GDF9 and BMP15 genes in Jamunapari and crossbred goats in Bangladesh. Trop. Anim. Health Prod. 54(6):1–8.

Shidiq, F., A. Gunawan, C. Sumantri, P. Riset, Z. Terapan, and F. Peternakan. 2023. Identifikasi Keragaman Gen Myostatin (MSTN|BsrI) pada Ayam Kampung dengan Metode PCR-RFLP. J. TERNAK Trop. 24(1):59–68.

Shimizu, K., T. Nakamura, N. Nakanishi, Y. Kasahara, and T. Nagai. 2019. Molecular mechanism of FSHR expression induced by BMP15 in human granulosa cells. J. Assist. Reprod. Genet. 36:1185–1194.

Estimasi Parameter Genetik Sifat Reproduksi dan Polimorfisme Gen BMP-15 pada Kambing Boerka di Loka
Penelitian Kambing Potong
ALFIAN DESTOMO, Prof. Ir. Dyah Maharani, S.Pt., M.P., Ph.D., IPM ; Prof. Ir. Diah Tri Widayati, S.Pt., M.P., Ph.D., I
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

Shokrollahi, B. 2015. Investigation of BMP15 gene polymorphisms associated with twining in Markhoz goat. Biharean Biol. 9(1):1–4.

Sholikha, R., and R.K. Dewi. 2020. Perbandingan karakteristik morfologi kambing Boerka F 1 dengan kambing Kacang di UPT . Agri Science Technopark Universitas Islam Lamongan. Anim. Sci. 6(1):13–17.

Silalahi, M. 2014. Pengaruh flushing pada induk kambing Saburai terhadap bobot lahir, bobot sapih dan mortalitas anak. Pages 410–415 in Prosiding Seminar Nasional Teknologi Peternakan dan Veteriner 2014.

Sudrajad, P., S.D. Volkandari, M. Cahyadi, A. Prasetyo, K. Komalawati, S. Wibowo, and S. Subiharta. 2021. Pemanfaatan informasi genom untuk eksplorasi struktur genetik dan asosiasinya dengan performan ternak di Indonesia. Livest. Anim. Res. 19(1):1–12.

Sulaksono, A., S. Suharyati, and P.E. Santosa. 2021. Penampilan Reproduksi (Service Per Conception, Lama Kebuntingan Dan Selang Beranak) Kambing Boerawa Di Kecamatan Gedong Tataan Dan Kecamatan Gisting. J. Ris. dan Inov. Peternak. 5(3):151–156.

Sulastri, and M.D.I. Hamdani. 2018. Dasar Pemuliaan Ternak.

Sulastri, Sumadi, T. Hartatik, and N. Ngadiyono. 2016. Estimasi Parameter Genetik dan Kemampuan Berproduksi Performans Pertumbuhan Kambing Rambon. J. AgriSains 3(5):1–23.

Sumadiasa, I.W.L., E. Yuliani, and Rodiah. 2022. Sinkronisasi Estrus untuk Mengatur Waktu Kawin dan Meminimalisir Kegagalan Reproduksi pada Ternak Kambing. J. PEPADU 3(2):195–204.

Suryana. 2013. Utilization of Genetic Variation for Increasing Alabio Duck Productivity. J. Litbang Pertan. 32(3):100–111.

Sutama, I.K. 2011. Inovasi teknologi reproduksi mendukung pengembangan kambing perah lokal. Pengemb. Inov. Pertan. 4(3):231–246.

Suyadi, S., T.E. Susilorini, W. Septian, A. Furqon, C. Nugraha, and R. Putri. 2020. Is The Reproductive Performance of Goats That are Kept Intensively Different from those Maintained by Small Farmer ? A Review. Pages 1–5 in The 4th Animal Production International Seminar.

Syawal M. and F. Mahmilia. 2010. Mortalitas prasapih kambing Kacang dan Boerka di Loka Penelitian Kambing Potong Sei Putih. Pages 633–637 in Proceeding Seminar Teknologi Peternakan dan Veteriner.

Talakua, E.W., L.O. Kakisina, and N.R. Timisela. 2022. Strategi Pengembangan Ternak Kambing Lakor: Pendekatan Produksi, Pendapatan, Dan Analisis Swot. J. Soc. Agric. Econ. 15(1):59.

Tarigan, A., S.P. Ginting, Arief, D.A. Astuti, and L. Abdullah. 2018. Body weight gain,

Estimasi Parameter Genetik Sifat Reproduksi dan Polimorfisme Gen BMP-15 pada Kambing Boerka di Loka
Penelitian Kambing Potong
ALFIAN DESTOMO, Prof. Ir. Dyah Maharani, S.Pt., M.P., Ph.D., IPM ; Prof. Ir. Diah Tri Widayati, S.Pt., M.P., Ph.D., I
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

nutrients degradability and fermentation rumen characteristics of Boerka goat supplemented green concentrate pellets (GCP) based on Indigofera zollingeriana. Pakistan J. Biol. Sci. 21(2):87–94.

Tixier-Boichard, M., A. Bordas, and X. Rognon. 2009. Characterisation and monitoring of poultry genetic resources. Worlds. Poult. Sci. J. 65(2):272–285.

Tribudi, Y.A., V.M.A. Nurgiartiningsih, and P.W. Prihandini. 2019. Pendugaan nilai heritabilitas sifat pertumbuhan pada Sapi Madura. J. Ilmu-Ilmu Peternak. 29(2):152–157.

Tribudi, Y.A., P.W. Prihandini, M.I. Rahaddiansyah, and S. Anitasari. 2021. Seleksi calon pejantan dan induk sapi Madura berdasarkan nilai pemuliaan berat lahir dan sapih. J. Sain Peternak. Indones. 16(1):1–7.

Utami, P., D. Samsudewa, and C.M.S. Lestari. 2019. Pengaruh Perbedaan Sistem Perkawinan terhadap Lama Bunting dan Litter Size Kelinci New Zealand White. J. Sain Peternak. Indones. 14(1):70–74.

Utomo, S. 2013. Pengaruh Perbedaan Ketinggian Tempat Terhadap Capaian Hasil Inseminasi Buatan Pada Kambing Peranakan Ettawa. Sains Peternak. 11(1):34–42.

Vatankhah, M., M.A. Talebi, and F. Zamani. 2012. Relationship between ewe body condition score (BCS) at mating and reproductive and productive traits in Lori-Bakhtiari sheep. Small Rumin. Res. 106(2–3):105–109.

Wang, W., S. Liu, F. Li, X. Pan, C. Li, X. Zhang, Y. Ma, Y. La, R. Xi, and T. Li. 2015. Polymorphisms of the ovine BMPR-IB, BMP-15 and FSHR and their associations with litter size in two Chinese indigenous sheep breeds. Int. J. Mol. Sci. 16(5):11385–11397.

Wang, Y., Y. Li, N. Zhang, Z. Wang, and J. Bai. 2011. Polymorphism of exon 2 of BMP15 gene and its relationship with litter size of two Chinese goats. Asian-Australasian J. Anim. Sci. 24(7):905–911.

Warwick, E.J., J.M. Astuti, and W. Hardjosubroto. 1990. Pemuliaan Ternak. Gadjah Mada University Press, Yogyakarta.

Widiastuti, L.K., S. Bintara, N. Ngadiyono, P. Panjono, B.A. Atmoko, and I.G.S. Budisatria. 2022. Reproductive Performances of Bligon Goats in Different Agroecological Zones in Bantul Regency , Yogyakarta. Pages 168–171 in 9th International Seminar on Tropical Animal Production.

Wondim, B., M. Taye, K. Alemayehu, M. Rouatbi, T. Getachew, A. Haile, and M. Rekik. 2022. The efficiency of estrus synchronization protocols and artificial insemination in the Abergelle goat on-station and on-farm conditions of Northern Ethiopia. J. Appl. Anim. Res. 50(1):518–525.

Yudi, A. Atabany, and B. P. Purwanto. 2021. Pengaruh Tipe Kelahiran terhadap Produksi Susu, Lama Laktasi, Masa Kering, Masa Kosong, dan Selang

UNIVERSITAS
GADJAH MADA
Estimasi Parameter Genetik Sifat Reproduksi dan Polimorfisme Gen BMP-15 pada Kambing Boerka di Loka Penelitian Kambing Potong
ALFIAN DESTOMO, Prof. Ir. Dyah Maharani, S.Pt., M.P., Ph.D., IPM ; Prof. Ir. Diah Tri Widayati, S.Pt., M.P., Ph.D., I
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

Beranak Kambing Saanen. J. Ilmu Produksi dan Teknol. Has. Peternak. 9(2):102–109.

Yusuff, A.T., and T.R. Fayeye. 2018. Repeatability Estimates for Body Weight , Skin and Leather Properties in Pure and Reciprocal Crosses of Nigerian Goats. Niger. J. Anim. Sci 20(4):317–322.

Yuwandaa, F., Sulastri, and M.D.I. Hamdani. 2016. Seleksi induk kambing boerawa grade 1 dan 2 berdasarkan nilai most probable producing ability bobot anak umur enam bulan. J. Ilm. Peternak. Terpadu 4(1):24–28.

Zhang, C., W. Zhang, H. Luo, W. Yue, M. Gao, and Z. Jia. 2008. A new single nucleotide polymorphism in the IGF-I gene and its association with growth traits in the Nanjiang Huang goat. Asian-Australasian J. Anim. Sci. 21(8):1073–1079.

Zhang, C.Y., S.L. Chen, X. Li, D.Q. Xu, Y. Zhang, and L.G. Yang. 2009. Genetic and phenotypic parameter estimates for reproduction traits in the Boer dam. Livest. Sci. 125(1):60–65.

Zhang, J.B., C. Yuan, Y.J. Yue, J. Guo, C.E. Niu, X.J. Wang, L.J. Wang, H.Q. Lü, and B.H. Yang. 2018. Comparison and analysis of genetic parameters estimation of early growth traits of alpine merino sheep by different animal models. Sci. Agric. Sin. 51(6):1202–1212.

Ziadi, C., A. Molina, E. Muñoz-Mejías, M. Sánchez, M.D. López, and O. González-Casquet. 2021a. Selection criteria for improving fertility in spanish goat breeds: Estimation of genetic parameters and designing selection indices for optimal genetic responses. Animals 11(2):1–10.

Ziadi, C., E. Muñoz-Mejías, M. Sánchez, M.D. López, O. González-Casquet, and A. Molina. 2021b. Genetic analysis of reproductive efficiency in Spanish goat breeds using a random regression model as a strategy for improving female fertility. Ital. J. Anim. Sci. 20(1):1682–1689.

Zulkharnaim, J. A Syamsu, M.I. A Dagong, and S. Sabile. 2016. Peningkatan Mutu Genetik Induk Dan Calon Induk Kambing Pe Prolifik Melalui Pemanfaatan Pakan Kulit Buah Kakao. AVES J. Ilmu Peternak. 10(2):1–9.