UNIVERSITAS
GADJAH MADA
DETEKSI DAN IDENTIFIKASI MOLEKULER INTERNAL TRANSRIBED SPACER 1 PADA Trypanosoma evansi
EDI WIDODO, Dr.drh.R.Wisnu Nurcahyo;Dr.drh.S.Indarjulianto
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

DAFTAR PUSTAKA

Agbo, E.C., Majiwa, P.A., Claassen, E.J., Roos, M.H. 2001. Measure of molecular diversity within the *Trypanosoma brucei* subspecies *Trypanosoma brucei brucei* and *Trypanosoma brucei gambiense* as revealed by genotypic characterization. *Exp Parasitol*. 99:123–131.

Amer, S., Ryu, O., Tada, C., Fukuda, Y., Inoue, N., Nakai, Y. 2011. Molecular Identification and Phylogenetic analysis of *Trypanosoma evansi* from Dromedary Camels (Camelus dromedaries) in Egypt, a Pilot Study. *Acta Tropica*. 117:39 – 4.

Aprilyanto, V. dan Sembiring, L. 2016. *Filogenetika Molekuler*. Innosain. Cetakan Pertama. Yogyakarta.

Areekit, S., Singhaphan, P., Kanjanavas, P., Kunchareontwon, S., Sriyapai, T., Pakpitcharoen, A., Chansiri, K. 2008. Genetic Diversity of *Trypanosoma evansi* in Beef Catle Based on Internal Transcribed Spacer Region. *Infection, Genetic and Evolution*. 8:484 – 488.

Bajyana, S.E. and Hamers, R. 1988. A Card Agglutination Test (CATT) For Veterinary Use Based On An Early VAT Rotat 1/2 Of *Trypanosoma Evansi*. *Ann Soc Belg Med Trop*. 68:233–240.

Barrett, M.P., Gilbert, I.H. 2002. Perspectives for new drugs against Trypanosomiasis and Leishmaniasis. *Curr Top Med Chem*. 2:471-482.

Berger, B.J. and Fairlamb, A.H. 1994. Properties of melarsamine hydrochloride (cymelarsan) in aqueous solution. *Antimicrob Agents Chemother*. 38:1298-1302.

Bernard S, Herzel H. 2006. Why do cells cycle with a 24 hour period? *Genome Inform*. 17:72-79.

Beltrame-Botelho, I.T., Gaspar_Silva, D., Steindel, M., Davila, A.M.R., Grisard, E.C. 2005. Internal Transcribed Spacers (ITS) Trypanosoma rangeli Ribosomal DNA (rDNA) : a useful marker for inter- specific differentiation. *Infection, Genetics, Evolution*. 5:17-28.

Bhaskararao, T., Raju, P.B., Hararama Das, J., M.Hafeez, M. 1995. Some observations on an outbreak of surra in circus Tigers. *Indian Veterinary Journal*. 72:1210–1221.

UNIVERSITAS
GADJAH MADA
DETEKSI DAN IDENTIFIKASI MOLEKULER INTERNAL TRANSRIBED SPACER 1 PADA Trypanosoma evansi
EDI WIDODO, Dr.drh.R.Wisnu Nurcahyo;Dr.drh.S.Indarjulianto
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

Birhanu, H., Gebrehiwot, T., Goddeeris B.M., Büscher P., Van Reet N. 2016. New *Trypanosoma evansi* Type B Isolates from Ethiopian Dromedary Camels. *PLOS Neglected Tropical Diseases* 10(4):1-22.

Biteau, N., Bringaud, F., Gibson, W., Truc, P., Baltz, T. 2000 Characterization of Trypanozoon Isolates Using a Repeated Coding Sequence and Microsatellite Markers. *Mol Biochem Parasitol*. 105:185–201.

Boibessot, I., Tettey, J.N.A., Skellern, G.G., Watson, D.G., Grant, M.H. 2006. Metabolism of isometamidium in hepatocytes isolated from control and inducer-treated rats. *J Vet Pharmacol Ther*. 29:547-553.

Bojanowski, K., Lelievre, S., Markovits, J., Couprie, J,, Jacquemin-Sablon, A., Larsen, A.K. 1992. Suramin is an inhibitor of DNA topoisomerase II *in vitro* and in Chinese hamster fibrosarcoma cells. *Proc Natl Acad Sci*. 89:3025-3029.

civas.net/2014/02/25/trypanosomiasis-surra [diakses pada tanggal 2 April 2016 pukul 18.35 WIB]

Claes, F., Radwanska, M., Urakawa, T., Majiwa, P.A., Goddeeris, B., Buscher, P. 2004 Variable Surface Glycoprotein RoTat 1.2 PCR as a specific diagnostic tool for the detection of *Trypanosoma evansi* infections. *Kinetoplastid Biol*. *Dis* 3:3.

Claes, F., Agbo, E., Radwanska, M., Te Pas, M.F.W., Buscher, P. 2007. *Molecular Markers For The Different (Sub)-Spesies of The Trypanozoon Subgenus. In : Developing Methodologies for the Use of Polymerase Chain Reaction in the Diagnosis and Monitoring of Trypanosomosis*. IAEA. Vienna. 217-233.

Clausen, P.H., Wiemann, A., Patzelt, R., Kakaire, D., Oestzch, C., Peregrine, A,, Mehlitz, D. 1998. Use Of A PCR Assay For The Specific And Sensitive Detection Of *Trypanosoma* Spp. In Naturally Infected Dairy Cattle In Peri-Urban Kampala, Uganda. *Ann. N.Y. Acad. Sci*. 849:21-31.

Clausen, P.H., Waiswa, C., Katunguka-Rwakishaya, E., Schares, G., Steuber, S., Mehlitz, D., 1999. Polymerase Chain Reaction And DNA Probe Hybridization To Assess The Efficacy Of Diminazene Treatment In *Trypanosoma Brucei*-Infected Cattle. *Parasitol. Res*. 85:206-211.

Coen, P.G., Luckin, A.G., Davison, H.C., Woolhouse, M.E.J. 2001. Trypanosoma evansi in Indonesia Buffaloes : Evaluation of Simple Models of Natural Immunity Infection. Cambridge University Press. *Epidemiol Infect*. 126:111-118.

UNIVERSITAS
GADJAH MADA
DETEKSI DAN IDENTIFIKASI MOLEKULER INTERNAL TRANSRIBED SPACER 1 PADA Trypanosoma evansi
EDI WIDODO, Dr.drh.R.Wisnu Nurcahyo;Dr.drh.S.Indarjulianto
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

Croof, H.I.M.N. 2008. *Molecular Diagnosis of Trypanosoma evansi Infection in Camels from Gedariff and Kordofan States of the Sudan*. Thesis. Faculty of Veterinary Medicine. University of Khartoum.

Davila, A.M., Herrera, H.M., Schlebinger, T., Souza, S.S, Traub-Cseko, Y.M. 2003. Using PCR for unraveling the cryptic epizootiology of livestock Trypanosomosis in the Pantanal. *Braz Vet Parasitol*. 117:1-13.

Davison, H.C., Thrusfield, M.V., Husein, A., Muharsini, S., Partoutomo, S., Rae, P ., Masake, Luckins, A .G . 1999. Evaluation of antigen detection and antibody detection tests for *Trypanosoma evansi* infections of buffaloes in Indonesia. *Epidemiol. Infect.* 149–155

Damayanti, R. 1993. *The Pathology of Natural Trypanosoma Infection in the Buffallo (Bubalus bubalis).* Penyakit Hewan, 25(45):34−39.

Delespaux, V. 2005. *Improved diagnosis of Trypanosome infections and drugs resistant T. congolense in livestock*. Thesis. Brussel. Belgia: Université Libre de Bruxelles.

Desquenses, M. 1997. Evaluation of a simple PCR technique for the diagnosis of *Trypanosoma vivax* infection in the serum of cattle in comparison to parasitological techniques and antigen - enzyme - linked immuno sorbent assay. *Acta Tropica*. 65:139 – 148.

Desquesnes, M., McLaughlin, G., Zoungrana, A., Davilla, A.M.R. 2001. Detection and Identification of *Trypanosoma evansi* of Africa Livestock through a single PCR Based on Internal Transcribed Spacer 1 of rDNA. *International Journal for Parasitology*. 31:610 – 614.

Desquesnes, M. 2004. Livestock trypanosomoses and their vectors in Latin America. CIRAD-EMVT publication,OIE, Paris, France, 2004, http://www.oie.int/doc/ged/D9818.PDF [diakses pada 24 Juli 2016]

Desquesnes, M., Bossard, G., Thevenon, S., Patrel, D., Ravel, S., Pavlovic, D., Herder, S., Patout, O., Lepetitcolin, E., Hollzmuller, P., Berthier, D., Jacquiet, P., Cuny, G. 2008. First Outbreak Of *Trypanosoma Evansi* In Camels In Metropolitan France. *Vet. Rec*. 162(23):750–752.

Desquesnes, M. and Davila, A.M.R. 2002. Aplications of PCR Based Tools for Detection and Identification of Animal Trypanosomoses : a review and perspective. *Veterinary Parasitology* 109:213 -231.

Desquesnes, M., Dargantes, A., Lai.D.H., Lun, Z.R., Holzmuller, P. and Jittapalapong, S. 2013[a]. *Trypanosoma evansi* and Surra: A Review and

UNIVERSITAS
GADJAH MADA
DETEKSI DAN IDENTIFIKASI MOLEKULER INTERNAL TRANSRIBED SPACER 1 PADA Trypanosoma evansi
EDI WIDODO, Dr.drh.R.Wisnu Nurcahyo;Dr.drh.S.Indarjulianto
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

Perspectives on Transmission, Epidemiology and Control, Impact, and Zoonotic Aspects. *BioMed Research International*.

Desquesnes, M., Holzmuller, P., Lai D.H., Dargantes, A., Lun, Z.R. and Jittaplapong, S. 2013[b]. *Trypanosoma evansi* and Surra: A Review and Perspectives on Origin, History, Distribution, Taxonomy, Morphology, Hosts, and Pathogenic Effects. *BioMed Research International*.

Dia, M.L. and Desquesnes, M 2004. Les Trypanosomoses: Utilisation Rationnelle Des Trypanocides. Fiche technique, Sant´e animale, CIRDES, BP454 Bobo-Dioulasso, Burkina Faso.1–8.

Dieleman, E.F. 1986. Trypanosomiasis in Indonesia. *Veterinary Quarterly* 8: 250-256.

Dirkeswan. 2014. *Manual Penyakit Hewan Mamalia*. Direktorat Kesehatan Hewan. Direktur Jenderal Peternakan dan Kesehatan Hewan. Kementerian Pertanian. Cetakan ke-2. 440-449.

Eisler, M.C., Lessard, P., Masake, R.A., Moloo, S.K., Peregrine, A.S. 1998. Sensitivity and Specificity of *Trypanosoma congolense* and *Trypanosoma vivax* Infection in Cattle. *Veterinary Parasitology* 79:187 – 201

Fahrimal, Y., Saad, M.D., Budiman, H. 2013. Inokulasi *Trypanosoma evansi* pada Mencit *Mus musculus* Strain Balb-C yang Berasal dari Darah Sapi Lokal. Medika Veterinaria 7:101-104

Gillingwater, K. 2007. *Discovery of Novel Active Diamidines as Clinical Candidates against Trypanosoma evansi Infection*. PhD Thesis. Basel Switzerland: Universität Basel.

Gillingwater, K., Kumar, A., Anbazhagan, M., Boykin, D.W., Tidwell, R.R., Brun R. 2009. *In vivo* Investigations of Selected Diamidine Compounds Against *Trypanosoma evansi* using a Mouse Model. *Antimicrob Agents Chemother.* 53:5074-5079.

Grandison, M.K. 2001. *Pharmacokinetic Evaluation and Protein Binding of Suramin*. PhD Thesis. Athens.USA: University of Georgia.

Gutierrez, C., Corbera, J. A., Doreste, F., Buscher, P. 2004. Use of the Miniature Anion Exchange Centrifugation Technique to Isolate *Trypanosoma evansi* from Goats. *Annual New York Academy of Science* 1026:149-151.

UNIVERSITAS
GADJAH MADA
DETEKSI DAN IDENTIFIKASI MOLEKULER INTERNAL TRANSRIBED SPACER 1 PADA Trypanosoma evansi
EDI WIDODO, Dr.drh.R.Wisnu Nurcahyo;Dr.drh.S.Indarjulianto
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

Gutiérrez, C., González-Martín, M., Corbera, J.A., Junco, M.T.T. 2013. Chemotherapeutic Agents Against Pathogenic Animal *Trypanosomes*. In: Méndez-Vilas A, editor. Microbial Pathogens and Strategies for Combating them:Sscience, Technology and Education. Madrid (Spain): *Formatex Research Center*:1564-1573.

Habila, N., Inuwa, M.H., Aimola, I.A., Udeh, M.U., Haruna, E. 2012. Pathogenic Mechanisms of *Trypanosoma evansi* Infections. *Research in Veterinary Science* 93:13-17.

Hanau, S., Rippa, M., Bertelli, M., Dallocchio, F., Barrett, M. 1996. 6-Phosphogluconate dehydrogenase from *Trypanosoma brucei*: kinetics and inhibition by trypanocidal drugs. *Eur J Biochem.* 240:592-599.

Hamilton, P.B, Gibson W.C.B., Stevens, J.R. 2007. Patern of Co-evolution Between Trypanosomoses and Their Host Deduced from Ribosomal RNA and Protein Coding Gene Phylogenies. *Molecular Phylogenetics and Evolution* 44:15-25.

Handoyo, D dan Rudiretna, A. 2000. *Prinsip Umum dan Pelaksanaan PCR. Unitas* 9:17-29.

Herrera, H.M., Davila, A.M.R., Norek, A., Abreu, U.G., Souza, S.S., D'Andrea, P.S., Jansen, A.M., 2004. Enzootiology of *Trypanosoma evansi* in Pantanal, Brazil.*Veterinary Parasitology* 125:263–275.

Hoare, C.A. 1965.Vampire Bats As Vectors And Hosts Of Equine And Bovine Trypanosomes. *Acta Tropica* 22:204–209.

Hoare, C.A. 1972. *The Trypanosomes of Mammals*. A Zoological Monograph. Oxford and Edinburgh: Blackwell Scientific Publications.

Hillis, D.M. and Dixon, M.T. 1991. Ribosomal DNA: molecular evolution and phylogenetic inference. *Quart Rev of Biol.* 66:411– 453.

http://agsavet.blogspot.co.id/2011/12/trypanosomiasis.html [20 September 2016 pukul 14.15]

Hughes, M.F., Beck, B.D., Chen, Y., Lewis, A.S., Thomas, D.J. 2011. Arsenic exposure and toxicology: a historical perspective. *Toxic Sci.* 123:305-332.

International Livestock Research Institute (ILRI) Monograph.1997.Disease resistance and protecting the environment. In; Livestock, people and the environment,10-11.

UNIVERSITAS
GADJAH MADA
DETEKSI DAN IDENTIFIKASI MOLEKULER INTERNAL TRANSRIBED SPACER 1 PADA Trypanosoma evansi
EDI WIDODO, Dr.drh.R.Wisnu Nurcahyo;Dr.drh.S.Indarjulianto
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

Jindal, H.K., Anderson, C.W., Davis, R.G., Vishwanatha, J.K. 1990. Suramin affects DNA synthesis in HeLa cells by inhibition of DNA polymerases. *Cancer Res.* 50:7754-7757.

Jones, T.W., Payne, R.C., Sukanto, I.P., Partoutomo, S. .1996. *Trypanosoma Evansi In The Republic Of Indonesia. Proceedings of the first internet conference on Salivarian trypanosomes*. FAO animal production and health paper.

Juyal, P.D., Singla L.D. and Kaur P. 2005. Management of Surra due to *Trypanosoma evansi* in India: an overview. In: V. Tandon and B.N. Dhawan (ed) Infectious diseases of domestic animals and zoonosis in India. *Proceedings of the National Academy of Sciences of India* 75(B)-special issue: 109-120p.

Khan, M.O.F. 2007. Trypanothione reductase: a viable chemotherapeutic target for antitrypanosomal and antileishmanial drug design. *Drug Target Insights*. 2:129-146.

Killick – Kendrick, R. 1968. The diagnosis of Trypanosomiasis of livestock: a review of current techniques. *Veterinary Bulletin* 8: 191-197.

Krinsky, W.L. 1976. Animal disease agents transmitted by horse flies and deer flies (Diptera: Tabanidae). *J. Med. Entomol.* 13: 225–275

Kuboki, N., Inoue, N., Sakurai, T., Di Cello, F., Grab, D.J., Suzuki, H., Sugimoto, C., Igarashi, I., 2003. Loop-mediated isothermal amplification for detection of African trypanosomes. *J. Clin. Microbiol*. 41:5517–5524.

Khucareontaworn, S., Singhaphan, P., Viseshakul, N., Chansiri, K. 2007. Genetic Diversity of Trypanosoma evansi in Buffalo Based on Internal Transcribed Spacer (ITS) regions. *J. Vet. Med. Sci* 69:487 – 493.

Kumar, S., Stecher, G. and Tamura, K. 2016. MEGA7 : Molecular Evolutionary Genetic Analysis Version 7 for Biggest Datasets. *Mol. Biol. Evol.* 33 (7) : 1870 - 1874

Kuriakose, S., Muleme, H.M., Onyilagha, C., Singh, R., Jia, P., Uzonna, J.E. 2012. Diminazene aceturate (berenil) modulates the host cellular and inflammatory responses to *Trypanosoma congolense* infection. *PLoS One* 7:e48696

Lai, D.H., Hashimi, H., Lun, Z.R., Ayala, F.J., Lukes, J. 2008. Adaptations of Trypanosoma brucei to Gradual Loss of Kinetoplast DNA:

UNIVERSITAS
GADJAH MADA
DETEKSI DAN IDENTIFIKASI MOLEKULER INTERNAL TRANSRIBED SPACER 1 PADA Trypanosoma evansi
EDI WIDODO, Dr.drh.R.Wisnu Nurcahyo;Dr.drh.S.Indarjulianto
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

Trypanosoma equiperdum and Trypanosoma evansi are Petite Mutants of T. brucei. *Proc. Natl. Acad. Sci*. 6:1999–2004.

Landfear, S.M. 2011. Nutrient transport and pathogenesis in selected parasitic protozoa. *Eukaryot Cell*. 10:483-493.

Lopez-Lopez, R., Langeveld, C.H., Pizao, P.E., van Rijswijk, R.E., Wagstaff, J., Pinedo, H.M., Peters, G.J. 1994. Effect of suramin on adenylate cyclase and protein kinase C. *Anticancer Drug Des*. 9:279-290.

Luckins AG 1988. "*Trypanosoma evansi*" in Asia. *Parasitology Today* 4(5):37-142

Luckins, A.G. 1992. *Protozoal diseases of camels. In Allen, W. R., Higgins, A.J., Mayhew, I.G., Snow, D.H. and Wade J.F. (eds.) Proceedings of the Ist International conference*. R. and W. Publication New Market Limited, Suffolk, U.K.: 23-27.

Lun, Z.R. and Desser, S.S. 1995. Is the broad range of hosts and geographical distribution of *Trypanosoma evansi* attributable to the loss of maxicircle kinetoplast DNA?. *Parasitology Today*. 11(4):131–133.

Lun, Z.R., Reid, S.A., Lai, D.-H., Li, F.J., 2009. Atypical Human Trypanosomiasis: a Neglected Disease or Just an Unlucky Accident? *Trends Parasitol*. 25:107–108.

Manuel, M.F. 1998. Sporadic outbreaks of Surra in the Philippines and its economic impact. *J. Protozool. Res.* 8:131–138.

Martindah, E. dan Husein, A. 2006. *Trypanosomiasis pada Ternak kerbau*. *Dalam: Subandriyo, Diwyanto K, Inounu I, Haryanto B, Djajanegara A, Priyanti A, Handiwirawan E, penyunting*. Prosiding Lokakarya Nasional Usaha Ternak Kerbau Mendukung Program Kecukupan Daging Sapi. Sumbawa, 4-5 Agustus 2006 . Bogor (Indonesia): Puslitbangnak.103-109.

Matthews, K.R. 2005. The developmental cell biology of Trypanosoma brucei. *Journal of Cell Science 11:283-290.*

Maudlin, I., Holmes, P.H., Miles, M.A. 2004. *The Trypanosomiasis*. CABI Publishing CAB International, Oxfordshire, UK. 25- 30, 283- 331.

McPherson, M., J., and Simon, G., M. 2006. *PCR The Basic*.[2nd] Edition. Francis: Taylor & Francis Group.

UNIVERSITAS
GADJAH MADA
DETEKSI DAN IDENTIFIKASI MOLEKULER INTERNAL TRANSRIBED SPACER 1 PADA Trypanosoma evansi
EDI WIDODO, Dr.drh.R.Wisnu Nurcahyo;Dr.drh.S.Indarjulianto
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

Men, A.E., Wilson, P, Siemering, K., Forrest, Susan. 2008. *Sanger DNA sequencing. Next Generating Genome Sequencing: Towards Personalized Medicine*. Wiley-Vch Verlag GmbH & Co. KGaA. Weinheim.

Miller, D.B. 2003. *The pharmacokinetic of diminazene aceturate after intramuscular and intravenous administration in the healthy dog*. Master Thesis. Pretoria.South Africa: University of Pretoria.

Morlais, I., Ravel, S., Grebaut, P., Dumas, V. and Cuny, G. 2001. New molecular marker for Trypanosoma (Dutonella) vivax identification. *Acta Tropica* 80:207 – 213.

My, L.N., Holland, W.G, Tam, P.T., Thanh, N.G, Hoan. D.H. 2000. Comparative study of techniques for diagnosis of *Trypanosoma evansi* in buffaloes. *Vet. Sci. Tech* 7:6-14.

Nantulya, V.M. 1990. *Trypanosomiasis in domestic animals: the problems of diagnosis*. Revue Scientifique Technique. Office International des Epizooties 9:357 - 367.

Nantulya, V. M. 1994. Suratex: a simple latex agglutination antigen test for diagnosis of *Trypansoma evansi* suratex. Infections (surra). *Tropical Medicine and Parasitology*. 45 1:9-1.

Ngaira, J.M., Olembo, N.K., Njagi, E.N., Ngeranwa, J.J. 2005. The detection of non-RoTat 1.2 Trypanosoma evansi. *Exp Parasitol.* 110:30–38.

Njiru, Z.K., Constantine, C.C., Masiga, D.K., Reid, S.A., Thompson, R.C. 2006. Characterization of Trypanosoma evansi type B. *Infect Genet Evol* 6: 292–300.

Njiru, Z.K., Ouma, J.O., Enyaru, J.C., Dargantes, A.P. 2010. Loop-Mediated Isothermal Amplification (LAMP) Test For Detection Of Trypanosoma Evansi Strain B. *Exp Parasitol* 125:196–201.

Nurcahyo, R.W. 1998. *Isolation of Recombinant Variant Surface Glycoproteins of Trypanosoma congolense from Eschericia coli*. Vet.Med.Diss. FU Berlin. Journal No. 2233.

Nurcahyo, R.W. 2013. *Occurance Trypanosomiasis in Indonesia*. Presented paper in Workshop on Biting flies and Trypanosome. Veterinary Research Institute (VRI), Ipoh, Malaysia, 16-20 November 2013.

OIE. 2013. *Trypanosomosis*.OIE Terestrial Manual.Chapter 2.4.17, 1-11

UNIVERSITAS
GADJAH MADA
DETEKSI DAN IDENTIFIKASI MOLEKULER INTERNAL TRANSRIBED SPACER 1 PADA Trypanosoma evansi
EDI WIDODO, Dr.drh.R.Wisnu Nurcahyo;Dr.drh.S.Indarjulianto
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

Ormerod, W. E. 1951. The mode of action of antrycide. *Br J Pharmacol.* 6:325-333.

Otto, M.A., Da Silva, A.S., Gressler, L.T., Farret, M.H., Tavares, K.C.S., Zanette, R.A., Miletti, L.C., Monteiro, S.G., 2010. Susceptibility of *Trypanosoma evansi* to human blood and plasma in infected mice. *Veterinary Parasitology* 168:1–4.

Paris, J., Murray, M., McOdimba, F. 1982. A Comparative Evaluation Of The Parasitological Techniques Currently Available For The Diagnosis Of African Trypanosomiasis In Cattle. *Acta Trop.* 39:307–316

Partoutomo, S., Soleh, M., Politedy, F., Day. A., Wilson, A.J., Copeman, D.B. 1995. Studi Patogenesis *Trypanosoma evansi* Pada Kerbau, Sapi Frisian Holland dan Sapi Peranakan Ongole. *JITV* 1(1):41–48.

Partoutomo, S. 1996. *Trypanosomiasis caused by Trypanosoma evansi "Surra" In Indonesia*. [prosiding] Seminar Teknik Diagnostik untuk *Trypanosoma evansi* di Indonesia. Balitvet, Bogor.1-9.

Payne, R.C., Sukamto, I.P., Djauhari, D., Partoutomo, S., Jone, T.W., Luckins, A.G., Boid, R. 1991. Trypanosoma evansi infection in cattle,buffalo and horses in Indonesia. *Veterinary Parasitology.* 38:253-256.

Payne, R.C., Sukanto, I.P., Partoutomo, S., Jones, T.W. 1994. Efficacy of cymelarsan treatment of suramin resistant *Trypanosoma evansi* in cattle. *Trop Anim Health Prod*. 26:92-94.

Pearson, R.A., Zerbini, E., Lawrence, P.R. 1999. Recent advances in research on draught ruminants. *Anim. Sci.* 68:1–17.

Pourjafar, M., Badiei, K., Sharifiyazdi, H., Chalmeh, A., Naghib, M., Babazadeh, M., Alavi, A.M., Joshani Zadeh, N.H. 2013. Genetic Characterization and Phylogenetic Analysis of Trypanosoma evansi in Iranian Dromedary Camel. *Parasitol Res* 112 : 899 – 903.

Prayoga, W. dan Wardani, A.K. 2015. Polymerase Chain Reaction untuk Deteksi Salmonella sp : Kajian Pustaka. *Jurnal Pangan dan Agroindustri* 3(2): 483-488.

Pruvot, M., Kamyingkird, K., Desquesnes, M., Sarataphan, N., Jittapalapong, S. 2010. A comparison of six primer sets for detection of Trypanosoma evansi by polymerase chain reaction in rodents and Thai livestock. *Veterinary Parasitology* 171:185–193.

UNIVERSITAS
GADJAH MADA
DETEKSI DAN IDENTIFIKASI MOLEKULER INTERNAL TRANSRIBED SPACER 1 PADA Trypanosoma evansi
EDI WIDODO, Dr.drh.R.Wisnu Nurcahyo;Dr.drh.S.Indarjulianto
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

Reid, S.A. 2001. Evaluation and improvement of parasitological tests for *Trypanosoma evansi* infection. *Vet. Parasitol.* 102:291–297.

Reid, S.A. 2002. Trypanosoma Evansi Control And Containment In Australasia. *TRENDS In Parasitology* Vol.18(5):219-224.

Röttcher, D., Schillinger, D., Zweygarth, E. 1987. Trypanosomiasis in the camel (*Camelus dromedarius*). *Rev Sci Tech*. 6:463-470.

Salim, B., Bakheit, M.A., Kamau, J., Nakamura, I., Sugimoto, C. 2011. Molecular epidemiology of camel Trypanosomiasis based on ITS1 rDNA and RoTat 1 . 2 VSG gene in the Sudan. *Parasites Vectors*. 4:31.

Sambrook, J. dan Russel, D.W. 2001.*Molekuler Cloning : A Laboratory Manual 3th editio*n. Cold Spring Harbor Laboratory Press , New York.

Sarkhel, S.P., Gupta S.K., Kaushik, J., Singh, J., Gaur, D.K., Kumar, S., Kumar, R. 2016. Molecular Characterization of Internal Transcribed Spacer 1 (ITS 1) Region of Different *Trypanosoma evansi* Isolates of India. *J. Parasit Dis.*

Sawitri, D.H., Wardhana, A.H., Wibowo, H., Sadikin, M., Ekaswati, F. 2015. Molecular Identification Technidue of Trypanosoma evansi by Multiplex Polymerase Chain Reaction. *JITV* Vol 20(4):297-307.

Seebeck, T. and Mäser P. 2009. *Drug resistance in African Trypanosomiasis in antimicrobial drug resistance*. Mayers D, editor. New York (USA): Humana Press.

Seri, H.I., Idris, O.F., Elbashir, H.M., Barsham, M.A., Elsadiq, A.A. 2002. *Misuse of antitrypanosomal drugs and their impact on camel reproduction in Sudan.* In: Proceeding 10th Scientific Congress Faculty of Veterinary Medicine Assiut University. Assiut (Egypt): Assiut University.247-252.

Seidl, A., Moraes A.S., Aguilar R, Da Silva, M. 1998. A financial analysis of treatment strategies for *Trypanosoma evansi* in the Brazilian Pantanal. *Prev. Vet. Med.* 33:219–234.

Shahzad, W., Munir, R., Khan, M.S., Ahmad, M.D., Ijaz, M., Ahmad, A., Iqbal, M. 2010. Prevalence and molecular diagnosis of *Trypanosoma evansi* in Nili-Ravi buffalo (*Bubalus bubalis*) in different districts of Punjab (Pakistan). *Trop Anim Health Prod*. 42:1597-1599.

UNIVERSITAS
GADJAH MADA
DETEKSI DAN IDENTIFIKASI MOLEKULER INTERNAL TRANSRIBED SPACER 1 PADA Trypanosoma evansi
EDI WIDODO, Dr.drh.R.Wisnu Nurcahyo;Dr.drh.S.Indarjulianto
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

Sinha, S., Anand, S., Mandal, T.K. 2013. Study of plasma protein binding activity of isometamidium and its impact on anthelmintic activity using *Trypanosoma* induced calf model. *Vet World*. 6:444-448.

Subekti, D.T. 2014. Perkembangan, Struktur, Mekanisme Kerja dan Efikasi Trypanosidal untuk Surra. *Wartazoa*. Vol. 24. No.I

Subekti, D.T., Sawitri, D.H., Wardhana, A.H., Suhardono. 2013. Pola parasitemia dan kematian mencit yang diinfeksi *T. evansi* Indonesia. *JITV*. 18:274-290.

Sukanto, I.P.,Payne R.C. , Saroso, H., Yusuf, S.H. dan Graydon, R. 1989 Survei Parasitologik dan Serologik Trypanosomiasis di Madura. *Penyakit Hewan*,Vol.XX,No,36: 85-87

Sukanto, I.P. 1994. *Petunjuk Diagnosa Parasit Darah Trypanosoma, Babesia dan Anaplasma dan Ringkasan Hasil Seminar Penelitian Parasit Darah Pada Ruminansia Besar di Indo*nesia. Proyek Kerjasama Balitvet–ODA (1986–1992). Puslitbang Peternakan, Bogor.3–31.

Sukanto, I.P., Solihat, L., Politedi, F., Wardhana, A.H., Satria, A. 2000. *Peran Diptera Hematofagus Sebagai Vektor Trypanosoma evansi*. Seminar Nasional Peternakan dan Veteriner.

Sukardono, S. 1989. Important Protozoan Disease of Animals in Indonesia (Review). *Buletin Penelitian Kesehatan* 17(2):154-163.

Sumba, A.L., Mihok, S., Oyieke, F.A. 1998.Mechanical Transmission Of *Trypanosoma Evansi* And *T. Congolense* By *Stomoxys Niger* And *S. Taeniatus* In A Laboratory Mouse Model," *Medical and Veterinary Entomology*. 12(4):417–422.

Suryana. 2004. *Tinjauan Aspek Penyakit dan Upaya Penanggulangannya pada Ternak Ruminansia Besar di Kalimantan Selatan*. Lokakarya Nasional Ketersediaan IPTEK dalam Pengendalian Penyakit Strategis pada Ternak Ruminansia Besar. 142-148

Syakalima, M., Yasuda., J, Hashimoto, A. 1995. Preliminary efficacy trial of cymelarsan in mice artificially infected with *Trypanosoma brucei brucei* isolated from a dog in Zambia. *Jpn J Vet Res*. 43:93-97.

Steverding, D. 2010. The development of drugs for treatment of sleeping sickness: a historical review. *Parasit Vectors*. 3:1-9.

Soulby, E.J.I. 1982. *Heltminths, Arthropods and Protozoa of Domestics Animal*, Baelliare-TindaI, London.

UNIVERSITAS
GADJAH MADA
DETEKSI DAN IDENTIFIKASI MOLEKULER INTERNAL TRANSRIBED SPACER 1 PADA Trypanosoma evansi
EDI WIDODO, Dr.drh.R.Wisnu Nurcahyo;Dr.drh.S.Indarjulianto
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

Tian, Z., Liu, G., Xie, J., Shen, H., Zhang, L., Zhang. P., Luo, J. 2011. The Internal Transcribed Spacer 1 (ITS-1) a Controversial Marker for Genetic Diversity of Trypanosoma evansi. *Experimental Parasitology* 129:303 – 306.

Thekisoe, O.M.M., Kuboki, N., Nambota, A., Fujisaki, K., Sugimoto, C., Igarashi, I., Yasuda, J., Inoue, N. 2007. Species-specific loop-mediated isothermal amplification (LAMP) for diagnosis of trypanosomosis. *Acta Tropica* 102:182–189.

Truc, P., Buscher, P., Cuny, G., Gonzati, M.I., Jannin, J., Joshi, P., Juyal, P., Lun, Z.R., Mattioli, R., Pays, E., Simmaro, P.P., Teixeira, M.M.G., Touratier, L., Vincendeau, P., Desquesnes, M. 2013. Atypical Human Infections by Animal Trypanosomoses. *PLOS Neglected Tropical Disease*.7: 1 – 7.

Uilenberg, G. 1998. *A field guide for the diagnosis, treatment and prevention of African animal Trypanosomes*. In *FAO Corporate Document Repository*. Agriculture Costumer Production. http://www.fao.org/docrep/006 /x0413e/x0413e02.htm.

Urakawa, T., Majiwa, P., Hiroyuki, H. 1998. Comparative analyses of ribosomal RNA genes of African and related trypanosomoses, including Trypanosoma evansi. *J. Protozool. Res*. 8: 224-226.

Urakawa, T, Verloo, D., Moens, L., Büscher, P., Majiwa, P.A.O. 2001. *Trypanosoma evansi*: Cloning and expression in *Spodoptera frugiperda* [correction of Fugiperda] insect cells of the diagnostic antigen RoTat1.2. *Experiment Parasitol*. 99:181-189.

Van Chau, N.V., Chau, L.B., Desquesnes, M., Herder, S., Lan., N.P.H., Champell, J.I., Cuong, N.V., Yimming, B., Chalermwong, P., Jittapalong, S., Franco, J.R., Tue, N.T., Rabaa, M.A., Mas, J.C., Thanh, P.T.P., Thiu, N.T.V., Berto, A., Hoa, N.T., Hoang, N.V.M., Tu, N.C., Chuyen, N.K., Wills, B., Hien, T.T., Thwaites, G.E., Yacoub, S., Baker, S. 2016. A Clinical and Epidemiological Investigation of The First Reported Human Infection With The Zoonotic Parasite *Trypanosoma evansi* in Southeast Asia. *CID* 62:1002-1008.

Vanhollebeke, B., Truc, P., Poelvoorde, P., Pays, A., Joshi, P.P., Katti, R., Jannin, J.G., Pays, E. 2006. Human Trypanosoma evansi Infection Linked to a Lack of Apolipoprotein L-I. *N. Engl. J. Med*. 355:2752–2756.

UNIVERSITAS
GADJAH MADA
DETEKSI DAN IDENTIFIKASI MOLEKULER INTERNAL TRANSRIBED SPACER 1 PADA Trypanosoma evansi
EDI WIDODO, Dr.drh.R.Wisnu Nurcahyo;Dr.drh.S.Indarjulianto
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

Ventura, R.M., Takeda, G.F., Texeira, M.M.G. 1996. *Molecular markers for characterization and identification of Trypanosoma evansi*. Proceedings of the first internet conference on Salivarian trypanosomes. FAO animal production and health.136.

Verloo, D., Magnus, E., Büscher, P. 2001. General Expression Of Rotat 1.2 Variable Antigen Type In Trypanosoma Evansi Isolates From Different Origin. *Vet Parasitol* 97:183–189.

Villareal, M.V., Mingala, C.N., Rivera W.L. 2013. Moleecular Characterization of Trypanosoma evansi isolates from water buffalo (Bubalus bubalis) in the Philippines. *Acta Parasitologica* 58:6-12.

Wainwright, M. 2010. Dyes, Trypanosomiasis and DNA: a historical and critical review. *Biotech Histochem*. 85:341-354.

Wesongah, J.O., Murilla, G.A., Kibugu, J.K., Jones, T.W. 2004. Evaluation of isometamidium levels in the serum of sheep and goats after prophylactic treatment against trypanosomosis. *J Vet Res*. 71:175-179.

Wilkinson, S.R., Kelly JM. 2009. Trypanocidal drugs : mechanisms, resistance and new target. *Expert Rev Mol Med*. 11:1-24.

Yilmaz, M., Cem, O., danIihami, G. 2012. *Gel Electrophoresis-Principles and Basics: Principles of Nucleic Acid Separation by Agarose Gel Electrophoresis.* China: University Campus STePRi. In Tech.

Youssif, F.M., Mohammed, O.S.A., Hassan, T. 2007. Efficacy and toxicity of cymelarsan® in Nubian goats infected with *Trypanosoma evansi*. *J Cell Anim Biol*. 2:140-149.

Yuwono, T. 2006. *Biologi Molekuler*. Jakarta: Erlangga. 49-74.

Woo, P.T.K. 1969. The Haematocrit Centrifuge For The Detection Of Trypanosomes In Blood. *Canadian Journal Of Zoology* 47 :921-923

www.fao.org/docrep/w5781e/w5781e05.htm. [diakses pada tanggal 2 April 2016 pukul 16.7 WIB]