Trop. Anim. Sci. J. Vol. 41 No. 2: 77-156, August 2018

Tropical Animal Science Journal

The Prediction of Prolificacy Using Linear Body Parameters and Craniometric Analysis in **Etawah-Grade Does**

R. H. Mulyono, C. Sumantri, R. R. Noor, Jakaria, & D. A. Astuti

Phylogenetical Relationships between Kejobong Goat and Other Goats Based on Mt-DNA Dloop Sequence Analysis

D. A. Lestari, E. Purbowati, S. Sutopo, & E. Kurnianto

Supplementation of Nigella sativa Oil and Honey Prolong the Survival Rate of Fresh and Post-Thawed Goat Sperms

M. Shikh Maidin, M. H. Padlan, S. A. N. Azuan, R. Jonit, N. H. Mohammed, & R. Abdullah

Association and Expression of CYP2A6 and KIF12 Genes Related to Lamb Flavour and Odour K. Listyarini, Jakaria, M. J. Uddin, C. Sumantri, & A. Gunawan

Dietary Supplementation of Purified Amino Acid Derived from Animal Blood on Immune Response and Growth Performance of Broiler Chicken

T. G. Wandita, N. Joshi, I. S. Nam, S. H. Yang, H. S. Park, & S. G. Hwang

Evaluation of Arbuscular Mycorrhizal Fungi Inoculum on Production and Nutrient Content of Pennisetum purpureum

P. D. M. H. Karti, I. Prihantoro, & M. A. Setiana

Rapid and Simultaneous Determination of Feed Nutritive Values by Means of Near Infrared Spectroscopy

Samadi, S. Wajizah, & A. A. Munawar

Nutritive and Anti-Nutritive Evaluation of Kleinhovia hospita, Leucaena leucocephala and Gliricidia sepium with Respect to Their Effects on in Vitro Rumen Fermentation and Gas **Production**

M. A. Ahmed, S. Jusoh, A. R. Alimon, M. Ebrahimi, & A. A. Samsudin

Increasing the Quality of Agricultural and Plantation Residues using Combination of Fiber Cracking Technology and Urea for Ruminant Feeds

S. P. Dewi, M. Ridla, E.B. Laconi, & A. Jayanegara

The Development of Adopting Innovation on Entrepreneurship Status of Madura Cattle **Farmers**

R. Pambudy





















Tropical Animal Science Journal

Accredited by Directorate General of Research and Development Strengthening, Ministry of Research, Technology and Higher Education of the Republic of Indonesia No: 36b/E/KPT/2016

Vol. 41 No. 2, August 2018

PUBLISHER

Faculty of Animal Science, Bogor Agricultural University associated with Animal Scientist's Society of Indonesia

CHIEF EDITOR

Komang G. Wiryawan

ASSOCIATE EDITORS

Tuti Suryati Sri Suharti Iakaria

EDITORIAL BOARDS

Abdul Razak Alimon (Malaysia) ~2019 Anuraga Jayanegara (Indonesia) ~2019 Arief Boediono (Indonesia) ~2019 Armagan Hayirli (Turkey) ~2019 Asep Gunawan (Indonesia) ~2018 Beben Benyamin (Australia) ~2020 Budi Santoso (Indonesia) ~2021 Burhanudin Sundu (Indonesia) ~2018 Cahyo Budiman (Indonesia) ~2018 Cece Sumantri (Indonesia) ~2019 Elizabeth Wina (Indonesia) ~2020 Epi Taufik (Indonesia) ~2021 Irma Isnafia Arief (Indonesia) ~2019 Jong K. Ha (Korea) ~2019 Junichi Takahashi (Japan) ~2019 Karl Schellander (Germany) ~ 2019 Kenji Fukuda (Japan) ~2019 Loh Teck Chwen (Malaysia) ~ 2019 Lucia Cyrilla (Indonesia) ~2018 Myunggi Baik (Korea) ~2018 Nahrowi (Indonesia) ~2019 Rita Mutia (Indonesia) ~2019 Sri Mulatsih (Indonesia) ~2018 Tadasu Urashima (Japan) ~2018 Toto Toharmat (Indonesia) ~2018 Wasmen Manalu (Indonesia) ~2018

TECHNICAL EDITORS

Irma Nuranthy Purnama Widya Hermana

SCOPE OF JOURNAL

Tropical Animal Science Journal receives original manuscripts encompass a broad range of research topics in tropical animal sciences: breeding and genetics, reproduction and physiology, nutrition, feed sciences, agrostology, animal products, biotechnology, behaviour, welfare, health, livestock farming system, socio-economic, animal waste management, and policy.

Authors have to prepare the manuscripts according to Tropical Animal Science Journal's guidelines. Manuscript and statement of originality and copyright release form (Form A) should be submitted via online submission through journal website: http://journal.ipb.ac.id/index.php/tasj.

ABOUT JOURNAL

Tropical Animal Scince Journal (Trop. Anim. Sci. J.) previously Media Peternakan is a scientific journal covering broad aspects of tropical animal sciences. Started from 2018, the title is changed from Media Peternakan in order to develop and expand the distribution as well as increase the visibility of the journal. The journal is published three times a year in April, August, and December by Faculty of Animal Science, Bogor Agricultural University, associated with Animal Scientist's Society of Indonesia. Tropical Animal Science Journal is a peer reviewed journal that has been indexed and abstracted in Elsevier products (Scopus, Reaxys), Clarivate Analytics product (Emerging Sources Citation Index), Scimago Journal Rank, ASEAN Citation Index, DOAJ, CAB, EBSCO, Science and Technology Index (SINTA), Google Scholar, and other scientific databases. The journal already used Similarity Check to prevent any suspected plagiarism in the manuscripts.

SECRETARIAT OF TROPICAL ANIMAL SCINCE JOURNAL

Faculty of Animal Science Building, Bogor Agricultural University
Jalan Agatis, Kampus IPB Darmaga, Bogor 16680, Indonesia
Phone/Fax: +62-251-8421692
e-mail: mediapeternakan@apps.ipb.ac.id; mediapeternakan@yahoo.co.id
website: http://journal.ipb.ac.id/index.php/tasj

Subscription Rate (Not including shipping and handling):

IDR 100.000/ edition and IDR 250.000/ year (Indonesian subscribers); 50 US\$ (Foreign subscribers) Bank account: BNI BOGOR No. 0668269871, o.b. Irma Nuranthy Purnama, SWIFT CODE: BNINIDJABGR

Tropical Animal Science Journal

Accredited by Directorate General of Research and Development Strengthening, Ministry of Research, Technology and Higher Education of the Republic of Indonesia No: 36b/E/KPT/2016

HISTORY

Tropical Animal Scince Journal (Trop. Anim. Sci. J.) (p-ISSN 2615-787X and e-ISSN 2615-790X) previously Media Peternakan (published from 1967-2017 with p-ISSN 0126-0476 and e-ISSN 2087-4634) is a scientific journal covering broad aspects of tropical animal sciences. Started from 2018, the title is changed from Media Peternakan in order to develop and expand the distribution as well as increase the visibility of the journal. The journal is published three times a year in April, August, and December by Faculty of Animal Science, Bogor Agricultural University, associated with Animal Scientist's Society of Indonesia.

The first edition with the new title was published in April 2018 edition (Vol 41 No 1 2018), while the previous edition (up to 2017 edition) still use Media Peternakan as the title. The online version of Tropical Animal Scince Journal could be accessed in the new website (http://journal.ipb.ac.id/index.php/tasj) and the previous editions are available in the old website (http://medpet.journal.ipb.ac.id/).

Tropical Animal Scince Journal has been indexed and abstracted in Elsevier products (Scopus, Reaxys), Clarivate Analytics products (Emerging Sources Citation Index), Scimago Journal Rank, ASEAN Citation Index, DOAJ, CABI, EBSCO, Science and Technology Index (SINTA), Google Scholar, and other scientific databases. The journal also used Similarity Check to prevent any suspected plagiarism in the manuscripts.

Tropical Animal Science Journal

Accredited by Directorate General of Research and Development Strengthening, Ministry of Research, Technology and Higher Education of the Republic of Indonesia No: 36b/E/KPT/2016

LIST OF CONTENT

The Prediction of Prolificacy Using Linear Body Parameters and Craniometric Analysis in Etawah-Grade Does R. H. Mulyono, C. Sumantri, R. R. Noor, Jakaria, & D. A. Astuti	77
Phylogenetical Relationships between Kejobong Goat and Other Goats Based on Mt-DNA D-loop Sequence Analysis D. A. Lestari, E. Purbowati, S. Sutopo, & E. Kurnianto	85
Supplementation of <i>Nigella sativa</i> Oil and Honey Prolong the Survival Rate of Fresh and Post-Thawed Goat Sperms M. Shikh Maidin, M. H. Padlan, S. A. N. Azuan, R. Jonit, N. H. Mohammed, & R. Abdullah	94
Association and Expression of CYP2A6 and KIF12 Genes Related to Lamb Flavour and Odour K. Listyarini, Jakaria, M. J. Uddin, C. Sumantri, & A. Gunawan	100
Dietary Supplementation of Purified Amino Acid Derived from Animal Blood on Immune Response and Growth Performance of Broiler Chicken T. G. Wandita, N. Joshi, I. S. Nam, S. H. Yang, H. S. Park, & S. G. Hwang	108
Evaluation of Arbuscular Mycorrhizal Fungi Inoculum on Production and Nutrient Content of <i>Pennisetum purpureum</i> P. D. M. H. Karti, I. Prihantoro, & M. A. Setiana	114
Rapid and Simultaneous Determination of Feed Nutritive Values by Means of Near Infrared Spectroscopy Samadi, S. Wajizah, & A. A. Munawar	121
Nutritive and Anti-Nutritive Evaluation of Kleinhovia hospita, Leucaena leucocephala and Gliricidia sepium with Respect to Their Effects on in Vitro Rumen Fermentation and Gas Production	128
M. A. Ahmed, S. Jusoh, A. R. Alimon, M. Ebrahimi, & A. A. Samsudin	
Increasing the Quality of Agricultural and Plantation Residues using Combination of Fiber Cracking Technology and Urea for Ruminant Feeds S. P. Dewi, M. Ridla, E.B. Laconi, & A. Jayanegara	137
The Development of Adopting Innovation on Entrepreneurship Status of Madura Cattle Farmers R. Pambudy	147