

Tropical Animal Science Journal

Artificial Insemination in Sheep with Fresh Diluted Semen: Comparison Between Two Different Semen Extenders and Management Protocols

A. Madrigali, A. Rota, D. Panzani, S. Castellani, M. Shawahina, A. Hassan, F. Di Iacovo, C. Rossignoli, & F. Camillo

The Protective Impacts of α -tocopherol Supplementation on the Semen Quality of Sapera Goat Preserved at 4°C

R. A. Prastiya, Rimayanti, M. M. Munir, & A. P. Nugroho

Detection of Tetracycline Resistance Genes among *Escherichia coli* Isolated from Layer and Broiler Breeders in West Java, Indonesia

A. Indrawati, K. Khoirani, S. Setiyaningsih, U. Affif, Safika, & S. G. Ningrum

Growth Performance of Male Line of Superior Tropical Rabbit

B. Brahmantiyo, N. Pratiwi, F. Saputra, Y. C. Raharjo, & L. H. Prasetyo

Genetic Diversity of Rabbit (*Oryctolagus cuniculus*) Population in South Eastern Nigeria Using Microsatellite Markers

A. I. Adeolu, M. Wheto, V. U. Oleforuh-Okoleh, R. N. Nwose, A. S. Adenaike, A. Yakubu, E. M. Abiola, & B. G. Mohammed

Feed Intake and Nutrient Digestibility, Rumen Fermentation Profiles, Milk Yield and Compositions of Lactating Dairy Cows Supplemented by *Flemingia macrophylla* Pellet

B. Phesatcha, K. Phesatcha, B. Viennaxay, N. T. Thao, & M. Wanapat

Nutrients, Fiber Fraction, and *In Vitro* Fiber Digestibility of Brown-Midrib Sorghum Mutant Lines Affected by The Maturity Stages

R. Sriagtula, P. D. M. H. Karti, L. Abdullah, Supriyanto, D. A. Astuti, & Zurmiati

Feed Intake, Nutrient Digestibility, Antioxidant Activity in Plasma, and Growth Performance of Male Dairy Cattle Fed Black Rice and Purple Corn Extracted Residue

R. Prommachart, J. Uriyapongson, A. Cherdthong, & S. Uriyapongson

Performances of Crossbred Chickens Fed Fermented Papaya Leaf and Seed Powder at High Stocking Density

S. Sugiharto, T. Yudiarti, E. Widiastuti, H. Wahyuni, T. Sartono, & A. R. Pratama

Comparison of Different Herbal Additives on Immune Response and Growth Performance of Broiler Chickens

S. Masoud-Moghaddam, J. Mehrzad, A. H. Alizadeh-Ghamsari, R. Bahari Kashani, & J. Saeidi

Environmental Monitoring of Zoonotic Fungal Infection in Broiler Chickens: Novel Approach to Control using Nanofungicide Composite

A. N. Mohammed & G. K. Abdel-Latef

Composition and Yield of Colostrum and Milk from Murrah and "Murrah x Carabao" Crosses in the Philippines

O. L. Bondoc, T. Almendral-Saludes, A. G. Tandang, A. R. Bustos, A. R. Ramos, & A. O. Ebron

Comparison between the Brix Refractometer and ELISA for Assessment of Colostrum IgG of Montbeliard x Holstein Cross Dairy Cows

N. H. Fahim & T. A. Imbabi

Detection of Class 1 Integron Encoding Gene in Multidrug Resistance (MDR) *Citrobacter freundii* Isolated from Healthy Broiler Chicken

A. M. Witaningrum, F. J. Wibisono, D. A. Permatasari, & M. H. Effendi

Characterization and Antimicrobial Activity of Whey Edible Film Composite Enriched with Clove Essential Oil

Fahrullah, M. Ervandi, & D. Rosyidi

Scopus®

Clarivate
Analytics
EMERGING SOURCES
CITATION INDEX

SJR

DOAJ

DIRECTORY OF
OPEN ACCESS
JOURNALS

ASEAN
CITATION
INDEX

Crossref

CAB Abstracts
www.cab.int

EBSCO
PUBLISHING

Google
scholar

SINTA
Science and Technology Index

Tropical Animal Science Journal

Accredited by Directorate General of Strengthening for Research and Development,
Ministry of Research, Technology and Higher Education of the Republic of Indonesia
No: 30/E/KPT/2018

Vol. 44 No. 3, September 2021

PUBLISHER

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

CHIEF EDITOR

Komang G. Wiryawan

ASSOCIATE EDITORS

Tuti Suryati
Sri Suharti
Jakaria

EDITORIAL BOARDS

Abdul Razak Alimon (Malaysia) ~2023
Anjas Asmara B. Samsudin (Malaysia) ~2021
Anuraga Jayanegara (Indonesia) ~2021
Arief Boediono (Indonesia) ~2024
Armagan Hayirli (Turkey) ~2023
Asep Gunawan (Indonesia) ~2023
Budi Santoso (Indonesia) ~2021
Burhanudin Sundu (Indonesia) ~2023
Cahyo Budiman (Indonesia) ~2021

Cece Sumantri (Indonesia) ~2024
Elizabeth Wina (Indonesia) ~ 2023
Epi Taufik (Indonesia) ~2021
Irma Isnafia Arief (Indonesia) ~2024
Jong K. Ha (Korea) ~2021
Junichi Takahashi (Japan) ~2024
Loh Teck Chwen (Malaysia) ~2022
Lucia Cyrilla (Indonesia) ~2022
Luki Abdullah (Indonesia) ~2021

Metha Wanapat (Thailand) ~2024
Mulyoto Pangestu (Australia) ~2022
Myunggi Baik (Korea) ~2021
Nahrowi (Indonesia) ~2024
Rita Mutia (Indonesia) ~2022
Sri Mulatsih (Indonesia) ~2021
Wasmen Manalu (Indonesia) ~2024

TECHNICAL EDITORS

Irma Nuranthi Purnama
Yuni Cahya Endrawati

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 and veterinary, 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 Science 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 FOUR times a year in March, June, September, and December by Faculty of Animal Science, IPB University (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, Dimensions-Digital Science, CABI, EBSCO, Science and Technology Index (SINTA), Google Scholar, and other scientific databases. The journal also uses Similarity Check to prevent any suspected plagiarism in the manuscripts.

SECRETARIAT OF TROPICAL ANIMAL SCIENCE JOURNAL

Faculty of Animal Science Building, IPB University (Bogor Agricultural University)
Jalan Agatis, Kampus IPB Dramaga, 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 350.000/ year (Indonesian subscribers); 50 US\$ (Foreign subscribers)

Bank account: Bank Rakyat Indonesia KCP KAMPUS IPB No. 0595-01-005208-53-3, o.b. Media Peternakan, SWIFT CODE: BRINIDJA

Tropical Animal Science *Journal*

Accredited by Directorate General of Strengthening for Research and Development,
Ministry of Research, Technology and Higher Education of the Republic of Indonesia
No: 30/E/KPT/2018

HISTORY

Tropical Animal Science 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 FOUR times a year in March, June, September, and December started from the year 2020 by Faculty of Animal Science, IPB University (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 Science 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 Science 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, Dimensions-Digital Science, CABI, EBSCO, Science and Technology Index (SINTA), Google Scholar, and other scientific databases. The journal also uses Similarity Check to prevent any suspected plagiarism in the manuscripts.

Tropical Animal Science Journal

Accredited by Directorate General of Strengthening for Research and Development,
Ministry of Research, Technology and Higher Education of the Republic of Indonesia
No: 30/E/KPT/2018

LIST OF CONTENT

Artificial Insemination in Sheep with Fresh Diluted Semen: Comparison Between Two Different Semen Extenders and Management Protocols	255
A. Madrigali, A. Rota, D. Panzani, S. Castellani, M. Shawahina, A. Hassan, F. Di Iacovo, C. Rossignoli, & F. Camillo	
The Protective Impacts of α-tocopherol Supplementation on the Semen Quality of Sapera Goat Preserved at 4°C	261
R. A. Prastiya, Rimayanti, M. M. Munir, & A. P. Nugroho	
Detection of Tetracycline Resistance Genes among <i>Escherichia coli</i> Isolated from Layer and Broiler Breeders in West Java, Indonesia	267
A. Indrawati, K. Khoirani, S. Setiyaningsih, U. Affif, Safika, & S. G. Ningrum	
Growth Performance of Male Line of Superior Tropical Rabbit	273
B. Brahmantiyo, N. Pratiwi, F. Saputra, Y. C. Raharjo, & L. H. Prasetyo	
Genetic Diversity of Rabbit (<i>Oryctolagus cuniculus</i>) Population in South Eastern Nigeria Using Microsatellite Markers	280
A. I. Adeolu, M. Wheto, V. U. Oleforuh-Okoleh, R. N. Nwose, A. S. Adenaike, A. Yakubu, E. M. Abiola, & B. G. Mohammed	
Feed Intake and Nutrient Digestibility, Rumen Fermentation Profiles, Milk Yield and Compositions of Lactating Dairy Cows Supplemented by <i>Flemingia macrophylla</i> Pellet	288
B. Phesatcha, K. Phesatcha, B. Viennaxay, N. T. Thao, & M. Wanapat	
Nutrients, Fiber Fraction, and <i>In Vitro</i> Fiber Digestibility of Brown-Midrib Sorghum Mutant Lines Affected by The Maturity Stages	297
R. Sriagtula, P. D. M. H. Karti, L. Abdullah, Supriyanto, D. A. Astuti, & Zurmiati	
Feed Intake, Nutrient Digestibility, Antioxidant Activity in Plasma, and Growth Performance of Male Dairy Cattle Fed Black Rice and Purple Corn Extracted Residue	307
R. Prommachart, J. Uriyapongson, A. Cherdthong, & S. Uriyapongson	
Performances of Crossbred Chickens Fed Fermented Papaya Leaf and Seed Powder at High Stocking Density	316
S. Sugiharto, T. Yudiarti, E. Widiastuti, H. Wahyuni, T. Sartono, & A. R. Pratama	
Comparison of Different Herbal Additives on Immune Response and Growth Performance of Broiler Chickens	327
S. Masoud-Moghaddam, J. Mehrzad, A. H. Alizadeh-Ghamsari, R. Bahari Kashani, & J. Saeidi	
Environmental Monitoring of Zoonotic Fungal Infection in Broiler Chickens: Novel Approach to Control using Nano-fungicide Composite	336
A. N. Mohammed & G. K. Abdel-Latef	
Composition and Yield of Colostrum and Milk from Murrah and "Murrah x Carabao" Crosses in the Philippines	347
O. L. Bondoc, T. Almendral-Saludes, A. G. Tandang, A. R. Bustos, A. R. Ramos, & A. O. Ebron	
Comparison between the Brix Refractometer and ELISA for Assessment of Colostrum IgG of Montbeliard x Holstein Cross Dairy Cows	356
N. H. Fahim & T. A. Imbabi	
Detection of Class 1 Integron Encoding Gene in Multidrug Resistance (MDR) <i>Citrobacter freundii</i> Isolated from Healthy Broiler Chicken	363
A. M. Witaningrum, F. J. Wibisono, D. A. Permatasari, & M. H. Effendi	
Characterization and Antimicrobial Activity of Whey Edible Film Composite Enriched with Clove Essential Oil	369
Fahrullah, M. Ervandi, & D. Rosyidi	