Journal of J. Indonesian Trop. Anim. Agric. pISSN 2087-8273 eISSN 2460-6278 the Indonesian Tropical Animal Agriculture

Accredited by DGSRD No. : 60/E/KPT/2016 [2016-2021]

Vol. 45 No. 2 June 2020



Jointly Published by Faculty of Animal and Agricultural Sciences-Diponegoro University and Indonesian Society of Animal Agriculture (ISAA)

Journal of the Indonesian Tropical Animal Agriculture J. Indonesian Trop. Anim. Agric.

pISSN 2087-8273 eISSN 2460-6278

EDITORIAL TEAM

Editor-in-Chi	ef :	Edy Kurnianto [Diponegoro University, Semarang-Indonesia]
Associate Edi	tors :	Agung Purnomoadi [Diponegoro University, Semarang-Indonesia] Joelal Achmadi [Diponegoro University, Semarang-Indonesia] Karno [Diponegoro University, Semarang-Indonesia] Sugiharto [Diponegoro University, Semarang-Indonesia]
International Editorial Boa		Abdulmojeed Yakubu [Nasarawa State University, Nigeria] Anang Muhammad Legowo [Diponegoro University, Semarang-Indonesia] Arda Yildirim [Gaziosmanpasa University, Turkey] Atien Priyanti [Center for Animal Research and Development, Bogor-Indonesia] Budi Hartono [Brawijaya University, Malang-Indonesia] Budi Indarsih [Mataram University, Malang-Indonesia] Cece Sumantri [Bogor Agricultural University, Bogor-Indonesia] Chalong Wachirapakorn [Khon Kaen University, Thailand] Dian Wahyu Harjanti [Diponegoro University, Semarang-Indonesia] Juni Sumarmono [Jenderal Soedirman University, Purwokerto-Indonesia] Khalil [Andalas University, Padang-Indonesia] Muhammad Cahyadi [Sebelas Maret University, Surakarta-Indonesia] Mukh Arifin [Diponegoro University, Semarang-Indonesia] Ni Wayan Kurnia Karja [Bogor Agricultural University, Bogor-Indonesia] Nyoman Suthama [Diponegoro University, Semarang-Indonesia] Sumeet Sharma [Edmonton North Animal Hospital, Alberta, Canada] Sumiati [Bogor Agricultural University, Bogor-Indonesia] Takuro Oikawa [University of the Ryukyus, Japan] Tety Hartatik [Gadjah Mada University, Yogyakarta-Indonesia] Umar Paputungan [Sam Ratulangi University, Manado-Indonesia] Wan Zahari Muhamed [University of Bari 'Aldo Moro', Italy] Wan Zahari Muhamed [Universiti Malaysia Kelantan, Malaysia]
Layout Editor	- :	Rahmat Wibowo [Diponegoro University, Semarang-Indonesia]
SEMARANG	Fa	Editorial Address: Journal of the Indonesian Tropical Animal Agriculture culty of Animal and Agricultural Sciences, Diponegoro University Campus Drh. Soejono Koesoemowardojo Tembalang - Semarang 50275 INDONESIA Phone/Fax : 024 - 7474750 JITAA E-mail: jppt.fpundip@gmail.com ISAA E-mail: isaa_ina@yahoo.com JITAA Website: ejournal.undip.ac.id/index.php/jitaa

The front cover illustrates the sketch of leaves and seeds of legume and grass forming a buffalo's horn (designed by Agung Purnomoadi)

JITAA Website: ejournal.undip.ac.id/index.php/jitaa

JOURNAL OF THE INDONESIAN TROPICAL ANIMAL AGRICULTURE

History

MEDIA was the first academic bulletin at Faculty of Animal Science and Fisheries, Diponegoro University in 1975. Along with the development of livestock and fisheries field in the faculty, the faculty was splitted into the Faculty of Animal Science and Faculty of Fisheries. Consequently, there was a change of the journal name from MEDIA to Jurnal Pengembangan Peternakan Tropis (JPPT) in 1998.

JPPT awarded accreditation at the first time in 1999 by Directorate General of Higher Education, Republic of Indonesia. The accredition was obtained every three years until 2011. JPPT is published on March, June, September and December.

JPPT was awarded the internationalization grant from 2009 to 2011. Consequently, JPPT no longer publish's articles in Indonesian, but all articles have been published in English since September 2009. The name of JPPT, therefore, was changed officially to Journal of the Indonesian Tropical Animal Agriculture (JITAA) in 2009.

JITAA was accredited for a period of five years from 2011 to 2016. JITAA was accredited again by Directorate General of Strengthening for Research and Development-Ministry of Research, Technology and Higher Education-Republic of Indonesia in 2016 for a period of five years started from November 18, 2016 with No 60/E/KPT/2016. JITAA as the open access journal has been indexed by Scopus, Scimago Journal & Country Rank (SJR), Emerging Sources Citation Index (ESCI)-Clarivate Analytics, Asean Citation Index (ACI), Directory of Open Access Journal (DOAJ), Google Scholar, CAB International, EBSCO, SHERPA/ROMEO, GARUDA (Garba Rujukan Digital), Sinta-Science and Technology Index, Feedipedia and Crossref.

Aims and Scopes

Journal of the Indonesian Tropical Agriculture (JITAA) is a double blind peer-reviewed publication devoted to disseminate all information contributing to the understanding and development of animal agriculture in the tropics by publication of original research papers. The topics of research are not only on Indonesian tropical animal agriculture, but also on other tropical regions of the world. The journal covers all aspect relating to animal agriculture, including animal breeding and genetics, animal feeding and nutrition, animal reproduction, animal biotechnology, animal physiology, animal products processing and animal by-products, animal microbiology, livestock farming systems, and other topics in relation to animal sciences.

Publication Ethics and Malpractice Statement

SECTION I: Publication

- 1. All submitted manuscript are reviewed by at least two reviewers who expertise in their subject.
- 2. The originality, soundness, novelty and language are factors that are taken into account in review by reviewers.
- 3. The results of review are categorized into eligible to publish in Journal of the Indonesian Tropical Animal Agriculture (JITAA) without revision, eligible to publish in JITAA with minor revision, eligible to publish in JITAA with major revision, and rejection.
- 4. If authors are encouraged to revise and resubmit a manuscript, then there is no guarantee that the revised submission will be accepted.
- 5. Rejected manuscript not be re-reviewed.

SECTION II: Editor

1. Editors have full responsibility and authority to reject/accept an manuscript.

- 2. Editors should guarantee the quality of the papers published in JITAA.
- 3. Editors should provide all information needed by aouthors to improve the publication.
- 4. Editors should preserve the identity or anonymity of reviewers.
- 5. Editors should publish errata page when needed.
- 6. Editors should not allow any conflicts of interest among authors, reviewers and board members.

SECTION III: Authors

- 1. Authors have to certify that the manuscript has not previously been published or is not being considered for publication elsewhere.
- 2. Authors have to certify that manuscript submitted is free from plagiarism.
- 3. Authors state that experiment conducted is according to national, international or applicable regulations for conducting scientific research.
- 4. Authors have to follow the rule of guideline of JITAA.
- 5. Authors state that all data analyzed are real.

SECTION IV: Reviewers

- 1. Reviewers should evaluate a manuscript solely on academic merits, in which if a conflict of interest is detected it should be immediately notified to the editor.
- 2. Reviewers have to keep all information relating to the manuscript reviewed.
- 3. Reviewers should review a manuscript objectively.
- 4. Reviewers should notify clearly on unclear statement written by authors.
- 5. Reviewers should not review manuscripts in which they have conflicts of interest resulting from competitive or relationships with any of the authors.
- 6. If plagiarism is detected, reviewers should notify the editors immediately.

Authors could refer to International Standards for Editors and Authors (https://publicationethics.org/search?t=international-standards) by COPE (Committee on Publication Ethics)

CONTENTS

Growth hormone locus polymorphism in Ongole Grade and Fries Holland Grade bulls and its implications in the digestibility of feed - S. Maylinda and W. Busono	71 - 77
Expression of Recombinant Fusion Protein from Local Isolate of Newcastle Disease Virus and Antibody Response to Recombinant Fusion Protein in Broiler Chickens Post-Vaccination - R.W. Astuti, N. Wijayanti and A. Haryanto	78 - 90
Effect of turmeric and garlic supplementation to fermented <i>Sauropus androgynus</i> -bay leaves containing diet on fat deposition and broiler meat composition - U. Santoso, Y. Fenita, K. Kususiyah and A. Agustian	91 - 102
Breast meat characteristics of broilers fed fermented mixture of cassava pulp and <i>Moringa</i> oleifera leaf meal - S. Sugiharto, E. Widiastuti, I. Isroli, T. Yudiarti, T. A. Sartono and H. I. Wahyuni	103 - 114
Effect of different transportation period on body weight loss, hematological and biochemical stress responses of sheep - L. Lendrawati, R Priyanto, A Jayanegara, W. Manalu and D. Desrial	115 - 123
In vitro ruminal biohydrogenation of C18 fatty acids in mixtures of Indigofera zollingeriana and Brachiaria decumbens - M. Makmur, M. Zain, Y. Marlida, K. Khasrad and A. Jayanegara	124 - 135
The effect of lemongrass (Cymbopogon citratus) supplement on growth performance and carcass characteristics of Pekin ducks - N. T. Linh, B. Guntoro, N. H. Qui, N. D. Khang, N. T. Dau and N. V. Vui	136 - 142
The optimation of cow-calf beef cattle and paddy farming integration on farmer household - T. Ekowati, E. Prasetyo and M. Handayani	143 - 152
Correlation between leptin and LH concentration during peri and postpartum to the onset of estrus postpartum in Bali cattle - D. N. D. I. Laksmi, I. G. N. B. Trilaksana, L. M. Sudimartini and I. W. N. F. Gunawan	153 - 159
Author Index	161
Acknowledgment	161

Journal of the Indonesian Tropical Animal Agriculture [JITAA-pISSN 2087-8273 and eISSN 2460-6278, formerly Jurnal Pengembangan Peternakan Tropis-JPPT] is accredited by Directorate General of Strengthening for Research and Development - Ministry of Research, Technology and Higher Education, Republic of Indonesia No. 60/E/KPT/2016 for a period of five years started from November 18, 2016. JITAA is jointly published by Faculty of Animal and Agricultural Sciences - Diponegoro University and Indonesian Society of Animal Agriculture in March, June, September and December. All rights reserved. JITAA is indexed by Scopus, Emerging Sources Citation Index (ESCI), Asean Citation Index (ACI), DOAJ, Google Scholar, CAB International, EBSCO, SHERPA/RoMEO, Indonesian Publication Index (IPI), Shinta-Science and Technology Index, Feedipedia and Crossref. The journal receives original papers in animal agriculture which should not have been previously published or is not being considered for publication elsewhere.