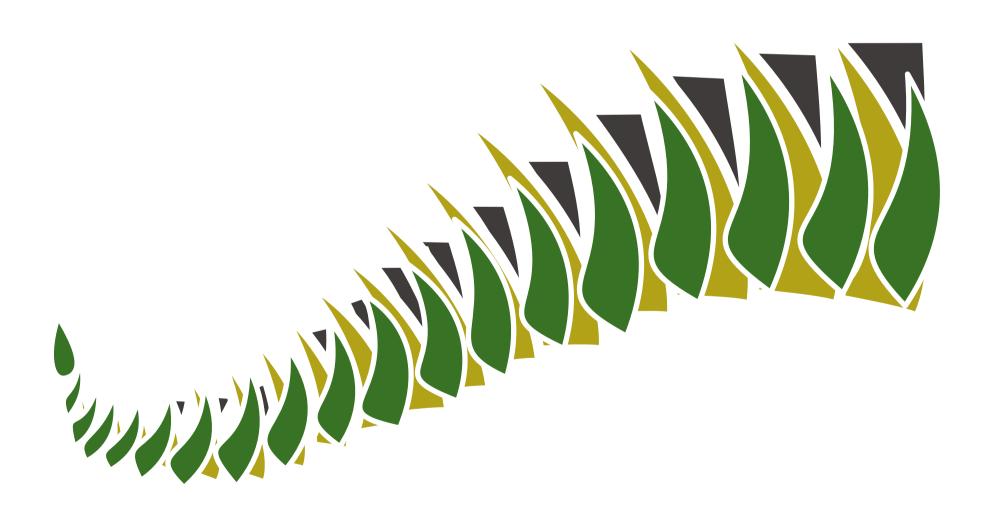
# Journal of J. Indonesian Trop. Anim. Agric. plssn 2087-8273 elssn 2460-6278 the Indonesian Tropical Animal Agriculture

Accredited No.: 81 / DIKTI / Kep / 2011

Vol. 41 No. 3 September 2016



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-Chief : Edy Kurnianto [Diponegoro University, Semarang-Indonesia]

Associate Editors : Agung Purnomoadi [Diponegoro University, Semarang-Indonesia]

Joelal Achmadi [Diponegoro University, Semarang-Indonesia]

Karno [Diponegoro University, Semarang-Indonesia]

Retno Adiwinarti [Diponegoro University, Semarang-Indonesia] Retno Murwani [Diponegoro University, Semarang-Indonesia] Sugiharto [Diponegoro University, Semarang-Indonesia] Sutaryo [Diponegoro University, Semarang-Indonesia] Titik Ekowati [Diponegoro University, Semarang-Indonesia]

International Editorial Boards Abdulmojeed Yakubu [Nasarawa State University, Nigeria]

Akhmad Sodiq [Jenderal Soedirman University, Purwokerto-Indonesia] Anang Muhammad Legowo [Diponegoro University, Semarang-Indonesia] Anuraga Jayanegara [Bogor Agricultural University, Bogor-Indonesia]

Arda Yildirim [Gaziosmanpasa University, Turkey]

Armina Fariani (Sriwijaya University, Palembang-Indonesia)

Atien Priyanti [Center for Animal Research and Development, Bogor-Indonesia]

Bambang Ali Nugroho [Brawijaya University, Malang-Indonesia] Cece Sumantri [Bogor Agricultural University, Bogor-Indonesia] Chalong Wachirapakorn [Khon Kaen University, Thailand]

Lili Warly [Andalas University, Padang-Indonesia]

Mukh Arifin [Diponegoro University, Semarang-Indonesia]

Ni Wayan Kurnia Karja [Bogor Agricultural University, Bogor-Indonesia] Sumeet Sharma [Edmonton North Animal Hospital, Alberta, Canada]

Takuro Oikawa [University of the Ryukyus, Japan]

Tety Hartatik [Gadjah Mada University, Yogyakarta-Indonesia] Urip Santoso [Bengkulu University, Bengkulu-Indonesia] Vincenzo Tufarelli [University of Bari 'Aldo Moro', Italy] Wan Zahari Muhamed [Universiti Malaysia Kelantan, Malaysia]

Layout Editor : Daud Samsudewa [Diponegoro University, Semarang-Indonesia]

# **Editorial Address:**

SEMARANG SEMARANG

Journal of the Indonesian Tropical Animal Agriculture
Faculty 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



### 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 acceditation at the first time in 1999 by Directorate General of Higher Education, Republic of Indonesia. The accrediation 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 again in 2011 for a period of five years since November 15, 2011 with No 81/DIKTI/Kep/2011. JITAA as the open access journal has been indexed by Directory of Open Access Journal (DOAJ), Google Scholar, CAB International, EBSCO, Index Copernicus International, SHERPA/RoMEO, Indonesian Scientific Journal Database (ISJD), Indonesian Publication Index (IPI), CiteFactor, Feedipedia and Crossref.

# **Aims and Scopes**

Journal of the Indonesian Tropical Agriculture (JITAA) is a 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 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 products technology, animal management and economics, animal products processing and animal by-products, animal microbiology, livestock farming systems, and other related topics in relation to animal science.

# **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.

# **CONTENTS**

Novel SNP Calpain-1 (CAPN1) Gene and Its Association with Carcass and Meat Characteristics Traits in Bali Cattle - N. Pratiwi, Maskur, R. Priyanto and Jakaria	109 - 116
Sapu-sapu Fish ( <i>Hyposarcus pardalis</i> ) as a Single Protein Source for Laying Mojosari Ducks - B. Indarsih, Asnawi and D. K. Purnamasari	117 - 124
The Effect of Sauropus androgynus Leaf Extract on Performance, Egg Quality and Chemical Composition of Eggs - U. Santoso and Y. Fenita	125 - 134
Effect of Synchronizationof Carbohydrate and Protein Supply in the Sugarcane Baggase Based Diet on Microbial Protein Synthesis in Sheep - A. T. Suhada, L. K. Nuswantara, E. Pangestu, F. Wahyono and J. Achmadi	135 - 144
Effect of α-tocopherol and Ascorbic Acids on Performance and Blood Immunity Profile of Male Native Muscovy Duck - E. Tugiyanti, T. Yuwanta, Zuprizal, Rusman and Ismoyowati	145 - 152
Efficacy of Curcumin and Monochromatic Light in Improving Liver Functions of Sexually Mature Magelang Duck - Kasiyati, W. Manalu, Sumiati and D. R. Ekastuti	153 - 160
A Development Strategy for Dairy Goat Farms in Bogor Regency – West Java - L. Cyrilla, B.P. Purwanto, A. Atabany, D.A. Astuti and A. Sukmawati	161 - 171
Author Index	173
Acknowledgment	173

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 Higher Education – Ministry of National Education, Republic of Indonesia No. 81/DIKTI/Kep/2011.

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 member of Directory of Open Access Journals (DOAJ), indexed by Google Scholar, CAB International, EBSCO, Index Copernicus International, SHERPA/RoMEO, Indonesian Scientific Journal Database (ISJD), Indonesian Publication Index (IPI), CiteFactor, 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.

The annual subscription is IDR 250.00 for domestic and US\$ 30.00 for overseas per year included mailing cost.