

[HOME](#) [ABOUT](#) [LOGIN](#) [REGISTER](#) [SEARCH](#) [CURRENT](#)
[ARCHIVES](#)

LANGUAGE

Select Language

English

FONT SIZE

EDITORIAL OFFICE

Jurnal Entomologi Indonesia
(Indonesian Journal of Entomology)

Secretariat Perhimpunan Entomologi Indonesia (The Entomological Society of Indonesia)

Jalan Kamper, Kampus IPB Dramaga, Bogor 16680

Phone/Fax: +62-251 8621267

Email: editor@jurnal.pei-pusat.org;
editor.jei@gmail.com

[Visitor Statistic-since May 2017](#)

00245472

Home > About the Journal > **Editorial Team**

Editorial Team

Chief Editor

[Damayanti Buchori](#), Departemen Proteksi Tanaman, Fakultas Pertanian, Institut Pertanian Bogor, Indonesia

Managing Editor

[Akhmad Rizali](#), Jurusan Hama dan Penyakit Tanaman, Fakultas Pertanian, Universitas Brawijaya, Indonesia
[Pudjianto Pudjianto](#), Departemen Proteksi Tanaman, Fakultas Pertanian, IPB, Indonesia
[Windra Priawandiputra](#), Bogor Agricultural University, Indonesia

Editorial Board

[Damayanti Buchori](#), Departemen Proteksi Tanaman, Fakultas Pertanian, Institut Pertanian Bogor, Indonesia
[Y Andi Trisyono](#), Gadjah Mada University, Indonesia
[Edni Martono](#), Departemen Hama dan Penyakit Tumbuhan, Fakultas Pertanian, Universitas Gadjah Mada, Indonesia
[Dadang Dadang](#), Departemen Proteksi Tanaman, Fakultas Pertanian, Institut Pertanian Bogor, Indonesia
[Bahagiawati Amir Husin](#), Balai Besar Penelitian Bioteknologi dan Sumberdaya Genetik Pertanian, Indonesia
[Deciyanto Soetopo](#), Pusat Penelitian dan Pengembangan Perkebunan, Badan Litbang Pertanian, Indonesia
[Nurindah Nurindah](#), Balai Penelitian Tanaman Pemanis dan Serat, Indonesia
[Edy Syahputra](#), Fakultas Pertanian, Universitas Tanjungpura, Indonesia
[Upik Kesumawati Hadi](#), Departemen Ilmu Penyakit Hewan dan Kesehatan Masyarakat Veteriner, Fakultas Kedokteran Hewan, Institut Pertanian Bogor, Indonesia
[Shahabuddin Shahabuddin](#), Program Studi Agroteknologi, Fakultas Pertanian, Universitas Tadulako, Palu, Indonesia
[Christian H. Schulze](#), University of Vienna, Division of Tropical Ecology and Animal Biodiversity, Department of Botany and Biodiversity Research, Austria
[Dewi Sartiami](#), Institut Pertanian Bogor, Indonesia
[Dodin Koswanudin](#), BB Biogen, Indonesia
[Ihsan Nurkomar](#), Program Studi Agroteknologi, Universitas Muhammadiyah Yogyakarta, Indonesia

English Language Editor

[Rebecca Johnson](#), Columbia University, USA



Jurnal Entomologi Indonesia is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](#).

USER

Username Password Remember me

ABOUT JEI

[Aim and Scope](#)[Editorial Team](#)[Reviewer Acknowledgment](#)[Publication Ethics](#)[Open Journal Systems: A Complete Guide to Online Publishing](#)[Editorial and Publishing Process](#)

INFORMATION FOR AUTHOR

Submission

Manuscript preparation and submission ([download](#))

Template Manuscript

Cover letter ([download](#))

Article ([download](#))

Short communication ([download](#))

Comments to editors ([download](#))

Reference Style

Endnote ([download](#))

Mendeley ([download](#))

Zotero ([download](#))

INDEXING & ABSTRACTING

[SINTA \(S2\)](#)[CrossRef](#)[DOAJ](#)[Google Scholar](#)

Indonesian Scientific Journal Database (ISJD LIPI, Indonesia)

[Indonesian Publication Index](#)

HOME ABOUT LOGIN REGISTER SEARCH CURRENT
 ARCHIVES

LANGUAGE

Select Language

English Submit

FONT SIZE

ABOUT THE AUTHORS

Martini Martini

ORCID iD

<http://orcid.org/0000-0003-0934-1146>

Fakultas Kesehatan Masyarakat, Universitas Diponegoro Indonesia

Novi Astriana

ORCID iD

<http://orcid.org/0000-0001-7029-0937>

Fakultas Kesehatan Masyarakat, Universitas Diponegoro

Sri Yuliawati

ORCID iD

<http://orcid.org/0000-0001-5944-8879>

Fakultas Kesehatan Masyarakat, Universitas Diponegoro

Retno Hestingsih

ORCID iD

<http://orcid.org/0000-0001-8754-8164>

Fakultas Kesehatan Masyarakat, Universitas Diponegoro



Susiana Purwantisari

ORCID iD

<http://orcid.org/0000-0003-2156-2849>

Fakultas Matematika dan Ilmu Pengetahuan Alam, Universitas Diponegoro

ARTICLE TOOLS

 [Print this article](#) [Indexing metadata](#) [How to cite item](#) Email this article (Login required) Email the author (Login required)

EDITORIAL OFFICE

Jurnal Entomologi Indonesia (Indonesian Journal of Entomology)

Secretariat Perhimpunan Entomologi Indonesia (The Entomological Society of Indonesia)

Jalan Kamper, Kampus IPB Dramaga, Bogor 16680

Phone/Fax: +62-251 8621267

Email: editor@jurnal.pei-pusat.org; editor.jei@gmail.com[Visitor Statistic since May 2017](#)

00245469

Home > Vol 15, No 1 (2018) > Martini

Keefektifan ekstrak daun kecubung (*Datura metel* L.) dalam menghambat penetasan dan siklus hidup *Aedes aegypti* L.

Martini Martini, Novi Astriana, Sri Yuliawati, Retno Hestingsih, Susiana Purwantisari

Abstract

Datura metel L. is a type of shrub that has a wooden stem, hard, and thick. *Datura* leaves contain chemical compounds alkaloids, saponins, flavonoids, and phenols. Based on the chemical content, *datura* leaves potentially as an alternative insecticide that can replace the use of synthetic insecticides. The use of synthetic insecticides in controlling the *Aedes aegypti* L. population has had a negative impact, such as environmental pollution, public health problems, and vector resistance. The purpose of this study was to study the effect *datura* leaf extract as a biochemical insecticide on inhibiting egg hatching and life cycles of *Ae. aegypti*. The research was conducted at Entomology Laboratory, Public Health Faculty, Universitas Diponegoro. This type of research was a true experiment with four replications and with concentration treatment i.e. 125, 250, 500, 750, 1000, and 1250 ppm. The subjects of this study were egg fertile of *Ae. aegypti* which were 25 eggs in each container and the total number of samples was 800 eggs. The used method for extraction was maceration. The result of probit analysis showed the activity of amethyst extract insecticide with $LC_{50} = 199.34$ ppm and $LC_{90} = 749.08$ ppm. The result of ANOVA showed a difference in the average number of non-hatching eggs due to exposure of *datura* leaf extract ($P = 0,001$). The percentage of *Ae. aegypti* egg hatching failure was lowest at concentration 125 ppm (41%) and the highest was at concentration 1250 ppm (98%). The survival of larvae, pupa, and mosquitoes was highest at concentration 125 ppm (49.18%, 55.17%, and 43.75% respectively). In conclusion, the *datura* leaf extracts potentially as a biochemical insecticide that inhibits eggs hatching and life cycles of *Ae. aegypti*.

Keywords

Aedes aegypti; biochemical insecticide; *datura* leave; *Datura metel*

Full Text:

[PDF \(INDONESIAN\)](#)DOI: <http://dx.doi.org/10.5994/jei.15.1.50>

Refbacks

- There are currently no refbacks.

Jurnal Entomologi Indonesia is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](#).

USER

Username Password Remember me

ABOUT JEI

[Aim and Scope](#)[Editorial Team](#)[Reviewer Acknowledgment](#)[Publication Ethics](#)[Open Journal Systems: A Complete Guide to Online Publishing](#)[Editorial and Publishing Process](#)

INFORMATION FOR AUTHOR

Submission

Manuscript preparation and submission ([download](#))

Template Manuscript

Cover letter ([download](#))Article ([download](#))Short communication ([download](#))Comments to editors ([download](#))

Reference Style

Endnote ([download](#))Mendeley ([download](#))Zotero ([download](#))

INDEXING & ABSTRACTING

[SINTA \(S2\)](#)[CrossRef](#)[DOI](#)[Google Scholar](#)

Indonesian Scientific Journal Database (ISJD LIP, Indonesia)

[Indonesian Publication Index](#)

Jurnal Entomologi Indonesia

eISSN : 20890257 | pISSN : 18297722

[Science](#) [Agriculture](#)

[Perhimpunan Entomologi Indonesia \(Entomological Society of Indonesia\)](#)



S2

Sinta Score



Indexed by GARUDA

17

H-Index

14

H5-Index

1137

Citations

932

5 Year Citations

JURNAL ENTOMOLOGI INDONESIA

Indonesian Journal of Entomology

ISSN 1412-7573



Vol. 11, No. 1, March 2005



PERHIMPUNAN ENTOMOLOGI INDONESIA
(Entomological Society of Indonesia)

Penerbit:

Perhimpunan Entomologi Indonesia (Entomological Society of Indonesia)

[Website](#) | [Editor URL](#)

Address:

Editorial Office of Jurnal Entomologi Indonesia, Sekretariat Entomological Society of Indonesia Jl. Kamper, Kampus IPB Dramaga. Departemen Proteksi Tanaman, Fakultas Pertanian, IPB. Bogor 16680 Indonesia Tel/Fax: +62-251-8621267 Email: editor@
Bogor

Email:
editor.jei@gmail.com

Phone:
62-251-8621267

Last Updated :
2021-02-03

2018

 Accreditations

Search..



Page 1 of 38 | Total Records : 376

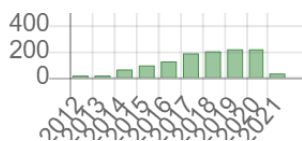
Publications	Citation
<u>Perbandingan Keanekaragaman Spesies dan Kelimpahan Arthropoda Predator Penghuni Tanah di Sawah Lebak yang Diaplikasi dan Tanpa Aplikasi Insektisida</u> S HERLINDA, WALUYO, S P. ESTUNINGSIH, C IRSAN Jurnal Entomologi Indonesia 5 (1), 96-107	53
<u>Hubungan Iklim, Kepadatan Nyamuk Anopheles dan Kejadian Penyakit Malaria</u> SUWITO, U KESUMAWATI HADI, S H SIGIT, S SUKOWATI Jurnal Entomologi Indonesia 7 (1), 42-53	53
<u>Aktivitas nokturnal vektor demam berdarah dengue di beberapa daerah di Indonesia</u> U Kesumawati Hadi, S Soviana, D Gunandini, Dwi Jurnal Entomologi Indonesia 9 (2), 1-6	47
<u>Aktivitas insektisida ekstrak buah Piper aduncum L. (Piperaceae) dan Sapindus rarak DC. (Sapindaceae) serta campurannya terhadap larva Crocidolomia pavonana (E.). (Lepidoptera ...</u> YY Syahroni, D Prijono Jurnal Entomologi Indonesia 10 (1), 39-50	34
<u>Perkembangan dan Kandungan Nutrisi Larva Hermetia illucens (Linnaeus) (Diptera: Stratiomyidae) pada Bungkil Kelapa Sawit</u> DACHMAWATI, D BUCHORI, B HIDAYAT, HEM SAUBINI, M D FAHMI	34

Publications	Citation
RACHMAWATI, D BUCHORI, P HIDAYAT, HEM SAURIN, M R FAHMI <u>Status dan Mekanisme Resistensi Biokimia <i>Crocidolomia pavonana</i> (F.) (Lepidoptera: Crambidae) terhadap Insektisida Organofosfat serta Kepekaannya terhadap Insektisida Botani ...</u> D DONO, S ISMAYANA, IDAR, D PRIJONO, I MUSLIKHA Jurnal Entomologi Indonesia 7 (1), 9–27	33
RACHMAWATI, D BUCHORI, P HIDAYAT, HEM SAURIN, M R FAHMI <u>Perkembangan dan Kandungan Nutrisi Larva <i>Hermetia illucens</i> (Linnaeus) (Diptera: Stratiomyidae) pada Bungkil Kelapa Sawit</u> Jurnal Entomologi Indonesia 7 (1), 28–41	32
YY Syahroni, D Prijono <u>Aktivitas insektisida ekstrak buah <i>Piper aduncum</i> L. (Piperaceae) dan <i>Sapindus rarak</i> DC. (Sapindaceae) serta campurannya terhadap larva <i>Crocidolomia pavonana</i> (F.) (Lepidoptera ...</u> Jurnal Entomologi Indonesia 10 (1), 39–50	30
Z Fadilla, UK Hadi, S Setiyaningsih <u>Bioekologi vektor demam berdarah dengue (DBD) serta deteksi virus dengue pada <i>Aedes aegypti</i> (Linnaeus) dan <i>Ae. albopictus</i> (Skuse) (Diptera: Culicidae) di kelurahan endemik DBD ...</u> Jurnal Entomologi Indonesia 12 (1), 31	28
E Rahmawati, UK Hadi, S Soviana <u>Keanekaragaman jenis dan perilaku menggigit vektor malaria (<i>Anopheles spp.</i>) di Desa Lifuleo, Kecamatan Kupang Barat, Kabupaten Kupang, Nusa Tenggara Timur</u> Jurnal Entomologi Indonesia 11 (2), 53	27

Page 1 of 38 | Total Records : 376



Citation Statistics



Copyright © 2017
Kementerian Riset dan Teknologi / Badan Riset dan Inovasi Nasional
(Ministry of Research and Technology / National Agency for Research and Innovation)
All Rights Reserved.



Jurnal Entomologi Indonesia

Indonesian Journal of Entomology

A Publication of The Entomological Society of Indonesia



[HOME](#) [ABOUT](#) [LOGIN](#) [REGISTER](#) [SEARCH](#) [CURRENT](#)

[ARCHIVES](#)

Home > Archives > **Vol 15, No 1 (2018)**

Vol 15, No 1 (2018)

March

Table of Contents

Articles

- [Serangan *Arthroschista hilaralis* Walk. \(Lepidoptera: Pyralidae\) pada tegakan jabon \(*Neolamarckia cadamba* \[Roxb.\] Bosser\) di Sumatera Selatan](#) [PDF \(INDONESIAN\)](#) 1
Sri Utami, Hermanu Triwidodo, Pudjianto Pudjianto, Aunu Rauf, Noor Farikhah Haneda
- [Keberhasilan hidup parasitoid *Diadegma semiclausum* Hellen dan serangga inangnya *Plutella xylostella* \(L.\) terhadap aplikasi ekstrak biji srikaya \(*Annona squamosa* L.\)](#) [PDF \(INDONESIAN\)](#) 10
Bonjok Istiaji, Djoko Prijono, Damayanti Buchori
- [Keaneekaragaman serangga pengunjung bunga pada tanaman tumpang sari kedelai dengan tanaman orok-orok \(*Crotalaria juncea*\)](#) [PDF \(INDONESIAN\)](#) 23
Sayekti Kurnia Rahayu, Supriyadi Supriyadi, Supriyono Supriyono, Retno Wijayanti, Retno Bandriyati Arni Putri, Retno Bandriyati Arni Putri
- [Populasi *Elaeidobius kamerunicus* Faust \(Coleoptera: Curculionidae\) pada beberapa umur tanaman kelapa sawit](#) [PDF \(INDONESIAN\)](#) 31
Bambang Tri Rahardjo, Akhmad Rizali, Ika Putri Utami, Sri Karindah, Retno Dyah Puspitarini, Bandung Sahari
- [Host preference fruit flies *Bactrocera carambolae* \(Drew & Hancock\) and *Bactrocera dorsalis* \(Drew and Hancock\) \(Diptera: Tephritidae\)](#) [PDF](#) 40
Dodin Koswanudin, Adi Basukriadi, I Made Samudra, Rosichon Ubaidillah
- [Keefektifan ekstrak daun kecubung \(*Datura metel* L.\) dalam menghambat penetasan dan siklus hidup *Aedes aegypti* L.](#) [PDF \(INDONESIAN\)](#) 50
Martini Martini, Novi Astriana, Sri Yuliawati, Retno Hestingsih, Susiana Purwantisari



Jurnal Entomologi Indonesia is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](#).

LANGUAGE

Select Language

English Submit

FONT SIZE

EDITORIAL OFFICE

Jurnal Entomologi Indonesia
(Indonesian Journal of Entomology)

Secretariat Perhimpunan Entomologi Indonesia (The Entomological Society of Indonesia)

Jalan Kamper, Kampus IPB Dramaga, Bogor 16680

Phone/Fax: +62-251 8621267

Email: editor@jurnal.pei-pusat.org;
editor.jei@gmail.com

[Visitor Statistic-since May 2017](#)

USER

Username

Password

Remember me

ABOUT JEI

[Aim and Scope](#)

[Editorial Team](#)

[Reviewer Acknowledgment](#)

[Publication Ethics](#)

[Open Journal Systems: A Complete Guide to Online Publishing](#)

[Editorial and Publishing Process](#)

INFORMATION FOR AUTHOR

Submission

Manuscript preparation and submission ([download](#))

Template Manuscript

Cover letter ([download](#))

Article ([download](#))

Short communication ([download](#))

Comments to editors ([download](#))

Reference Style

Endnote ([download](#))

Mendeley ([download](#))

Zotero ([download](#))

INDEXING & ABSTRACTING

[SINTA \(S2\)](#)

[CrossRef](#)

[DOAJ](#)

[Google Scholar](#)

Indonesian Scientific Journal Database (ISJD LIPI, Indonesia)

[Indonesian Publication Index](#)