

**PENDUGAAN POPULASI *Oryctes rhinoceros* L (COLEOPTERA:
SCARABAEIDAE) DI PERKEBUNAN KELAPA SAWIT
(*Elaeis guineensis* Jacq).**

Oleh

JANRI SETIAWAN G



**PROGRAM STUDI ILMU HAMA DAN PENYAKIT TUMBUHAN
JURUSAN HAMA DAN PENYAKIT TUMBUHAN
FAKULTAS PERTANIAN
UNIVERSITAS SRIWIJAYA**

**INDRALAYA
2009**

SKRIPSI

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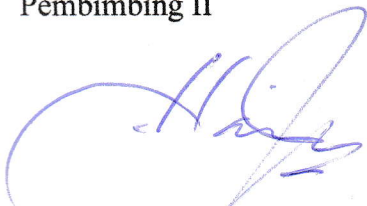
telah diterima sebagai salah satu syarat
untuk memperoleh gelar
Sarjana Pertanian

Pembimbing I



Dr. Ir. Yulia Pujiastuti M.S

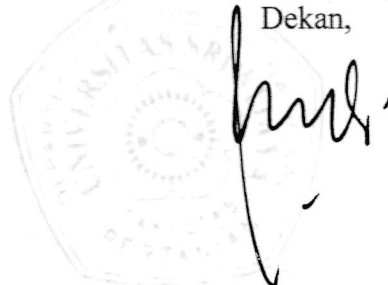
Pembimbing II



Dr.-phil.Dipl.-Ing.agr. Ir. Arinafril

Inderalaya, Oktober 2009


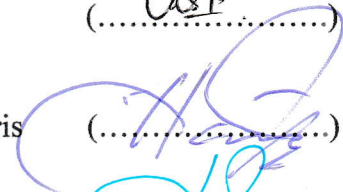


Fakultas Pertanian
Universitas Sriwijaya
Dekan,



Prof. Dr. Ir. H. Imron Zahri, M.S.
NIP. 1952102819755031001

Skripsi berjudul " Pendugaan Populasi larva *Oryctes rhinoceros* L (Coleoptera: Scarabaeidae) di Perkebunan Kelapa Sawit (*Elaeis guineensis* Jacq)" oleh Janri Setiawan Ginting telah dipertahankan di depan Komisi Penguji pada tanggal 13 Oktober 2009.

Komisi Penguji

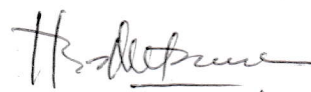
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|---|------------|---|
| 1. Dr. Ir. Yulia Pujiastuti, M.S. | Ketua | () |
| 2. Dr. -phil. Dipl. -Ing.agr. Ir. Arinafril | Sekretaris | () |
| 3. Dr. Ir. Chandra Irsan, M.Si. | Anggota | () |
| 4. Ir. Triani Adam, M.Si | Anggota | () |

Mengetahui
Ketua Jurusan
Hama dan Penyakit Tumbuhan



Dr. Ir. Chandra Irsan, M.Si.
NIP. 196502191989031004

Mengesahkan
Ketua Program Studi
Ilmu Hama dan Penyakit Tumbuhan



Ir. Hj. Rosdah Thalib, M.Si.
NIP. 19505111975032001

Saya yang bertanda tangan di bawah ini menyatakan dengan sesungguhnya bahwa seluruh data dan informasi yang disajikan dalam skripsi, kecuali yang disebutkan dengan jelas sumbernya, adalah hasil penelitian atau investigasi saya sendiri dan belum pernah atau tidak sedang diajukan sebagai syarat untuk memperoleh gelar kesarjanaan yang sama di tempat yang lain.

Indralaya November 2009

Yang Membuat Pernyataan



JANRI SETIAWAN G

SUMARRY

JANRI SETIAWAN GINTING Time Series Analysis as Coconut Beetle, *Oryctes rhinoceros* L. (Coleoptera: Scarabaeidae) Forecast Population Method in Palm Oil Estate (Supervised by **YULIA PUJIASTUTI** and **ARINAFRIL**).

Approximately 1.000 species of insects are associated with coconut worldwide. Over 40 species of coleopteran pests have been recorded – most are under effective natural control but some require interventions. In view of the increasing and devastating damage by coconut beetle (*Oryctes rhinoceros*) to coconut palms in the many countries, many efforts are made to find appropriate method to forecast its population. The basic procedures of these monitoring programs are outlined together with forecasting method.

A study to forecast coconut beetle population has been carried out in palm oil estate, near Palembang. Study is aimed to forecast population after several beetle population observations. Another aim was to assess the influences environmental factors, e.g. temperature, relative humidity, rainfall intensity, which could affect on the beetle population fluctuation.

Results showed that beetle population could decline up to 70 % due to unsuitable environmental factors. At first observation temperature was recorded 26 – 30 centigrade and 1085 larvae were found. At last observation larvae population decreased to 392 at temperature 29 – 33 centigrade. It was found that relative humidity and rainfall intensity also played important role in decreasing beetle population.

Key words: Coconut beetle, time series analysis, population forecast, monitoring programs, environmental factor

