

# Planta Tropika

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Effects of Fruit Coatings, Fungicide, and Storage Temperature on Fruit Shelf-Life and Qualities of 'California' Papaya

**SOESILADI ESTI WIDODO, SUSKANDINI R. DIRMAWATI, ZULFERIYENNI ZULFERIYENNI, RACHMANSYAH A. WARDHANA, FITRIA FITRIA, ANNISA FITRI, JEANETTE FAJRYAH**

Study on Agronomic and Economic Performance Characteristics of Cassava (*Manihot utilissima* L.) in Gunungkidul Regency Special Region of Yogyakarta

**GATOT SUPANGKAT SAMIDJO, SARJIYAH SARJIYAH, HARYONO HARYONO, REYNALDI GUSTAMI**

Callus Induction and Differentiation on Melon From In Vitro Culture with The Addition of Indole Acetic Acid and Benzyl Amino Purine Growth Regulator

**WIWIT PROBOWATI, BUDI SETIADI DARYONO**

Weeds Growth in Various Population of Sweet Corn+Peanut Intercropping

**DWI NDARU SEKAR ASIH, AGUS NUGROHO SETIAWAN, SARJIYAH SARJIYAH**

Land Management for Agriculture After The 2010 Merapi Eruption

**SRI NURYANI HIDAYAH UTAMI, BENITO HERU PURWANTO, DJAKA MARWASTA**

Effects of Planting Pattern on The Performance of Soybean Genotypes

**HERDINA PRATIWI, TITIK SUNDARI**

Impacts of El Niño Climate Anomaly on Irrigation Scheduling of Maize Crop Using Budget Models under Tropical Climate Conditions

**MOMON SODIK IMANUDIN, BAKRI BAKRI, KARIMUDDIN Y, P. RATMINI**



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# Planta Tropika

Jurnal Agrosains (Journal of Agro Science)

Planta Tropika focuses related to various themes, topics and aspects including (but not limited) to the following topics Agrotechnology, Plant Breeding, Agriculture Waste Management, Plant Protection, Soil Science, Post Harvest Science and Technology, Horticulture. Planta Tropika published two times a year (February and August) by Universitas Muhammadiyah Yogyakarta in collaboration with Indonesian Association of Agrotechnology / Agroecotechnology (PAGI). The subscriptions for one year : IDR 350.000.

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# Editorial

Journal of Planta Tropika ISSN 0216-499X published by Study Program of Agrotechnology, Faculty of Agriculture, Universitas Muhammadiyah Yogyakarta, is journal presenting scientific articles of agricultural science (Journal of Agro Science). With full sense of gratitude to the Almighty Allah, Volume 6 Number 1 for the year of 2018 has been published.

In this edition, Journal of Planta Tropika presents seven research articles in the field of Agro sciences comprising post harvest physiology, crop cultivation system, weeds management, tissue culture, land management, and climate. The scientific articles discuss about:

(1) Effects of fruit coatings, fungicide, and storage temperature on fruit shelf life and qualities of 'California' papaya, (2) Study on agronomic and economic performance characteristics of cassava (*Manihot utilissima* L.) in Gunungkidul Regency Special Region of Yogyakarta, (3) Callus induction and differentiation on melon from in vitro culture with the addition of Indole Acetic Acid and Benzyl Amino Purine growth regulator, (4) Weeds growth in various population of sweet corn+peanut intercropping, (5) Land management for agriculture after the 2010 Merapi eruption, (6) Effects of planting pattern on the performance of soybean genotypes, (7) Impacts of El Niño climate anomaly on irrigation scheduling of maize crop using budget models under tropical climate condition.

The editors would like to thank the authors, reviewers, executive editors, leaders and LP3M UMY for their participation and cooperation. Our hope, this journal can be useful for readers or be a reference for other researchers and useful for the advancement of the agriculture.

Editors

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# GUIDE FOR AUTHORS

## TYPE OF PAPERS

PLANTA TROPIKA receives manuscripts in the form of research papers in Bahasa Indonesia or English. The manuscript submitted is a research paper that has never been published in a journal or other publication.

## SUBMISSION

The submission of the manuscript is done through our journal website <http://journal.umy.ac.id/index.php/pt/index>. If you need information regarding the process and procedure for sending the manuscript, you can send it via email at [plantatropika@umy.ac.id](mailto:plantatropika@umy.ac.id). Editor's address: Program Studi Agroteknologi, Fakultas Pertanian, Universitas Muhammadiyah Yogyakarta, Jl. Ring Road Selatan, Tamantirto, Kasihan, Bantul, Telp (0274) 387646 psw 224, ISSN: 2528-7079.

## ARTICLE STRUCTURE

The submitted manuscripts should consist of 15-20 pages of A4 size paper with 12-point Times New Roman fonts, 1.5 spacing with left-right margin and top-bottom of the paper is 2.5 cm each. All manuscript pages including images, tables and references should be page-numbered. Each table or picture should be numbered and titled.

The systematic of the manuscript writing is as follows:

**TITLE** : The title should be brief and informative and written bold. Only the first letter of the words is written in uppercase. Maximum length should be 14 words.

**AUTHOR NAMES** : The author names should be written in lowercase letters (only the first letter of the words is written in uppercase) and should be written from the first author and followed by the others along with the marker of each author's affiliation.

**AUTHOR AFFILIATIONS** : The author affiliation should be written in lowercase letters (only the first letter of the words is written in uppercase) and it is written according to the order of the number marker of each author's affiliation.

**EMAIL** : Please list one of authors' email address used for paper's correspondence.

**ABSTRAK** : Abstrak is written in Bahasa Indonesia using single space in a paragraph with maximum length of 200 words. It should contain background, objective, method, results, and conclusion followed by keywords containing maximum of 5 words.

**ABSTRACT** : Abstract is written in English using single space in a paragraph with maximum length of 200 words. It should contain background, objective, method, results, and conclusion followed by keywords containing maximum of 5 words.

**INTRODUCTION** : Introduction contains background, hypothesis or problem outline, and the objective of the research.

**MATERIALS AND METHOD** : Explaining in detail about materials and method used in the research as well as the data collection and analysis.

**RESULT AND DISCUSSION** : The results of the research should be clear. State the results collected according to analyzed data. Discussion should include the significance of the results.

**CONCLUSION** : Authors are expected to give brief conclusion and to answer the objective of the research.

**ACKNOWLEDGEMENT** : If necessary.

**REFERENCES** : Single space, according to the authors' guide of *Planta Tropika*.

#### EXAMPLES ON HOW TO WRITE REFERENCES

References are written in alphabetical order according to the rules below:

##### REFERENCE TO A BOOK

Gardner, F.P., R.B. Pearce, and R.L. Mitchell. 1991. *Fisiologi Tanaman Budidaya* (Translated by Herawati Susilo). UI Press. Jakarta.

##### REFERENCE TO A JOURNAL PUBLICATION

Parwata, I.G.M.A., D. Indradewa, P.Yudono dan B.Dj. Kertonegoro. 2010. Pengelompokan genotipe jarak pagar berdasarkan ketahanannya terhadap kekeringan pada fase pembibitan di lahan pasir pantai. *J. Agron. Indonesia* 38:156-162.

##### REFERENCE TO A THESIS/DISSERTATION

Churiah. 2006. Protein bioaktif dari bagian tanaman dan akar transgenic Cucurbitaceae serta aktivitas antiproliferasi galur sel kanker *in vitro*. Disertasi. Sekolah Pascasarjana. Institut Pertanian Bogor. Bogor.

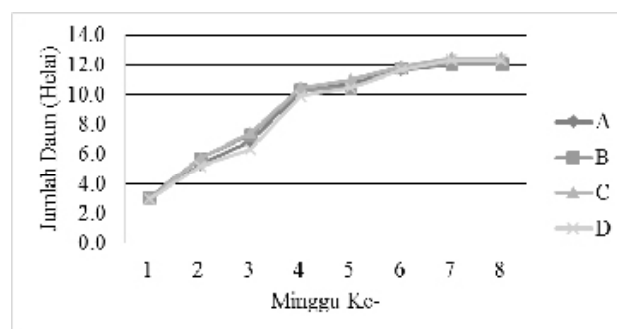
#### REFERENCE TO AN ARTICLE IN PROCEEDING

Widaryanto dan Damanhuri. 1990. Pengaruh cara pengendalian gulma dan pemberian mulsa jerami terhadap pertumbuhan dan produksi bawang putih (*Allium sativum* L.). *Prosiding Konferensi Nasional X HIGI* hal. 376-384.

#### FIGURE FORMATTING

Title should be given **below each figure**. Additional information (notes) should be written in lowercase letters except the first letter in each sentence. All figures need to be numbered respectively. Figures should be placed close to explanation/discussion about the figure.

Examples :



**Figure 1.** Number of leaves of corn plant

Notes:

A = 250 kg KCl/ha + 0 kg KJP/ha

B = 125 kg KCl/ha + 273,89 kg KJP/ha

C = 62,5 kg KCl/ha + 410,84 kg KJP/ha

D = 0 kg KCl/ha + 547,79 kg KJP/ha

Fig. 1., Fig. 2., and so on. The title of the figure is written with lowercase letters (use uppercase letter at the beginning of the title only) and without full stop (.). Additional information (notes) is placed below the figure.

## TABLE FORMATTING

The **title** of the table should be written **above the table** started from the left (left alignment). Additional information related to the table (notes) is placed below the table. The information is written in uppercase letters at the beginning only as well as the titles inside the table. Table is placed close to the discussion of the table.

Examples :

**Table 1.** Fruit compost analysis

Variable	Jatropha before composted	Jatropha after composted	SNI (National standard) for compost	Category
Water content	22,49 %	45,79 %	≤ 50 %	Qualified
pH	7,05	8,02	4-8	Qualified
C-Organic content	10,01	5,11	9,8-32 %	Not qualified
Organic matter	17,42 %	8,81 %	27-58	Not qualified
N-Total	0,97 %	2,69 %	< 6 %	Qualified
C/N Ratio	10,44	1,90	≤ 20	Qualified
Potassium	-	9,06 %	< 6 %**	Qualified

Notes: \*\*) Certain materials originated from natural organic matters are allowed to contain P<sub>2</sub>O<sub>5</sub> dan K<sub>2</sub>O level > 6% (proved with the results of laboratory analysis).