

# Planta Tropika



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# Planta Tropika

Planta Tropika focuses and emphasized on the exploration and development of the tropical plant biodiversity related to various themes, topics, and aspects as follows: Agro-Biotechnology, Plant Protection, Soil Science, Post-Harvest Science and Technology, Plant Production. 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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---

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Department of Agrotechnology, Faculty of Agriculture, Universitas Muhammadiyah Yogyakarta, Bantul, Indonesia



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 Department of Crop Production, Faculty of Agriculture and Environmental Sciences, Université Evangélique en Afrique (UEA)

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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 11 Number 2 for the year of 2023 has been published.

In this edition, Journal of Planta Tropika presents ten research articles in the field of Agro sciences comprising soil and plant nutrition, weeds management, agrobiotechnology, plant breeding, plant disease, and plant physiology. The scientific articles discuss about:

(1) Soil Physical Characteristics of The Mangrove Ecosystem in Bone Bay, Palopo City, (2) Effects of Micronutrients (Mn and Zn) Fertilizer on the Growth and Production of Sorghum (*Sorghum bicolor L.*), (3) Diversity and Allelopathic Potential of Weeds in Swampland, (4) Identification of Potential Biofertilizer and Bioremediator Bacteria from Upland Soil Based on 16s rDNA Sequence Analysis, (5) A Study on the Specific Combining Ability in Several Inbred Lines of Maize, (6) Secondary Metabolites Application of Two *Pseudomonas fluorescens* isolates and Two *Trichoderma Harzianum* Isolates in Combination Against Postharvest Anthracnose in Papaya, (7)  $\alpha$ -Mangostin Content of Mangosteen Leaves (*Garcinia mangostana L.*) Based on Different Growing Conditions, (8) Physio-Biochemical Characteristics of Prope Legitimate Seedlings of 13 Cocoa Clones Under Drought Stress, (9) Increasing the Efficiency of Cattle Bone Ash P Fertilization with Nano Technology and Its Effect on the Growth and Yield of Shallots, (10) Response of Common Bean (*Phaseolus vulgaris L.*) to Endomycorrhizal Inoculation under Different Phosphorus Application Levels in South-Kivu, Eastern DRC.

The editors would like to thank the authors, reviewers, executive editors, leaders and LRI 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. Brawijaya, 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 :

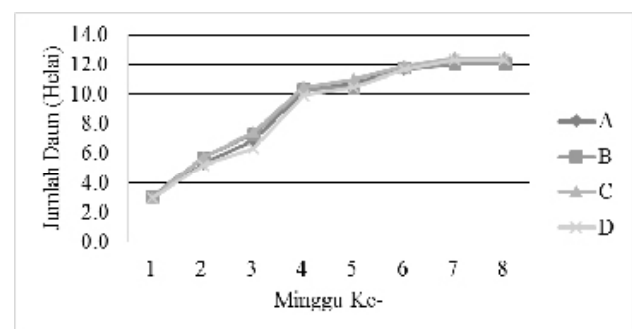


Figure 1. Number of leaves of corn plant

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  $P_2O_5$  dan  $K_2O$  level > 6% (proved with the results of laboratory analysis).