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## Preface: Proceedings of The Second International Conference on Organic Agriculture in the Tropic (2<sup>nd</sup> ORGATROP) 2021

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## **Preface: Proceedings of The Second International Conference on Organic Agriculture in the Tropic (2<sup>nd</sup> ORGATROP) 2021**

Organic farming is an agricultural system that has been developed since the 20th century as a reaction to rapidly changing agricultural practices. Organic farming is intended to overcome chemical problems both in the field and in plants. Organic farming continues to be developed by various groups to this day. This is determined by the use of fertilizers of organic origin such as compost, or green manures that emphasize techniques such as crop rotation, etc.

In tropical countries, the influence of climate is also an important aspect that must be considered. Climatic factors not only affect plant growth but also affect agricultural production. Changes in climate patterns both spatially and temporally have a significant impact on agriculture. Over the past few years, more and more organic farming initiatives have developed in tropical countries, which often emerge as a reaction to problems of soil degradation, water pollution by leaching of pesticides and nutrients, or the direct health effects of pesticides on farmers, and inappropriate (conventional) techniques. Therefore, it is important to include climate in achieving sustainable agrosystems especially in tropical countries.

Indonesia is a country where many crops are grown naturally with no external inputs, and so it is a step towards organic farming. In addition, there are many organic farming initiatives on traditionally grown crops (rice, vegetables). The Indonesian government strongly supports organic farming, including marketing and certification support. Over the past 10 years, Universitas Gajah Mada has collaborated with many institutions, organizations, and universities intensively in research on organic rice and vegetable agriculture in Java, and the holding of this International Conference is the result of that concern.

Department of Soils, Faculty of Agriculture, Universitas Gadjah Mada organizes a series of conferences in every four years. This year, the conference is focused on "Organic Agriculture as a Sustainable Agro-system to Support Agriculture Production and Food Safety Under the Threat of Climate Change". It is crucial because food safety is the basic human needed which can be gained not only from conventional agriculture but also from organic agriculture. However, the challenges of developing organic agriculture are still many, especially related to climate change, natural disasters, and the outbreaks of pests and diseases.

These proceedings from the 2nd International Seminar on Organic Agriculture in the Tropic (ORGATROP) provide an opportunity for readers to engage with a selection of refereed papers that were presented during the 2nd ORGATROP. The papers



published in these proceedings were selected from a total of 70 abstracts presented in the conference from many countries. These proceedings are divided into nine sections, namely: Sustainable Agro-ecosystem, agriculture production, and food safety, Outbreaks Pest & Diseases In Agriculture, Soil Degradation, Pollution And Security, Climate Change, Landslide, Flash Flood, Drought, Forest Fire And Volcanic Eruption, Peat Degradation And Lowland Problems, Waste Management, Socio-Economic Agricultural , IOT and Precision Agriculture.

We express our deep gratitude to the organizing committee, invited speakers, reviewers, subject editors, and student part-timer for their high dedication and continuing hard work along the series of conference events until this proceeding publication. Special acknowledgment goes to the Dean and the Vice Deans of Faculty of Agriculture for their solid support for this conference. We also thank all participants and authors for taking excellent opportunity for discussing and publishing the papers. A large number of people have to be appreciated for their work and contribution for the success of this proceeding publication. Hopefully, these proceedings will give the reader prominent information in organic agriculture from a different point of view.

Yogyakarta, 10<sup>th</sup> January 2022

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