

Proceeding of the 1st International Conference on Tropical Agriculture

Alim Isnansetyo • Tri Rini Nuringtyas
Editors

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 Springer

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Preface: Proceedings of the First International Conference on Tropical Agriculture (1st ICTA) 2016

Merriam-Webster Dictionary defines “tropical” as the characteristic of a region or climate that is frost-free with temperatures high enough to support year-round plant growth given sufficient moisture and relating to, occurring in, or suitable for use in the tropics (<https://www.merriam-webster.com/dictionary/tropical>). In the same dictionary, “agriculture” is defined as the science, art, or practice of cultivating the soil, producing crops, and raising livestock and in varying degrees the preparation and marketing of the resulting products (<https://www.merriam-webster.com/dictionary/agriculture>). Tropical agriculture refers to the agricultural activity conducted in the tropics that covers crop production, livestock, fisheries, aquaculture, postharvest, and marketing. Tropical agriculture has unique characteristics compared to that of temperate agriculture. Subsistence farming and small-scale agricultural business are conducted in the tropics, aside from cash crops which are crops grown for export. High temperatures throughout the year uniquely affect land and water management, cropping patterns, pest and disease control management, and farming business management for either crop farming, livestock, fisheries, or aquaculture.

Universitas Gadjah Mada organizes a series of conferences annually. One of the conferences is focused on tropical agriculture that has crucial roles not only in world energy and food productions but also in world carbon budget. Tropical agriculture serves as the main income-generating sector for many smallholder farmers who predominantly live in rural areas in tropical countries. The theme of this first conference was Integrated and Sustainable Tropical Agriculture that deals with broader topics such as agriculture, animal production, animal health, forestry, fisheries, and agricultural technology in the tropics.

These proceedings from the First International Conference on Tropical Agriculture (1st ICTA) provide an opportunity for readers to engage with a selection of refereed papers that were presented during the 1st ICTA. The papers published in these proceedings were selected from a total of 173 full papers presented in the conference. These proceedings are divided into six sections, namely, “Sustainable Tropical Agriculture,” “Sustainable Tropical Forestry,” “Sustainable Tropical Fishery,” “Innovative and Emerging Food Technology and Management,” “Sustainable Tropical Animal Production,” and “Sustainable Animal Health.” From

the six sections, the readers will discover the broad sense of tropical agriculture including crop production, animal production, fisheries and aquaculture, and post-harvest technology as well as the socioeconomic aspects of all production systems.

We express our deep gratitude to the organizing committee, keynote and invited speakers, reviewers, subject editors, and the head and staff of the Badan Penerbit dan Publikasi, Universitas Gadjah Mada for their high dedication and continuing hard work along the series of conference events until this proceeding publication. Special acknowledgment goes to the rector and the vice rectors of UGM 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 the first ICTA and finally this proceeding publication. Hopefully, these proceedings will give the reader prominent information in tropical agriculture from a different point of view.

Bulaksumur, Yogyakarta, Indonesia

Alim Isnansetyo

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