Opening remark of rector of IPB University

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Welcome to Bogor Indonesia

Welcome to IPB University

It is my great pleasure and honour to great you all at the Opening Ceremony of Southeast Asia Plant Protection Conference (SEAPPRO) organized by Department of Plant Protection, Faculty of Agriculture IPB University, in collaboration with The International Society for Southeast Asian Agricultural Sciences (ISSAAS) chapter of Indonesia and Universiti Putra Malaysia.

Currently we are facing the era of industrial revolution 4.0. This stage has started in the beginning of the 21st century, characterized by the development of artificial intelligence (AI), robotic development, information technology and management system, bio-technology, big data and Internet of Things (IoT). These developments resulted in disruptions of industries in many countries, while promising transformations in production and governance systems. The existence of 4.0 technology is expected to improve on-farm and off-farm activities and management as well as to solve problems on many social and economic aspects in agricultural practices.

Plants provide 80% of global calorie human intake, but it is continuously affected and threatened by pests and diseases. According to FAO, approximately one-third of global crop production is lost every year to plant pest and diseases. Beside causing yield losses, pest and diseases cause farmers worldwide spending USD 81.13 billion for pesticides as well as receiving its negative impacts to environment. In the last decades increasing records of emerging and transboundary pests spread to a number of countries and can reach epidemic proportions in which control and management require international or regional collaboration among countries.

A new emerging invasive pest fall army worm (FAW) is an example of the role of pest movement that potentially cause huge losses to farmers and impact on food security. There is a ‘scary’ feature in the emerging pathogens such as Enterobacter cloacae (Jordan) which infects human but also able to infect a broad number of plants. There are some emerging or transboundary diseases recorded in Southeast Asia that gaining more attention, such as the bacterial and fusarium wilt on banana, geminivirus on vegetables and blast disease on rice.

Ladies and Gentlement,

The concepts of integrated pest management (IPM), which focused on ecological and economic aspects of pest management, has been in practice for a long time. Implementation of IPM in modern
times should address the recent developments in agricultural technology, modern communication tools, and changing consumer trends. The use of industrial technology 4.0 such as Unmanned Aerial Vehicle (UAE) or drone for more effective and efficient spraying and fertilization, and the use of precision pest management by using Geographic Information Systems (GIS), the Global Positioning System (GPS), Variable Rate Technology (VRT), and Remote Sensing (RS) is gaining acceptance in the present high-technology era. Countries in Southeast Asia region should take the opportunities to strengthen the collaboration in sharing technologies and information of pests and diseases management for the better future in the area.

The conference has importance, in which the Southeast Asia region has the excellences:

1. Center of production of economic important commodities, such as oil palm, natural rubber, black pepper
2. Center of origin of tropical fruits such as banana, durian, rambutan, mangosteen, duku and also unique tropical plants such as coconut, Falcatoria moluccana (sengon)
3. One of the center for rice diversity
4. Represent wet tropics of Asia and has similar climatic condition

On the other hand, Southeast Asian Countries had common problems and challenges:

1. Invasive pests, for example in this year (2019): Fall armyworm, Spodoptera frugiperda on corn
2. Emerging plant diseases in various crops, for example fusarium wilt of banana, rice blast disease and begomoviruses on horticulture crops
3. Closer relation among SEA countries, and consequently more intensive trade and traffic of people, goods and services. It has implication of increase of pests, diseases, weeds risks in all countries
4. Victim of black campaign on oil palm

SEAPPRO promote exchange, consolidation and utilization of best knowledge, technology and experts network in plant protection among countries in the regions. With the spirit of Nusantara collaboration, plant protection scientific community hopefully will be able to strengthen development of science and technology and agriculture in Southeast Asian Countries.

Finally I expressed my sincere gratitude to all participants who attended the conference of the SEAPPRO 2019.

It is now my pleasure to declare that this seminar is officially opened and wish you all to enjoy the event.

Rector of IPB University – Indonesia
Prof. Dr. Arif Satria, M.Si