

12<sup>th</sup> International Conference on

## AGRICULTURE AND HORTICULTURE

July 09-10, 2018 Sydney, Australia

**ENSO effect on production of rambutan (*Nephelium lappaceum L.*) in Indonesia****Yeli Sarvina and Kharmila Sari**

Indonesian Agency of Agricultural Research and Development, Indonesia

The alteration rain fall in Indonesia as an impact of climate variability and climate change has given huge impact to agriculture sector, not only on food crops, but also on horticulture crops. El Nino-Southern Oscillation (ENSO) is an inter-annual factor that influences rainfall variability in Indonesia. The ENSO occurrences increase in its intensity and frequency. This paper aimed to identify the influence of ENSO on rambutan (*Nephelium lappaceum L.*) production in Indonesia. Rambutan is one of the most important tropical fruits in Indonesia. The data analyzed are time series production data all provinces and ENSO phase data. The data was analyzed by main island base (Sumatra, Java, Bali and Nusa Tenggara, Kalimantan, Sulawesi, Papua and Maluku). The analyses reveal that annual production rambutan decreased on El-Nino years. Analyses by island also showed that productions decreased in all islands. The influence of El-Nino on production in Sumatra islands is less significant than other islands. Several researches have been reported that, there is another factor that influences Sumatra rainfall significantly, namely Indian Oscillation Dipole (IOD). ENSO have influenced the production of rambutan in Indonesia. Therefore, efforts to understand the relation of ENSO and production should be assessed continuously.

**Biography**

Yeli Sarvina has graduated from Flood Risk Management Erasmus Mundus Master Program. Presently, she is working as an Agrohydrometeorology Researcher at Indonesia Agro-climate and Hydrology Research Institute, Indonesia, Agency for Research and Development, Ministry of Agriculture, Indonesia.

ysvina@yahoo.com

**Notes:**