

## 4<sup>th</sup> International Conference on **Biodiversity**

June 15-17, 2015 Las Vegas, USA

### Genetic diversity of local cultivars and improved varieties of sweet potato in Indonesia

**Muhammad Jusuf Yakub, D Harnowo, E Ginting, Minantyorini, I M J Mejaya and Haryono**  
Indonesian Agency for Agricultural Research and Development, Indonesia

Sweet potato (*Ipomoea batatas*) is one of the major food sources in Indonesia. Based on the phenotypic diversity in local cultivars, Indonesia is considered to be a secondary center of genetic diversity of sweet potato. Local cultivars and landraces serve as source of genetic variability, they could be used as gene donors in variety improvement program. Therefore, the collection and germplasm conservation of sweet potato are very important in order to maintain the full range of genetics variability within the species. Indonesian Agency for Agricultural Research and Development (IAARD) through its research institutions have been exploring, collecting, conserving, evaluating sweet potato germplasm and developing improved varieties. To date, 1321 accessions have been introduced to gene bank at IAARD and these materials represent native cultivars from several provinces in Indonesia. Morphological characterization has been done on all accessions while DNA analysis has been carried out on 600 accessions under the collaboration with Kyushu and Okinawa National Research Center of Japan. All of the collected accessions are being conserved in the field and concrete pavement. Until now, twenty six varieties of sweet potato have been released in Indonesia for different purposes such as for table uses, processing (industrial) types and pig feeds. Among these 26 varieties, fourteen varieties are for table uses, three varieties for processing purposes, two varieties with high beta carotene content, three varieties with high anthocyanin content and four varieties adapted to high altitudes.

#### Biography

Muhammad Jusuf Yakub has completed his Ph.D at the age of 37 years from Mississippi State University, USA. Now, he is the Researcher at Indonesian Agency for Agricultural Research and Development especially working on sweet potato breeding at Indonesian Legume and Tuber Crops Research Institute based in Malang, East Java, Indonesia. He has published more than 15 papers in reputed journals.

[m.jusuf751@gmail.com](mailto:m.jusuf751@gmail.com)

#### Notes: