

## **Soil Surface Insect Diversity of Tobacco Agricultural Ecosystem in Imogiri, Bantul District of Yogyakarta Special Region, Indonesia**

**Authors :** Martina Faika Harianja, Zahtamal, Indah Nuraini, Septi Mutia Handayani, R. C. Hidayat Soesilohadi

**Abstract :** Tobacco is a valuable commodity that supports economic growth in Indonesia. Soil surface insects are important components that influence productivity of tobacco. Thus, diversity of soil surface insects needs to be studied in order to acquire information about specific roles of each species in ecosystem. This research aimed to study the soil surface insect diversity of tobacco agricultural ecosystem in Imogiri, Bantul District of Yogyakarta Special Region, Indonesia. Samples were collected by pitfall-sugar bait trap in August 2015. Result showed 5 orders, 8 families, and 17 genera of soil surface insects were found. The diversity category of soil surface insects in tobacco agricultural ecosystem was poor. Dominant genus was *Monomorium* with dominance index score 0.07588. Percentages of insects' roles were omnivores 43%, detritivores 24%, predators 19%, and herbivores 14%.

**Keywords :** diversity, Indonesia, soil surface insect, tobacco

**Conference Title :** ICNSE 2016 : International Conference on Natural Science and Environment

**Conference Location :** San Francisco, United States

**Conference Dates :** June 09-10, 2016