

## Master thesis



# Oil Palm pollinators and pollination ecosystem service within a tropical lowland forest transformation landscape of Sumatra, Indonesia



**Oil palm** is a major crop in Indonesia, but production can come at the cost of **biodiversity loss** and **ecological degradation**, making it a critical issue to conservation. Despite oil palm's economic significance and ecological impact, little is known about biotic factors in its production, in particular how the ecosystem service of pollination from insects contributes to yield. Only in the last half century was it established that oil palm is pollinated by curculionid beetles, which have been introduced in Indonesia. Still, **little is known about the roles of native pollinators and forests**, the latter of which can provide habitats for native and introduced pollinators. Understanding these relationships could improve our knowledge of how oil palm may fit into a **diversified agroecological landscape** and the **role of pollination in yield gaps** in palm oil production. Such knowledge is critical for developing conservation strategies that factor in the needs of the farming community as well as the natural and agro-ecosystem within the larger socioeconomic and agroecological landscape.

We are looking for a Master's student to conduct a research project investigating the role of pollinators in oil palm yield on a smallholder farm in Sumatra, Indonesia. The student will use field experimental methods such as size-based **insect exclusion** and **camera traps** to investigate the **contributions of different insect groups** in pollinating oil palm flowers and the **effect of distance to neighboring forest**. This project is part of the Collaborative Research Center 990: Ecological and Socioeconomic Functions of Tropical Lowland Rainforest Transformation Systems (CRC 990 EFForTS), a multi-disciplinary research collaboration between the University of Göttingen and the Indonesian universities Bogor Agricultural University, the University of Jambi, and Tadulako University.

Fieldwork will take place from **July–October 2018** in Jambi Province, **Sumatra, Indonesia**. You will work in the field with a smallholder oil palm farmer to conduct pollinator exclusion and hand pollination field experiments. Experience **working abroad** and **in the tropics** would be advantageous.

**If you are interested, please submit a letter of interest and CV to us by 16 March 2018:**

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