

CRC 990 Ecological and Socioeconomic Functions of Tropical D) E(G **Lowland Rainforest Transformation Systems** Sumatra, Indonesia

Z02

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Aim: To provide CRC 990 with meteorological data from core and reference sites

Climatology of Jambi (1960-1990):

300 —	Walter-Lieth diagramm Jambi (Sultan Taha) 1.63°S, 103.65°E, 25 m (FAO)	
	Precipitation Page=2102 mm	- 140

Rainfall and Air Temperature in Jambi (July-August 2013):





Meteorological stations at core plots

• 1 meteo station in each core plot

Plot distribution / core sites

• 2 Landscapes:

1) Harapan 2) Bukit Duabelas

•4 Transformation systems





Meteorological stations at reference sites

- 5 reference meteo stations :
 - Harapan landscape:
 - Forest: Reki
 - Transformation Systems: Pompa Air (temporary location)
 - Bukit Duabelas landscape: _____
 - Forest: Permatang Kabau Ranger Station
 - Transformation Systems: Lubuk Kepayang

F = forest

O = oil palm

R = *rubber plantation*

J = *jungle rubber*

Manual chamber Plot Scheme in Core Sites

•4 replicates for each landscape and transformation system → 16 core sites per landscape → 32 core sites in total

- Variables measured (1 Hz, Average: hourly data):
 - Air Temperature
 - Relative humidity
 - Soil temperature
 - Soil moisture









Variables measured (1Hz, Average: 10 min. data):

- Wind speed, direction (3.5 m) ____
- Net radiation (3m) ____
- PAR (3m) ____
- Short wave radiation (3m) —
- Air Temperature (0.5 and 2 m) ____
- Relative Humidity (0.5 and 2 m) —
- Soil Moisture (x3 0.3m) ____
- Soil Temperature (x3 0.3m) —
- Rainfall (x2) ____
- Air Pressure _____

University of Jambi

Soil Heat Flux ____

All measurements available from June/July 2013







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