

Brief report on Buriram experiment

Date: 23 and 24 of June 2014

Objective

take soil sampling after spray herbicide (28-29 June 2014)

Physical-chemical

Soil nematofauna

Soil micro fauna

measurement soil moisture

Sentek mobile

TDR mobile

Work on the last mission 23-26 June 2014

1. Make study area

Select 5 colors to paint in study area and paint at 150 cm.

Study area will be 7 tree x 4 line



Paint color at 150 cm.
in each treatment

Treatment	T0 = Control	(T)	white
	T1 = Mucuna	(M)	red
	T2 = Caeruleum	(CC)	blue
	T3 = Pueraria	(P)	yellow
	T4 = Cassava	(CA)	pink

2. Install 2 sentek access tube row/inter row

Sentek access tube in the row and inter row - install at the first line in the study area between tree number 2 and 3, 170 cm depth.



The result of mission on 7-9 July 2014

Position for all the soil sampling in study area beginning at the first line where install sentek access tube (layout figure -1)

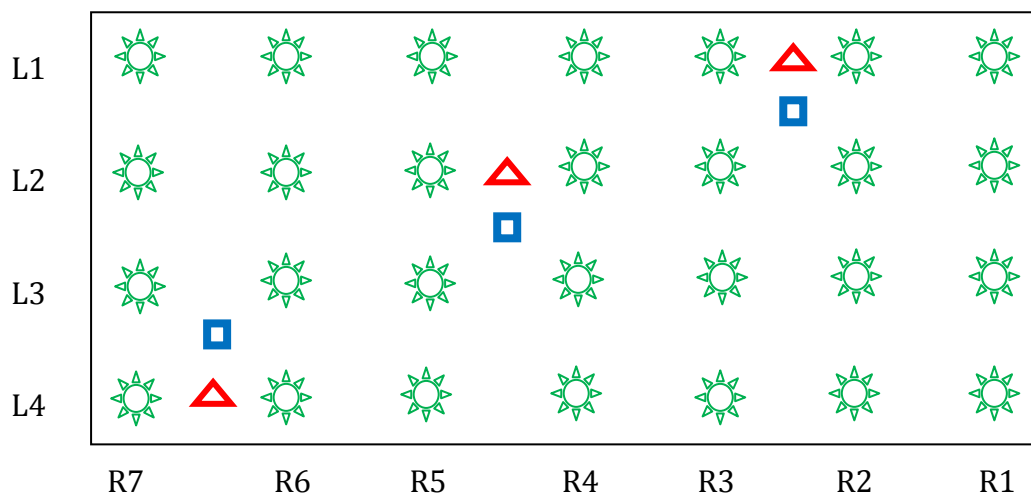


Figure 1 : Study area layout 7 trees X 4 lines = 28 trees

- △ Position to take soil sample in row
- Position to take soil sample inter row

1. Soil Nematofauna (Som)

- 0-10 in each plot (20 samples) originated from a composite samples
- But take the sample separate not use the same samples of physical-chemical.
- Because those nematode samples must keep in the freeze as soon as possible.

2. Soil physical-chemical sampling (Kae+Vlad)

Samples the soil with bulk density cylinder 0-5 cm.

- Use 2 cylinder/2 first (0-5,5-10 cm) in each position because just one cylinder it's not enough for all soil analysis.
- Prepare soil microbial samples



- Root biomass, physical analysis will do at Khon Kaen.

3. Soil micro fauna sampling (Kasem+Kiki)

Take off the litter (if exist)

Dug a 25*25 cm-monoliths (Method TSBF)

- 3 holes only in the inter-row
 - 2 Hole 0-10/10-20 cm
 - 1 hole 0-10/10-20 /20-30
- Collect with forceps all visible organisms in the litter and in the different layers (do not pool the layers)
- Stored the samples in 70° alcohol before to be identified



4. Soil moisture measurement

- Sentek mobile (Kasem)
- TDR mobile measure 3 line cover row –inter row each 2 m. (1-20 m.)

Use the first line in study area only but difference tree number

- The first line between tree no. 2-3 (near sentek access tube)
- The second line between tree no. 4-5
- The third line between tree no. 6-7



Agenda 21-25 July 2014

- Soil preparation for cultivate inter crop
- Cultivate all the inter crop in the trial.