

## **NGEE tropics BNL-STRI leaf traits by leaf age project – leaf sampling protocol for LMA and CHN**

Leaf discs are collected in small envelopes with individual numbered barcodes. All LWP, Aci and AQ leaves measured have samples collected for CHN. Minimum fresh weight sample requirements is 100 mg.

### **Equipment required:**

Balance  
Spare batteries (4 x AA)  
Weighing cup  
Disc cutters (aka cork borer set)  
Rubber stopper  
Large cable tie (for poking discs out of cutters)  
Notebook or record sheet  
Pen  
Extra unlabeled envelopes (to replace very wet envelopes)  
Clear tape (for envelope repair and re-sticking barcodes)  
Brown paper bags (for holding sample envelopes).

### **What to record:**

Barcode, analysis type (LWP, ACi, AQ), species, cutter size (6-15), number of discs, fresh weight (g)

### **Process notes:**

To set up balance, take off travel lock (switch on underside). Set in stable position and shelter from wind (preferably indoors on concrete floor).

Select largest cutter to sample leaf avoiding midrib. On large leaves take 4 x #15 size discs; on smaller leaves take what is possible.

Place samples in brown bag labeled with date, location, sample type, project, contact details.

### **Drying:**

At San Lorenzo place all samples in oven and turn on low heat. Turn off after a few minutes and take samples out after ~5 minutes. On return to Tupper, place in 60°C oven.