

Leaf sampling for DNA fingerprinting

DNA fingerprinting is an extremely sensitive method for sugarcane variety identification. The following guidelines should be followed when collecting leaf samples for DNA fingerprinting analysis at AGRF.

1. Collect from the youngest leaf (half- or fully-unfurled; Image 1) and ensure it is free from disease and insects.

2. Remove the midrib (Image 2).

3. Cut leaf blade to length to fit in the collection tube (Image 3).

NB: Do not rub fingers along the leaf blade. Remove portion of leaf blade that has been in contact with fingers.

4. Label the collection tube as follows: 'Clone name_Region_number' and the **date** of collection.

Eg: If 3 sources of Q96 are to be sampled from the North, the 3 tubes would be labelled as:

Q96_N_1 Date

Q96_N_2 Date

Q96_N_3 Date

5. Create a spreadsheet (SRA internal use example **Table 1.**) according to which clones and plots the samples were taken from, and return to George Piperidis by email; **include Purchase Order number.**

George will notify AGRF via their website that these samples are being sent. This will generate a sample submission form which will then be sent to you.



Image 1:
Cut
youngest
leaf.

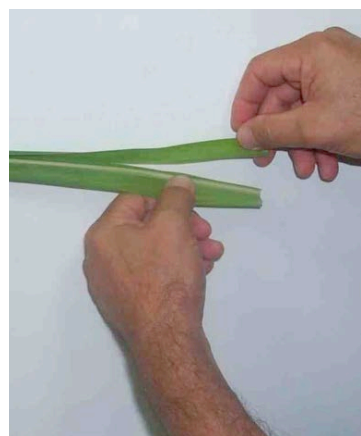


Image 2:
Remove
mid-rib.

| Date | Clone | Region | Batch No. | Sample No. | Labelled | Trial | Row | Plot | Result |
|----------|-------|----------|-----------|------------|----------|----------|-----|------|--------|
| 15.03.12 | Q244 | Southern | 1 | 1 | Q244_S_1 | BIN09-32 | 13 | 10 | HIT |

NB: The AGRF sample submission form and SRA Purchase Order form **MUST** accompany the leaf sample(s) to AGRF.

6. Send the samples and AGRF sample submission form by overnight courier to the following address:

John Stephen/ Paul Gooding
C/O AGRF Ltd
Plant Genomics Centre
Junction 2 Hartley Grove
University of Adelaide
Glen Osmond SA 5064



Image 3:
Put leaf
into
tube.

