

CROP SAMPLING PROTOCOLS FOR MICRONUTRIENT ANALYSIS

PEARL MILLET SAMPLING PROTOCOL

FIELD PROCEDURE

- 1. Familiarize the field team with the Precautionary Notes on Avoiding Contamination.
- 2. To obtain a truly representative sample, sib-mate through hand pollination with bulk pollen collected from 50–60 plants and crossed on 20 plants of the same entry. When panicles develop, cover with clean paper bags to reduce exposure to dust.
- 3. When sib-mated plants have reached physiological maturity (85–90 days after planting), harvest sib-mated panicles (with paper bags on) and place them in clean, new brown paper bags.

IN THE LABORATORY

- 4. Dry the panicles in their paper bags in a clean, dry location in full sunlight.
- 5. Remove the grains from the panicles with a thresher.
- 6. Manually clean the seed of any panicle residue.
- 7. Collect a representative grain sample of 100 grams for analysis (use a sample splitter, if one is available; if not, refer to *Collecting a Representative Sample* and Figure 1 in **Precautionary Notes on Avoiding Contamination**). Package samples in clean, new, properly labeled, paper #1 coin envelopes, and store them in a clean, dry, insect-free location until ready for analysis.

For more information, contact:

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