TUBER AND ROOT CROP SAMPLING PROTOCOL
POTATO AND SWEETPOTATO

FIELD PROCEDURE

1. Familiarize the field team with the Precautionary Notes on Avoiding Contamination.

2. Randomly collect 30 medium-sized tubers per genotype from different plants growing in the same field.

IN THE LABORATORY

Prepare three compound samples per genotype:

3. Wash the tubers with plain tap water and then rinse with deionized water.

4. Dry the tubers with paper towels. Peel and cut each tuber longitudinally into four wedges; each wedge represents one sample. Or, refer to Collecting a Representative Sample and Figure 1 in Precautionary Notes on Avoiding Contamination: Divide each root or tuber into four roughly equal parts, discard two diametrically opposite quarters, and combine the remaining quarters as a representative sample. (To account for variation between roots or tubers on the same plant, combine diametrically opposite quarters from several tubers or roots from the same plant).

5. Slice each wedge with a stainless steel slicer. Mix the slices manually, and collect one 50 gram sample.

6. Cut the slices into smaller pieces, and place the sample in a clean Petri dish. Dry the sample in an oven at 80°C for at least 24 hours.

7. Weigh the dried samples, then grind them with a non-contaminating mill.

8. Package the ground samples in clean, new, properly labeled paper bags, and store them in a clean, dry, insect-free location until ready for analysis.

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