

# CLIENT GUIDELINES

## Field Sampling for Microbiological Analysis

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The information in this guideline is being provided to you as a resource to enable you to develop a sampling plan for your operation prior to sampling and sending your sample to PrimusLabs.com for analysis. This is not a complete procedure however, but it is based upon the requirements of FDA's Pesticide Analytical Manual to assist in obtaining a statistically representative sample for analysis.

*The analytical results for these samples are representative only of the actual sample sent to PrimusLabs.com (please see the Disclaimer of Warranties provided with the final approved results or on our web site – [www.primuslabs.com](http://www.primuslabs.com)).*

### General Information:

1. There are no requirements on the minimum or maximum number of acres that must be included in a sample.
2. If a field is traversed by a road, whether paved or unpaved, greater than 8 feet wide, then the field shall be treated as two separate fields and two samples must be taken.
3. All samples shall consist of 9 - 15 sub-samples, taken randomly throughout the entire plot to obtain a representative sample of the entire plot.
4. The sampled commodities shall be trimmed as they would be found in a retail establish.
5. New rubber gloves shall be used for each sample.

### Sampling:

1. Put on a new pair of rubber gloves.
2. Enter the field within two to ten feet of the corner you have chosen as the start point.
3. Proceed in a zigzag pattern through the field ensuring that the sample is representative of the entire field.
4. The sample shall consist of 9 - 15 sub-samples. Each sub-sample shall be of sufficient quantity to ensure that the attached commodity list requirements (see Attachments A) have been met.
5. Place each sub-sample into a polyethylene sample bag and seal the bag.
6. Record the GPS coordinates for each sub-sample taken.
7. Ensure that each sample is specifically identified.
8. Place the sample in a cooler with ice packs for transportation to the laboratory. If using water based ice, double bag the sample and the ice to minimize the chance of cross-contamination.

## Attachment A

Commodity	Sub-Sample Instructions <sup>1</sup>
<b>Artichokes</b>	Cut 1 mature artichoke at base, do not include leaves
<b>Avocado</b>	Select 1 mature avocado
<b>Bell Peppers</b>	Select 1 mature pepper
<b>Beets</b> (Table)	Pull a beet, gently brush off all soil, keep leaves intact
<b>Bok Choy</b>	Cut a ground level, remove first 3 outer layers of leaves
<b>Broccoli</b>	Cut from stalk about 6" below the florets, remove any leaves
<b>Brussels Sprouts</b>	Select 2 mature, fresh sprouts from each plant
<b>Cabbage</b> (Green, Red, Savoy)	Cut at ground level, remove outer leaves as needed
<b>Cantaloupe</b>	Cut from stem and brush off all soil
<b>Cardoon</b>	Cut at ground level, remove leaves from the bottom area and then trim off the top portion where it starts to leaf out
<b>Carrots</b>	Pull a carrot, shake off all soil, trim off the green tops
<b>Cauliflower</b>	Cut as close to the head as possible, remove the leaves
<b>Celery</b>	Cut at ground level, remove spreading outer ribs and trim off the top portion where it starts to leaf out
<b>Chives</b>	Cut at ground level, shake off all soil, remove all dead or dirty leaves
<b>Cilantro</b>	Cut at ground level, shake off all soil, remove all dead or dirty leaves
<b>Collard Greens</b>	Cut bundle at ground level, shake off all soil, remove dead or dirty leaves
<b>Corn</b>	Select an ear, leave husk in place
<b>Cucumber</b>	Select a mature cucumber, shake off all soil, remove all leaves
<b>Daikon</b>	Select mature daikon, trim off the leafy part, brush off all soil, if less than 5" take entire daikon, if greater than 5" cut as needed to ensure a 5" – 8" section, alternate sections taken when cut
<b>Dandelion Greens</b>	Cut bundle at ground level, shake off all soil, remove dead or dirty leaves
<b>Eggplant</b>	Select 1 mature eggplant
<b>Endive</b>	Cut at ground level, remove roots and damaged or dirty leaves (usually grown and sampled with Escarole)
<b>Escarole</b>	Cut at ground level, remove roots and damaged or dirty leaves (usually grown and sampled with Endive)
<b>Fava Beans</b>	Sample 3 bean pods from various areas of the plant
<b>Fennel</b> (Anise)	Cut at ground level, remove spreading outer ribs and trim the top portion where it starts to leaf out
<b>Gailan</b> (Choy Sum)	Cut at ground level, brush off all soil, leave whole plant intact
<b>Grapes</b>	Select 5 ripe grapes, select from different areas on each vine
<b>Green Beans</b>	Sample 5 mature beans from various areas of the plant
<b>Green Onions</b>	Pull bunch, shake off all soil, remove dead and damaged leaves
<b>Honeydew Melon</b>	Cut from stem and brush off all soil
<b>Kale</b> (Garnish)	Sample 4 leaves from various areas of the plant, sample only fresh, undamaged leaves
<b>Kale</b> (Oriental)	Cut at ground level, remove roots and damaged or dirty leaves
<b>Kohlrabi</b>	Cut at ground level, shake off all soil, leave whole plant intact
<b>Leeks</b>	Pull the leek, trim roots, shake off all soil, trim the tops to no more than 6" of leaves, remove outer 2 leaves to expose white portion of the leek
<b>Lettuce</b> (Butter, Boston, Bibb)	Cut at ground level, remove damaged or dirty leaves (2 layers maximum)
<b>Lettuce</b> (Head, Iceberg)	Cut at ground level, remove outer wrapper leaves, shake off all soil
<b>Lettuce</b> (Red & Green Leaf)	Cut at ground level, remove 2 – 3 layers of outer leaves

<b>Commodity</b>	<b>Sub-Sample Instructions<sup>1</sup> (cont.)</b>
<b>Lettuce</b> (Romaine)	Cut at ground level, remove damaged or dirty leaves (2 layers maximum)
<b>Mango</b>	Select 1 mature mango
<b>Mint</b>	Cut several stalks from various areas of the plant, sample only fresh, clean leaves
<b>Mustard Greens</b>	Cut bundle at ground level, shake off all soil, remove dead or dirty leaves
<b>Napa Cabbage</b>	Cut at ground level, remove first 3 layers of leaves
<b>Onions</b> (Bulb)	Select mature onions, shake off all soil, trim the roots and stem
<b>Parsley</b>	Cut bundle at ground level, shake off all soil, remove dead or dirty leaves
<b>Peas</b>	Sample 3-5 mature bean pods from various areas of the plant
<b>Peppers</b> (Non-Bell)	Sample 1 mature pepper, cut stem close to the pepper
<b>Radicchio</b>	Cut at ground level, Trim roots, remove all but 2 layers of outer leaves
<b>Radishes</b>	Select mature radishes, shake off all soil, keep leaves intact
<b>Romanesco</b>	Cut from stalk about 5" below the flowers, remove any leaves
<b>Snap Beans</b>	Sample 5 mature beans from various areas of the plant
<b>Snow Peas</b>	Sample 5 mature bean pods from various areas of the plant
<b>Spinach</b>	Cut bundle at ground level, shake off all soil, remove dead or dirty leaves
<b>Strawberries</b>	Select 3 mature, ripe, undamaged strawberries
<b>Summer Squash</b> (Yellow, Zucchini)	Select a mature squash, cut stem close to the squash, remove the flower, shake off all soil
<b>Swiss Chard</b>	Cut bundle at ground level, shake off all soil, remove dead or dirty leaves
<b>Tomatillos</b>	Sample a mature tomatillo
<b>Tomatoes</b> (Cherry, Grape)	Sample 3 ripe, undamaged tomatoes from various areas of the vine
<b>Tomatoes</b> (Other than above)	Sample 1 ripe, undamaged tomato
<b>Tree Fruit</b>	Select 1 mature fruit from the top, center and lower sections of each tree.
<b>Turnip Greens</b>	Cut bundle at ground level, shake off all soil, remove dead or dirty leaves
<b>Watercress</b>	Cut bundle at ground level, shake off all soil, remove dead or dirty leaves
<b>Watermelon</b>	Cut from stem and brush off all soil

<sup>1</sup> Sub-Sample Instructions – these instructions apply to each of the 9-15 sub-samples taken in 1 sample.