

Soil Testing Protocol for HSP Recipients

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June 22, 2020

Have you received an HSP grant? Are you wondering what to do next?

Once your grant has been executed and **before** you implement any of your practices, you need to take soil samples to measure the soil's baseline organic matter content. You will need to take soil samples 3 times over the course of your project. You should take the soil samples at the same time of the year every year. You should not take soil samples right after major rain events or right after you've applied soil amendments like manure.

How do you take soil samples? Here's the CDFA's protocol:

First of all, here's what you need to bring to the field:

- Plastic buckets
- Soil sample bags or one-gallon freezer storage bags (one bag per sample)
- Clipboard and papers for recording
- Permanent marker
- Straight shovel or soil probe

Where should you take your samples?

You should check your grant agreement to see how many soil samples you said you would take. Usually, it's 1 sample per APN or per field.

Next, mark an area of 30' by 30'. Take samples from 9-10 locations within that sampling unit. You can pick your locations by either:

- Walking in a zig-zag pattern
- Dividing the field into 9 grids of 10' by 10' and collecting one sample from each grid

Once you've chosen a location, here's how you can take a sample:

1. Remove any vegetation, litter, or crop residue
2. If you use a shovel:
 - a. Use the shovel to dig a small hole 8" deep. From the side of the hole, take a vertical rectangular slice of soil 8" deep and 2" thick. Remove any extra soil to ensure that the sample is the same width at the top and bottom of the slice.



Pistachio grower Michael Banducci takes a soil sample in Kern County

3. If you use a soil probe:
 - a. Twist the probe into the ground until the probe is 8” deep.
4. Place sample into clean bucket
5. Go to the next location and repeat until you finish all 9-10 sampling locations.
6. Mix soils in the bucket and pour at least 6 cups/1 lb of soil into the sample bag.
7. Label the sample bag with the APN, sampling date, and farm name.

Now that you have your sample, send it to a soil lab nearby that uses UC methods. Tell the lab that you’ll need results for the soil’s organic matter content.

For more information, reach out to me at sashroder@ucanr.edu or 661-903-9442. I can help you take your soil samples and find a local soil lab. For more information, read through the grant manual: <https://www.cdfa.ca.gov/oefi/healthysouils/docs/2020-HSPIncentives-GAPManual.pdf>

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