Soil Sampling Directions (By Dr. Sebastian Fajardo)

1- Identify the plant you want to sample.
Things to consider: prioritize symptomatic plants showing classic Phytophthora symptoms such as yellowing, wilting, and dieback (few dead branches, starting from the tip). Samples from dead plants may work, but sometimes Phytophthora is no longer present in the vicinity once the plant has been dead for weeks. Alternatively, sample species of interest/concern or individuals sourced from Phytophthora-positive nurseries.

2- Before taking the sample, make sure to use clean tools by disinfecting them with Alcohol 70% or Quaternary Ammonium. Clean all of the soil debris by removing it with a brush or pick.
Things to consider: A small shovel or a trowel are always good options for taking soil samples. Gallon freezer Ziploc bag are the best options, due to they can handle the weight of the sample and are not easily pierced. Other brands are ok, but make sure they are of the freezer type.

3- Ideally the sample should be taken within the restoration basin and no further than 4in (10cm) from the main stem of the plant and no deeper than 8in (20 cm) deep. Fill between 1/4 to 1/2 of the gallon ziploc bag, which is approx. 32 oz. (1L) of soil. Avoid big rocks, leaf litter and wood debris. Make sure to completely seal the bag before transport. Coolers are a good way to transport soil samples from the field.
Things to consider: If you are in a restoration site, and you want to avoid further damage to the individual, make sure to avoid root material as much as you can. If the plant is to a point of no return or concern of Phytophthora presence is high, make sure to incorporate root material.

4- Before sending, store the sample in a dry cool area, avoiding direct sunlight.
Things to consider: If samples are not going to be sent in the first 24-48 h of taking the sample leave the bags open and make sure to avoid cross contamination with any other sample you have taken. If bags remain sealed, there is a risk that samples can become moldy and reduce the chances of finding Phytophthora later in the lab.