



# *THE SPOTT*

The Spott Laboratory

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## Collection guidelines and pricing for leaf samples for gender analysis.

IMPORTANT! THIS PROCEDURE REQUIRES USE OF NEW UNCONTAMINATED COLLECTION MATERIALS (BAG, VIAL, ENVELOPE) AND TOOLS THAT HAVE BEEN STERILIZED WITH A **10% BLEACH SOLUTION!**

**DO NOT SUBSTITUTE ALCOHOL FOR BLEACH!** Alcohol may be used to remove oily or resinous material from tools prior to sterilization, **BUT IT DOES NOT DESTROY CONTAMINATING DNA!!!**

Avoiding cross contamination between samples is VERY IMPORTANT! qPCR technology is extremely sensitive, able to detect and amplify a single copy of the target code of DNA. Any tools that will touch the samples, i.e. scissors, razors, etc. MUST be washed with a **10% BLEACH** solution to destroy any contaminating DNA. If possible, try to avoid actually touching the leaves being collected for samples. If touching the sample is unavoidable, use rubber gloves and change gloves between handling each sample. The preferred sample size is one full leaf, minimum sample size is 1 leaflet, or “finger” of a leaf.

1. First, if there are multiple plants and they are in close proximity and/or touching one another, spray the plants heavily with water to wash any contaminating DNA from neighboring plants and allow them to dry.
2. If using scissors to collect multiple samples, prepare a rinse cup of **10% bleach** solution, and two rinse cups of water to rinse scissors between samples. Use a fresh, clean, sealable bag, envelope, or vial for each sample to be collected. If you must touch the sample, use a fresh pair of rubber gloves to handle each sample.
3. Label the sample bag/envelope/vial with identifying information (strain/seed/plant#) of the plant to be sampled.
4. Open and hold the bag or vial under or around the leaf sample to be collected.
5. If possible, use the bag or envelope to grasp the leaf and pull/pinch it away from the plant and seal the bag/envelope. If pinching the leaf, be careful not to puncture the bag with fingernails doing so could contaminate the sample.
  - If you must use scissors, rinse them in clean water, then **10% bleach solution**, then water again. Cut the sample from the plant, dropping it into the bag/vial without touching it, then seal the bag/vial.
6. If collecting multiple samples, change gloves, get a new bag/envelope/vial, rinse the scissors in the water, bleach, water sequence, then repeat Steps 3 – 6.

If you have any questions about sample collection, please call 269-459-6462.

Receive a free membership with 20 samples for sex testing.