

SAMPLE STORAGE/PACKAGING/SHIPPING PROCEDURES FOR HONEY BEES

Ship overnight or early in the week (Monday or Tuesday) to avoid unpredictable storage temperatures over the weekend. Specimens will likely decay due to secondary bacteria or fungi, which thrive under warm, humid conditions. Genotyping and pathogen testing might be difficult to impossible on decayed specimens. Below are the general guidelines for sending specimens to NAGC.

Whole body (honey bees only)

1. Honey bees should be placed in a leak proof container such as a 50ml conical tube. Have the tubes labeled prior to collection.
2. Label each conical tube with **Submitter Name, Hive Name/Number, and Date/Initials of Collection.**
3. Submit a minimum of 50 bees per hive (a minimum of 50 bees is ideal, but a sample with a lower count will be accepted). Be sure to keep honey bees from different hives separate for proper testing.
4. Add enough 70% denatured ethyl alcohol to completely cover the honey bee sample. After complete submergence of the sample, the ethyl alcohol should be removed by carefully pouring off the liquid, leaving the alcohol soaked bees in the tube. **DO NOT RE-USE THE ETHYL ALCOHOL.** Ethyl rubbing alcohol can be purchased at local pharmacy such as CVS, Walgreens, etc.
Note: It is important to use ethyl alcohol and not isopropanol due to loss of sensitivity and/or increased degradation with isopropanol.
5. Place all labeled tubes containing honey bee samples in a crush-resistant box.
6. **Include the completed Submission Form with the sample shipment.**
7. Ship samples at ambient temperature.
8. Avoid shipments over the weekend.
9. If samples are not going to be shipped immediately but within 2 days, the prepared samples should be stored at 4°C (refrigerator or on ice) for up to 2 days until ready to ship at ambient temperature.
10. If the collected samples are not going to be shipped within 2 days, store the prepared samples at -20°C (freezer) or -80°C (ultra-freezer) until ready to ship at ambient temperature.

If there are any questions regarding sampling and shipping procedures, please contact the National Agricultural Genotyping Center Laboratory at 701-239-1451.

Ship Samples To:

**National Agricultural Genotyping Center
1616 Albrecht Blvd N
Fargo, ND 58102**