

### **PROTOCOL: Dried and Frozen Leaf Sample Transport**

#### **(i) Equipment**

- Large capacity MVE Dewar (dry shipper)
- Duffle bags
- Transport permits

#### **(ii) Consumable materials**

- Large vacuum seal Ziploc bags (gallon size)
- Extra large Ziploc bags (2 gallon size)
- Vacuum pumps
- Powder free nitrile gloves
- Labeling pens
- Zip ties and TSA locks for transport

#### **(iii) Sample preparation**

- 1-2 days before departure from the field site prepare for sample transport.
- Wearing clean nitrile gloves, transfer completely dried bulk leaf samples from paper bags into vacuum seal bags.
- Pump out all the air from each sample.
- Pack 10-12 of these samples together in a second Large Ziploc bag and seal.
- Tape both sides and staple the top side of the coin envelopes containing dry sample for SLA (detailed in 'SLA and water protocol').
- Pack ~30 envelopes each into vacuum Ziplocs and seal.
- Label Ziploc containing coin envelopes with the first and last numbers that were included on each bag.
- Pack bulk samples and coin envelopes into large duffle bags.
- Dump off excess liquid nitrogen from the 'dry shippers' one day before departure and insert knee high pantyhose containing "inspection frozen samples."
- Pack plant press with vouchers into a plastic box and seal it if the vouchers are being transported.

#### **(iv) Sample transport**

- Before transporting samples, ensure local regulations for sample inspection are met and sample export permits are obtained.
- Transport dried and frozen leaf samples as personal luggage or send them via freight in accordance with the APHIS permit specifications.
- Always include a copy of the permit in each container of samples being transported.
- Always carry a letter designating you as the Spectranomics Project representative if you are transporting the samples as your luggage.