

Two-step storage of feces for DNA analysis

Materials needed:

50 mL tubes containing silica gel beads and topped with a kimpwipe
Ethanol (pharmacy grade, 97%), 90% should also work
Empty 50 mL tubes

Preparation:

1. Pour approximately 30 ml of ethanol into empty tubes for sample collection.

Collection:

2. Collect each fresh feces sample (approx 5 g – approximately the size of a small walnut) into a tube containing ~ 30 ml ethanol.
3. Label tube (but remember this tube will be discarded).

*** It is very rare, but occasionally a tube containing ethanol will leak and cause the writing to wear off itself and adjacent tubes. It is best to just put a few ethanol containing tubes together in any single plastic bag to minimize potential losses of information.***

Processing (next day):

4. The fecal sample will either have maintained its shape and structure (fecal bolus) or have dissipated into the ethanol and have formed a sludge.
5. Carefully pour out as much ethanol as possible
 - a. If the fecal bolus is intact, it should be simple to pour off all of the ethanol and then transfer the bolus onto the kimpwipe in the silica tube, close lid.
 - b. If a fecal sludge has formed, let the sludge settle to the bottom of the tube and then decant as much ethanol from the tube as possible (it is OK to lose some fecal sludge at this step). Then, transfer the sludge to the kimpwipe in the silica tube, close lid.
6. The tube should be labelled, with a unique identifier and date (GPS location, collector name, species collected, field site of collection if possible).
7. Store at RT.
8. All samples and associated information should be entered into a spreadsheet and this spreadsheet should be sent with the samples.

Reference:

Nsubuga AM, Robbins MM, Roeder A, Morin P, Boesch C and Vigilant L (2004) Factors affecting the amount of genomic DNA extracted from ape feces and the identification of an improved sample storage method. *Molecular Ecology* 13: 2089-2094.