

Agricultural Water Sampling

Surface Water Canals and Piped Water Systems

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Know your site!

1. Look for the easiest access point
2. Remove any obstacles
3. You want to have a clean, representative sample of your irrigation source
4. Remove high grass or any canal clean out materials
5. Avoid sampling within eddies



Example of a good sampling site: easy access, low grass

Maintain your sample site (Surface or Piped)

- Keep an eye on algae (will affect water sample)
- Keep spigot in good condition
- You could give your site an ID
 - GPS marker
 - Landmark
 - Canal mile



Example: Algae in pond may interfere with water sample

Be prepared

- Let someone know that you are sampling that day
- Avoid dangerous situations, take a sampling pole if necessary
- Take a pen and paper, ex. chain of custody, sharpies, ball point pen
- Prepare cooler with ice or frozen ice packs
- Take extra sample bottles or bags with you

How to take a sample-surface water

- Wear gloves
- Grasp bottle with one hand, remove cap with the other one
- Secure the cap → don't put your finger inside or lay it on the ground
- Sample upstream
- Invert and submerge the open bottle quickly downward below the water surface
- Avoid touching the bottom or sides of canal
- Tip the bottle up, avoid filling above neck, leave air space below cap.
- Place the sample directly in the cooler



Example Procedure: sampling canals



Start with bottle in one hand, cap in the other hand.



Dip the bottle quickly and straight with neck down into the water column at least wrist deep.



Make a semi-circular (arc) motion under water.



Tip the bottle up to allow the water to flow in.



Pour off excess water to avoid overfilling the bottle.

How to take a sample-piped water

- Remove any hoses or filters from sample point
- Open spigot and flush the pipe for 2-5 minutes
- After flushing wipe the pipe (inside/outside) with a ethanol pad
- Flush the pipe again for 2-3 minutes
- Prepare your sampling bottle in the meantime
- Place your bottle or bag into the stream of water
- Put the sample directly in the cooler with ice



Remove hoses or filters before sampling



Piped water:
-avoid using old garden hoses