WATER SAMPLING PROCEDURES FOR LABORATORY ANALYSIS

Last updated: November 13, 2026



General conditions:

The objective of the sampling is to collect a portion of water with a volume (500 ml) small enough for easy transport but sufficiently representative for its analysis to demonstrate the characteristics of the entire material from which the sample is taken. The sample must be handled in such a way that its composition is not altered during transport, and all possible precautions must be taken to eliminate contamination or changes in sample composition caused by temperature or improper handling.

Step 1: Choosing the sampling container:

For a complete water analysis or a complete fertilizer solution analysis, a 500ml plastic water bottle can be used. Ideally, this bottle should be new and completely empty of its original contents to ensure that the inside of the bottle and its cap have not been contaminated by any substance that could interfere with the analysis results (such as plant residue, beverage residue, saliva, or metals). The greater the risk of contamination, the more likely the results will be inaccurate. In the case of a bacteriological analysis (bacterial count), the sampling container used must be completely sterile and at least 250ml. Do not place samples in containers of unknown origin.

Step 2: Identification:

The bottles must be clearly identified and the *SGS* form given to you by your *Groupe Horticole Ledoux* representative must be duly completed.

Step 3: Precautions:

- Before collecting your water sample, it is recommended that you wash your hands;
- Never smoke during sampling or when transporting samples;
- Never sample immediately after filling a car with gasoline;
- Avoid collecting water samples in bathrooms, which may contain chemical air fresheners with a composition similar to some of the organic compounds being measured.

Step 4: Sampling:

- Collect the sample from Monday to Thursday inclusive (so that it arrives at the lab before the weekend), and prioritize the beginning of the week, especially if it is a sample for bacteriological analysis;
- Run cold water at a high flow rate for 5 minutes before collecting a sample to ensure that the water sampled is representative of the water circulating in the distribution system;
- Then, fill and rinse the bottle 3 times before proceeding with the actual sampling;
- When collecting the sample, be careful not to place the neck of the bottle directly on the tap to avoid metal contamination;
- Fill the bottle to the brim to avoid the presence of air;
- Seal the bottle tightly with the cap.

Step 5: Sample preservation:

Keep the sample cool by placing it in the refrigerator until it is sent to the laboratory.

Step 6: Shipping the sample:

The shipment must be made as soon as possible after sampling. Containers should ideally reach the laboratory within 48 hours of collection. The laboratory address appears in the header of the SGS form. Packages must be shipped the same day as the sample collection (so that the laboratory receives them no later than the following day), possibly via Purolator (1-888-SHIP-123 (1-888-744-7123)). Contact them early in the morning to let them know to pick up your package.

Step 7: Receiving your results:

You will receive your results by email.

Taken from the document “Measure and Manage; sampling protocol for agricultural water sites” available on the Agri-food laboratories website: http://www.agtest.com/articles/samplingwater.pdf and from various sources.