Greenhouse Pest Message, October 6, 2022 Leanne Pundt, UConn Extension

Testing Your Greenhouse Irrigation Water

When was the last time you tested your water? As you know, alkalinity can be a major factor affecting pH changes in the growing media. With the drought, some growers have noticed increased levels of sodium and chloride from water tests this year, especially when using well or surface water for irrigating.

Water tests are recommended for every water source at your farm and should be done at least once up to three times a year. If you produce greenhouse crops year-round, test your water twice a year, once in the winter and once in the summer. If you just produce spring crops, test your water just before the spring growing season.

A standard analysis for greenhouse horticultural crops usually includes: pH, EC, and alkalinity (which you can think of as the dissolved limestone in water) as well as macro and micronutrients (N, P, K, Ca, Mg, S, B, Cl, Cu, Fe, Mn, Mo, and Zn) and sodium (Na).

Testing for macro and micronutrients should be done for each well at least once a year.

This water testing is not the same as water testing done for GAP (Good Agricultural Practices) for colony counts for coliform and *E. coli* for food crops but is needed to better manage your nutrient program and select the best fertilizers for your crops.

Sampling Procedure

- 1. Allow the water to run for 5 minutes to clear the line.
- 2. Rinse a clean plastic 16 oz. container 2 to 3 times with the water to be tested.
- 3. Begin by filling a 5-gallon bucket with water from the hose. Submerge the bottle completely in the bucket of water. Allow all the air in the bottle to be replaced by water and cap the bottle while it is completely submerged.
- 4. Fill the container completely and cap tightly.
- 5. Label bottle with your name, address, and type of analysis requested. Most laboratories will have a submission form for your use.
- 6. Mail the sample within 24 hours.



Here is a Partial List of Water Testing Laboratories (for greenhouse water samples used by some growers)

QAL (Quality Analytical Laboratories)

2814 W. 15th Street, Panama City, FL 850-872-9595 http://www.qal.us/

JR Peters, Inc.

6656 Grant Way Allentown, PA 866- 522-5752

Email: <u>jrlab@jrpeters.com</u>

https://www.jrpeters.com/lab-testing-services

Waters Agricultural Laboratories, Inc.

257 Newtown Road, PO Box 382 Camilla, GA (229) 336-7216

Email: info@ watersag.com

http://watersag.com/

SunGro Horticulture

770 Silver Street Agawam, MA 1-800-732-8667

Email: info@sungro.com

http://www.sungro.com/tools-services/analytic-testing/

For more: Five Tips for Testing the Chemical Quality of Your Irrigation Water: by Paul Fisher, UF, IFAS Extension Greenhouse Training Online https://www.youtube.com/watch?v=lkSiSmDwIqw

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