



Nitrate Test Kits for Agriculture (Ag-NTK) Superior Stock Nitrate Reductase Inside!

The Nitrate Elimination Co., Inc. (NECi), sells nitrate testing kits specifically for agriculture. NECi Ag-NTK were developed with funding from the USDA in collaboration with crop consultants, crop scientists, extension agents, and NRCS to help you with nitrate testing needs.

NECi's enzyme-based nitrate test kits are...

- **Fast:** Results in 30 minutes. No shipping or waiting for lab results
- **Reliable:** Accurate information you can use to make important decisions
- **Economical:** As low as \$5 per test
- **Easy-to-use:** No special skills or equipment required
- **Non-toxic, non-polluting:** Safe to use on-site, in the field or at your home office

Ag-NTK's are available for a variety of test applications:

Soil Kits (S-NTK-series) - Simply place one scoop of soil in the distilled water (supplied) and test one drop. Use to determine how much nitrate is in your soil. Make better fertilizer purchase decisions, do your own PSNT testing, track your own info to meet CAFO requirements, know your nitrogen credit.

Water Kits (AW-NTK-series) - One drop of your water is all you need. Lets you know whether your well water is safe for livestock – and your family! Check runoff. Show that you're in compliance with EPA and state water quality regulations.

Plant Kits (P-NTK-series) - Use pliers or a garlic press to squeeze one drop of liquid from your plant samples. Use to make optimal harvest and fertilization decisions. Don't over- or under-fertilize! Check vegetables for food safety. Custom kits for specific crops!

Livestock Feed Kits (LF and LFH-NTK-series) - Use pliers or a garlic press to squeeze one drop of liquid from your samples. Know whether your silage, green chop or standing hay is safe for animal consumption. Important tool for times of drought!

Save on fertilizer: Don't buy too much! Avoid over-use of N by testing with NECi Soil Nitrate Test Kits.

Check your runoff: Stay safe and in compliance with NECi Water Nitrate Test Kits.

Test crops for quality and nutrients: Check crops for livestock safety and for optimum nitrate content though the growth cycle with NECi Plant Nitrate Test Kits.

NECi: The Nitrate Elimination Company

To order: 1.888.NITRATE 1.906.296.1115 info@nitrate.com



The Nitrate Elimination Co., Inc.

Nitrate Test Kits for Agriculture
Manage your nitrogen inputs effectively.
Precision agriculture you can use!

NECi applies the latest discoveries in Biotechnology to the solution of agricultural and environmental problems. Our Nitrate Testing products are enzyme-based, giving you unmatched versatility in nitrate analysis. And we sell them at prices you can afford!

All Ag-NTK's are sold in packs that include everything you need to test four samples. Buy as many packs as you need for your application. A nitrate standard is included in each 4-pack to compare with your results. The nitrate standard is set based on the target level for selected testing:

- **Soil** kits are set at 25 ppm nitrate-N (best nitrate level for corn and many crops).
- **Water** kits are set at 10 ppm (the EPA limit).
- **Plant** kits are customized by crop type – Specify your crop, and NECi sends the correct kit based on advice from our team of experts.
- **Livestock Feed Safety** kits are based on recommendations from university animal husbandry publications.

Ag-NTK's are shipped at ambient temperatures and must be stored at 72°F or colder for best results. Kits are stable for up to 7 days exposure to hot summer conditions, including in the back of your pick-up.

NECi's Partners:

Charles T MacKown, US Dept of Agriculture Grazinglands Research Station, OK
Charles J Patton, US Geological Survey, Nat'l Water Quality Lab, Denver, CO
Jerry Hatfield, Lab Director, NRCS Midwest Soil Tilth Lab, Ames, IA
Jerry Grigar, NRCS Michigan State Agronomist
Darryl Warncke, Professor and Extension Specialist, MI State University
Leonard Lauriault, Forage Agronomist, New Mexico State Extension

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- Nitrate test kits have been developed with funding from the **US Dept of Agriculture (USDA)**
- Automated nitrate analysis reagent systems (ARKs) are being developed with **USDA** support
- Superior Stock Nitrate Reductase (YNar) was developed with funding from the **Nat'l Institutes of Health (NIH)**

Validations and Technical Publications:

1. ER Campbell, TPK Skidmore, LA Winowiecki & WH Campbell (2001) A new trend in nitrate analysis: enzyme-based field test for nitrate. *Am Env Lab* 33(4):90-94, online@scpubs.com/articles
2. Environmental Technology Verification Report, available online: epa.gov/etv
3. CJ Patton, AE Fischer, WH Campbell & ER Campbell (2002) Corn leaf nitrate reductase – A nontoxic alternative to cadmium for photometric nitrate determinations in water samples by air-segmented continuous-flow analysis. *Env Sci. & Technology* 36(4):729-735
4. CT MacKown & JC Weik (2004) Comparison of laboratory and quick-test methods for forage nitrate. *Crop Science*, Jan/Feb 2004 issue
5. Campbell et al (2004) New and improved nitrate reductase for enzymatic nitrate analysis. *Am Lab News* Sept 2004

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