

NuRelease™

Top 10 Reasons to Put NuRelease™ in Your Programs

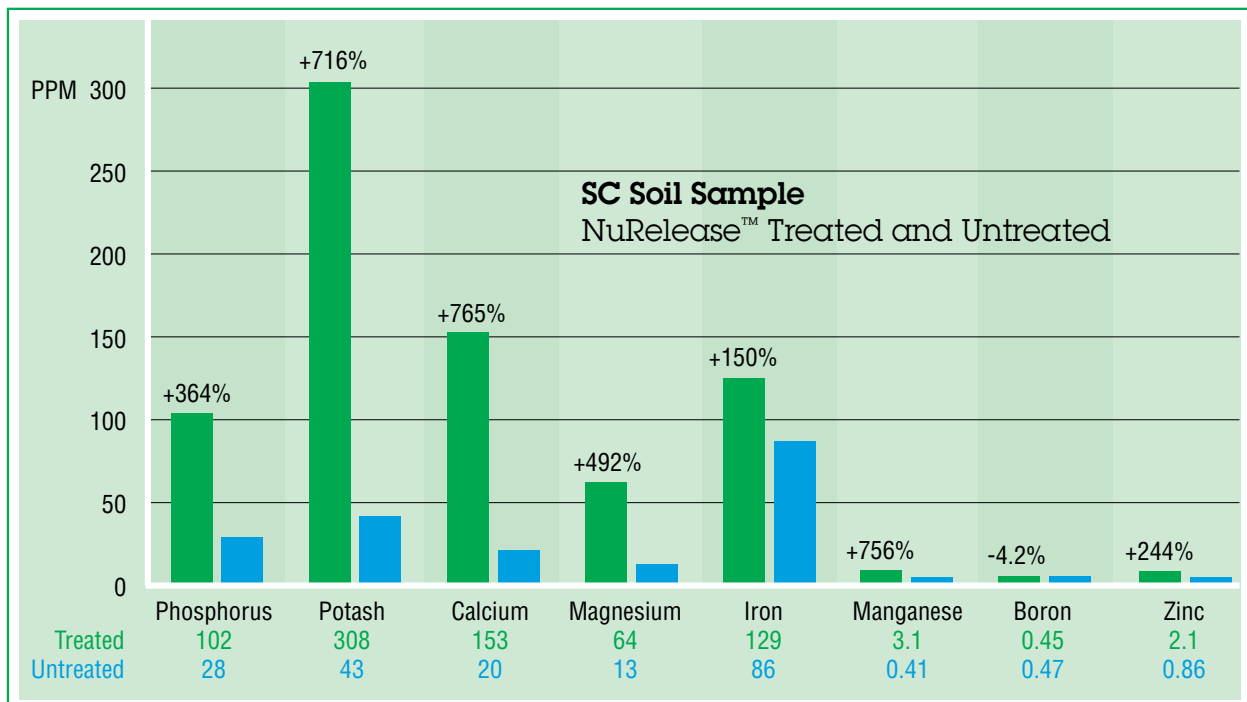
NuRelease™ is an innovative nutrient release soil treatment and performance enhancing fertilizer additive. NuRelease is formulated to maximize nutrient release, bioavailability and uptake efficiency in the rootzone. When added to fertilizers, it maintains nutrient solubility and facilitates plant nutrient uptake and foliar absorption.

NuRelease is a proprietary formulation of specific, naturally occurring organic acids. Independent research has confirmed that NuRelease not only makes soil-bound phosphorus available, but also makes other phosphate-bound essential nutrients like the calcium, iron, magnesium, manganese and zinc bioavailable.

NuRelease's extraordinary versatility is perhaps its most unique characteristic. It's like a very complete biofertility toolbox.

1. It will help you do more with less. You can apply 20-40 % less phosphorus with no compromise in turf quality, color or density. Better for your budget, better for the environment.
2. It will help you improve the performance of the rootzones, rhizospheres and soils you manage. It will help you “mine” the reservoir of unavailable, soil-bound P and make it available for root uptake. In the process it will also release phosphorus-bound divalent cations like Ca, Fe, Mg, Mn and Zn... making them more bioavailable.
3. It works in cool soils so it will help your more desirable turfgrasses like bentgrasses out-compete poa annua in spring and fall when cooler soil temperatures favor poa. NuRelease™ puts bents on a “more even playing field.” Also great for repairing winter damage; better spring seeding, sodding and

Independent Testing Confirms NuRelease's Efficacy



sprigging. Superior to seed and soil inoculants, especially in cooler soils.

4. It will help you maximize photosynthetic capacity and efficiency, respiratory efficiency, and stress tolerance in the turfgrasses you manage. The bottom line is: NuRelease™ will help you get significantly more of the genetic

potential out of your turf—and the more intense the stress, the more important that benefit becomes.

5. It's effective across a broad range of soils and conditions, from soils with either high or low phosphate levels to those with high or low pH's. NuRelease's extraordinary versatility is perhaps its most

unique characteristic. It's like a very complete biofertility toolbox.

6. It's fast-acting. It starts working as soon as it's sprayed on when it's tank-mixed with fertilizers and other commonly applied foliar materials, or as soon as it's watered in when applied as a soil treatment.

Independent Testing Proves NuRelease™ Enhances Availability of Calcium, Magnesium, Iron, Zinc, and Phosphorus

NuRelease™ Soil Test Report

Soil samples were collected, mixed, and pulverized using ceramic stones. The soil was thoroughly mixed and sifted to remove small gravel and other unbroken concretions. Samples of five hundred grams each were weighed, one for the control and one for the test sample.

Water (125 ml) was added to the control sample and mixed thoroughly. NuRelease was added to the second sample (5 ml dissolved in 125 ml water). Both samples were thoroughly dried and then separately pulverized. The samples were sent to the Texas Soil and Plant Lab for analysis.

Summary: The analysis in the following table verifies that NuRelease will increase the solubility and availability of soil-bound Phosphorous, Calcium, Magnesium, Zinc, and Iron, and will release bound Sodium.

Test performed in W. Texas on arid soil with pH between 7.5 and 8.5.

Soil Test Report: NuRelease™ compared to Control	Control	NuRelease™	NuRelease™ Difference (%)
P ₂ O ₅ available (lb/A)	21	33	+57
K, H ₂ O extract, ppm	95	111	+16.8
Ca, H ₂ O extract, meq/L	468	851	+81.8
Mg, H ₂ O extract, meq/L	65	133	+104
Zn, DTPA extract, ppm	5.27	7.29	+38
Fe, DTPA extract, ppm	5.87	7.29	+24
P ₂ O ₅ , Total (lb/A)	329	329	*
Na, H ₂ O extract, ppm	87	664	+663

* No Phosphorus added, just made available. See first line.



7. It's compatible with virtually everything you apply. Although best management practices suggest a jar test before mixing, NuRelease™ is often used as a tank mix additive to improve stability as well as uptake of nutrients, biostimulants, PGRs and other plant protection materials.
8. It delivers results that are not only visible but also measurable. Soil tests comparing nutrient availability between treated and untreated areas consistently show significant nutrient release improvements.
9. It's sustainable. It helps you lower phosphorus inputs and reduce risk of groundwater contamination without lowering turf quality.
10. It's affordable and budget friendly – typically about \$11.00 per acre per application.

NuRelease™ Use Guidelines, Prices and Cost-To-Use

Application rates range from 8 oz/acre to 32 oz/acre.

Application frequencies vary from weekly in some foliar programs to monthly or seasonally in most soil treatment regimes.

RATE	COST-TO-USE
8 oz per acre	\$5.50/acre
16 oz per acre	\$11.00/acre
32 oz per acre	\$22.00/acre

NuRelease™ is available in these sizes:

5 gallon case \$440.00
 15 gallon drum \$1,305.00

NuRelease™ Use Recommendations

As a soil applied treatment to increase nutrient release, availability and uptake of soil-bound Phosphorus, and phosphorus-bound calcium, iron, magnesium, manganese and zinc, apply 1 qt. (32 oz) per acre monthly and water into the rootzone.

As a fluid or foliar fertilizer additive to enhance stability and solubility of phosphates and other fertilizers and nutrients and facilitate root uptake and foliar absorption of biostimulants, PGR's and commonly sprayed plant protection materials, apply 1 pint (16 oz) monthly.

A jar test for tank mix compatibility is recommended before application.

If you are applying foliar fertilizers and nutrients more frequently than once per month, divide the monthly rate (16 oz) by the number of applications per month and apply that amount each time. For example, if you foliar feed golf course greens every two weeks, apply 8 oz per acre each time.

How Large an Area Can You Treat With a 5 Gallon Case of NuRelease?

A 5 gallon case (2 x 2.5 gal jugs) contains 640 ounces (128 oz/gal x 5). At a 16 oz per acre rate, 5 gallons (640 oz) will treat:

- 40 acres once, or**
- 20 acres twice, or**
- 10 acres four times, or**
- 5 acres eight times**

For example, if you have 20 acres of fairways and you want them in peak condition for the invitational in June and the club championship in July, a case of NuRelease would cover your needs for those 2 applications. Likewise, if you have 5 acres of greens and tee boxes that you regularly treat with foliar fertilizers and biostimulants, a 5 gallon case of NuRelease will be sufficient to allow you to incorporate 16 oz per acre for 8 of those applications during the season.

A little NuRelease goes a long way and delivers a host of benefits cost effectively. So order some today and take your turf's physiological fitness and stress tolerance to the next level.

NuRelease™ Compared to Triple Super Phosphate (TSP) Rice Yield Trial*

Treatment	Bushels/acre	% Difference
NuRelease 16 OZ	161	+9.5% a
NuRelease 8 OZ + 30 LBS TSP	160	+8.8% a
NuRelease 8 OZ	157	+6.8%ab
60 LBS TSP	155	+5.4%ab
NuRelease 32 OZ	154	+4.8%ab
Check LSD 0.05 CV % 3.4	147	b

- 16 oz NuRelease/acre outperformed 60 lbs/acre Triple Super Phosphate (TSP)
- 16 oz of NuRelease per acre increased rice yield 9.5% or 14 bushels per acre.
- 60 lbs of Triple Super Phosphate (TSP) increased rice yield 5.4% or 8 bushels per acre.
- Adding 8 oz NuRelease allowed P inputs to be reduced by 50%. Eight ounces of NuRelease plus 30 lbs of TSP out-produced 60 lbs. of TSP alone.
- 16 oz of NuRelease costs \$11.00
- 60 lbs of Triple Super Phosphate costs \$40.00
- **MORE FOR LESS!**

* Rice trial conducted by Dr. David Dunn 2009, University of Missouri, Portageville Research Station



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