...and a Whole Lot More

**Phosphorus — Essential for energy transformation and conversion of carbohydrate starch to sugar.**

Phosphorus absorption through roots declines as root growth declines. NuRelease® makes more Phosphorus and divalent cations, like Ca, Fe, Mg, Mn, and Zn, available to the plant.

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

**2011 Testing — Excellent Results on Golf Courses in the Midwest**

In field tests on several golf courses in summer 2011, application of NuRelease® made Nitrogen, Phosphate, Potassium, Calcium, Magnesium, and Iron more available to turf. At some sites, bioavailable forms of Ca increased by as much as 59%; Mg by 65%; and K by 70%.

<table>
<thead>
<tr>
<th>2011 Golf Course Trials</th>
<th>% Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium</td>
<td>59%</td>
</tr>
<tr>
<td>Magnesium</td>
<td>65%</td>
</tr>
<tr>
<td>Potassium</td>
<td>70%</td>
</tr>
</tbody>
</table>

### 14 Reasons to Add NuRelease® to Your Program

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.

3. **In the process it will also release Phosphorus-bound divalent cations like Ca, Fe, Mg, Mn and Zn…making them more bioavailable.**

4. **It works in cool soils so it will help 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.”

5. **Also great for repairing winter damage; and better spring seeding, sodding and sprigging.** Superior to seed and soil inoculants, especially in cooler soils.

6. **It will help you maximize photosynthetic capacity and efficiency, respiratory efficiency, and stress tolerance in the turfgrasses you manage.**

7. **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.

8. **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.

9. **It’s fast-acting.** It starts working as soon as it’s applied, or when it’s tank-mixed with fertilizers and other foliar materials, or as soon as it’s watered in when applied as a soil treatment.

10. **It’s compatible with virtually everything you apply.**

11. **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.

12. **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.

13. **It’s sustainable.** It helps you lower phosphorus inputs and reduce risk of groundwater contamination without lowering turf quality.

14. **It’s affordable and budget friendly.**

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**NuRelease’s extraordinary versatility is perhaps its most unique characteristic. It’s like a very complete biofertility toolbox.**
Independent Testing Confirms NuRelease’s Efficacy

NuRelease® increases the solubility and availability of soil-bound Phosphorous, Calcium, Magnesium, Zinc, and Iron, and releases bound Sodium.

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

A 5 gallon case contains 640 ounces. At a 16 oz per acre rate, 5 gallons 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.

A little NuRelease® goes a long way and delivers a host of benefits cost-effectively.

**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 Calcium, Iron, Magnesium, Manganese and Zinc bioavailable.**

**In other tests, 16 oz NuRelease®/acre outperformed 60 lbs/acre Triple Super Phosphate (TSP)**

- 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.
- **More For Less!**

**South Carolina Soil Sample**

![NuRelease® Treated and Untreated](image)

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Control</th>
<th>NuRelease®</th>
<th>NuRelease® Difference (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P₂O₅ available (lb/A)</td>
<td>21</td>
<td>33</td>
<td>+57</td>
</tr>
<tr>
<td>K, H₂O extract, ppm</td>
<td>95</td>
<td>111</td>
<td>+16.8</td>
</tr>
<tr>
<td>Ca, H₂O extract, meq/L</td>
<td>468</td>
<td>851</td>
<td>+81.8</td>
</tr>
<tr>
<td>Mg, H₂O extract, meq/L</td>
<td>65</td>
<td>133</td>
<td>+104</td>
</tr>
<tr>
<td>Zn, DTPA extract, ppm</td>
<td>5.27</td>
<td>7.29</td>
<td>+38</td>
</tr>
<tr>
<td>Fe, DTPA extract, ppm</td>
<td>5.87</td>
<td>7.29</td>
<td>+24</td>
</tr>
<tr>
<td>P₂O₅, Total (lb/A)</td>
<td>329</td>
<td>329</td>
<td>-</td>
</tr>
<tr>
<td>Na, H₂O extract, ppm</td>
<td>87</td>
<td>664</td>
<td>+663</td>
</tr>
</tbody>
</table>

Independent Testing Confirms NuRelease’s Efficacy

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