

Calculating the Daily Cost of Your Fertilizer Choice

Superintendents have been applying enhanced efficiency fertilizers (EEFs) for decades. They recognize the value these consistently reliable technologies provide to help keep turfgrass green and healthy, which goes a long way in determining how a course looks and plays.

Have you ever thought about what your fertilizer cost is per day to maintain that green, healthy appearance on turfgrass? With this calculation, you can figure it out. The key in this equation is the longevity of nutrient delivery.



Looking at Longevities

The chart to the right shows the percentage of nitrogen (N) released, and the longevity of that release. Longevity is the length of time in which a defined percentage of nutrients are released or remain available to the plant. Shown, too, is that increasing the percentage of EEF technology extends the longevity of N release to keep turfgrass green.

- Since non-amended urea releases almost immediately, the longevity of the blend with only 30% EEF technology is 21 days
- With the 50% blend, the longevity is 46 days
- At 70% longevity extends out to 65 days



How Nutrient Release Impacts Cost Per Acre Per Day of Green

28-0-16 Blend 30%, 50% or 70% EEF Technology (Variable N Rates and Bags per Acre)								
% Urea : % EEF	*N Rate (Ibs of N per 1000 sq. ft.)	Bags per Acre	х	Cost per Bag	÷	Longevity (80% Release + 14 Days)**	=	Cost per Acre per Day of Green
70:30	0.8	2.5	Х	\$19.65	<u>*</u>	35	=	\$1.40
50:50	1.2	3.7	Х	\$21.60	÷	60	=	\$1.34
30:70	1.4	4.4	х	\$23.55	<u>*</u>	79	=	\$1.30
NOTE: This is only an example. Pricing data, application and coverage rates are for representative purposes only.								

*Nitrogen rates vary based on the expected longevity of release. | **Expected additional plant response after nutritional release

Increasing the percentage of EEF technology in the blend also affects longevity, the application rate, bag-per-acre and cost-per-bag factors. Using the formula, the cost-per-acre per day of green has been calculated by multiplying the bags per acre by the cost per bag and then dividing that number by the longevity of nutrient release.

The Takeaway

With higher percentages of enhanced efficiency technology in the blended fertilizers you buy at least 50%—your cost per acre per day of green decreases, because of the extended longevity. The economic advantage? The fertilizer with a higher "cost per bag" is actually your best value.

Consider This

When you increase the longevities of the fertilizers you buy, fewer applications are needed to maintain healthy, green turfgrass and you can gain these valued business advantages:

- Fewer fertilizer bags to buy, handle and store
- Crews have **more time** to complete other tasks
- Freight and shipping expenses are reduced

Plus—it's been shown that more technology in fertilizer blends increases nutrient uptake by the turfgrass, which reduces potential environmental losses through volatilization, denitrification, runoff and leaching.

Do The Math

Calculate what it is currently costing you—and your turfgrass—by not incorporating more enhanced efficiency technology into the fertilizer blends you buy. You may discover what so many superintendents already know. There is A Better Way to Fertilize.[™]

To learn more—and view a video—visit KochTurf.com/green.

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