



U.S. Farmers Keep Phosphorus Out Of Water

(NAPSA)—While a disruption in drinking water supplies in Ohio and the Hypoxia “Dead Zone” in the Gulf of Mexico are two examples of what can happen when too much phosphorus fertilizer runs off into waterways from agricultural fields and suburban lawns, there are solutions to the problem.

Fortunately, new farming methods and technologies are already addressing it, and the agricultural industry is ramping up efforts to minimize its environmental footprint.

“Agriculture is making efforts across the board to control both point and nonpoint pollution,” says Karl Brooks of the Environmental Protection Agency (EPA). “Farmers are doing a great job of partnering with the EPA and staying ahead of the curve by using a variety of practices to help reduce nutrient loss and cut nutrient loads in water bodies.”

A primary culprit in nutrient runoff is phosphorus, one of the three essential elements necessary for plant life. Derived from phosphate rock, phosphorus fertilizers are essential to farming and food production. Without it—put simply—life would cease to exist.

“Eliminating use of phosphorus fertilizers is not a realistic option—but using this essential element in the right amounts at the right time with smarter application techniques and improved efficiency is the answer to ensuring the best use of phosphorus,” says Dave White, an environmental consultant and former chief of the Natural Resources Conservation Service (NRCS).

White cites a number of measures that U.S. farmers take to reduce runoff of phosphorus from crop land: no-till production techniques that eliminate or significantly reduce soil erosion and sedimentation; cover crops and grass filter strips around fields to soak up excess nutrients; precision application techniques that optimize the quantity of fertilizer applied; and fertilizer enhancers and stabilizers to ensure more phosphorus gets into crops following application due to improved plant uptake, versus leaving unused phosphorus in the soil subject to off-site movement via erosion.



The more phosphorus fertilizer taken up by growing crops, the less there is to move off-site into the water supply.

A major challenge farmers face with phosphorus applications is that 75 to 95 percent of the nutrient gets “locked up” or “tied up” in the soil following application due to the interplay of positive and negative charges among the nutrients in the soil, such as calcium, magnesium, aluminum and iron. When this happens, the phosphorus is unavailable for plant uptake, remaining in the soil instead and subject to movement off-site.

To help combat this problem, an increasing number of farmers use AVAIL Phosphorus Fertilizer Enhancer from Verdesian Life Sciences. It reduces the soil lockup of applied phosphorus and helps maximize availability of the nutrient for plant uptake, so a much higher percentage is available for the crops.

Drew Buettner, an agronomist and corn and soybean producer in Nebraska, farms on sandy soils in the Platte River Valley. “We have a very shallow water table and nutrient runoff is a big concern for us,” he explains. “By using AVAIL with our phosphorus fertilizer, it is obvious to us that more phosphorus is getting into our crops and less is left in the soil and running into our waterways. The product does a great job of addressing our environmental concerns.”

In addition to reducing phosphorus runoff, Buettner says applying the enhancer also results in stronger crops, improved corn-stalk strength and higher yields.

AVAIL is a registered trademark of Verdesian Life Sciences. © 2014 Verdesian Life Sciences. All rights reserved.