



As a 4R partner we embrace 4R Nutrient Stewardship, promote the 4R initiative, and implement the 4R scientific principles.

4R Mission Fertilizers provide the nutrients necessary to improve and maintain soil fertility by replacing the nutrients removed by harvested crops, and they are a primary component of sustainable crop production system. As industry representatives and stakeholders we recognize the need to efficiently utilize the nutrients fertilizers provide. 4R Nutrient Stewardship is an innovative and science-based approach that offers enhanced environmental protection, increased crop production and quality, increased farmer profitability, and improved soil productivity and sustainability. The concept is to use the right nutrient source, at the right rate, the right time, and in the right place to support nutrient needs of crops. To be sustainable, nutrient use must support cropping systems that provide economic, social, and environmental benefits. Three goals within the initiative include: promoting the 4Rs as a recognizable strategy for economic, social, and environmental sustainability; expanding the implementation of 4R Nutrient Stewardship on the farm, and increasing the awareness of efforts to boost adoption of the 4Rs among the general public and policy developers worldwide.

4R Partner Support As agricultural industry representatives and stakeholders, we support 4R Nutrient Stewardship. Support of this initiative means:

- Embracing the 4R framework within our organization and our messaging as a recognizable strategy for economic, social, and environmental sustainability;
- Creating awareness and providing outreach for the initiative within our organization, to our stakeholders, to policy developers and to the public; and as applicable
- Implementing services or practices consistent with the 4R scientific principles, as defined below:
 - Use concepts and terminology consistent with defined 4R scientific principles and evolving standards.
 - Balance consideration of the three areas of sustainability - economic, social, and environmental.
 - Provide site-specific recommendations addressing specific regional soil, climate and operational issues.
 - Balance nutrition to ensure that N, P, K, secondary nutrients and micronutrients are in adequate supply to meet crop production expectations.
 - Use appropriate tools such as soil testing, tissue testing, nutrient budgeting and knowledge of crop nutrient uptake demand dynamics to assess nutrient requirements.
 - Consider all sources of nutrients (fertilizer, soil organic matter, manure, irrigation water, crop residual etc.) during the planning process.
 - Comply with applicable nutrient management regulations in your region or community.
 - Measure or evaluate the effectiveness of selected BMPs and use on farm or community based assessments to support continuous improvement in nutrient use efficiency and effectiveness to achieve crop yields and quality.
 - Adapt to changes in proven crop production and soil and water technologies (e.g. fertilizer, seed, equipment, etc.) which support goals for economic, environmental, and social progress.
 - Provide and maintain clear documentation of the nutrient management plan and its implementation.

4R Nutrient Stewardship Partner

SoilBiotics



ABOUT SOILBIOTICS

SoilBiotics was founded in 2010 with the purpose of providing a comprehensive line of non-toxic conventional and organic plant growth systems based on improving soil structure, reducing water usage, and increasing the plants ability to metabolize nutrients. Based in rural Reddick, IL, SoilBiotics has quickly grown to become a leader in specialty inputs for commercial agriculture, commercial/residential gardening, turf/grasses and more. SoilBiotics maintains a highly trained and experienced sales team based throughout the United States, with qualified dealers serving growers in Europe, Asia, and the Middle East.

SoilBiotics Growth Systems utilize naturally occurring humic matter or humates, which were formed through the chemical and biological humification of plant and animal matter over millions of years. Humates are recognized by many in the sustainable agriculture movement as one of the most productive inputs available to growers. They have the ability to chemically bond with nutrients in the soil for increased absorption by the plant. In addition, they increase the permeability of plant cells which has been shown to both increase nutrient uptake and decrease stress on plants throughout the growing season. The overall effect is substantially increased yields.

Additional services include the SoilBiotics Soil Testing Program, provided through GMS Laboratories in Cropsey, IL. This program provides a soil analysis that aids in determining pre-plant and side-dress fertilization requirements. It was created by GMS and SoilBiotics with certain criteria to provide an understanding of the crop production capabilities of each field in terms of salinity, soil type, water holding capacity, percolation, and much more!

SoilBiotics is a member of the Humic Products Trade Association (HPTA), Organic Certifiers, and The Organic Materials Review Institute (OMRI), and supports local FFA efforts.

SoilBiotics.....Providing Full Circle Improvement for Soil Health and Plant Growth..... Naturally.