

IPNI 4R Nutrient Stewardship Communications Guide

This guide is intended to support the communication of 4R Nutrient Stewardship in a consistent manner. It represents consensus among agricultural service providers and scientists worldwide on appropriate definitions, terminology and structure for partner organizations and individuals engaged in implementing and promoting 4R Nutrient Stewardship.

Definitions

- 4R..... Right **source** @ right **rate**, right **time**, right **place**. In common usage, “the 4Rs” refers to the full concept of 4R Nutrient Stewardship.
- Nutrient..... A substance needed to sustain the growth and health of an organism.
- Stewardship..... i) “the careful and responsible management of something entrusted to one’s care” (Merriam-Webster), and/or
ii) “an ethic that embodies the responsible planning and management of resources” (Wikipedia).
- Nutrient Stewardship..... Stewardship of nutrient use.
- 4R Nutrient Stewardship.... Application of the right source of nutrients at the right rate, time and place for sustainable plant-based production systems.

Referencing the 4Rs

- The preferred core expression for referencing the 4Rs is “4R Nutrient Stewardship.”
- Additional words may sometimes be added to the core expression depending on context. Examples include: concept, framework, program and system.

4R Components and Sustainability

- Documents on 4R Nutrient Stewardship should acknowledge all four components (source, rate, time and place – in that order). Use of the preferred set of terms is strongly encouraged to avoid confusion and demonstrate a unified stewardship effort.
- 4R Nutrient Stewardship defines the right source, rate, time, and place for plant nutrient application as those improving sustainability, by producing the economic, social, and environmental outcomes desired by stakeholders.

Relating the 4Rs to Nutrient Best Management Practices

- Best management practices (BMPs) are those which provide positive results, as demonstrated through research and ongoing systematic assessment (adaptive management).
- Because the resources of crop production (e.g. soil, climate, genetics, etc.) vary from one site to another, BMPs are site-specific.
- Every crop nutrient application involves all 4Rs (source, rate, time, and place)
- All nutrient BMPs link to one or more of the 4R components.
- 4R Nutrient Stewardship uses adaptive management to assess site-specific BMPs for all crop nutrient applications.

4R Logo

- The logo and guidelines for its use are found as a 4R Style Guide at <http://partners.nutrientstewardship.com/> (login required).



4R Diagram

- This diagram and other resources are available at <http://www.ipni.net/4R>.

