

ADVOCATE PROFILE



Fifth Generation Farms is a 2,700-acre dry land farm growing winter wheat, spring wheat, triticale, spring barley and mustard.

Grower: Jesse (middle) and Rick Brunner (right)

Location: Almira, Washington

Retail Facility: Crop Production Services

Crop Advisor: Josh Bafus (left)

Retailer Location: Almira, Washington

What Rick and Jesse say about the 4Rs: “The 4R program epitomizes our philosophy to farm management. As a multi-generational farm, we are responsible not only to our current family to provide a living, but also to those that will come after us. We strive to improve our overall soil health, to limit our environmental impact, and to increase our profits while continuing the farm legacy we received.”

What Josh says about the 4Rs: “Crop Production Services and our growers promote the 4R Nutrient Stewardship Program to produce better crops with higher yields. We utilize the best management practices for agricultural sustainability as well as minimizing environmental impact for future generations to follow.”

CROPPING SYSTEM OBJECTIVES:

To replace nutrients used by the previous crop to provide enough nutrients for the next crop to maximize yield without over fertilizing.

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BEST MANAGEMENT PRACTICES IMPLEMENTED ON THE FARM:

- Apply aqueous ammonia and Microessentials with sulfur and zinc with no-till drill at seeding
- Use variable rate application based on soil and tissue sampling as well as yield map data
- Create a fertilizer prescription for each individual field and crop
- Use a balanced nutritional program for various crops not only to grow but to help with disease controls as well
- Use prescription fertilizer maps to place nutrients where they are needed
- Use weather forecasting and knowledge of local climate to better time fertilizer applications
- Use soil test data to determine organic matter, crop residue and nutrient needs

FORMS OF NUTRIENTS APPLIED:

Microessentials MES SZ 12-40 0 10 1z is used as a starter placed with the seed. Aqueous ammonia is placed between and below paired seed rows. We have used a custom dry blend to add potash and other micronutrients. We add Thiosol 12-0 0 26 with the aqueous ammonia as a sulfur source.

NUTRIENT USE EFFICIENCY: 0.95 lbs N/bushel, achieved through fertilizer BMPs and placement with a John Deere Conserva Pak™ 1870 direct seed drill. This provides separation from the primary N source and allows starter to be placed with the seed. We feel like this precision placement gives us a 10% increase in efficiency.

Average Yield for Each Crop:

Winter wheat yields an average 81 bushels/acre

Spring wheat yields an average 40 bushels/acre

Barley yield averages 58 bushels/acre

Triticale averages 99 bushels/acre

Economic Measure of Savings: Seasonal moisture is our primary yield limiter. Conditions do not always allow effective post emergence nitrogen applications. Our goal is to keep our application efficiency under 1 lb N/bushel.