

Bio Pesticides
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- Simplot – Privately held Agriculture Business' in Boise, Idaho.
 - Simplot Agribusiness
 - Fertilizer mining, manufacturing and marketing
 - Ag Retail (Crop Inputs, fertilizer, chemicals, seed)
 - Simplot Grower Solutions
 - Simplot Food Group
 - Food Processing – Potatoes
 - Simplot Land and Livestock
 - 2 large feedlots in the PNW
 - 2nd largest cow-calf operation in the US
- “Mine to Fork” business
 - Fertilizer, crops, cattle, food processing, cattle processing,



- Simplot Advocates -“Cool Potatoes”
 - Potato Sustainability Alliance (PSA)
 - Resource Positive Agriculture
 - “A food and farming system which makes full and responsible use of the natural world”
 - Cool Farm Alliance (CFT)
 - Greenhouse Gas Emissions
 - Identifies factors that influence emissions
 - 4 R’s (Nutrient Stewardship)
 - The Right Source, the Right Rate, the Right Time, the Right Placement
 - “Its better to be 85% efficient and on time, than 100% efficient and late”
 - IPM Strategy
 - Pesticide Triangle – Host, Causal Agent, Environment
 - Use multiple modes of action to prevent resistance



- The JR Simplot Company procures potatoes by purchasing raw potatoes by pounds in hundred weights (CWT) from growers. Growers grow potatoes on their farms that are measured in acres (1 acre = 43560 square feet). If production of **marketable potatoes is maximized per acre**, then it would take less acres to produce a contracted volume of potatoes, which would reduce the overall use of the scarce resources of **Land** and **Water** and crop inputs (seed, nutrients, and pesticides). Maximizing the acre production would also lower the overall greenhouse gas emissions required for potato production.
- **Land** and **Water** are scarce resources.
- Reducing GHG emissions will affect climate change.
- Pesticide math: We can reduce pesticide use by increasing marketable yield/acre.
 - Production decrease 10% (100 acres X 500 CWT= 50,000 CWT) 50,000 CWT
 - (111.11 acres X 450 CWT = 50,000 CWT) 50,000 CWT
 - Pesticide use 10 lbs(fictional number) X 100 acres = 1000 lbs (fictional number)
 - Pesticide use 10 lbs(fictional number) X 111.11 acres =1111.11 lbs(fictional number)