

# Facts From the Field

## ESN<sup>®</sup> Is Smart Nitrogen for Potatoes

Potatoes require careful management of relatively high nitrogen (N) rates. They are a shallow-rooted crop often grown under irrigation on sandy soils with potential for N leaching beyond the root zone. Typical N management usually includes multiple in-season applications to assure proper timing and amounts of N. ESN has repeatedly shown to produce greater potato yields with fewer applications, reduce N leaching and increase profits. This Idaho study demonstrates ESN's value and flexibility in saving applications while producing top yields and profits.

- ESN maintained top yields and profits with fewer applications either as a single application or when combined with fertigation.
- One ESN application at emergence produced yields comparable to the standard fertigation program.
- Combinations of ESN with in-season fertigation produced yields similar to one-time ESN application and the standard fertigation program.
- Combination of 50% of N as ESN with fertigation produced the greatest grower profit, which was \$24/ac. greater than the standard fertigation program based on a typical grower contract.

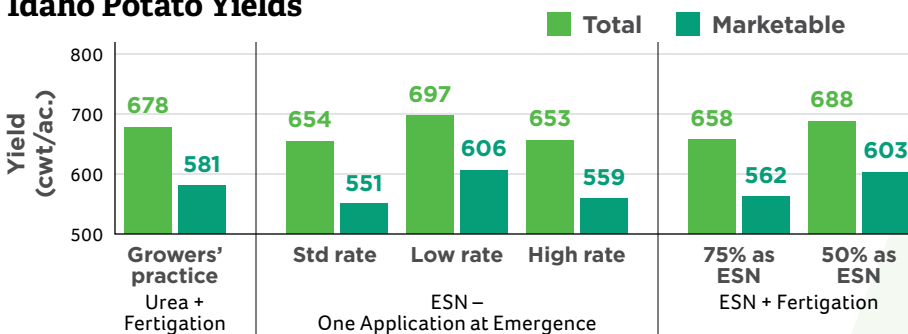


### ESN SMART NITROGEN

- Enhances nitrogen use efficiency
- Improves crop yield and quality
- Provides convenience through ease of use
- Environmentally responsible



### Idaho Potato Yields



- All plots were fertilized with a total of 350 lb N/ac. except for the low- and high-rate ESN treatments at emergence
- 50 lb of the total N was applied to the entire trial as ammonium polyphosphate (11-37-0; 30 N) at planting and MAP (11-52-0; 20 N) broadcast just prior to hilling
- Growers' practice is 75 lb N/ac. as urea broadcast and incorporated at hilling followed by nine fertigation applications of 25 lb N/ac. each; ESN full rate, ESN low rate, and ESN high rate are broadcast and incorporated at hilling; the low- and high-rate ESN treatments were 350 lb N/ac. plus or minus 8% in 2018 and 15% in 2019; ESN + fertigation is 75% of total N (225 lb N/ac.) or 50% of total N (150 lb N/ac.) as ESN broadcast and incorporated at hilling followed by the remainder in three or six, respectively, fertigation applications of 25 lb N/ac. each

Source: Miller Research, Burley, ID.

### HOW CAN WE HELP?

To make ESN a part of your nitrogen management program, contact an authorized retailer or ESN representative.

### FOR MORE INFORMATION:

[www.SmartNitrogen.com](http://www.SmartNitrogen.com)

### ESN REPRESENTATIVE:



Learn more about the industry's leading environmentally smart nitrogen at [www.SmartNitrogen.com](http://www.SmartNitrogen.com)