

CENTRAL VALLEY AGRONOMY

KNOWLEDGE YOU CAN TRUST



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This Newsletter will be published monthly and available on our website www.centralvalleycoop.com. If you would like it emailed to you, please contact us with your address.

The “Science” and “Economics” of Grid Sampling

Even the most extensive soil sampling schemes measure only a small fraction of the soil. However, there is a limit to the cost/benefit relationship of intensive soil sampling. According to the University of Illinois a field will be under fertilized by 38% when using field average sample results. Here are 3 cell sizes and the % of the grid that is under fertilized. 1 acre grid, 110 ft by 110 ft = 2.5%. 2 acre grid, 220 ft by 220 ft = 4.5%. 2.5 acre grid, 330 ft by 330ft = 9.0%. **4.4 acre grid, 440 ft by 440 ft = > 9% and < 38% under fertilized.** When comparing the true cost of 2.5 acre grids and 4.4 acre grids, remember you have approximately

1/2 the number of sample points. On an 80 acre field 4.4 acre grids will be 70% of the cost. However, you will only receive 56% of the information. In other words, you are actually spending more to receive less. **18 sample points vs. 32 sample points.** With the cost of inputs, why would you move forward with less information? **The purpose of grid sampling is to identify variability and manage it not mask it!** The **hidden cost difference** between 2.5 acre grids and 4.4 acre grids or conventional samples is in the inaccuracy of the data, in over/under applying costly inputs like fertilizer or seed and in the resulting yield losses or loss of potential yield.

Liebig’s Law of the Minimum

Liebig’s Law of the Minimum is a law developed in agriculture science that states “That growth is not controlled by the total of resources available, but by the scarcest resource.” Only by increasing the amount of the **limiting nutrient** (the one most scarce in relation to “need” can the growth of a plant or crop be improved.

Soybean Seed Treatments

Before choosing a seed treatment, get educated on the types of seed protection, active ingredients, amount of A.I. and warranties/ programs that are available. Central Valley uses Warden CZ, Warden RTA, Apron Maxx, Cruiser 5FS, Vault and Optimize Inoculants because of superior performance. Warden CZ has the best pythium and phytophthora control on the market today. 3.2 fl Oz/cwt of Warden CZ includes: .32

fl oz/cwt of Apron XL, .08 fl oz/cwt of Maxim 4fs, and 1.28 fl oz/cwt of Cruiser 5fs. The probability that a seed treatment will pay for itself is extremely high. **Make sure your seed treatment includes insect control, disease control and an inoculant.** With CZ we guarantee you will not need a second applications of insecticide to control aphids. For more details, contact a Central Valley agronomist.

Preemerge Rates - Corn

| | |
|-------------|-----------|
| Harness 7EC | 2.75 pts. |
| Camix | 2.4 qts. |
| Dual II Mag | 2 pts. |
| Halex GT | 3.6 pts. |
| Outlook | 21 oz |
| Surestart | 2 pts. |
| Surpass | 3 pts. |

SPECIAL PRODUCT OF INTEREST:

ZINC

- Gets seedling off to a fast start.
- Helps establish a large, vigorous root system.
- Helps alleviate the impact of cold, wet and compacted soils.
- Weed management by enhancing canopy closure.
- Often reduces grain moisture.
- Reduces many types of stress on plant growth & development.

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