

## Potatoes Need Nourishment, Too

### Plan Nutrient Management Program Now To Ensure Quality, High-Yielding Potatoes At Harvest

Raising quality, high-yielding potatoes depends on many management factors, not the least of which is ensuring that plants receive a sufficient supply of nutrients. When soil nutrient levels are not adequate to meet plant growth demands, fertilizer applications are essential for optimizing tuber yield and quality and minimizing undesirable environmental impacts.

Dr. Carl Rosen of the Department of Soil, Water and Climate at the University of Minnesota, suggests potato growers start planning their spring crop nutrient programs now by reviewing previous yield and fertilizer program records coupled with soil test reports from this past fall.

"Planning should be based on ensuring that fertility levels are adjusted to an optimum point using appropriate soil tests," he says. "Since nutrients are basic components of yield, there is no way to produce optimum yields with sub-optimum nutrient supplies."

For example, most efficient nitrogen use depends on an adequate balance of potassium and phosphorus supplies.

Rosen says potatoes require and take up significant quantities of potassium to promote yield. Adequate potassium nutrition also helps to reduce blackspot and bruising incidence, which improves the storage quality of processing potatoes and shelf life of potatoes for the fresh market.

"Soil tests have been very useful in predicting potassium responsive soils," he says. "On low potassium testing soils, which require high potassium fertilizer application rates, both broadcast and banded applications are recommended. Also, when in proper balance, nitrogen, phosphorus, sulfur, magnesium, and potassium ensure a high-yielding potato crop."

As part of the fertilizer mix, producers can provide potatoes with several necessary crop nutrients in the form of potassium magnesium sulfate (K-Mag®), according to Dr. Ray Hoyum, vice president of Market Development and Communications at IMC Global.

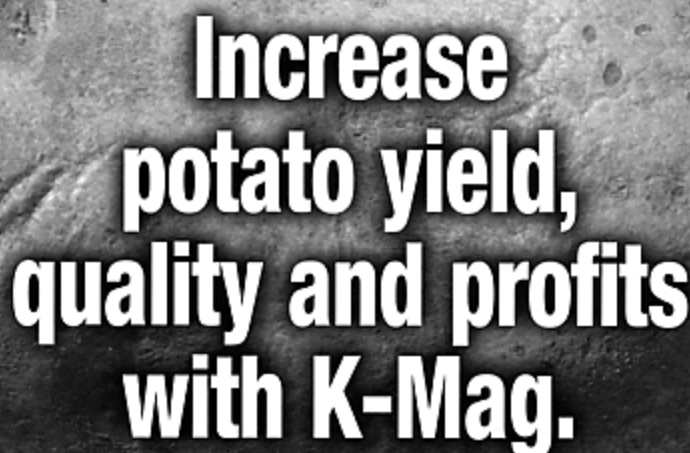
"Growers need to team individual nutrients, like potash, magnesium, and sulfur with nitrogen and phosphorus for a balanced fertility program—a prerequisite for a healthy, profitable crop," he says. "K-Mag provides the proper balance of these nutrients needed to produce a desired crop."

Mined by IMC Global, K-Mag is a 3-in-1 combination that consists of 20-22 percent potassium, 10-11 percent magnesium, and 21-22 percent sulfur.

"Since K-Mag contains potassium, magnesium, and sulfur, growers may be able to reduce the amount of these

nutrients from other sources in the overall mix," Hoyum says. "A low salt index, low chloride content, and the fact that K-Mag is 100 percent water-soluble are additional product features that are attractive to potato growers."

IMC is the world's largest producer and marketer of concentrated phosphates and potash fertilizers for the agricultural industry. It is also the world leader in production and distribution of feed ingredients for the animal nutrition industry. ■



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