

New Fertilizer Plant Has Area Farmers Taking a New Approach

“It’s All About Searching for Ways to Be More Efficient”

With a difficult harvest finally behind them and snow accumulating on their fields, Prairie farmers have begun looking ahead to next spring.

As many scrutinize soil test results to determine their fertilizer needs for next year’s crop, a new fertilizer plant has launched production in Western Canada this month that has a number of producers breaking from tradition and taking a different approach to the phosphate they apply to their soil each year.

It’s all about searching for ways to be more efficient as farm sizes increase and farmers are pushed to cover more acres within a tight time frame, says Gerald Anderson, P.Ag., an agronomist and crop consultant in Coaldale, Alta. He says the phosphate fertilizer blend produced at the new Alpine Plant Foods manufacturing facility near Regina, Sask., is different from other phosphate fertilizers farmers typically use to promote early growth in the spring. Anderson says an increasing number of farmers he works with are using the liquid starter to gain new efficiencies on their farms.

Liquid Frees Up Dry Air Tank – Can Seed Crops Faster

First, because it’s a liquid instead of a dry granular phosphate, it’s carried in a separate tank – freeing up considerable space in a farmer’s air cart for additional seed, nitrogen, or other dry fertilizer blends, he explains. That enables them to seed more acres without stopping to refill, and gets their crops seeded faster. “Time is money. The sooner that seed is in the ground, the faster it reaches maturity, and the higher the yield potential, especially if there’s an early fall frost,” says Anderson.

That ability to seed faster with a liquid system was a definite advantage this year for Glen Hill, who grows 12,000 acres of pulses, canola and wheat near Rosetown, Sask. Rain and excess moisture forced him to seed his crops 20 days later than usual. “With dry phosphate, we were able to seed 160 acres of wheat or canola per fill. With the liquid Alpine, I can do 320 acres per fill, which is huge, especially in a year like this where everything got off to such a late start.”

Hill says his crops also emerge faster with the liquid phosphate. He did a side-by-side comparison with lentils and says the rows with Alpine liquid starter had larger roots and came up two days faster than the rows with dry phosphate.

Anderson says the farmers he works with report similar results. That’s partly because it’s a liquid and an orthophosphate – a form of phosphate that’s immediately useable by plants, explains Terry Good, Alpine’s Western Canada Sales Manager. “Dry phosphate has to break apart and dissolve in soil moisture before plants can use it. There’s no dissolving or conversion required with the Alpine liquid phosphate, so the roots absorb a higher percentage more quickly regardless of soil temperature.”

He adds phosphate comes in two forms – ortho and poly – but plants can only absorb it in the ortho form. “So a liquid polyphosphate like 10-34-0 has to convert to ortho in the soil before it’s useable, which can take more than 30 days. The colder and drier the soil, the longer it takes.”

Immediately Usable in Cold Soils

Seed-placing an available form of phosphate is essential to spur vigorous early growth and root development in cold, spring soils, says Good. “Although there’s a very large pool of phosphate already in the soil, it only starts feeding the crop once soil temperatures warm up.”

The way liquid phosphate is distributed in the seed row is also important, says Anderson. “Farmers dribble the liquid Alpine starter in a continuous stream so virtually every seed has orthophosphate right there for the roots to access.” With most dry phosphates there’s a granule every two-to-three inches, leaving several seeds in between with no P, he explains, noting phosphate doesn’t move in the soil.

Lower Rates

Because it’s immediately available in the seed row, Anderson says farmers are able to use lower rates of the liquid phosphate starter than they did with dry P. “Their yields are the same or better with 8-to-14 lbs/acre of liquid Alpine as they were with twice that much dry phosphate.”

Dr. Tom Jensen, regional director of the International Plant Nutrition Institute in Saskatoon, says plants uptake almost half of the phosphate they need within the first four weeks after emergence, so the sooner they can access it in the soil, the better.

Jensen adds he doesn’t doubt farmers can speed up emergence with better distribution of a liquid orthophosphate in the seed row. He says the spring of 2009 – one of the coldest and driest on record – proved orthophosphates give crops an early growth advantage as research plots with seed-placed orthophosphate significantly outperformed yields on plots with polyphosphate.

New Plant in Full Production

Before launching production at its new Saskatchewan facility this month, Alpine had been shipping liquid orthophosphate to Western Canada by rail from it’s plant in Ontario, says Good, noting farmers will now save on shipping costs with the new plant in full production. “It started 10 years ago with one farmer, Murray Wilson, who moved to Western Canada after using our product in Ontario for 15 years,” he explains.

Wilson and his son now grow canola, barley, and corn near Melville, Sask. “The first year we moved to Western Canada we used dry phosphate because we had no choice. There was no liquid orthophosphate out here.” After that first year, he called Alpine and arranged to have some liquid phosphate starter shipped to his farm. The next spring he seeded half his crop with the liquid P and half with dry. He says the crops with liquid Alpine starter matured a day or two faster and yielded 2-to-3 bu/acre more. “We’ve always found liquid orthophosphate is more available quicker in the soil,” he says.

Wilson adds his soil was short of zinc back then, and having liquid phosphate made it easier to apply zinc to his crop. “You can’t mix micronutrients into dry phosphate and get a consistent blend but it’s easy with a liquid.”

Anderson points out soils across Western Canada can be deficient in zinc, boron, copper, and plant-available manganese. He advises farmers to test for these elements when doing their regular soil tests for nitrogen, phosphate, potassium and sulphur, because they also play an important role in promoting early plant growth in the spring. He reminds farmers to ensure soil test samples are taken at the same field locations each year, at the same soil depth, and are processed at the same lab to ensure the findings are a consistent, accurate benchmark.

Good notes Alpine’s liquid phosphate starter contains micronutrients such as zinc, manganese, boron, and molybdenum, as well as N, P, and K. Additional micronutrients, including copper, can be added to

overcome deficiencies in the soil. He adds its low salt content and neutral pH make the starter seed safe and non-corrosive.

The company's new 14,000-square-foot facility is the only hot mix liquid phosphate plant in Western Canada. It can produce 700,000 litres/day of Alpine's liquid starter, foliar products, and micronutrients.

FOR MEDIA INQUIRIES, PLEASE CONTACT:

Terry Good
Western Canada Sales Manager
Alpine Plant Foods
1-800-265-2268

CUTLINES TO ACCOMPANY ATTACHED PHOTOS:

PHOTO #0068: Terry Good, Western Canada Sales Manager with Alpine Plant Foods, at the company's new manufacturing facility near Regina. The plant launched full production this month. Good says the liquid phosphate starter fertilizer produced at the new facility is helping a growing number of Prairie farmers gain new efficiencies by freeing up space in their dry tanks for more seed and fertilizer, allowing them to seed their crops faster. It's also a liquid orthophosphate – the most immediately plant-usable form of phosphate in cold, spring soils.

PHOTO #76: Alpine Plant Foods employees Larry Balion (left) and company engineer Dietmar Walch monitor production of liquid orthophosphate fertilizer starter at Alpine's new manufacturing facility near Regina. The plant launched full production this month. The liquid orthophosphate produced at the new facility is the most immediately plant-useable form of phosphate in cold, spring soils.

PHOTO #112: Alpine Plant Foods' new Western Canadian manufacturing facility located near Regina launched full production this month. The liquid phosphate fertilizer starter produced at the new facility is helping a growing number of Prairie farmers gain new efficiencies by freeing up space in their dry tanks for more seed and fertilizer, allowing them to seed their crops faster. It's also a liquid orthophosphate – the most immediately plant-usable form of phosphate in cold, spring soils.