Central Alberta Co-op Ltd.

PULSE CHECK

It's been said that the universal answer to any agronomic question is a diverse crop rotation. After mulling it over I must say I tend to agree. Problems with disease, weeds, time management, shifts in market supply and demand, soil health, insect pressure and low protein wheat can often be mitigated or even eliminated with a good crop rotation.

What defines a good crop rotation? Well, the more the better. Of course, our climate doesn't support long season crops such as lentils, chickpeas, cotton, sunflowers, grain corn, or soybeans, but we still have options. Traditionally wheat, barley and canola dominate the Prairie landscape, but consider pulse crops, such as field peas and faba beans, and how they could fortify several aspects of a farm business. With a 5-crop rotation every field will have a 4-year break before seeing a crop for the second time. As each crop has a specific set of challenges such as Clubroot in canola or Fusarium Head Blight in cereals, the diversity created from an expanded rotation breaks the lifecycle between a pest and its host. Furthermore, research proves the more frequent a crop is grown in the same field the higher the risk of infection.

However, introducing a new crop to a farming operation is easier said than done. Pulses are usually the odd man out when it comes to crop rotations in Central Alberta. Peas are challenging to harvest when laying flat to the ground, causing extra wear and tear on machinery. Fabas on the other hand are easy to harvest, but late to reach maturity. Some advantages to growing pulse crops is that they have the ability to fix atmospheric nitrogen into the soil for the crops that follow (free fertilizer), improve soil health, spread out seasonal workloads, and add an extra buffer year to the clubroot threat in canola.

Farming is a business that requires long-term vision, but as canola prices are currently reaching record highs its tempting to look at the potential gain by condensing the crop rotation for the short-term to capitalize on a bullish market. As agronomists we want to shift the mindset of looking at each crop individually, to instead look at the entire rotation as one. When we do this, what we notice is that there are intrinsic benefits to extending the rotation with pulses that you can't account for just looking through the lens of a single year. Financially speaking, pulse crops can be more expensive to grow, and the return on investment can be lower, causing many farmers to shy away from them. But you cannot discount the extra margin earned by the following wheat crop when utilizing the free nitrogen provided by the pulses that results in higher protein content, or the suppression of viable clubroot spores in the canola, or the volunteer weed control in malt barley. These are tangible benefits that should be accounted for and attributed to the peas and/or faba's value.

Also, worth noting, is the increasing global demand for consumer pulse products, as well as new domestic investors, such as Protein Industries Canada who are creating new markets for national brands.

In summary, pulse crops are just one way that diversity can provide flexibility and resilience to a farming operation. To focus in on our vision of increasing production we need to exchange our microscopes for telescopes and examine the rotation as a whole, rather than in segments.

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