Considering adding a new crop to your rotation? Check these boxes first. By Anders Gurda

I hate to start this article with a boring regulation, but it's important. Certified organic production is a federally regulated practice standard. We all know that, are committed to it, and benefit from it. Now don't fall asleep just yet, but according to §205.205 in the regulation, a crop rotation that controls erosion, effectively manages pests and nutrients, and maintains or improves soil organic matter *is required*. That last bit is the important part: "Is required". Now there's room for interpretation here, but this most often looks like at least a three year rotation that in our region is most likely corn, beans, a small grain, and cover crops in between. Veteran organic farmers clearly see this as just a starting point, often going to 5 or more years in rotation.

Adding new crops 1) keeps you on the right side of the regulation, 2) gets you the seemingly limitless benefits of a solid rotation including what amounts to a comprehensive pest, weed, and disease package and if you plant a forage, a fertility program as well, and 3) diversifies your markets, decreasing risk and increasing your operation's resilience. As you think about what crops to add as you transition or how to lengthen your organic rotation, there are a few things to keep in mind that will make it a good decision instead of an expensive mistake. Here are a few:

- Is there a market? This isn't mind blowing, but it is something that gets missed far too often. If you're assured that a market exists, or that the buyers are always looking for more crop, that's an okay starting point, but it's not enough. Get into direct contact with multiple buyers. Ask lots of questions, ask about contract and payment terms, specifications and grades, testing protocols, delivery locations, etc. If possible, lock a contract in before even buying seed if it's not a crop with a spot market or posted bids.
- **Get educated.** You want to walk into planting the same way you walk into a classroom when you're overly prepared for a test confident and ready to get at it. Don't assume that growing a specific crop is like growing something else in your current rotation. Even jumping from feed to food-grade can be considered a different crop with different growing and handling strategies. We have tons of free resources on our website (www.pipelinefoods.com). Some of them we've created, but we also have carefully organized links to all of the best resources on the internet. There are organizations like MOSES (mosesorganic.org) and OGRAIN (ograin.cals.wisc.edu) and many more focused on row crop and non-grain topics. Ideally, find a farmer in your area who has experience with the crop who can point out the stumbling blocks before you trip over them yourself.
- Run the numbers. It can be dangerous to assume that a new crop will work financially without running the numbers, taking into account *all* costs. Are there additional processing costs (dehulling, drying, cleaning) that will be required? How much more time will the crop take to manage? If you end up getting the low end on price, how will you fare? Run all the scenarios so you're ready for anything.

- **Know where it fits.** Consider all of the pros and cons of a crop's location in your rotation. There are the obvious directions don't follow a grass with another grass or a legume with a legume but varying rooting depth, nutrient needs, cool/warm season crops, row spacing, cultivar, planting/harvest dates etc. should also be taken into account. Knowing your field's nutrient levels, drainage patterns, and past disease or weed pressure will also help you match the crop to the right area.
- **Be skeptical of 'the next best thing'**. It's cliché, but if it sounds too good to be true, it just might be. The next biggest crop is obviously hemp at the moment, both for grain and CBD. There appears to be real opportunity, but the size of the opportunity is anybody's guess. As with all things, a certain amount of measured risk can be strategic, but the investment should be equally measured, as should the expectations for a return.
- **Start slowly.** As far as new crops to add to a rotation, start with something that there's a relatively predictable market for with plenty of helpful resources including regional expertise. Hard or Soft Red Winter Wheat are good places to start. Start on a few acres to get on top of the learning curve before jumping all the way in.
- **Have a back-up plan.** If there's not a market, or it collapsed over the season, have a second-best option available. If you wanted to sell your rye into a distillery and the booze went bust, know what your region's cover crop seed needs are and help to satisfy them, or consider planting no-till beans into heavy-seeded crimped rye next year.
- Consider ALL markets. You'll likely sell much of your production into commodity
 markets, but challenge yourself to get creative with lower volume, higher value crops.
 Consider regional distilleries and breweries, seed companies looking for contract
 growers, regional millers, canning crop companies (peas, beans, sweet corn, etc),
 regional livestock producers looking for feed and forage, vegetable protein (yellow peas)
 etc.

In nature, diversity is the law. It creates a system that survives and thrives no matter the disturbance. Through longer, smarter rotations we're mimicking the genius of creation and keeping ourselves financially and environmentally healthy in the meantime.

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