

Crop establishment basics for success | Ask the Industry

Potatoes

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*Maintaining seed quality and adequate storage and handling practices, as well as applying seed treatments prior to storage or planting, are imperative for potato growers when preparing for the next growing season. **Syngenta Senior Technical Services Lead Scott Mathew** explains the steps to achieving a quality potato crop.*

With a major potato planting season just around the corner, it's worth taking some time to consider what's really important with setting up your season for high yields and top quality. Industry best-practices applied during the crop establishment phase will have a huge impact on the final results at harvest. Get these 3 factors right and you are off to a good start.

Seed quality

The foundation for good crops really is laid early, even before the crop is planted. High quality seed is the first step in maximising yield and quality. Given that you are reading this now, I hope you managed to visit your seed grower over summer to inspect the seed crop. If not, you should inspect the seed lot prior to purchasing. It's important to know what you are dealing with - you really should reject the seed if it is not up to standard.

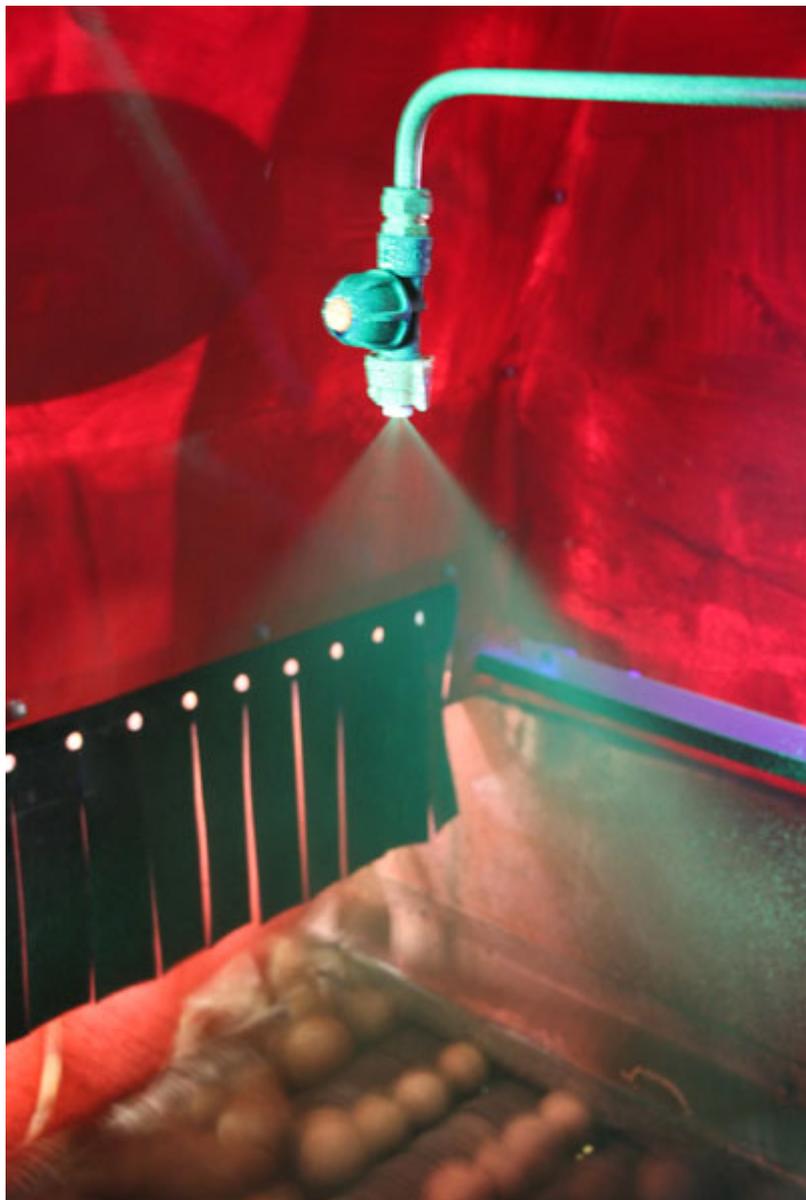
Only source seed from a certified seed grower or from a reputable grower that has demonstrated a history you know you can trust. Planting poor quality seed is a recipe for disaster.

Storage and handling

After the seed potatoes are produced the next step will be to handle that seed carefully and store it correctly.

Overall cleanliness and sanitary conditions are key elements of best-practice storage. Badly maintained, dusty sheds are places where diseases such as silver scurf, caused by the fungus *Helminthosporium solani*, thrive, ready to infect this year's seed. Poorly ventilated sheds with fluctuating temperatures lead to undesirable physiological seed-ageing. Ideal conditions for storing potatoes mimic conditions underground: dark, temperatures between 5 to 15°C, along with adequate air circulation and humidity.

Seed handling is just as important. Poorly maintained, dirty equipment with exposed steel and high drop points can bruise or damage the tubers leaving them open to infection from pathogens like *Fusarium* spp. and bacteria. These cause seed piece decay. Sometimes, old potato residue from previous grading can be found on the floor or jammed up under belts or between rollers. Again, these are potential sources for disease transfer.



Seed treatment

Inadequate seed protection from disease is still responsible for some of the largest crop losses and failures. Applying a fungicide seed treatment prior to storage or planting is a sound investment. What product is the most appropriate will depend on what disease(s) you know are in the soil.

If the paddock is new to you, its rotational history and location will be your best guide and if unsure, you should seek expert advice.

In disease risk areas you may need to consider seed treatment prior to storage or planting, and possibly follow-up with an in-furrow fungicide application. This is definitely the case when black scurf (*Rhizoctonia solani*) or pink rot (*Phytophthora erythroseptica*) are an issue.

VIBRANCE® PREMIUM is a seed treatment that offers excellent control of black scurf (*Rhizoctonia solani*) and silver scurf (*Helminthosporium solani*), whilst also providing suppression of seedborne common scab (*Streptomyces* spp.). It's also registered to control seedborne black dot (*Colletotrichum coccodes*) and fusarium dry rot (*Fusarium* spp.). I mention this treatment because it is the only registered option that covers the major soil and seedborne diseases.

VIBRANCE® PREMIUM can also be applied prior to storage of seed potatoes, offering protection from

fusarium in storage. This registration gives you greater treatment flexibility.

For crops grown in pink rot areas, RIDOMIL GOLD® 480 SL applied in-furrow offers further protection, which is especially important in wet conditions. If black scurf or silver scurf look like they are going to be ongoing issues, an in-furrow application of AMISTAR® 250 SC would offer longer lasting protection.

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