How to treat seed-borne and soil-borne diseases

Potatoes
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By Scott Mathew, Senior Solutions Development Lead @HortApplication

When looking for the most appropriate seed treatment for your crop, you need to consider if you are treating a soil-borne or a seed-borne disease. Depending on where the infection is originating from, the soil or the seed, this will determine the most appropriate treatment for your crop.

SOIL-BORNE DISEASE PROTECTION

If you are looking for control of soil-borne diseases, AMISTAR® 250 SC in-furrow will be appropriate for your needs.

AMISTAR 250 SC is a systemic fungicide (Group 11) and when applied as an in-furrow treatment and evenly incorporated into the soil mound it provides long lasting protection within this treated zone. Azoxyystrobin controls soil-borne pathogens before they can infect stolons, roots, shoots and developing daughter tubers. Some azoxyystrobin is also absorbed by the developing plant to give a level of protection from inside the plant issue.

When looking at applying an in-furrow treatment like AMISTAR, here are some things to consider:

- If using 1 nozzle to apply an in-furrow treatment you should mount the spray nozzle so the spray is directed into the furrow as a 15-20 cm band just before the seed is covered.
- If using 2 nozzles to apply an in-furrow treatment you should mount the spray nozzle so that the
first nozzle is directed at spraying the soil at the bottom of the furrow and opened in a 15-20 cm band just before the seed is covered. The 2nd nozzle should be directed so that it sprays the soil as the furrow is closing (Bow Wave). This results in better incorporation of AMISTAR throughout the plant soil profile.

- Apply in 1-3 L of water/100 m of row. Ensure the water volume used is not so high as to wash off any seed treatments previously applied to seed.
- Fit 2 x 100 wire mesh filters in the circulation system. DO NOT fit nozzle filters.
- Use nozzles with a minimum 0.8 mm orifice.
- DO NOT apply AMISTAR 250 SC if conditions or seed quality favour bacterial rots as these diseases may be aggravated if seed comes into contact with additional moisture.
- Do not apply AMISTAR 250 SC if planting in hot, sandy soils as bacterial rots may be aggravated.
- Care must be taken with any liquid in furrow application.

**SEED-BORNE DISEASE PROTECTION**

If you are looking for control of seed-borne diseases, MAXIM® will be appropriate for your needs.

MAXIM is a very persistent contact fungicide (Group L) that provides excellent residual control of seed-borne diseases such as Black scurf, Silver Scurf, and suppression of Common Scab. Applied as a seed treatment, the active ingredient (fludioxonil) binds to the outer layer of the seed piece and exhibits a “halo” effect in the soil, suppressing pathogens in the soil around the treated seed piece (rhizosphere). In the absence of light, the active ingredient is very persistent and provides excellent long lasting protection.

When looking at applying a seed treatment like MAXIM, here are some things you need to consider:

- If cutting seed, the wounds ideally should be submersed before treatment.
- The product should be applied diluted with water in specialised seed-treatment equipment.
- Use only sufficient water to give complete coverage. A purpose designed low volume atomising applicator will normally be necessary to achieve this when the throughput of seed is less than 6 tonnes/hour.
- The applicator should be mounted at the point of maximum seed rotation. Ensure seed is promptly and thoroughly dried after application, before planting. If necessary, dust seed with fir bark after applying to aid drying.
COMBINATION SEED AND SOIL-BORNE PROTECTION

You can actually combine AMISTAR 250 SC and MAXIM to get seed and soil-borne protection in one go.

Used in combination, MAXIM seed treatment and AMISTAR 250 SC in-furrow delivers the most comprehensive control of seed and soil borne fungal diseases currently available on the market. By providing immediate and lasting protection against fungal disease in stolons, roots, stems and tubers, this program can enhance the evenness of emergence, tuber size, clean skin finish, processing quality, visual appearance and marketable yields. Providing a clean start for a quality finish.

Download the Technotes below for more information:

More reasons to use MAXIM 100FS in potatoes 146.87 kb

Amistar in potatoes in-furrow 208.86 kb
Products:
Maxim 100 FS
Amistar 250 SC