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AMISTAR 250 SC
Now registered for in-furrow use

AMISTAR 250 SC is now registered for in-furrow use in potatoes to control Black scurf (*Rhizoctonia solani*) and for suppression of Silver scurf (*Helminthosporium solani*).

Black scurf is a potato disease which affects the marketability of potatoes due to the formation of dark, brown to black sclerotia on the skin of the tuber. These surface defects primarily impact on tuber appearance and ultimately the market ability of the crop.

Rhizoctonia can also infect potato stems and result in stem girdling reducing the number and health of potato plants.

Silver scurf, another fungal disease also affects the marketability of fresh potatoes by causing a silvery sheen on the potato skin especially when wet. Affected areas can dry and flake off resulting in water loss during storage and subsequently shrivelled, dehydrated tubers.

AMISTAR 250 SC’s new in-furrow registration has been a collaborative effort, with Syngenta working with its many industry partners.

The new in-furrow registration will be welcomed by many growers throughout Australia for up to this point in time, there have been no products available to effectively controlled these seed and soil-borne diseases.

Field trials conducted by Syngenta in Australia to evaluate AMISTAR® 250 SC applied as an in-furrow spray at planting have shown this product’s ability to effectively control Black scurf (*Rhizoctonia solani*) and suppress Silver scurf (*Helminthosporium solani*).

Growers should note, best results were achieved when AMISTAR 250 SC was used in conjunction with MAXIM 100 FS. MAXIM 100 FS should be applied as a potato seed piece treatment before sowing.

AMISTAR 250 SC IN-FURROW
... HOW DO YOU DO IT?

For control of Black scurf (*Rhizoctonia solani*) and suppression of Silver scurf (*Helminthosporium solani*), apply between 5 and 10 mL of AMISTAR 250 SC per 100 metre of row - as an in-furrow spray at planting.

You should mount the spray nozzles so the first spray is directed into the furrow just before the seed and the second nozzle into the soil as it covers the seed.

Use the higher rate of AMISTAR 250 SC where higher levels of disease occur.

Apply in 1 to 3 L of water/100 m of row. Ensure the water volume used is not so high as to wash off any seed treatments such as MAXIM 100 FS previously applied to the seed.

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.
Phillip’s already geared up for AMISTAR 250 SC in-furrow

Phillip and Jane Beswick of Sisters Creek, Tasmania, have done some small scale trial work with AMISTAR applied as an in-furrow treatment. Phillip says their fertile soils and plentiful rainfall support good crops, which without protection would support a wide range of root and foliar diseases.

“We can get Rhizoctonia, Pink Rot, Early Blight (Target Spot) and Sclerotinia in the tops. They are the main ones,” he says. “Our fungicide program is based on a protectant spray program, basically every seven days.

“Heavier red soil paddocks that have had a substantial amount of cropping and are prone to Pink Rot get RIDOMIL GOLD 25G granules and a couple of follow up foliar RIDOMIL GOLD MZ sprays.

“And AMISTAR is a product that’s come into the program in the last three years as a strategic foliar spray.

“We’re already geared up for the new registration with a tank on the front of our planter. We’ve got two jets in each row, spraying in line with the rows so we’ve got one spraying straight down where the seed drops and another one spraying back as the dirt folds in around the seed piece.

“From what I’ve seen of AMISTAR in-furrow, there could be a lift in yield but it’s mainly about quality. You haven’t got the rejection which, in all fairness, is a yield increase because the wastage is reduced.”

AMISTAR foliar has big impact

Late maturing potato varieties like Russett Burbank can be hugely responsive to AMISTAR applied as a foliar treatment to control Early Blight (Target Spot). According to Phillip Beswick of Beswick Holdings Tasmania, on any of their long season varieties that grow for 22 to 25 weeks, they go in at between 16 and 18 weeks and spray with AMISTAR (depending on disease pressure and on how they are looking).

“That helps tidy up any Target Spot in the tops,” he says. “The yield advantages are definitely there because the crop’s clean. It grows for a lot longer which makes a big difference. We believe we can get an extra 5 t/ha with that extra two to three weeks of growth.”

‘Isolink’ technology in FUSILADE FORTE

FUSILADE FORTE (128 g/L fluozifop-p) is now registered and available! This product maintains the wide ranging benefits of FUSILADE EC, but comes already formulated with Syngenta’s unique ‘isolink’ advanced surfactant technology.

Highly effective and rapidly absorbed, FUSILADE FORTE selectively controls many annual and perennial grass weeds in a wide range of cropping situations.

With it’s own in-built adjuvants, growers will discover FUSILADE FORTE even easier to use.

Syngenta’s innovative micro-droplet technology makes it possible to produce a formulation with all components linked together in exactly the right proportions.

This advanced technology makes the spray droplet size more uniform and therefore a greater amount of active ingredient reaches and is retained on the leaf.

Inbuilt surfactants aid spreading on the leaf to maximise surface coverage and special penetrants help the active ingredient move quickly into the weed through the leaf cuticle.

FUSILADE FORTE is rainfast in just 1 hour and can stop weed growth in two days.

‘Isolink’ advanced surfactant technology maximises the inherent power of FUSILADE offering growers improved flexibility and additional power, with lethal effect to grass.
Serve-Ag Research was instrumental in initiating some of the first investigations in Australia into the use of AMISTAR in-furrow. Phillip Frost, the company's Project Manager based in Devonport, Tasmania, says, "At industry meetings when growers are working out their research priorities, Rhizoctonia control always comes up as one of the major disease issues.

"It seems to be getting worse and the level of inoculum in the soil here appears to be fairly high.

"Potatoes are a major crop for this area and a lot of the ground has been fairly heavily cropped in the past. I think it's leading to the build up of the disease in our soils. And as some of the other diseases are becoming better controlled, it's putting a spotlight on Rhizoctonia as an emerging issue.

"Growers have been getting some protection with seed treatments, but they're still struggling to control soil-borne Rhizoctonia.

"Some growers and contractors have set up in-furrow application equipment on their planters. So once AMISTAR is registered for in furrow use, it shouldn't be a big change in equipment or production practices.

"The thing growers will have to keep in mind when using AMISTAR in-furrow is not to totally rely on this one product for control of Rhizoctonia; they need to use AMISTAR as part of their overall disease management.

"The major things they need to do are:
- have good crop rotations;
- use AMISTAR in conjunction with seed treatments like MAXIM; and,
- use other products in the program to maximise the health of their crop to try and encourage disease prevention."

Serve-Ag Research Project Manager Phillip Frost (right) with Syngenta Territory Sales Manager Trevor Sibbings.

Serve-Ag Research Project Manager Phillip Frost (right) with Syngenta Territory Sales Manager Trevor Sibbings.

In Serve-Ag’s 2003 trial at Sisters Creek, AMISTAR applied in-furrow yielded 4.9 t/ha more than the untreated crop.

Add a seed treatment of MAXIM 100 FS and the yield increased to 17.2 t/ha above the untreated.

Conservatively pricing potatoes @ $200/t, the combination of a seed and in-furrow treatment grossed $3,440 more income.

That doesn’t take into account any price premium that would have been paid for the better quality potatoes!
McCain Foods (Aust) welcome new AMISTAR 250 SC in-furrow application

Les Murdoch, McCain Foods (Aust) Agricultural Manager based in Smithton, Tasmania confirms many of his grower clients have been awaiting the registration of AMISTAR 250 SC for use in-furrow.

Three years ago a group of growers approached McCains to organise a study tour to the US. From that initial approach they ended up with 10 growers and two McCain field staff (Steve Cook and Greg Bullock) as well as Serve-Ag Agronomist, Rob Wilson, that went on the trip.

“One of the things that came out of that particular study tour was that they could all see the potentially exciting results with AMISTAR being used in-furrow,” says Les.

“Potato growers in the US and Canada were talking about what it was doing for their crops and how it was reducing, (dramatically in some cases), diseases. So when the boys came back, they there were keen to pursue it further.

“After the trip, Steve and Greg, conducted focus groups amongst our clients and they started looking even closer at crops. When they started pulling samples and testing for different diseases, we realised just how big a problem Rhizoctonia really was for us.

“Once we’d put our finger on that, we could see there were a lot of crops that had deformed potatoes and we could better understand why.

“More often than not they were in crops we thought would be really high yielding. They might have grown for 160 to 170 days and we were leaving tonnes of potatoes on the ground after harvest because they were not suitable.

“It was evident that Rhizoctonia was a real issue!

“We ran some initial AMISTAR trials. Serve-Ag was an instigator of that, with the growers also pushing it to get it happening.

“After the first few trials there were some vast differences with AMISTAR in-furrow, evidenced by much better growth in the treated crop.

“Upon digging the trials, we could see the difference in potato yield and quality, prompting us to work even closer with Syngenta.

“While AMISTAR has been going through the process of registration for in-furrow use, we’ve done quite a lot locally in an attempt to perfect the in-furrow application.

“Syngenta’s Tasmanian Territory Sales Manager, Trevor Stebbings, ran a growers’ night to demonstrate different application methods and how effective these were going to be.

“We have tried a number of different nozzle configurations and settings and now believe we’ve got the right product, the right application equipment and the right method of application to ensure good use of the new in-furrow registration.

“One of the big things that we’ve been working on with our growers, is increasing productivity and by increasing productivity, I mean increasing physical yield as well as quality per hectare.

“We know that increasing yield increases growers’ returns per hectare so their profit margins are better.

“It also means that we can plant less hectares each year to get the same volume of potatoes and that is really important down here from an industry point of view.

“It means we can look at extending rotations to a degree, so the less hectares we grow for the same tonnes every year it means that eventually, we hope to be able to stick to our four or five year rotation.

“That is one of the things we really value. When we’re assessing existing growers and looking at their performance or even looking at taking on new growers, we really focus on that ability for the grower to be able to give us a good rotation.

“We’re hoping AMISTAR in-furrow will play an important role in helping to achieve that objective.”

**Independent Trial conducted in Tasmania - 2004/05**

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<th>AMISTAR</th>
<th>Rizolex*</th>
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<td>Tuber No.</td>
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Visual quality assessment from a 3 metre row sample.

AMISTAR in-furrow

Rizolex* treatment
Syngenta Crop Protection has added BRAVO WEATHERSTIK to its horticultural range, strengthening even further the company’s impressive list of market leading potato fungicides.

For almost 30 years BRAVO’s broad-spectrum disease protection, excellent crop tolerance and outstanding formulation have built an unrivalled reputation for disease prevention.

“No fungicide can cure plant tissue that has already been killed by disease infection,” says Tony Carr, Syngenta’s Horticultural Business Manager. “We see time and time again that fungicide programs based on disease prevention produce the highest yields.”

Syngenta’s research reveals that BRAVO WEATHERSTIK is more persistent on plant surfaces than other protectant fungicides such as mancozeb and other chlorothalonil based formulations.

The secret behind this superior stickability is BRAVO WEATHERSTIK’s patented new surfactant technology, which maximises its ability to stick to the waxy cuticle of the leaf, even during heavy rainfall or irrigation. The benefit to growers is that between sprays, more active ingredient remains on the plant surface where it is needed.

“Nothing matters what the crop, growers need multi-site activity protectant fungicides as part of their disease management programs,” says Tony. “And the fungicide has to be properly applied to ensure thorough coverage of the plant and stay long enough to do its disease fighting work. “Many field and laboratory tests comparing it with other products have proven BRAVO WEATHERSTIK’s capacity to resist the wash-off effects of rain and degenerative effects of wind, sunlight and humidity.

Tony said, “Growers will find BRAVO WEATHERSTIK is easy to handle, smooth flowing and disperses quickly and evenly in the tank.”

“In terms of resistance, BRAVO WEATHERSTIK’s ‘multi-site’ contact action means it is considered a low-risk product. That makes it the ideal foundation of integrated disease protection programs, especially where more disease specific fungicides like AMISTAR or SCORE are used during high pressure periods.”

BRAVO WEATHERSTIK will replace the old BRAVO 720 SC formulation and is available in a 10L drum or 100 L MAXI™ returnable container. It will have the same crop uses, withholding periods and application rates.

BRAVO WEATHERSTIK is formulated with a unique spreader sticker combination for:

- Excellent fungicide retention, even after heavy rain or irrigation
- No additional surfactants or additive required
- Available in 10 L and the MAXI-100 closed system returnable container

BRAVO WEATHERSTIK Benefits

- Superior protection, sticks up to 20% better than BRAVO
- Multi-site activity for resistance management
- Broad spectrum disease control
- Wide crop registrations
- Long persistence on crop surfaces for extra protection
- Soft on key beneficial insects
- Excellent crop tolerance
- Compatible with most fungicides and insecticides
- Easy to mix and measure liquid formulation

Commence BRAVO WEATHERSTIK applications at flowering time or earlier if conditions favour the development of Early Blight (Target Spot) or Late Blight (Irish Blight).
BRAVO, AMISTAR and SCORE, they’re all part of the Queensland foliar disease package

High relative humidity, heavy dews, inclement rain and warm temperatures. Queensland can produce an unforgiving climate in terms of foliar diseases for potato growers. Any mistake or gap in the spray program can be costly and for many growers Early Blight (Target Spot - Alternaria Solani) is the worst.

Dean Cayley and his father Neville grow potatoes and sugar cane in Bundaberg. All their potatoes are grown on trickle irrigation which is not only more waterwise, it helps with disease prevention.

Dean explains, we went into trickle about 15 years ago. It just made it a heck of a lot easier to water the blocks during the day because we have a lot of wind in Bundaberg.

“All our potatoes are grown for Smiths and Arnotts. Atlantic is the main variety for Arnotts and Smiths have their own proprietary line.

“The Smiths FL variety grows 10 to 20 days longer than the Atlantic and that’s something we can’t achieve without very good disease control.

“Because of the trickle irrigation it stands to reason there is a lot less wetting of the leaf and therefore, lower disease pressure.

“Flowering time is the most critical for us when we start with AMISTAR, more so on the FL variety. At that time BRAVO also plays an important role for general disease prevention.

“Since we’ve been using AMISTAR, the FL’s tend to grow right to their finish. We’ve got better yields because there’s more foliage for longer and the tubers fill better.

“We’ve seen some yields sneak up to 18 tonnes to the acre, whereas without AMISTAR we’d be lucky to get 15 tops.

“If we do see any sign of Target Spot, which is our main disease risk, we’ll go straight in with SCORE and that seems to clean it up.

“I saw the results a few years ago when only half a paddock was sprayed with SCORE before it rained and I had to stop. On the SCORE side there was still green foliage a fortnight later whereas on the other side, was just totally gone with disease.

Specialist Bundaberg potato producer, Graham Ramsay of Carrington Farms agrees, Target Spot is the principal foliar disease they have to contend with.

Graham runs a large business growing processed potatoes with his son Graham and son in law Bruce Richards.

“Our spray program is based on disease prevention, rather than cure and we generally put six or seven fungicide applications on in any one growing season.

“Exactly what we use depends on seasonal conditions and whatever we feel is the most cost effective solution, but we go for realistic rates and correct timing, ahead of high dose rates to cure a problem.

Aerial spraying by chopper is the way we now apply our fungicides and we’ve found it to be really effective.

“By using the helicopter we find we can spray when it needs to be done, not simply when we can get back onto the ground after we’ve watered up or ploughed.

“So it’s a preventative program based on products like BRAVO.

“I like to get an AMISTAR spray on early, before we side dress fertiliser and that’s based on advice we’ve had from the agronomy people at Smiths.

“In the 1867 which is Smiths proprietal variety we go for two AMISTAR sprays and I think, that has been of great benefit. We haven’t had a Target Spot issue. This is the second year we’ve done that.

“SCORE is the one that we really hammer home in the last five to six weeks of the plant’s life and we’ve upped the rate from 300 to 500 mL/ha and we do that as a preventative.

“It seems to work marvellously well.”

Bundaberg potato grower, Dean Cayley (right) with Peter Holmes (left) of Syngenta and Simon Andreoli of Wide Bay Rural Supplies.

Graham Ramsay (left) with Bruce Richards. Graham uses BRAVO, SCORE and AMISTAR in his foliar disease program.
Glen and Dean give AMISTAR foliar the ‘thumbs up’

Pemberton potato growers, Dean and Glen Ryan and their father Tony, start planting their 45 ha crop in mid August with the aim of finishing planting before Christmas. Harvesting starts around Christmas time with the last of the crop coming in by the end of May/early June.

All their potatoes are grown for fresh consumption, except for a small amount of seed.

High yield is important but with the fresh market being so quality driven their attention is also focused on quality and they dig and wash their potatoes the same day, which is a bit unique in Western Australia.

“Early Blight (Target Spot) is a problem for us in our later plantings that we dig in April and May,” says Glen.

“Light south coastal drizzle and cool days really sets the disease up and that’s when we’ve got to be especially careful. It can get straight in to any crops that are a bit weak or suffering around that time.

“Early in the year we haven’t really got a problem, the blight doesn’t seem to get into early crops that are growing well. It’s later that we generally need to keep the crops growing a bit longer and that’s when we start applying our AMISTAR.

“We’ve found AMISTAR is doing a better job than anything else we’ve tried. We’re really wasting our time using anything else if we’re not getting the results.

“We get yield improvements through the fact that the crop grows longer and the potatoes are able to fill out better.

“If a crop goes down early, you end up with a lot of small potatoes which have a lower value.

“We’re using AMISTAR for disease prevention, as soon as the rows meet, we go in with our first spray. Then about two weeks later we’ll decide if we need another one.”

Please contact the Syngenta Technical Product Advice Line:
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