



# INNOVATION FOR PROGRESSIVE FARMERS

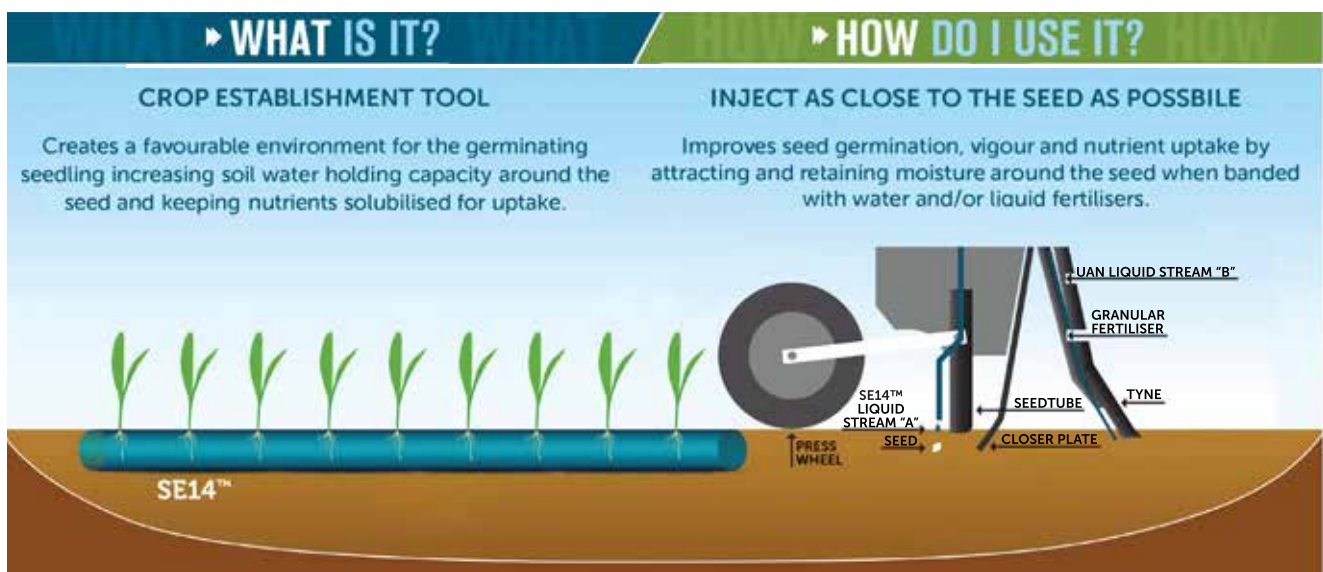
**SE14<sup>TM</sup>**  
MOISTURE RETAINER



SACOA

## WHAT IS SE14™ *In-Furrow Banded Moisture Retention Agent*

- SE14™ is a unique soil moisture attraction and retention agent.
- When placed in close proximity to the planted seed in a continuous liquid band with water, UAN or a combination of both, SE14™ attracts moisture to the seed to assist with germination.
- Moisture can be drawn to the seed from below, the sides (inter-row) or from above the sown seed.
- By drawing moisture to the seed, SE14™ aids with crop establishment in non wetting soils and/or after marginal rainfall events post dry seeding.
- SE14™ is relatively immobile in the soil profile therefore can remain in situ for a considerable period of time awaiting an opportunity to “grab” any moisture.



## SE14™ USAGE RATES

The standard use rate of SE14™ is 3L/ha based on 25.4cm (10") row spacings. As row spacing increases, rates can be reduced due to the increased concentration per metre of furrow.

As an example, 3L/ha on 25.4cm row spacings will deliver 0.076mL/m of crop row. If row spacing are increased to 30.48cm, 2.5L/ha will deliver the same rate of SE14™ per metre of crop row.

SE14 Usage Rate	Row Spacings	Delivery per linear metre
3L/Ha	25.4cm	0.076ml
2.5L/Ha	30.48cm	0.076ml

Other factors to consider when choosing an SE14™ rate are:

### SOIL TYPE

Forest gravel soils are very responsive to SE14™ and therefore a rate at the lower end of the rate range is commonly used with good results. On lighter textured soils such as non wetting sands, use the higher end of the rate range to achieve optimum performance.

### PROXIMITY OF LIQUID STREAM TO SEED

The closer the liquid stream containing SE14™ is to the seed the lower the potential rate can be. If the amount of moisture needed to be drawn to surround the seed is minimal, then less SE14™ will be required. The drawing power of water by SE14™ has a direct correlation to rate.

### PROXIMITY OF LIQUID STREAM TO PREVIOUS YEARS FURROW

If sowing into the previous year's furrow or using edge row systems, there is generally residual water resources for the SE14™ to tap into. This can impact how much product is required to have the seeds surrounded by moisture.

### HAS SE14™ BEEN USED IN THE PADDOCK PRIOR?

There is plenty of anecdotal evidence where growers who have been using SE14™ for several years are getting a residual build up in their soil. If sowing back into previous furrows or edge row sowing lower rates may well achieve the desired outcome.

In general most growers start using between 2-3L /ha depending on the variables mentioned above. They will generally settle on a rate once they see the responses to different rates for themselves on their own property with their own equipment.



## LIQUID STREAM SEPARATION FROM SEED

To optimise the performance of SE14™, liquid systems on seeding bars usually need to be adapted to ensure the liquid stream containing SE14™ is delivered as close to the seed as possible. Conducting a dye test to verify the position of liquid relative to the seed is good practice to validate liquid stream placement.

Seeding bars which have been set up for the delivery of UAN often result in liquid being delivered to "liquid stream B placement". This is too far from the seed for SE14™ to be effective.



### **LIQUID STREAM A**

Placement in concentrated band as close to the seed possible for optimum results.

### **LIQUID STREAM B**

Liquid Stream where UAN is typically placed (down the back of the tyne) results in too greater seed-liquid separation and vertical spread causing dilution.



**MAKE EVERY**  
**SEED**  
**COUNT**  
**THE SEASON STARTS WITH SE14**

 **SACO A**  
**SE14™**  
MOISTURE RETAINER

# LIQUID PLACEMENT WITH COMMON SEED BOOTS

## AUSFLOW DBS



LIQUID STREAM A



LIQUID STREAM A



LIQUID STREAM A



# LIQUID PLACEMENT WITH COMMON SEED BOOTS

## AG MASTER PAIRED ROW



## AG MASTER SINGLE SHOOT



## LIQUID PLACEMENT WITH COMMON SEED BOOTS

### STILLETTO



LIQUID STREAM A



LIQUID STREAM A





**THE MOST**  
***EFFECTIVE***  
**DEFENCE AGAINST**  
**NON WETTING SOIL**  
**MAKE EVERY SEED COUNT**

## SE14 FERTILISER INTERACTION TRIAL DATA

CANOLA | Location : Bolgart

### Metre Row Counts - 07 June 2020 - 35 DAS

Treatment #	Treatment	Average
1	80kg NPK with seed + 50L UAN below seed	2.2
2	80kg NPK + 30L UAN + SE14™ 3L - all with seed	5.3
3	80kg NPK + 30L UAN - all with seed	2.3
4	80kg NPK + 60L UAN + SE14™ 3L - all with seed	4.6
5	80kg NPK + 60L UAN - all with seed	2.2
6	48kg NPK + 30L UAN + SE14™ 3L all with seed + 72kg NPK below seed	5.5
7	48kg NPK + 60L UAN + SE14™ 3L all with seed + 72kg NPK below seed	6.4
8	48kg NPK + 90L UAN + SE14™ 3L all with seed + 72kg NPK below seed	4.8
9	48kg NPK + 90L UAN all with seed + 72kg NPK below seed	2.2
10	120kg NPK below seed + 50L UAN + SE14™ 3L all with seed	7.8
* Avg of 3 reps , 6 counts per plot		

### Biomass Imagery - 25 June 2020 - 53 DAS

Treatment #	Treatment	Average
1	80kg NPK with seed + 50L UAN below seed	2.2
2	80kg NPK + 30L UAN + SE14™ 3L - all with seed	13.3
3	80kg NPK + 30L UAN - all with seed	2.9
4	80kg NPK + 60L UAN + SE14™ 3L - all with seed	14.0
5	80kg NPK + 60L UAN - all with seed	1.8
6	48kg NPK + 30L UAN + SE14™ 3L all with seed + 72kg NPK below seed	18.3
7	48kg NPK + 60L UAN + SE14™ 3L all with seed + 72kg NPK below seed	18.7
8	48kg NPK + 90L UAN + SE14™ 3L all with seed + 72kg NPK below seed	13.8
9	48kg NPK + 90L UAN all with seed + 72kg NPK below seed	2.1
10	120kg NPK below seed + 50L UAN + SE14™ 3L all with seed	22.0
* Avg of 3 reps , 4 counts per plot		

3 Colour Scale Legend	Lowest Value	Percentile	Highest Value
-----------------------	--------------	------------	---------------

## SE14 FERTILISER INTERACTION TRIAL DATA

WHEAT | Location : Bolgart

### Metre Row Counts - 07 June 2020 - 12 DAS

Treatment #	Treatment	Average
1	80kg NPK with seed + 50L UAN below seed	17.7
2	80kg NPK + 30L UAN + SE14™ 3L - all with seed	21.2
3	80kg NPK + 30L UAN - all with seed	14.0
4	80kg NPK + 60L UAN + SE14™ 3L - all with seed	15.5
5	80kg NPK + 60L UAN - all with seed	12.1
6	48kg NPK + 30L UAN + SE14™ 3L all with seed + 72kg NPK below seed	15.7
7	48kg NPK + 60L UAN + SE14™ 3L all with seed + 72kg NPK below seed	17.3
8	48kg NPK + 90L UAN + SE14™ 3L all with seed + 72kg NPK below seed	13.1
9	48kg NPK + 90L UAN all with seed + 72kg NPK below seed	12.9
10	120kg NPK below seed + 50L UAN + SE14™ 3L all with seed	18.9
* Average of 3 reps, 6 counts per plot		

### Biomass Imagery - 13 August 2020 - 79 DAS

Treatment #	Treatment	Average
1	80kg NPK with seed + 50L UAN below seed	70.7
2	80kg NPK + 30L UAN + SE14™ 3L - all with seed	68.0
3	80kg NPK + 30L UAN - all with seed	64.1
4	80kg NPK + 60L UAN + SE14™ 3L - all with seed	69.3
5	80kg NPK + 60L UAN - all with seed	66.7
6	48kg NPK + 30L UAN + SE14™ 3L all with seed + 72kg NPK below seed	69.5
7	48kg NPK + 60L UAN + SE14™ 3L all with seed + 72kg NPK below seed	73.7
8	48kg NPK + 90L UAN + SE14™ 3L all with seed + 72kg NPK below seed	71.6
9	48kg NPK + 90L UAN all with seed + 72kg NPK below seed	70.6
10	120kg NPK below seed + 50L UAN + SE14™ 3L all with seed	71.3
* Average of 3 reps, 4 images per plot		

3 Colour Scale Legend	Lowest Value	Percentile	Highest Value
-----------------------	--------------	------------	---------------



## SE14 FERTILISER INTERACTION TRIAL DATA

CANOLA | Location : South Tammin

### Metre Row Counts - 05 June 2020 - 31 DAS

Treatment #	Treatment	Average
1	80kg NPK with seed + 50L UAN below seed	15.2
3	80kg NPK + 30L UAN + SE14™ 3L - all with seed	17.7
2	80kg NPK + 30L UAN - all with seed	19.2
4	80kg NPK + 60L UAN + SE14™ 3L - all with seed	13.4
5	80kg NPK + 60L UAN - all with seed	11.1
6	48kg NPK + 30L UAN + SE14™ 3L all with seed + 72kg NPK below seed	20.2
7	48kg NPK + 60L UAN + SE14™ 3L all with seed + 72kg NPK below seed	14.5
8	48kg NPK + 90L UAN + SE14™ 3L all with seed + 72kg NPK below seed	13.0
9	48kg NPK + 90L UAN all with seed + 72kg NPK below seed	13.1
10	120kg NPK below seed + 50L UAN + SE14™ 3L all with seed	20.2
* Average of 3 reps, 6 counts per plot		

### Biomass Imagery - 25 June 2020 - 53 DAS

Treatment #	Treatment	Average
1	80kg NPK with seed + 50L UAN below seed	48.05
3	80kg NPK + 30L UAN + SE14™ 3L - all with seed	52.29
2	80kg NPK + 30L UAN - all with seed	49.97
4	80kg NPK + 60L UAN + SE14™ 3L - all with seed	44.39
5	80kg NPK + 60L UAN - all with seed	43.86
6	48kg NPK + 30L UAN + SE14™ 3L all with seed + 72kg NPK below seed	66.04
7	48kg NPK + 60L UAN + SE14™ 3L all with seed + 72kg NPK below seed	50.90
8	48kg NPK + 90L UAN + SE14™ 3L all with seed + 72kg NPK below seed	54.83
9	48kg NPK + 90L UAN all with seed + 72kg NPK below seed	48.98
10	120kg NPK below seed + 50L UAN + SE14™ 3L all with seed	55.41
* Average of 3 reps, 4 images per plot		

3 Colour Scale Legend	Lowest Value	Percentile	Highest Value
-----------------------	--------------	------------	---------------

## SE14 FERTILISER INTERACTION TRIAL DATA

WHEAT | Location : Tammin

### Metre Row Counts - 05 June 2020 - 31 DAS

Treatment #	Treatment	Average
1	80kg NPK with seed + 50L UAN below seed	24.3
2	80kg NPK + 30L UAN + SE14™ 3L - all with seed	27.5
3	80kg NPK + 30L UAN - all with seed	20.5
4	80kg NPK + 60L UAN + SE14™ 3L - all with seed	26.8
5	80kg NPK + 60L UAN - all with seed	24.9
6	48kg NPK + 30L UAN + SE14™ 3L all with seed + 72kg NPK below seed	28.1
7	48kg NPK + 60L UAN + SE14™ 3L all with seed + 72kg NPK below seed	25.7
8	48kg NPK + 90L UAN + SE14™ 3L all with seed + 72kg NPK below seed	25.3
9	48kg NPK + 90L UAN all with seed + 72kg NPK below seed	25.9
10	120kg NPK below seed + 50L UAN + SE14™ 3L all with seed	26.1
* Average of 3 reps, 6 counts per plot		

### Biomass Imagery - 18 June 2020 - 44 DAS

Treatment #	Treatment	Average
1	80kg NPK with seed + 50L UAN below seed	5.21
2	80kg NPK + 30L UAN + SE14™ 3L - all with seed	5.78
3	80kg NPK + 30L UAN - all with seed	4.32
4	80kg NPK + 60L UAN + SE14™ 3L - all with seed	6.64
5	80kg NPK + 60L UAN - all with seed	5.31
6	48kg NPK + 30L UAN + SE14™ 3L all with seed + 72kg NPK below seed	5.93
7	48kg NPK + 60L UAN + SE14™ 3L all with seed + 72kg NPK below seed	5.94
8	48kg NPK + 90L UAN + SE14™ 3L all with seed + 72kg NPK below seed	5.92
9	48kg NPK + 90L UAN all with seed + 72kg NPK below seed	5.39
10	120kg NPK below seed + 50L UAN + SE14™ 3L all with seed	6.11
* Average 3 reps, 4 images per plot		

3 Colour Scale Legend	Lowest Value	Percentile	Highest Value
-----------------------	--------------	------------	---------------

## SE14 FERTILISER INTERACTION TRIAL DATA

WHEAT | Location : Wongan Hills

### Metre Row Counts - 23 June 2020 - 50 DAS

Treatment #	Treatment	Average
1	80kg NPK with seed + 50L UAN below seed	35.9
2	80kg NPK + 30L UAN + SE14 3L - all with seed	33.3
3	80kg NPK + 30L UAN - all with seed	31.7
4	80kg NPK + 60L UAN + SE14 3L - all with seed	42.7
5	80 kg NPK + 60L UAN - all with seed	35.3
6	48kg NPK + 30L UAN + SE14 3L all with seed + 72kg NPK below seed	34.9
7	48kg NPK + 60L UAN + SE14 3L all with seed + 72kg NPK below seed	39.9
8	48kg NPK + 90L UAN + SE14 3L all with seed + 72kg NPK below seed	35.6
9	48kg NPK + 90L UAN all with seed + 72kg NPK below seed	34.6
10	120kg NPK below seed + 50L UAN + SE14 3L all with seed	36.6
* Average 3 reps, 6 counts per plot		

### Biomass Imagery - 13 August 2020 - 101 DAS

Treatment #	Treatment	Average
1	80kg NPK with seed + 50L UAN below seed	62.5
2	80kg NPK + 30L UAN + SE14 3L - all with seed	65.5
3	80kg NPK + 30L UAN - all with seed	46.6
4	80kg NPK + 60L UAN + SE14 3L - all with seed	65.3
5	80 kg NPK + 60L UAN - all with seed	64.3
6	48kg NPK + 30L UAN + SE14 3L all with seed + 72kg NPK below seed	58.8
7	48kg NPK + 60L UAN + SE14 3L all with seed + 72kg NPK below seed	61.2
8	48kg NPK + 90L UAN + SE14 3L all with seed + 72kg NPK below seed	63.7
9	48kg NPK + 90L UAN all with seed + 72kg NPK below seed	63.0
10	120kg NPK below seed + 50L UAN + SE14 3L all with seed	54.7
* Average 3 reps, 4 images per plot		

3 Colour Scale Legend	Lowest Value	Percentile	Highest Value
-----------------------	--------------	------------	---------------



## NOTES

This image shows a single sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

# SACOA SE14 Shines in non-wetting soils

By **KEN WILSON**

ONE of the highlights of the WA No Till Farmers Association's (WANTFA) Soil Amelioration Day at Bolgart on Thursday, August 27, is a bus tour of various trials involved in soil amelioration.

It will also include trial work on Bolgart farmer Trevor Syme's property of SACOA's SE14 banded surfactant which is gaining in popularity for use when dry sowing and for use on non-wetting soils.

With increasing larger cropping programs, dry sowing has become a management practice throughout the Wheatbelt to maximise crop establishment in the sowing window.

But the bogeyman is non-wetting soils.

Farmers are addressing the problem by ameliorating soils through strategies including mouldboard ploughing, spading, offset discs and deep ripping.

But according to SACOA regional WA manager Damon Fleay, such treatments can be inhibited by soil structure.

"Typically forest gravel soils, for example, are too hard or littered with tree stumps preventing any decent measure to eliminate non-wetting," Mr Fleay said.

"The other aspect of dry sowing is that changing weather patterns are seeing less autumn breaks and more showery rain events.

"This leads to risks of crops not germinating evenly which has been the key focus of SACOA in recent years and the fruits of that research led to the commercial release of SE14 in 2015."

Mr Syme, who is hosting WANTFA's Soil Amelioration Day, used SE14 for the first time this year on a lease block



□ SACOA WA regional manager Damon Fleay (left) and Bolgart farmer Trevor Syme discuss the performance of SACOA SE14 surfactant in this healthy stand of Hyola 410XX canola.

south of his main property.

"It mostly comprised non-wetting forest gravels and I wanted to capitalise on marginal moisture," Mr Syme said.

"The benefit I saw was that you can place SE14 with a carrier next to the seed and it worked well in a scenario where I was not expecting the crop to germinate that well.

"We had conserved a bit of summer moisture with standing stubble so I started sowing in mid-April.

"Where we applied the SE14, we got a uniform germination within four days compared to the control which was slow away and very staggered.

"We got a five to six millimetre rain event on May 7 but even then the control didn't show complete germination in the rows."

Mr Syme applied SE14 at two litres a hectare with 50 litres of water on 375 millimetre

rows streaming the liquid behind each seeding boot.

"The other aspect of the trial was the obvious proliferation of weeds in the control with none present in the SE14 treated rows," he said.

"We used 1.8 kilograms a hectare seeding rate and it worked out we got 15 per cent germination in the control versus 100pc in the SE14-treated rows.

"We'll definitely use it again because it's another tool in the toolbox when you need it."

According to Mr Fleay, SE14 also improves the efficacy of herbicides, activating pre-emergents.

"It's a patented formulation of surfactants and retention agents which hold moisture and nutrients in the seeding furrow when banded within close proximity to the seed," he said.

"It actually increases soil moisture holding capacity around the germinating seed.

"And it's designed to be applied using existing liquid injection equipment and is compatible with a range of other in-furrow liquids such as liquid UAN, in-furrow fungicides, trace elements and insecticides.

"It also has a low per hectare use rate which can be tailored for soil type, making it a cost effective crop establishment tool."

The subject of fertiliser toxicity using SE14 has led SACOA to also establish trials on Mr Syme's property to evaluate toxicity.

"Some guys are having great success using it with Flexi-N while others are a bit more cautious," he said.





□ Classic dry sown canola establishment in mid-April this year on nonwetting soils showing staggered germination (left) and SACOA SE14-treated (right). Measurements revealed a 15 per cent strike in the control compared

“That’s why we’ve started trials to evaluate the subject to identify specific interactions and looking at the whole package.”

With the liquid stream placement being critical to the success of SE14, much emphasis is placed on this when growers are setting up to use it for the first time.

“This is where the fertiliser toxicity piece comes into it,” Mr Fleay said.

“Placement, rates and types of compound fertiliser being

used along with rates of UAN (if any) can help determine how new SE14 growers set up liquid systems on their bars.

“There re some growers

running a second tank and liquid kit, some using the one kit with two delivery lines or placing taps and short secondary line

which gives the option to direct liquids to behind the seed boot or away from seed where UAN has traditionally been placed.

“Some growers who are concerned about fertiliser toxicity have changed the placement of compound fertiliser if they are going to

use SE14 with UAN or even changed their nitrogen source.

The SACOA trials will form part of WANTFA’s ‘bus tour’ during the day assessing 17 demonstrations along with a soil pit talk by Department of Primary Industries and Regional Development (DPIRD)



□ A close-up of the control trial clearly shows weed burdens flourishing from lack of crop competition.

## GIVE EVERY SEED A FIGHTING CHANCE

SACOA  
**SE14**<sup>TM</sup>  
MOISTURE RETAINER



SACOA

[sacoa.com.au](http://sacoa.com.au)



# One of best crop germinations ever for Fowlers

By **KEN WILSON**

DESPITE less-than-ideal growing sea-son rainfall, Mark Fowler is declaring it one of the best crop germination years he has ever seen on the family's proper-ties near Williams and Harrismith.

For the first time, this year the Fowlers banded SACOA's unique SE14 soil moisture attraction and retention agent at seeding, a new addition to their overall strategy to improve and optimise germination that already includes deep seeding, edge-row sowing, high seeding rates, narrow row spacing and, eventu-ally, soil amelioration.

"And it wasn't just the germination that was better my feeling is that early seedling vigour has improved as well," Mr Fowler said.

"In a year of below average rainfall, there has been better access to moisture and nutrition because the furrows have been wetter for longer.

"With our hay crops, evenness of germination is particularly important as it means we can cut our hay at the best possible growth stage to optimise quality, rather than delaying cutting because parts of the crop with a later germination date have not yet progressed passed booting.

"This, in turn, leads to faster curing, which leads to better quality hay and reduced risk.

"SE14 is really just another tool and we will see how it translates to dollars, but it looks pretty compelling at this stage."

Mark and his wife Tish, together with his parents, Doug and Jenny, crop 4230 hectares to barley, oaten hay, oats and canola, with the program spread over several properties around Williams and Harrismith.

They also run 3000 sheep, excluding lambs.



□ Williams grower Mark Fowler looks over some of the family's hybrid, triazine-tolerant canola dry sown into a pasture paddock using a paired row seeding boot at 2.5 kilograms per hectare. It was sown with SACOA's SE14 soil moisture attraction and retention agent at 3 litres per hectare, also applied with trace elements

About 40 per cent of their ewe flock was sold to Eastern States restockers this year.

White gum gravel soils at Williams, including ironstone ridges and granite valleys, present some non-wetting issues, but due to good clay content, not to the extent of red gum gravel soils in the region.

At the Harrismith properties, soils are more variable and include gravelly sand over clay, as well as York gum and red morrel, with heavier loams.

Many years of dry sowing and a poor germination outcome last year, due to the long dry summer, turned the focus onto the SE14 moisture agent this season.

"With the changing weather patterns, getting crops germinated and established early while the soil is warm and to allow for a longer growing season for higher yields, is critical especially for hay," Mr Fowler said.

"We have two cleaning crops in our main rotation of canola-barley-hay, so a knockdown is nice, but not necessary.

"We don't focus on when we

start seeding, but rather when we will finish. "With our program, which involves a lot of shifting around between farms that are up to 140 kilometres apart, that

means that we commence at the start of April, go around the clock and aim to be finished by mid-May."

However, he said the dry seeding exacerbated the stratification of soil particles, culminating in more non-wetting issues. "With the dry summer last year, the fats and waxes on soil particles also were not broken down by microbial activity,"

Mr Fowler said.

"It can be hard to germinate canola in these circumstances and even oats for hay seeded at 150 kilograms a hectare may not germinate evenly."

He said having their two seeders already set up for deep banding urea, made it a relatively easy proposition to band SE14 with the seed, together with trace elements and fungicide.

A 19,000 litre, Morris 9535 air cart, and 18 metre John Deere 1830 air hoe drill, is

pulled by a Case 550 tractor, at Harrismith, while the Williams rig comprises a 12,000L Simplicity cart and 12m Morris 9000 bar, pulled by a New Holland TJ375 tractor.

Seeding depths include barley at 3- 6cm, oats at 4-8cm and canola at about 2cm 'matchbox' depth.

At the Harrismith properties, SE14 was banded with the more difficult-to- germinate crops, canola and oats, as well as with some of the barley on problem paddocks.

With the more non-wetting gravels, but higher yielding land at Williams, it was banded with all crops and at rates from 1.5L/ha up to 4.5L/ha to assess rate responses, but 3L/ha was the pre- dominant rate.

The SE14 was applied with 60L/ha of water, however, Mr Fowler said their local agronomy group had identified benefits from using higher water rates and, hence, he expected to lift the rate possibly up to 100L/ha, also considering their paired row seeding system.



❑ Staggered canola germination in a seeding run at the Fowler family's Williams property that did not receive SACOA's SE14 soil moisture attraction and retention agent.



❑ Clear canola germination benefits where SACOA's SE14 soil moisture attraction and retention agent, together with trace elements and fungicide, was banded with the seed and compound fertiliser at the Fowler's Williams property.

The Fowlers also left areas where SE14 was not applied and in various cases the establishment differences were stark

Mr Fowler said in some of the worst germination conditions at Harrismith, it was noticeable where SE14 was not used with the barley and he anticipated using it with a lot more of his barley from next season.

"Where it wasn't applied, the barley didn't germinate as well as the oats," he said.

"Normally it's the other way around."

At Williams, good summer rainfall of 45mm was received during February, followed by 18mm in March,

however during April, when canola seeding commenced on April 6-7, just 2mm was recorded on April 5, 3.5mm on April 19, and 1.8mm on April 22.

"It was completely dry and dusty at sowing and we were not expecting any germination, but quite a lot of crop came up after the 3.5mm, which we put down to the effect of the SE14," Mr Fowler said.

"We were a bit alarmed because we thought the germinated fraction might die without any proper soil moisture.

"Fortunately, 36mm was received on May 4.

"The earlier summer rains

may have increased microbial activity on the soils to break down the fats and waxes on soil particles which causes the non-wetting, but not in our wildest dreams would we expect to germinate any crop on 3.5mm.

"We sowed hybrid TT (triazine-tolerant) canola into a dry pasture paddock at 2.5kg and when it came up it looked like it had been sown at 4kg.

"In challenging wetting conditions, Roundup Ready canola sown into stubble came up on almost no rain and the TT canola sown into pasture came up incredibly evenly when more meaningful rain arrived in early May."

At Harrismith, similar

February- March rainfall was followed by 10.5mm in April and 29.5mm in May.

Crops were sown and germinated on soils that had retained some moisture and were topped-up by another 9.5mm on April 19.

Mr Fowler said he wondered whether the crops would show any trifluralin damage, due to the action of the SE14, but none was identified.

He said the evenness of crops also made spraying decisions easier.

"We have had several difficult years with staggered canola germinations and that can do your head in with spray decisions," he said.

Depending upon soil moisture levels at seeding, Mr Fowler said he planned to apply SE14 at 3L/ha with all crops at Williams, on all oats and canola at Harrismith, to increase the use on barley at Harrismith and he would continue to investigate different rates in different soil types, in an effort "to find the sweet spot" with the moisture agent.

**SEASON  
STARTS WITH  
SE14™**  
MOISTURE RETAINER



[sacoa.com.au](http://sacoa.com.au)