SACOA UPDATE GROWING TECHNOLOGY

SACOA SE14 a standout in crop establishment

MANY farmers across Western Australia face the challenge of inconsistent germination caused by dry sowing, unreliable rains and non-wetting soils.

Local company SACOA is building on its past success with its newest product offering SE14 now in its fourth successful season.

SE14 attracts and holds moisture when germinating seeds need it most.

SACOA's founder Justin Matthews is a fourth-generation farmer with a profound interest in developing products to support local farmers to meet local challenges.

Building on Mr Matthews' experience farming west of Brookton and based on grower feedback, the team at SACOA has developed a range of adjuvants and innovative soil applied moisture conservation products.

In the mid-1990s SACOA took some interest in work being done by Paul Blackwell, at the Department of Agriculture and Food, with off-the-shelf soil wetters, but they only showed limited success.

"Even from SACOA's early days, we saw the need for a product that could aid with the ever increasing and frustrating issue of non-wetting soils," Mr Matthews said.

"Also I had a vested interest in trying to find a solution to non-wetting soils on my own farm."

By the early 2000s, Mr Matthews and SACOA's in-house chemical engineer set about using their knowledge of herbicide adjuvants and surfactants to test a range of novel surfactants and humectants on non-wetting soils.

"These products were sourced from Europe and North America and to our knowledge most had never been tested in an agricultural environment, let alone dry and dusty old WA," Mr Matthews said.

The team at SACOA had an open mind and hoped that one of the tested actives would have a meaningful effect on improving rainfall infiltration, soil water holding capacity and ultimately seed germination.

"After much trial and error over the next several years, SACOA honed in on some very unique chemistry which showed an incredible capacity to aid rainfall infiltration while still ensuring the moisture was retained in the top 10-20 centimetres of the soil profile on what's now termed non-wetting forest gravels," Mr Matthews said.

In 2011, SACOA commercialised its first wholly in-house developed soil wetter product Lure H_2O, which is applied via boomsprayer prior to the opening rains in autumn.

Today, Lure H_2O still enjoys a very strong following with growers farming the gravels of the Great Southern region.

Lure H_2O is extremely effective in reducing rainfall runoff particularly on bare gravel hills in March and April.

True to SACOA's philosophy of developing products for today's problems, the company set out to look for solutions to the significant issues of widespread, staggered germination typically caused by smaller, less reliable opening rainfall events (eg 5-10 millimetres) in WA's traditional grain belt.

A product which could be applied at seeding, in combination with other furrow applied products, such as UAN, trace elements and fungicides, without compromising seed safety was paramount.

SACOA's extensive field and laboratory development work culminated with a formulation that attracts and retains moisture in a band around the seed.

It not only increases germination and seedling vigour but ultimately improves seedling survival until the next rainfall event.

In 2016 SACOA commercialised the first true in-furrow soil moisture attractant and retention agent SE14, suitable for applications in all soil types.

"In the four quite different seasons since its release, SE14 sales have grown rapidly to become a key cropping input on many broadacre farms where crop establishment can be variable in any given year," Mr Matthews said.

❒ SACOA's newest product offering SE14 attracts and holds moisture when germinating seeds need it most. SE14 has been applied to the crop at the left of the photo.

Best practice sees SE14 delivered in a band close to the seed in a minimum total delivery volume of 50 litres per hectare.

Sowing seed into the environment created by the SE14 gives crops the best opportunity to germinate under sub-optimal conditions.

Other advantages of SE14 include activation of pre-emergent herbicides when moisture is limited, solubilisation of applied crop nutrients, reduced leaching in high rainfall environments, increased nodulation in legume crops and reduced soil borne disease.

While many air seeders with liquid kits are set up to have separation between the seed and UAN to minimise the risk of fertiliser toxicity, SACOA's extensive experience shows it is possible to use liquid UAN and SE14 close to the seed by:

❒ Separating some and/or all compound fertiliser away from the seed;

❒ Using paired row sowing boots to dilute the amount of fertiliser per metre of crop row;

❒ Reducing the rate of UAN below 45 litres a hectare and/or adding water;

❒ Top dressing SOA and MOP fertilisers in more susceptible crops such as canola;

❒ Using a secondary liquid tank and lines enabling two liquid systems to run independently.

SACOA's local manufacturing facility is in full production of both SE14 and Lure H_2O and will have product available for new orders in early March.

Contact your preferred local sales agent when placing orders.

❒ **For information on ideal liquid placement setup or other ongoing technical support contact SACOA's State sales manager Damon Fleay 0427 425 702 or your local agronomist.**

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GIVE EVERY

SEED

A FIGHTING CHANCE

THE SEASON STARTS WITH SE14

SACOA

SACOA SE14™

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