

TECHNOTE

FORM AN ALLEGIANCE AGAINST SUCKING AND CHEWING PESTS WITH LEGION[®] INSECTICIDAL SEED TREATMENT

In addition to appropriate varietal selection and addressing the crops' nutritional requirements, an effective insecticidal seed treatment targeting early season sucking and chewing pests is an invaluable crop management tool to help maximise crop emergence and establishment of canola, sorghum and sunflowers.

THE PROBLEMS

Redlegged earth mites, RLEM (*Halotydeus destructor*) are amongst the most destructive and regular early season pests common throughout all **canola** growing regions in Australia. RLEM emerge from over-summering eggs in response to autumn rains and falling temperatures. There can be three to four generations during autumn-spring. Adult mites rupture the surface of cotyledons and leaves, removing cell contents. Damaged plants may wilt and die if damage is severe, particularly if growing conditions are poor.

False wireworm (*Pterohelaeus darlingensis* and *Gonocephalum macleayi*) are prevalent insect pests in **sorghum and sunflowers**. Larvae feed on decaying vegetable and crop residues in the soil, with damage most common in early planted crops where crop residue has become scarce. They also feed on newly germinating seed and the growing points of seedlings, which results in patchy stands. Damage by both larvae and adults may necessitate re-planting.

Black field earwig (*Nala lividipes*) eat newly sown and germinating **sorghum and sunflower** seed and the roots of the crop below ground, resulting in poor establishment. They also chew the stems of newly emerged seedlings above ground.

THE SOLUTION

Containing 500 g/L fipronil, Legion Insecticidal Seed Treatment is highly effective against these destructive pests.

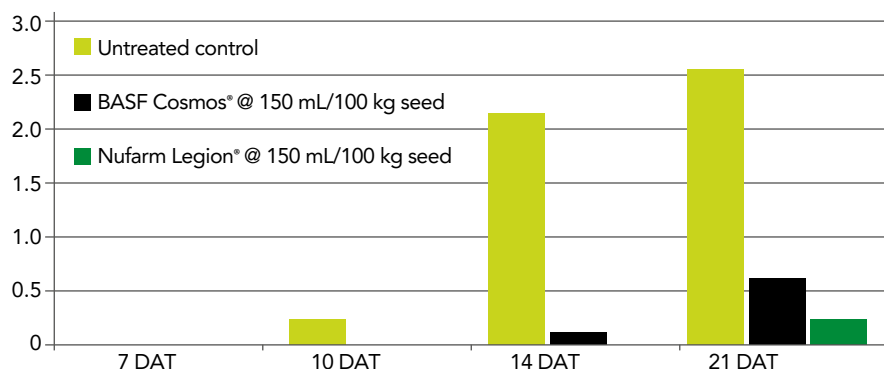
Legion is a Group 2B insecticide which has been developed specifically for seed treatment application.

Benefits of Legion

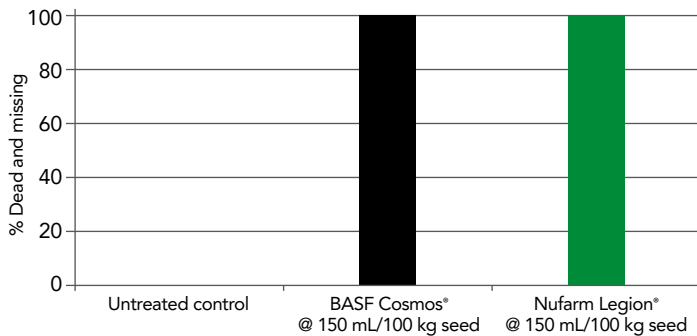
- Seed treatment application of Legion is a highly targeted approach to insect control compared with broad spectrum, non-selective foliar insecticides, many of which are detrimental to beneficial insect species such as lacewings, ladybirds and parasitoid wasps. Translocation of the active, targets chewing and sucking pests, preserving beneficial insects which assist with insect pest control. Legion is therefore ideally suited to an Integrated Pest Management (IPM) system.
- By treating canola, sorghum or sunflowers seed with Legion, growers can be assured their crops are protected from these destructive insect pests immediately after sowing.
- Legion provides 4-6 weeks control of target pests, enabling these crops to emerge and establish without the plant stresses associated with insect damage, maximising plant stand and yield potential.

Graph 1 - Sorghum trial. Mean damaged plants.

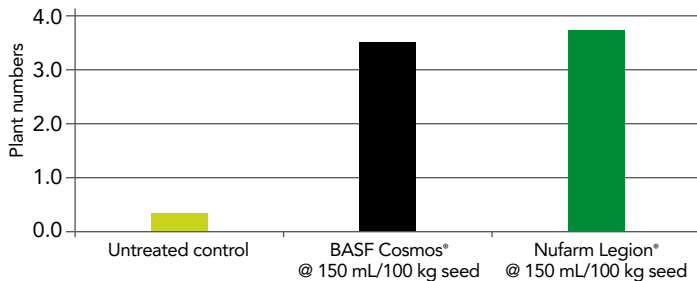
Agrisearch trial no. 130702, 2013, Toowoomba, QLD



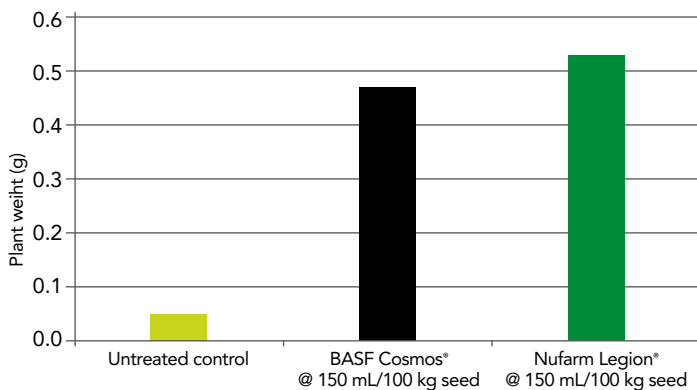
Graph 2 - Sorghum trial. Mean wireworm mortality.
Agrisearch trial no. 130702, 2013, Toowoomba, QLD



Graph 3 - Sorghum trial. Mean number surviving plants.
Agrisearch trial no. 130702, 2013, Toowoomba, QLD



Graph 4 - Sorghum trial. Total plant weight of live plants (21DAT).
Agrisearch trial no. 130702, 2013, Toowoomba, QLD



DIRECTIONS FOR USE

CROP	PEST	STATE	RATE	CRITICAL COMMENTS
Canola	Redlegged earth mite (<i>Halotydeus destructor</i>)	Qld, NSW, Vic, SA & WA only	400 mL/100 kg seed	Ensure thorough coverage of seed. Add 400 mL of LEGION to 600 mL of water/100 kg seed (total volume 1.0 L/100 kg seed). Seedling protection will be satisfactory under conditions of low pest pressure (ie. less than 1000 per m ²). Where greater pest numbers are anticipated or where there are more than 8 mites per plant, alternative or additional treatments will be required.
Sorghum Sunflowers	False wireworm (<i>Pterohelaeus darlingensis</i> and <i>Gonocephalum macleayi</i>) Protection from: Black field earwig (<i>Nala lividipes</i>)	Qld, NSW, Vic WA & NT only	150 mL/100 kg seed	Thoroughly coat seed using commercial seed coating equipment. Add 150 mL of LEGION to 350 mL of water/100 kg seed (total volume 500 mL/100 kg seed).

Not to be used for any purpose, or in any manner, contrary to this label unless authorised under appropriate legislation.

WITHHOLDING PERIODS

Harvest: Canola, sorghum, sunflower: not required when used as directed.

Grazing

Canola: Do not graze plants grown from treated seed or cut for stock food within 9 weeks of sowing.

Sorghum: Do not graze plants grown from treated seed or cut for stock food within 5 weeks of sowing.

Sunflower: Do not graze plants grown from treated seed or cut for stock food within 3 weeks of sowing.

Do not feed treated seed to animals.

For more information on Legion, contact your local Nufarm Territory Manager.

nufarm.com.au



The information and recommendations set out in this brochure are no substitute for professional or expert advice and are based on tests and data believed to be reliable at the time of publication. Results may vary, as the use and application of the products is beyond our control and may be subject to climatic, geographical or biological variables, and/or developed resistance. To the maximum extent permitted by law, Nufarm Australia Limited disclaims all warranties of any kind, whether express or implied, including but not limited to any warranty that the information is up-to-date, complete, true, legally compliant, accurate, non-misleading or suitable.

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