

# #114

## Challenges facing canola growers – stand establishment and Plinazolin as a new solution

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Pests and diseases are a continually evolving threat to growers around the world, and with the changing environment conditions it makes it even harder for growers to establish their crops. In the Canadian Western Prairies, flea beetles attack plants in the seedling to early vegetative stages causing significant damage and negatively impacting stand establishment. In Canada their control is imperative to growing a successful canola crop. In Australia, the sap-sucking red legged earth mite has the potential to cause significant damage to emerging canola reducing seedling survivability, development, and in some situations require re-sowing of the crop. Early protection of the seedlings with an insecticidal seed treatment is an effective strategy to protect canola seedlings from these pests.

Australia will be the first country to have access to PLINAZOLIN Seedcare technology; a novel isoxazoline insecticide and acaricide with activity against lepidopteran, hemipteran, coleopteran, thysanopteran, and dipteran pest species including the red legged earth mite, wireworms, and flea beetles. PLINAZOLIN® technology will be available to the canola certified seed market under the trademark EQUENTO® Extreme (PLINAZOLIN® technology plus thiamethoxam co-pack). The active ingredient isocycloseram, is a GABA receptor antagonist, selectively targeting the invertebrate Rdl GABA receptor at a distinct site. This chemistry was developed through extensive testing in more than 40 countries globally. Results showed that EQUENTO® efficiently controlled pests either by contact or ingestion and was effective even under low soil temperature conditions, ultimately reducing pest populations in the soil. Moreover, the treatment boasts exceptional target specificity allowing precisely customized dose rates based on specific pest challenges in different geographic regions. PLINAZOLIN® has been shown to lack cross-resistance to IRAC Group 2 insecticides making it suitable for use against pests with this resistance mutation.

PLINAZOLIN® technology has been tested and shown that it delivers a new standard of performance, particularly against pests for which existing products no longer can provide effective control. It provides an effective solution in resistance management strategies and replaces older, less effective chemistries. Many different environmental factors can affect and impact stand establishment in crops; PLINAZOLIN® technology has shown that it will reduce the impact of pest pressure when it comes to establishing a healthy crop.