

NORTH COAST

EXTENSION MATTERS

1 Old Main Road, The Workstation, Umhlali
 Tel : 032 947 1410
 Cell : +27 82 653 3144
 Email: tracey.campbell@sugar.org.za
 www.sasri.org.za



TRACEY CAMPBELL
EXTENSION SPECIALIST

Yellow Sugarcane Aphid (YSA) Management Guidelines

The sudden surge in YSA infestation across the sugarcane industry these past few weeks, has highlighted the importance of pest management to mitigate significant yield losses further along the season. This surge could likely be attributed to meteorological fluctuations characterised by periods of high temperatures, with little to no rainfall.



Below is a set of basic guidelines to assist in the management of YSA.

Surveying: Know your soil and know your symptoms!

Surveying remains the crucial first step to detect the pest before infestation becomes severe.

Key factors to be on the lookout for include:

- Purple-red discolouration of grasses on verges – colour change is a reaction to YSA feeding on the grass.
- YSA will usually move from the grass to the closest cane. If no YSA can be found on discoloured verge grasses, check the cane closest to the grass.
- Early infestation appears as yellow patches. Old infestation turns brown as the leaves dry.
- Infestation can either be patchy and unevenly distributed in the field or infestation can be uniform.

- Check the underside of leaves as YSA are UV sensitive and do not like direct sunlight.
- Leaves of some cane varieties also exhibit a colour change from green to purple when infested with YSA. In particular, N12, N16, N37, N59.
- Cane is most susceptible up to 6 months, however, infestation has been recorded in old cane (12-14 months).
- Plant and ratoon cane are both susceptible.
- Stressed cane is particularly prone to infestation, therefore areas with shallow, sandy or acidic soils should be closely monitored.

Chemical Treatment of YSA: Spray with a conscience!

- There are several chemicals registered for application against YSA on cane (see Table below). These chemicals must be applied as per label specifications to optimise efficacy e.g. do not use a foliar application where the label recommendation is a stubble treatment.
- Do not use three consecutive applications of the same active ingredient, e.g. do not use Alice three times in a row, in the same field, to control a single infestation. Always alternate active ingredients at least after two applications (see Table below for actives).
- As a cautionary measure, where growers have multicropping systems and require the work of pollinators (bees specifically), the timing of these insecticide applications is crucial to minimise impacts on bee populations as all the listed chemicals are to some degree toxic to bees.
- **Predator Preservation:** ladybird, lacewing, pirate bugs, soldier beetle, hover fly.
 - In most instances, infested cane must be chemically treated for YSA. We unfortunately cannot depend solely on the predatory action of these insects to curb populations enough to minimise damage on the cane.
 - The idea here, assuming these insects are highly prevalent in a particular infested zone, is to spray with a chemical that will not kill them altogether.

Registered on Sugarcane	Active ingredient: IRAC code	Field application rate	Effect on Natural Predators
Actara SC (Syngenta)	Thiamethoxam (neonicotinoid): 4A <ul style="list-style-type: none"> • Application restricted to between 7-30 days post-harvest on soil/stubble or early regrowth. • Systemic action from soil to upper parts of plant. 	900ml/ha	Moderately toxic to predators Most toxic to bees
Allice 20 SP (Arysta)	Acetamiprid (neonicotinoid): 4A <ul style="list-style-type: none"> • Foliar application • Acropetal - will not move from sprayed leaves to new leaves. 	1,5kg/ha	Moderately toxic to predators Least toxic to bees
Ampligo (Syngenta)	Chlorantraniliprole (diamide): 28 and λ -cyhalothrin (pyrethroid): 3 <ul style="list-style-type: none"> • Foliar application. • Contact action only against YSA 	150-300ml/ha	Highly toxic to predators Highly toxic to bees
Bandito (Arysta) Combination of nematicide + insecticide	Imidacloprid (neonicotinoid): 4A and Oxamyl (carbamate): 1A <ul style="list-style-type: none"> • Granular application in furrow at planting • On row or banded in ratoons (the latter after stubble has dried out and best applied in spring/early summer). • Systemic action from soil to upper parts of plant. • Combined product is granular hence no drift. 	30kg/ha	Sub-lethal effects on predators Moderately toxic to bees
Benevia 1000D (FMC) (registered in Dec '22)	Cyantraniliprole (diamide): 28 <ul style="list-style-type: none"> • Foliar application. • Acropetal - will not move from sprayed leaves to new leaves. 	500ml/ha	Moderately toxic to predators Moderately toxic to bees

You can also find helpful resources on the SASRI website at www.sasri.org.za, including the YSA Information Sheet and the Thrips and YSA Manual.



For further details on this matter or any additional information, please do not hesitate to reach out to me (details above).