



# BEES, POLLINATION, AGRICULTURAL REMEDIES AND THE FUTURE

**The bee and neonicotinoid debate** entered a different level recently with Syngenta and Bayer litigating against the European Union for banning the use of certain neonicotinoids insecticides. BASF has also lodged legal proceedings against the EU for banning fipronil, another insecticide that has wrongfully been implicated in bee colony collapse disorder.

CropLife SA has taken a number of steps to safeguard our neonicotinoids against unfounded regulatory steps. This edition of the CLSA Green Bulletin will highlight the position that CLSA has

taken on neonicotinoids.

Strong recommendations have also emerged from the USA to merge the interests of beekeepers and the agricultural sector in safeguarding bees. Bees are very important to both: beekeepers rent their bees out for pollination services while harvesting the honey and producers rely on bees for pollinating their crops.

CLSA can only hope that the South African bee situation will remain as stable as it is, but we do recognize that there are challenges especially with off-label use of insecticides.

## Bees need food— and a good variety of it



**One of the detriments of being a bee** is living in an environment that experiences a rapid demise of biodiversity. The transformation of natural vegetation into monocultures deprives bees of a balanced diet with all the nutrients they require to remain healthy.

It is believed that bees should be supported with a variety of food plants that can be planted around cash crop fields, orchards and other monocultures.

South Africa boasts with more than 24,000 species of vascular plants and selecting those that

can provide pollen and nectar such as Aloes, can make a huge difference to bees' shopping list for food.

A well fed bee is a productive bee!

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**CLSA's Position Statement on bees and neonicotinoids is available on the website at [www.croplife.co.za](http://www.croplife.co.za)**

## CLSA's new policy on neonicotinoids as seed dressings



CLSA's Seed Treatment Working Group worked like a bee colony for two years to bring a policy into effect to ensure that neonicotinoid seed dressings pose no threat to pollinators.

All companies who offer the service of dressing seeds with neonicotinoids must now use polymers that bind the seed dressings to seed without producing unacceptable dust levels.

It is envisaged that all companies offering this service will use professional application equipment, submit samples for dust level evaluation and germination, and also attach a special bag tag to all seed bags to inform the producer on the safe and responsible management of such seed.

Producers will be discouraged from doing their own seed dressing as it requires professional equipment that is not always affordable at the farm level.

A professional seed dressing

service ensures that seed remain viable and that the dust problem that triggered the outcry against these insecticides is no longer of concern.

CLSA also produced an A4 information leaflet to inform producers about the safe use of neonicotinoid dressed seed.

CLSA wishes to acknowledge the enthusiasm of Dirk Uys of Bayer CropScience who spear-headed the seed dressing initiative and everyone else who contributed to the success of this venture.

## What is the issue with neonicotinoid soil drenching?

Neonicotinoid soil drenching has taken pest management in several crops from environmentally dangerous to an environmentally compatible situation. These insecticides are used as drenches around the trunks of trees upon which they are absorbed to become systemic. It is a much more target specific application than using traditional pesticide spraying.

Allegations have been made that

soil drenching results in residues of these products in nectar and pollen that will be detrimental to bees. In the same breath it is alleged that weeds in the crops will take up these products and deposit residues in their nectar and pollen that will harm bees.

Research conducted by some CLSA members showed that none of this is true. Weeds are furthermore well managed and therefore the chances of weeds posing a

neonicotinoid threat to bees, are very remote.

CLSA members who are registration holders of neonicotinoids will in any case strongly advise producers to keep orchards free of weeds.

There is also a duty of care on the producer to ensure that all such products are used strictly according to label instructions.

## There are two classes of neonicotinoids.....

A cyano substituted neonicotinoid is vastly different from a nitro substituted one in its toxicity for honey bees.

The two cyano neonics, acetamiprid and thiacloprid are much less toxic to bees under normal application conditions than the three nitro products namely imidacloprid, thiamethoxam and clothianidin.

This is an indication that one can never treat all members of a particular chemical group the same. Each molecule is a separate entity with its own chemical, physical and toxicological properties.

While there is an outcry against the three nitro products the world is quiet about the organophosphates and pyrethroids that have been

around for many decades. Some of these are highly toxic to bees.

So what is the real issue???? Lobbyists who lost their cause with the fall of the Berlin Wall and now looking for a new cause or what??

There is still NO evidence that ANY neonic is responsible for bee decline.

## Vultures take a beating with poisoning



The year 2013 has been disastrous for vultures. Four major incidents occurred in southern Africa in which four vulture species were poisoned.

Botswana's vulture population lost nearly a thousand birds at the hands of poachers who poisoned poached elephant carcasses with carbofuran. They did this to prevent game rangers from spotting soaring vultures and detecting poached pachyderms. African White-backed vultures, Lap-pet-faced Vultures, White-headed vultures and probably also Hooded vultures died in these incidents.

KwaZulu-Natal had an incident that appeared to have been the work of poachers who poisoned vultures for traditional medicine. Twenty six vultures died in this incident close to

Hluhluwe-Umfolozi Game Reserve. These were mostly African White-backed vultures.

In the Swartberg region of KwaZulu-Natal 65 Cape Griffon vultures were poisoned with carbofuran. The case shocked the conservation world and farmers in the area were up in arms about their vultures that were killed by an unscrupulous individual.

The last incident in which 46 Cape Griffon vulture were poisoned occurred around the 5th of December. The chemical that killed the vultures was carbofuran.

The poisoning of vultures is now at a stage where it becomes a critical threat to the sub-continent's vulture population. Rumours about vulture

poisoning are also coming out of Zimbabwe. All indications are that the Zim situation is related to poaching.

While all parties agree that predation is a huge challenge for livestock farmers, it remains morally and socially unacceptable to poison animal carcasses as a means of killing predators due to the threat it poses to scavengers like vultures.

Conservationists have joined hands with the livestock industry in South Africa to fight illegal poisoning. Individuals who poison vultures will be facing penalties from R5 million or five years imprisonment to much higher depending on the nature of the incidents.

## French Roundup and GM maize study smells of a rat

The French rat study in which rats were exposed to GM maize, Roundup and combinations thereof, that was published in Food and Chemical Toxicology, has been retracted by the Science Direct publishing house.

The study was severely criticized globally by many scien-



tists and institutions including the European Food Safety Agency EFSA. Criticism revolved around poor experimental design, poor feeding protocols, dubious statistical analysis, generalization and misleading interpretations. One of the most sig-

nificant findings of the study was that 70-80% of the rats in the control group that were not exposed to GM maize or Roundup, also developed tumours. This cast serious doubt over the scientific validity of the study.

Both glyphosate and GM maize are still regarded as absolutely safe and pose no threat to human health.

## The problem lies off the label!!

**Remind yourself constantly of Regulation Nr R1716 of 26 July 1991**

Application of all agricultural remedies is governed by only one entity: the product labels. Originators of agricultural remedies do trials and tests to prove the efficacy, plant compatibility and environmental compatibility of their products. This eventually results in the label instructions.

The downfall of agricultural remedies is what happens at the recommendation, sales and application. If the per-

son intending selling the product recommend and sells a product for any other purpose than what the label states, the product is compromised. When the person who applies the product follows such wrongful recommendations, the product is bound to cause some unforeseen harm somewhere.

It is in the interest of all CLSA members to impress strongly upon all

agents, consultants and end users to ONLY recommend, sell and use agricultural remedies as instructed by their labels.

In terms of neonicotinoids being under pressure, it is even more critical to abide by label instructions. It means NO aerial application if labels do not explicitly state that. It means NO use as seed dressings if the labels do not instruct that.



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### **CROPLIFE SA AERIAL APPLICATORS COURSE LODGED WITH THE AGRI SETA**

CropLife SA's aerial applicators course was lodged with the AgriSETA for accreditation. This course has been the backbone of training offered by Gerrit van Vuuren on behalf of CropLife SA to aerial applicators nationwide.

According to the Regulation for Pest Control Operators, only accredited courses are recognized by the Registrar of Act 36 of 1947 when applicants apply for registration. If all goes according to plan, the CropLife SA course should be accredited soon.

This course is offered by Gerrit van Vuuren who is the country's specialist on aerial application. It has a strong element of USA safety and technical details. Gerrit has been keeping himself and the course abreast of international developments to ensure that pilots are equipped with the best practices to apply agricultural remedies safely.

CLSA will keep members and the public informed about the progress of the accreditation.

For more information about aerial application contact Gerrit on 083-326-9272.

## **FEATURE ON RESPONSIBILITY, COMPLIANCE AND ACT 36 OF 1947 IN THE NEXT EDITION**

The industry is hounded by claims from producers who seek relief for crop damage, unsatisfactory results and everything else that can go wrong with the application of agricultural remedies.

Fingers are pointed at registration holders, distributors, aerial ap-

plicators and even government.

The question is: who is responsible when something goes wrong? Is it the registration holder that will be held liable? Is it the distributor who must cough up? Is it the agent who sold the product? Or is it government?

The next edition of the CLSA Green Bulletin will feature in-depth discussions on this pressing issue. The answers may be uncomfortable to digest, so watch this space next time!