



# Myth BUSTING

## The Myth Of Bees & Insecticides

FORCE OF NATURE | THE WHOLE TRUTH FROM AN INDEPENDENT PERSPECTIVE from  
National Organization Responding Against HUIE that seek to harm the Green Space Industry (NORAHG)

# Myth BUSTING



A response to the incessant conspiracy to maliciously destroy the green space and agriculture industries by imposing reckless prohibition based upon coercion, concocted stories, deceptions, fear-mongering, fraudulent lies, misconceptions, myths, paranoid conspiracies, terror, and threats

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**Myth-BUSTING**

# **There Is NO Bee Crisis**

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## **Field Studies Show That Neonicotinoid Insecticides Are Low Risk To Bees**

November 19<sup>th</sup>, 2013

Farmers Guardian

European Union

Selected And Adapted Excerpts

FORCE OF NATURE | THE WHOLE TRUTH FROM AN INDEPENDENT PERSPECTIVE from  
National Organization Responding Against HUJE that seek to harm the Green Space Industry (NORAHG)



# Myth-BUSTING There Is NO Bee Crisis

## Summary

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According to the results of the Syngenta FIELD STUDIES conducted in various different regions in France between 2005 and 2010 —

- Exposure, and hence risk, to honey bees from Neonicotinoid Insecticides is LOW UNDER REAL IN-USE FIELD CONDITIONS.
- FIELD STUDIES ADD CONSIDERABLE VALUE TO THE UNDERSTANDING OF RISK TO BEES UNDER REAL IN-USE FIELD CONDITIONS.
- FIELD STUDIES showed Neonicotinoid Insecticides DO NOT POSE A THREAT TO BEE HEALTH AT DOSES TYPICALLY USED IN THE FIELD.
- FIELD STUDIES showed NO EVIDENCE OF DETRIMENTAL EFFECTS ON COLONIES THAT WERE REPEATEDLY EXPOSED to Neonicotinoid Insecticides.
- FIELD STUDIES showed THERE IS A LOW RISK TO HONEY BEES FROM SYSTEMIC RESIDUES IN NECTAR AND POLLEN following the use Neonicotinoid Insecticides.
- Many European Union [ EU ] Member Nations have stated that Syngenta provided THE BEST FIELD STUDIES THEY HAD EVER SEEN.
- Prior risk assessment based on LABORATORY DATA ALONE, however, WILL NOT PROVIDE CRITICAL INFORMATION ON REALISTIC EXPOSURE OR BEHAVIOUR OF BEES following actual use of Neonicotinoid Insecticides under normal agronomical conditions.



## Myth-BUSTING There Is NO Bee Crisis ( cont )

### Summary ( continued )

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- The European Union Commission has FORCED THROUGH A SUSPENSION [ a.k.a. PROHIBITION ] despite the fact that the MEMBER NATIONS FAILED TO REACH A DEFINITIVE DECISION [ and MOST DID NOT WANT PROHIBITION ].
- The European Union Commission IMPOSED PROHIBITION against Neonicotinoid Insecticides on the basis of a FLAWED PROCESS, an INACCURATE and INCOMPLETE ASSESSMENT by the European Union Food Safety Authority, and WITHOUT THE FULL SUPPORT OF EU MEMBER NATIONS.
- The manufacturers of Neonicotinoid Insecticides launched a LEGAL CHALLENGE against the decision by the European Union Commission to IMPOSE PROHIBITION against their products.
- The process to review the Syngenta FIELD STUDIES was EXTREMELY RIGOROUS and TOOK ALMOST A YEAR TO COMPLETE.

### Field Studies Show That Neonicotinoid Insecticides Are Low Risk To Bees

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Neonicotinoid Insecticides DO NOT POSE A THREAT TO BEE HEALTH AT DOSES TYPICALLY USED IN THE FIELD, according to the results from extensive FIELD STUDIES carried out by Syngenta in France.

Syngenta, which markets seeds and pest control products, is a company with annual sales of 11.6 billion dollars, and which employs over 27,000 people in over 90 countries.



## Myth-BUSTING There Is NO Bee Crisis ( cont )

### Field Studies Show That Neonicotinoid Insecticides Are Low Risk To Bees ( continued )

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Syngenta hopes the results of the FIELD STUDIES, which were finally published after a protracted peer review process, will help FILL THE DATA GAP on the impact of Neonicotinoid Insecticides in the field and REINFORCE THE CASE for their continued use in Europe.

The FIELD STUDIES were conducted in various different regions in France between 2005 and 2010 to support the Syngenta's application to use Cruiser, a Neonicotinoid Insecticide, as a seed treatment on maize and oil-seed rape in the European Union.

In one part of the FIELD STUDIES, results showed the residue levels of thiamethoxam [ the active ingredient in Cruiser ] in pollen and nectar collected by from fields TREATED with the product were « *TYPICAL* ».

In the other part of the FIELD STUDIES, results showed NO EVIDENCE OF DETRIMENTAL EFFECTS ON BEE COLONIES THAT WERE REPEATEDLY EXPOSED to residues in pollen and nectar of the Neonicotinoid Insecticide thiamethoxam over a four-year period, following seed treatment of maize and oil-seed rape.

Various measures of bee colony health, including mortality, foraging behaviour, colony strength and weight and food storage levels, were compared in the FIELD STUDIES.

The results were found to be BROADLY SIMILAR with colonies located NEAR THE TREATED CROPS, and with colonies located NEAR UN-TREATED CROPS.



## Myth-BUSTING There Is NO Bee Crisis ( cont )

### Field Studies Show That Neonicotinoid Insecticides Are Low Risk To Bees ( continued )

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In the following spring, the FIELD STUDIES also showed that colonies exposed to the TREATED CROPS were able to SUCCESSFULLY OVER-WINTER, and had a SIMILAR HEALTH STATUS when compared with colonies located NEAR UN-TREATED CROPS.

According to the study's researchers, in a paper published in the scientific journal Plos One —

*We conclude that these data demonstrate THERE IS A LOW RISK TO HONEY BEES FROM SYSTEMIC RESIDUES IN NECTAR AND POLLEN following the use of thiamethoxam as a seed treatment on oil-seed rape and maize.*

### Reckless Prohibition In The European Union

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Cruiser was one of three Neonicotinoid Insecticides that will be SUSPENDED [ i.e. PROHIBITED ] across the European Union for two years, from December 1<sup>st</sup>, 2013, AGAINST SEED TREATMENTS ON CROPS THAT ARE ATTRACTIVE TO BEES.

The SUSPENSION [ a.k.a. PROHIBITION ] was FORCED THROUGH by the European Union Commission AFTER MEMBER NATIONS FAILED TO REACH A DEFINITIVE DECISION [ and MOST DID NOT WANT PROHIBITION ].

The SUSPENSION was based upon research showing various so-called « *SUB-LETHAL EFFECTS* » on bees exposed to the chemicals in LABORATORY EXPERIMENTS, including reduced colony growth and impaired foraging and homing behaviour.



## Myth-BUSTING There Is NO Bee Crisis ( cont )

### Neonicotinoid Insecticide Exposure Is Low Under Real Field Conditions

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Syngenta, backed by the Government of the United Kingdom, and the farming industry, has argued that previous LABORATORY EXPERIMENTS USED MUCH HIGHER DOSES THAN WOULD BE DEPLOYED IN THE FIELD.

The results from Syngenta's large-scale FIELD STUDIES provide a different conclusion to these laboratory because ...

*Exposure, and hence risk, to honey bees from systemic thiamethoxam [ a Neonicotinoid Insecticide ] residues in pollen and nectar following seed treatments IS LOW UNDER REAL IN-USE FIELD CONDITIONS.*

Syngenta said its FIELD STUDIES were « *UNIQUE* » and THE FIRST TO « *DIRECTLY INVESTIGATE THE DATA GAP REGARDING POTENTIAL OVER-WINTERING EFFECTS ON HONEYBEE COLONIES IN THE FIELD* ».

Researchers acknowledged the limitations of FIELD STUDIES of this magnitude conducted over a number of years.

Challenges included finding suitable trial sites with sufficient distance between the UN-TREATED and TREATED plots that separated from other INSECTICIDE-TREATED sites, and accounting for high bee colony losses caused by other factors, such as loss of healthy egg-laying queens and background disease.





## Myth-BUSTING There Is NO Bee Crisis ( cont )

### Neonicotinoid Insecticide Exposure Is Low Under Real Field Conditions ( continued )

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But researchers said —

*Risk assessment based on LABORATORY DATA ALONE, however, WILL NOT PROVIDE CRITICAL INFORMATION ON REALISTIC EXPOSURE OR BEHAVIOUR OF BEES following actual use of the pesticide [ Neonicotinoid Insecticides ] under normal agronomical conditions.*

*Therefore, while there can be limitations and challenges with regards to conducting and interpreting FIELD TRIALS, the information generated ADDS CONSIDERABLE VALUE TO OUR UNDERSTANDING OF RISK UNDER REAL IN-USE FIELD CONDITIONS.*

### The Best Field Study Ever Seen

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A Syngenta spokesman said the research had been described by many European Union Member Nations as ...

*... the best field study they had ever seen.*

The Syngenta spokesman also said —

*We would have preferred to see this data published sooner in order for it to form part of the debate ahead of the Commission's decision to restrict neonicotinoid use in some contexts*



## Myth-BUSTING There Is NO Bee Crisis ( cont )

*but, quite rightly, THE JOURNAL'S REVIEW PROCESS IS EXTREMELY RIGOROUS AND TOOK ALMOST A YEAR TO COMPLETE.*

### Legal Challenge Against Prohibition Of Neonicotinoid Insecticides

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Syngenta, along with Bayer, are facing the loss of key products due to the SUSPENSION [ a.k.a. PROHIBITION ] in the European Union.

Consequently, Syngenta and Bayer launched a LEGAL CHALLENGE against the decision to SUSPEND [ i.e. PROHIBIT ] Neonicotinoid Insecticides.

The companies claim that the European Union Commission decided to IMPOSE PROHIBITION against Neonicotinoid Insecticides on the basis of ...

*... a FLAWED PROCESS, an INACCURATE and INCOMPLETE ASSESSMENT by the European Union Food Safety Authority, and WITHOUT THE FULL SUPPORT OF EU MEMBER NATIONS.*

It has filed its LEGAL CHALLENGE against the Commission at the European Union General Court in Luxembourg.

No date has been set yet for a hearing.

The DECISION TO SUSPEND [ i.e. PROHIBIT ] the three Neonicotinoid Insecticides will be REVIEWED in 2015.

**Myth-BUSTING**

**There Is NO Bee Crisis ( cont )**



# Neonicotinoid Insecticides Hurting Bees Is A MYTH

## Key Findings

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One part of the FIELD STUDIES looked at residue levels in pollen and nectar collected from bees exclusively foraging in flowering thiamethoxam SEED-TREATED maize and oil-seed rape [ thiamethoxam a.k.a. Cruiser, a Neonicotinoid Insecticide ].

The FIELD STUDIES found thiamethoxam residue levels were « *TYPI-CALLY LOW* » with median values between less than 1 and 7 µg/kg for pollen and less than 0.5 and 4 µg/kg for nectar.

These were MUCH LOWER than the doses that showed sub-lethal effects in the laboratory studies.



## Myth-BUSTING There Is NO Bee Crisis ( cont )

### Key Findings ( continued )

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Residues in hive samples were **CONSISTENTLY LOWER** than residues in pollen and nectar samples collected from bees, indicating dilution and/or degradation of residue in the hive following collection.

In the other part of the **FIELD STUDIES** considered the long-term risk to honey bee colonies from four years consecutive single treatment crop exposures to flowering maize and oil-seed rape grown from **thiamethoxam-TREATED** seeds [ Cruiser, a Neonicotinoid Insecticide ].

Bee colony health was compared with bee colonies located near **UN-TREATED** fields.

During the exposure period, when bee colonies were placed adjacent to **TREATED** and **UN-TREATED** fields, the number of dead bees, foraging behavior, colony strength, brood development and food storage levels were, on average, **SIMILAR** between **TREATED** and **UN-TREATED** bee colonies.

By monitoring the weight of colonies throughout the four-year period, it was evident that there were also **NO SUBSTANTIAL LOSSES** of foraging bees exposed to **TREATED** crops in the field.

Detailed examination of brood development throughout the year demonstrated that colonies exposed to the **TREATED** crop were also **ABLE TO SUCCESSFULLY OVER-WINTER**, and had a **SIMILAR HEALTH STATUS** to the **UN-TREATED** bee colonies in the following spring.



# There Is **NO** Bee Crisis

FORCE OF NATURE | THE WHOLE TRUTH FROM AN INDEPENDENT PERSPECTIVE from  
National Organization Responding Against HUJE that seek to harm the Green Space Industry (NORAHG)

# N O R A H G

We are living in the 9|11 Era of Anti Pesticide and Environmental Terrorism where at least ONE SUBVERSIVE ACT OF TERROR is Perpetrated EVERY SINGLE DAY by enviro lunatics.

We are living in the DARK AGE OF ANTI PESTICIDE TERRORISM where sound science is trumped by FAKE SCIENTISTS, JUNK SCIENCE and UNVERIFIABLE SECRET EVIDENCE through FABRICATION, INNUENDO, and INTERNET RUMOUR — scientific research PROVES that pest control products CAUSE NO HARM and can be USED SAFELY.

NORAHG is the National Organization Responding Against HUJE that seek to harm the Green space industry.

NORAHG morally represents the VAST SILENT MAJORITY of people associated with turf and ornamental plant maintenance who are OPPOSED to Anti Pesticide PROHIBITION and the CLOSURE of green spaces under the RIDICULOUS PRETEXT of somehow « saving » the environment.

NORAHG is a NATIONAL NON PROFIT NON PARTISAN organization that does not accept money from corporations or governments or trade associations, and represents NO VESTED INTERESTS WHATSOEVER.

NORAHG is dedicated to reporting the work of RESPECTED and HIGHLY RATED EXPERTS who promote ENVIRONMENTAL REALISM and PESTICIDE TRUTHS.

Anti Pesticide HUJE are enviro lunatics and lawn haters who particularly DESPISE the golf industry — they are Hateful Underhanded Jokes as Environmentalists who have been WRONG FOR OVER 50 YEARS.

There is NO RECOURSE but LITIGATION against Anti Pesticide HUJE.

Another RECOURSE is to SEEK the CANCELLATION of GOVERNMENT GRANTS and REVOCATION of the TAX EXEMPT STATUS of Anti Pesticide Organizations.

HUJE should Get OFF Our grASS, and they should Roast In Hell.

NORAHG manages the Library of Force Of Nature Reports and References, which is a VAST ARCHIVE of REPORTS, MEDIA REFERENCES, AUDIO CLIPS, and VIDEOS on ALL Anti Pesticide Terrorist Acts of Subversion.

The purpose of this ARCHIVE is to provide information that will lead to a SUCCESSFUL LITIGATION AGAINST Anti-Pesticide Organizations.

All names, statements, activities, and affiliations have been ARCHIVED for the intention of eventual CRIMINAL CHARGES.

When CRIMINAL CHARGES for FRAUD and CONSPIRACY are laid, legal experts say that the ARCHIVE is sufficient to lead to a SUCCESSFUL PROSECUTION!

NORAHG also produces FORCE OF NATURE, reports that present THE WHOLE TRUTH FROM AN INDEPENDENT PERSPECTIVE about environmental issues, including anti pesticide terrorism.

FORCE OF NATURE is a series of reports destined for the green space industry, the environmental terrorist movement, governments, and the media, nationwide across Canada, the United States, and overseas.

FORCE OF NATURE is committed to SOUND SCIENCE, as well as ground breaking original reporting that informs, entertains, and creates real change.

FORCE OF NATURE was launched for CONTINUOUS transmission on the Internet on January 1st, 2009 — however, the VERY FIRST Stand-Alone FORCE OF NATURE Report was issued on September 19th, 2008.

By early 2009, the reports were released no more than five times per week, but by August 25th, 2009, FORCE OF NATURE was produced on a DAILY basis.

On March 15th, 2010, Uncle Adolph independently launched the Blog-Site called The Pesticide Truths, for the posting of information right-off-the-press.

By May 27th, 2010, Uncle Adolph expanded Pesticide Truths to a SECOND Blog-Site, and independently acquired the rights to archive the ENTIRE FORCE OF NATURE Library of Reports.

By mid-December 2010, ENTIRE FORCE OF NATURE Library of Reports was FULLY SUMMA-

The Whole Truth From An Independent Perspective

# N O R A H G

RIZED and CROSS-REFERENCED, and by early 2012, the library was archived on The Pesticide Truths Web-Site, in the form of Web-Pages.

The information presented in FORCE OF NATURE has been developed for the education and entertainment of the reader by providing a sequence of events WITH COMMENTARY, striving for accuracy in history, politics, and science.

FORCE OF NATURE is TOTALLY INDEPENDENT and provides NO guarantee regarding accuracy or completeness. In no event shall FORCE OF NATURE be liable for any incidental or consequential damages, lost profits, or any indirect damages.

NORAHG also produces A LOOK AT, a series of reports providing TECHNICAL INFORMATION on issues such as Career Management, Golf Course Maintenance, Green Alternatives, Summer Stress, Turfgrass Pests, and Turfgrass Species.

Finally, NORAHG frequently responds to anti pesticide activists in LETTERS TO THE EDITOR in newspapers across Canada and around the world.

All information, excerpts, and pictures contained in FORCE OF NATURE, A LOOK AT, and LETTERS TO THE EDITOR were retrieved from the Internet, and may be considered in the public domain.

FORCE OF NATURE, A LOOK AT, and their various incarnations, was the brainchild of William H. Gathercole and his colleagues in 1991. Mr. Gathercole is now retired, although his name continues to appear as founder.

Here is a brief summary of Mr. Gathercole's career —

Fields of study — Horticulture/Agriculture, Mathematics, Physics

Alma mater — McGill University • University of Guelph • the first person ever to obtain university degrees and contribute to both the professional lawn care and golf maintenance industries

Expertise in — environmental issues and anti pesticide terrorism • turf and ornamental maintenance and troubleshooting • history of the industry • sales and distribution of seeds, chemicals, fertilizers, and equipment • fertilizer manufacturing and distribution

Notable activities — worked in virtually all aspects of the green space industry, including golf, professional lawn care, distribution, environmental compliance, government negotiations, public affairs, and workplace safety • supervisor, consultant, and, programmer for the successful execution of hundreds of thousands of management operations in the golf and urban landscape, as well as millions of pest control applications • advisor, instructor, and trainer for thousands of turf and ornamental managers and technicians • pesticide certification instructor for thousands of industry workers • founder of the modern professional lawn care industry • prolific writer for industry publications and e-newsletters • first to confirm the invasion of European Chafer insect in both the Montreal region and the Vancouver / Fraser Valley region • with Dr. Peter Dermoeden, confirmed the presence of Take All Patch as a disease of turf in Eastern Canada • with Dr. David Shetlar, confirmed the presence of Kentucky Bluegrass Scale as an insect pest in South Western Ontario, and later, in the Montreal and Vancouver regions

Special contributions — creator of the exception status that has allowed the golf industry to avoid being subjected to anti pesticide prohibition • creator of the signs that are now used for posting after application • co-founder of annual winter convention for Quebec golf course superintendents • the major influence in the decision by Canadian Cancer Society to stop selling for profit pesticide treated daffodils • the only true reliable witness of the events of anti pesticide prohibition in the town of Hudson, Quebec • retired founder of FORCE OF NATURE and A LOOK AT reports

Notable award — the very first man of the year for contributions leading to the successful founding of Quebec professional lawn care industry, which served as a beach-head against anti pesticide activists in the 1980s and 1990s

Legacy — Mr. Gathercole and his colleagues ... designed and implemented strategies that reined anti pesticide activists to provide peace and prosperity for the entire modern green space industry across Canada • orchestrated legal action against anti pesticide activists in the town of Hudson, Quebec • launched the largest founding professional lawn care business in Canada • quadrupled the business revenues of one of the largest suppliers in Canada

Mr. Gathercole is now retired, although his name continues to appear as founder of FORCE OF NATURE and A LOOK AT reports.