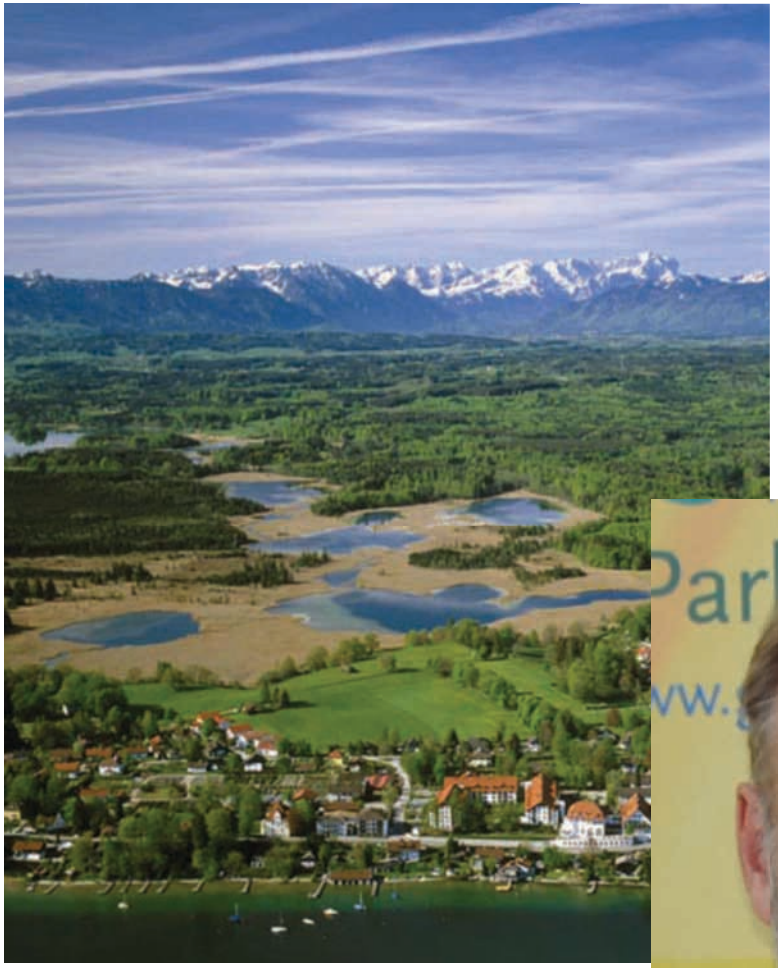
Colony Collapse Disorder and What's Being Done to Protect our Pollinators?

Walter Haefeker
Member of the Board of Directors, Deutscher Berufs und Erwerbsimkerbund (DBIB)
President, European Professional Beekeepers Association (EPBA)
Coordinator, AWG10 - GMOs and impact on beekeeping sector (Apimondia)

In Seeshaupt (Bavaria) with my employees



Bee products & pollination service

Beekeeping is an open system.

We are not keeping bees in a barn or on a pasture.

Foraging range: Minimum 2 Miles

What are bees foraging for?

CO-EXISTENCE OF GM-CROPS WITH BEEKEEPING

IMPACT OF GM-CROPS ON THE SUPPLY CHAIN FOR HONEY AND OTHER BEE PRODUCTS.

Walter Haefeker, Vice President, European Professional Beekeepers Association

Collecting nectar from canola

Collecting honeydew in forest

Collecting pollen from corn (Photo: A. Spiegel)

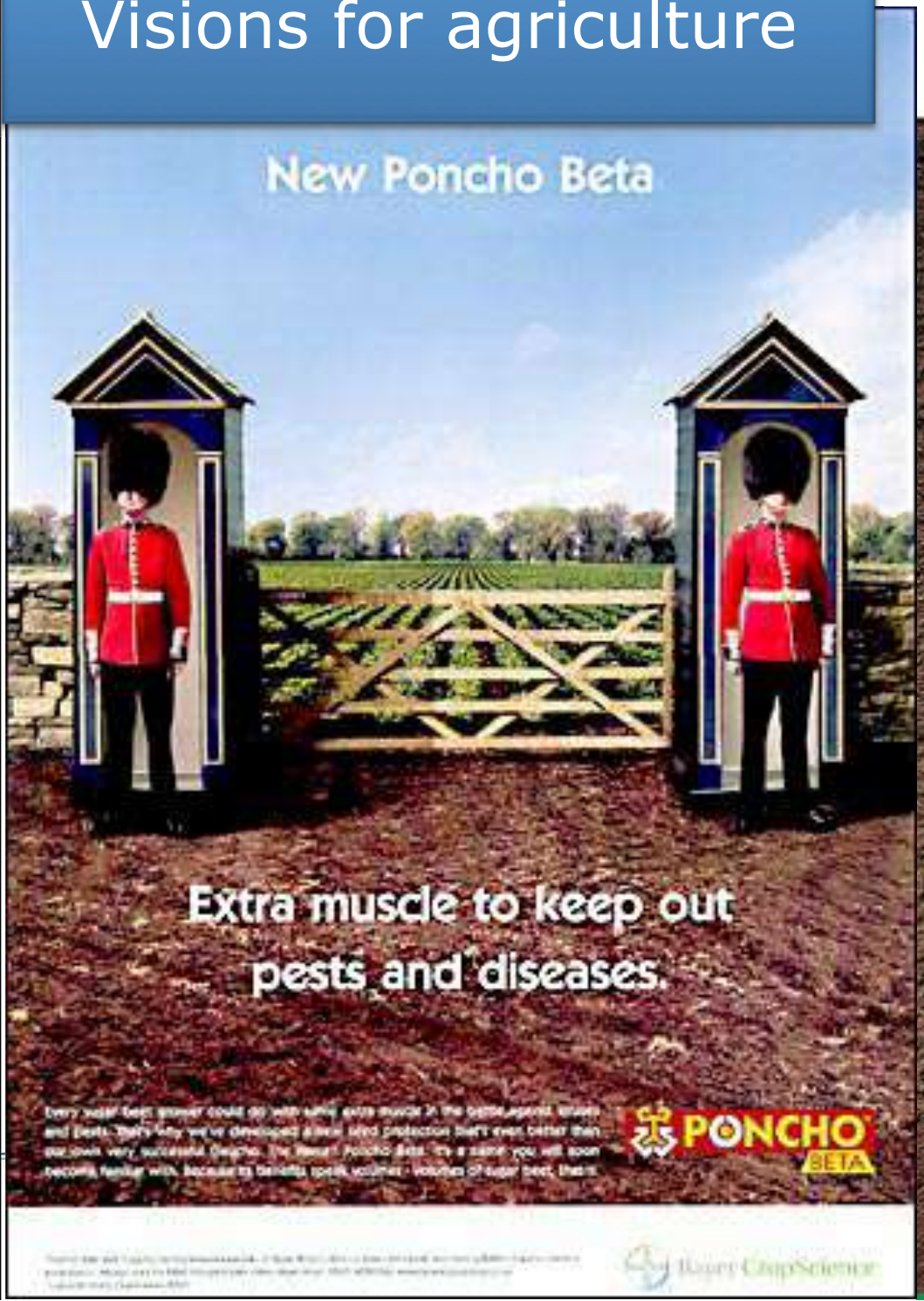
Collecting resin for propolis from tree bud.

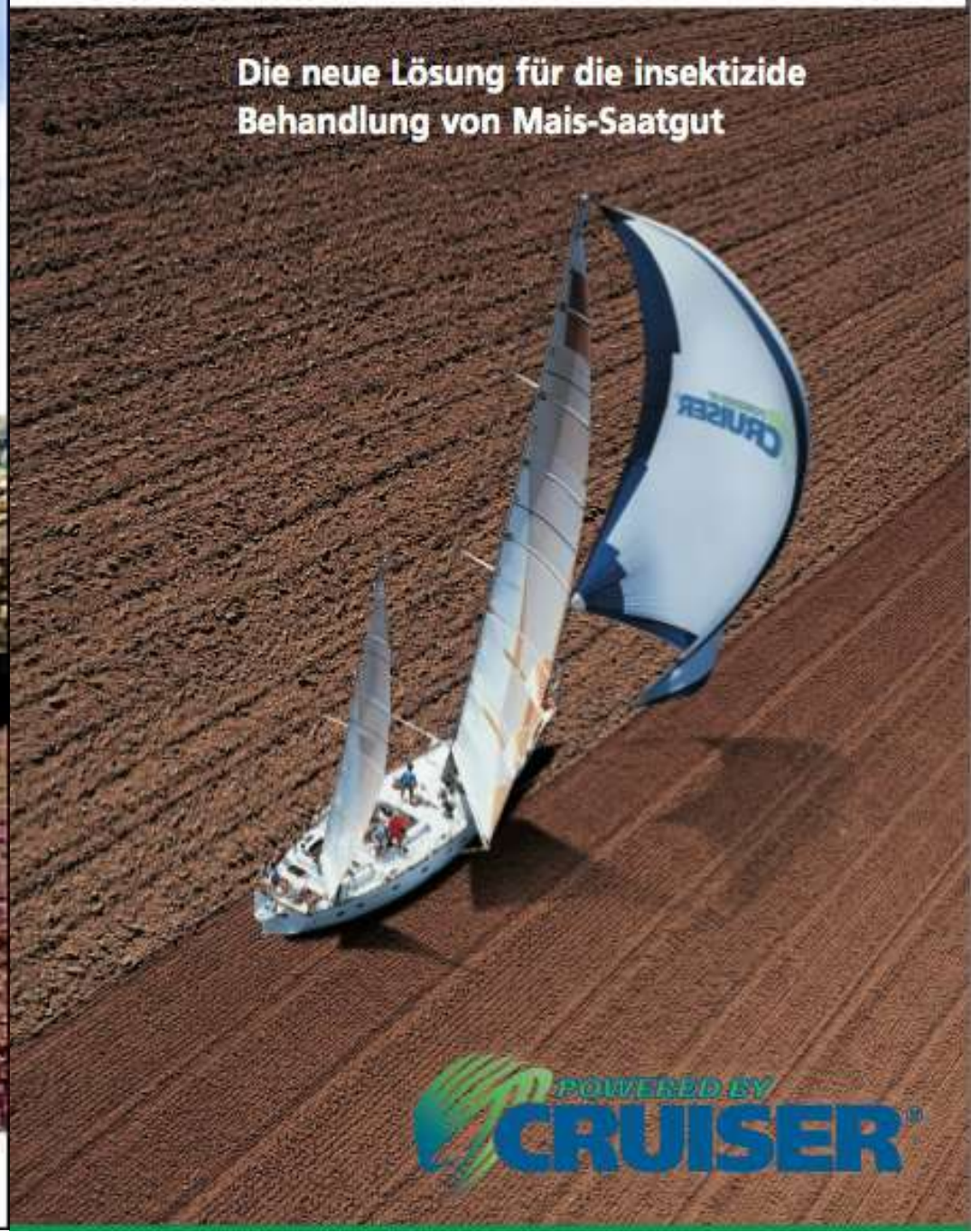
Collecting water.

Honey bees collect Nectar, Honeydew, Pollen, Resin and Water.

Bee products can be contaminated by GM-crops including those not intended for food production like starch potatoes, poplar trees or pharma crops.

Visions for agriculture





Visions for agriculture

New industry buzzword: Sustainable intensification

ELO
European Landowners' Organization

syngenta

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6th Forum for the Future of Agriculture

08:45-18:00 Tuesday 5th March 2013, The Square Meeting Place, **Brussels**

Meeting the Food & Environmental Challenge

Sustainable intensification of food production

José Manuel Barroso
President of European Kommission

Soy Cultivation in South America for EU

Canola in Germany

Lower Bavaria, Deggendorf County

Common Pollen Beetle (Brassicogethes aeneus)

Maize silage

Turning over green pasture

Biogas

Seed treatments enable bad farming practice

"If Maize is sown without seed treatment, the risk of crop failures very large. However, an effective pesticide against wireworm is approved. However, it is only available as treated seed. Therefore you have to order the treated seeds early."

Amt für Ernährung,
Landwirtschaft und Forsten
Weißenburg i. Bay.

Bayerisches Staatsministerium für
Ernährung, Landwirtschaft und Forsten

Über uns Termine Zuständigkeiten Kontakt Impressum/Datenschutz Druckversion

StMELF → ÄELF in Bayern → Amt für Ernährung, Landwirtschaft und Forsten Weißenburg → Pflanzenbau

Unser Angebot

- Bildung
- Ernährung
- Förderung
- Pflanzenbau
- Tierhaltung
- Erwerbskombination
- Ländlicher Raum
- Wald & Forstwirtschaft
- Natur & Umwelt
- Daten & Fakten

Bayernweites Angebot...

Den Drahtwurm bei Grünlandumbruch beachten.

Nein, wie Sie wissen ist der Drahtwurm kein neuer Schädling. Er ist bei uns heimisch.
Wenn er in seinem Lebensraum, den Wiesen, im Kleegras oder in Stilllegungen in Frieden gelassen wird, fällt er uns gar nicht auf. Erst wenn diese Flächen unter den Pflug genommen und in Ackerland umgewandelt werden, kann er richtig lästig werden.
Und von diesem Grünlandumbruch scheint einiger Gebrauch gemacht worden zu sein.
Ausgelaufene KulaP-Verträge und die Attraktivität des Ackerbaus waren der Lockstoff.
Dies sollte aber kein Freibrief sein. So sind schwere nasse Flächen noch immer am besten als Grünland genutzt und auch beim Schutz vor Abschwemmung oder Überschwemmung sind Wiesen besser als Ackerland. Auch bei der Rückhaltung von Nitrat ist Grünland besser als Ackerland. Darüber hinaus gibt es natürlich auch noch Regelungen zum Erhalt des Dauergrünlandes. Ab 5 % Umbruch in Bayern ist die Umwandlung in Acker genehmigungspflichtig. Ab 8 % kann die zuständige Landesstelle die Wiederaussaat anordnen. Ab 10 % Umbruch muss in jedem Fall wieder Grünland gesät werden.
Der Drahtwurm ist ausgewachsen ein 1 cm großer Käfer und heißt dann Schnellkäfer. Er kann nämlich, wenn er auf dem Rücken zu liegen kommt, sich mit einem Schnalz in die Bauchlage herumschnellen. Der Käfer richtet weiter keinen Schaden an. Er legt aber einmal im Jahr um die 200 Eier im Boden ab. Die daraus schlüpfenden Larven ernähren sich im ersten Jahr vom Humus und beginnen ab dem zweiten Jahr auch auf lebende Pflanzen überzugehen. Es dauert 3 bis 5 Jahre, bis aus den Larven sich wieder ein Käfer entwickelt.
Daher ist es auch verständlich, dass das Grünland, langjähriger Feldfutterbau oder langjährige Stilllegungen der natürliche Lebensraum dieser Tiere sind, da sie sich hier ungestört entwickeln können.
Die Larve wird als Drahtwurm bezeichnet. Sie wird bis 2,5 cm lang, ist gelbbraun und durch den harten Chitinpanzer sehr zäh und widerstandsfähig. Wird die Wiese gepflügt, freuen sich zuerst insektenfressende Vögel über das viele Lebendfutter. Die Larven, die überleben, können dann aber den landwirtschaftlichen Kulturen
Man sagt, dass im ersten Jahr des Umbruches die Ge
Fressen zur Verfügung stehen. Aber Garantie ist das
den frisch angesäten Kulturen.
Richtig gefährlich wird es dann ab dem zweiten Jahr,
Das Schadbild schaut beim Getreide folgendermaßen
Auflaufschäden kommt. Später wandern die Larven v
Blätter werden gelb und braun. Sie lassen sich leicht
Pflanzen sterben ab.
Mais wächst bei 15 - 20 cm nicht mehr weiter. Je na
oben durch den Wurzelkopf in den Trieb frisst, sterbe
Meist ist der Schaden nicht flächendeckend.

Acute Toxicity relative to DDT

Pesticide	®	utilisation	LD_{50} (ng/honeybee)	Toxicity index relative to DDT
DDT	Dinocide	insecticide	27000	1
Amitraz	Apivar	insecticide / acaricide	12000	2
Coumaphos	Perizin	insecticide / acaricide	3000	9
Tau-fluvalinate	Apistan	insecticide / acaricide	2000	13.5
Methiocarb	Mesurol	insecticide	230	117
Carbofuran	Curater	insecticide	160	169
λ-cyhalothrin	Karate	insecticide	38	711
Deltamethrine	Decis	insecticide	10	2700
Thiamethoxam	Cruise	insecticide	5	5400
Fipronil	Regent	Insecticide	4.2	6475
Clothianidine	Poncho	Insecticide	4.0	6750
Imidacloprid	Gaucho	Insecticide	3.7	7297

Table 1. Toxicity of insecticides to honeybees, compared to DDT. Median lethal dose (LD_{50}) for honeybees is given in nanogram per honeybee. The final column expresses the toxicity relative to DDT (Source: Bonmatin, 2009).

Neurotoxic at minimal doses

Honeybees are a super organism, which depends on highly intelligent behavior for survival.

- Orientation in the landscape with complex decision making.
- Communication about food sources (waggle dance).
- Self motivated behaviour – not command and control.
- Regulation of brood temperature.
- Collective immune system (hygiene in the hive).
- Synergies with common bee diseases.


50 KG


ZDF
38A24-I533
F1761N831876
831876
293 g.
80 000
THIRAM
MAXIM XL
PONCHO PRO
MESUROL
P 38A24 38A24-I533
BATCH 831876
F1761N831876


ZDF

Italy, France, Germany and Slovenia and other member states had already implemented partial suspensions and bans.

In France imidacloprid has been banned on sunflowers already since 1999.
In 2003 the substance was also banned as a sweetcorn treatment.
Bayer´s application for clothianidin was rejected by French authority AFFSA.

Italy suspended the use of pesticides containing clothianidin, thiametoxam and imidacloprid for the coating of any plant seeds in May 2009.

Germany suspended the use of all neonicotinoids in 2009, but partially lifted the suspensions later for certain uses including canola.

Germany and Slovenia banned sales of clothianidin and imidacloprid in May 2010.

Italy banned clothianidin and imidacloprid in November 2010.

EU Kommission formally requested a review by the European Food Safety Authority (EFSA)

The Regulation (EC) No 1107/2009 concerning the placing of plant protection products on the market foresees in Article 21 the possibility to review the approval of active substances in light of new scientific and technical knowledge and monitoring data.

- ✓Deadline on **31/12/2012**
- ✓Substances: **imidacloprid, clothianidin, thiamethoxam**
- ✓**all authorised uses** as **seed treatment** and as **granules** had to be considered
- ✓Additional requests have been received and are in the review process
- ✓Recently completed review of Fipronil – possible decision to ban in Sep. 2013.

EFSA conclusions on imidacloprid, clothianidin, thiamethoxam

efsa
European Food Safety Authority
EFSA Journal 2013;11(1):3067

CONCLUSION ON PESTICIDE PEER REVIEW

Conclusion on the peer review of the pesticide risk assessment for bees for the active substance thiamethoxam[1]

European Food Safety Authority[2]

European Food Safety Authority (EFSA), Parma, Italy

ABSTRACT

The European Food Safety Authority (EFSA) was asked by the European Commission to perform a risk assessment of neonicotinoids, including thiamethoxam, as regards the risk to bees. In this context the conclusions of EFSA concerning the risk assessment for bees for the active substance thiamethoxam are reported. The context of the evaluation was that required by the European Commission in accordance with Article 21 of Regulation (EC) No 1107/2009 to review the approval of active substances in light of new scientific and technical knowledge and monitoring data. The conclusions were reached on the basis of the evaluation of the uses of thiamethoxam applied as a seed treatment on a variety of crops currently authorised in Europe. The reliable endpoints concluded as being appropriate for use in regulatory risk assessment, derived from the submitted studies and literature data as well as the available EU evaluations and monitoring data, are presented. Missing information identified as being required to allow for a complete risk assessment is listed. Concerns are identified.

KEY WORDS

Thiamethoxam, peer review, risk assessment, pesticide, insecticide

[1] On request from the European Commission, Question No EFSA-Q-2012-00533, approved on 19 December 2012.
[2] Correspondence: pesticides.peerreview@efsa.europa.eu

Suggested citation: European Food Safety Authority; Conclusion on the peer review of the pesticide risk assessment for bees for the active substance thiamethoxam. EFSA Journal 2013;11(1):3067. [68 pp.] doi:10.2903/j.efsa.2013.3067. Available online: www.efsa.europa.eu/efsajournal

efsa
European Food Safety Authority
EFSA Journal 2013;11(1):3068

CONCLUSION ON PESTICIDE PEER REVIEW

Conclusion on the peer review of the pesticide risk assessment for bees for the active substance imidacloprid[1]

European Food Safety Authority[2]

European Food Safety Authority (EFSA), Parma, Italy

ABSTRACT

The European Food Safety Authority (EFSA) was asked by the European Commission to perform a risk assessment of neonicotinoids, including imidacloprid, as regards the risk to bees. In this context the conclusions of EFSA concerning the risk assessment for bees for the active substance imidacloprid are reported. The context of the evaluation was that required by the European Commission in accordance with Article 21 of Regulation (EC) No 1107/2009 to review the approval of active substances in light of new scientific and technical knowledge and monitoring data. The conclusions were reached on the basis of the evaluation of the uses of imidacloprid applied as a seed treatment or granules on a variety of crops currently authorised in Europe. The reliable endpoints concluded as being appropriate for use in regulatory risk assessment, derived from the submitted studies and literature data as well as the available EU evaluations and monitoring data, are presented. Missing information identified as being required to allow for a complete risk assessment is listed. Concerns are identified.

KEY WORDS

Imidacloprid, peer review, risk assessment, pesticide, insecticide

[1] On request from the European Commission, Question No EFSA-Q-2012-00792, approved on 19 December 2012.
[2] Correspondence: pesticides.peerreview@efsa.europa.eu

Suggested citation: European Food Safety Authority; Conclusion on the peer review of the pesticide risk assessment for bees for the active substance imidacloprid. EFSA Journal 2013;11(1):3068. [55 pp.] doi:10.2903/j.efsa.2013.3068. Available online: www.efsa.europa.eu/efsajournal

efsa
European Food Safety Authority
EFSA Journal 2013;11(1):3066

CONCLUSION ON PESTICIDE PEER REVIEW

Conclusion on the peer review of the pesticide risk assessment for bees for the active substance clothianidin[1]

European Food Safety Authority[2]

European Food Safety Authority (EFSA), Parma, Italy

ABSTRACT

The European Food Safety Authority (EFSA) was asked by the European Commission to perform a risk assessment of neonicotinoids, including clothianidin, as regards the risk to bees. In this context the conclusions of EFSA concerning the risk assessment for bees for the active substance clothianidin are reported. The context of the evaluation was that required by the European Commission in accordance with Article 21 of Regulation (EC) No 1107/2009 to review the approval of active substances in light of new scientific and technical knowledge and monitoring data. The conclusions were reached on the basis of the evaluation of the uses of clothianidin applied as a seed treatment or granules on a variety of crops currently authorised in Europe. The reliable endpoints concluded as being appropriate for use in regulatory risk assessment, derived from the submitted studies and literature data as well as the available EU evaluations and monitoring data, are presented. Missing information identified as being required to allow for a complete risk assessment is listed. Concerns are identified.

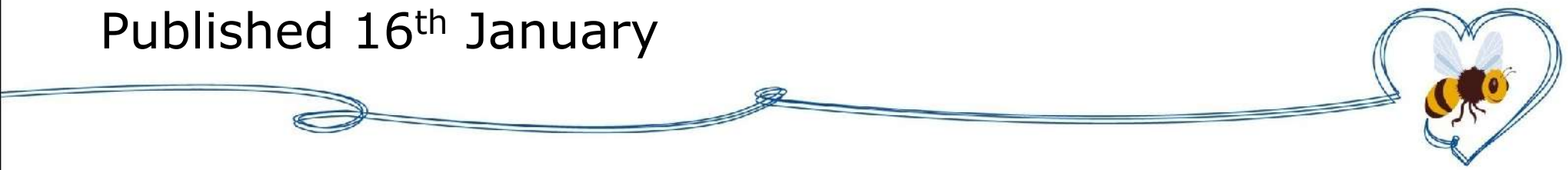
KEY WORDS

Clothianidin, peer review, risk assessment, pesticide, insecticide

[1] On request from the European Commission, Question No EFSA-Q-2012-00793, approved on 19 December 2012.
[2] Correspondence: pesticides.peerreview@efsa.europa.eu

Suggested citation: European Food Safety Authority; Conclusion on the peer review of the pesticide risk assessment for bees for the active substance clothianidin. EFSA Journal 2013;11(1):3066. [58 pp.] doi:10.2903/j.efsa.2013.3066. Available online: www.efsa.europa.eu/efsajournal

Published 16th January



Personal intimidation of the EFSA director in the case of the neonicotinoid ban.

After analysing the documents provided by EFSA, they then targeted EFSA's Director, accusing her of not including Syngenta's comments on the draft press release in harsh terms: "you took the personal responsibility to overrule the internal EFSA proposal to rectify the incorrect press release". Therefore, "Syngenta would appreciate further explanations from you" before "deciding on the legal options available to it and the identity of specific defendants in any possible court action".

Source: http://corporateeurope.org/publications/pesticides-against-pollinators

Syngenta advertising campaign targeting delegates arriving for the vote at airport in Brussels.

EU votes to enact partial ban of imidacloprid, clothianidin, thiamethoxam

On 29 April 2013, 15 of the 27 European Union member states voted to enact a 2-year ban on the use of three neonicotinoids.

This ban will go into effect December 1st 2013.

The law prevents the use of imidacloprid, clothianidin, and thiamethoxam on flowering plants for two years unless compelling scientific evidence comes out that says the chemicals are safe

Routes of exposure (EFSA 2012)

Imidacloprid, clothianidin, thiamethoxam are systemic active substances

Dust during sowing

Residues in nectar and/or pollen

Residues in succeeding plants/crop

Residues in guttation fluid

Residues in insect honeydew

Surface water contamination with Imidacloprid

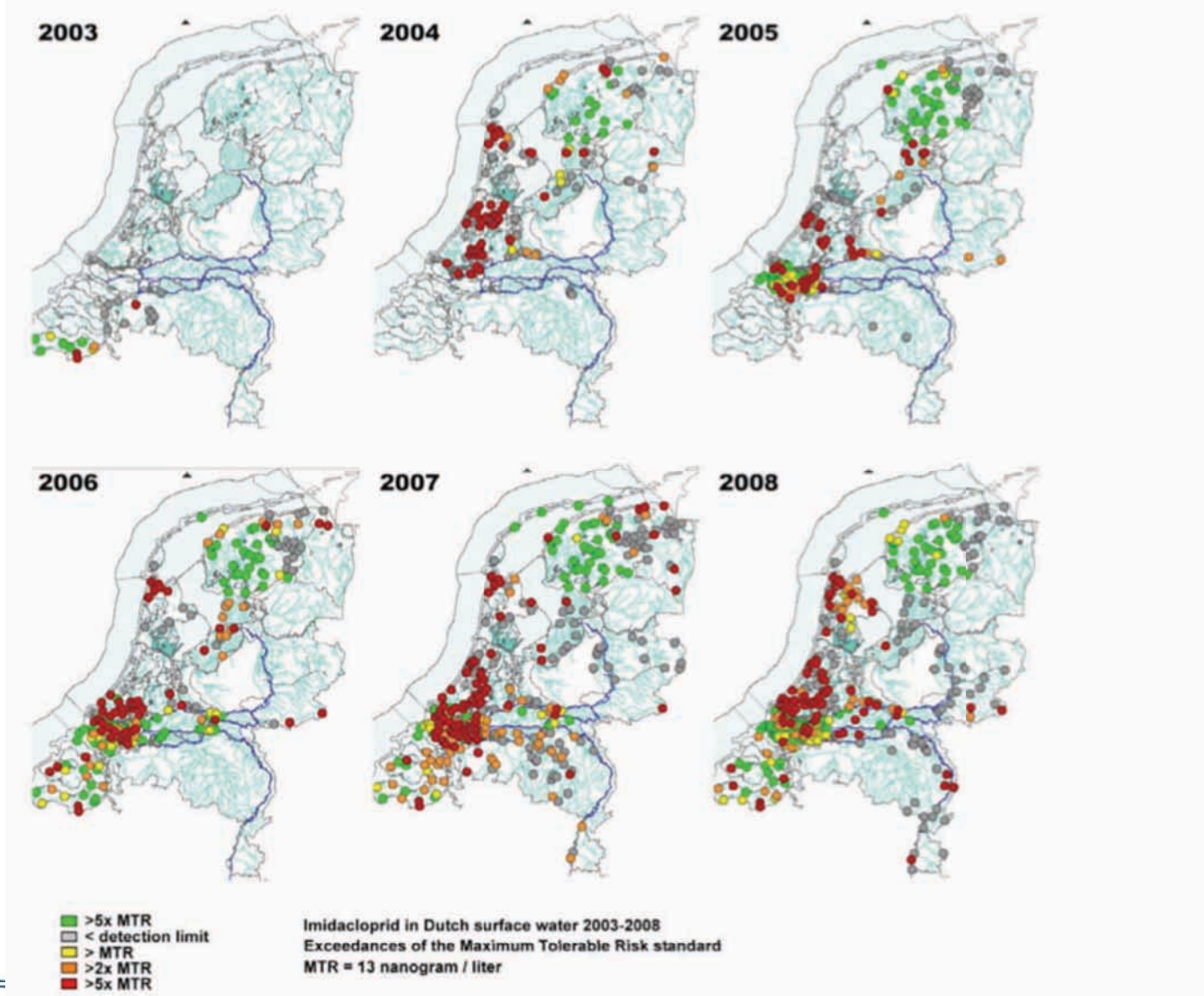


Figure 2. Map of the locations at which surface water concentrations of imidacloprid were measured, and where the MTR norm was exceeded. Measurements are expressed in violation of MTR (1x MTR=13ng/liter) (CML, 2010: www.bestrijdingmiddelenatlas.nl).

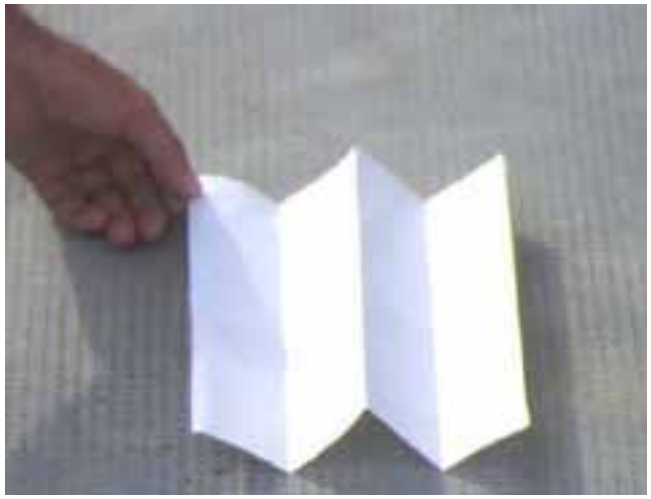
Guttation problem known to Bayer since 1992

„It still needs to be tested in how far the loss of a. i. through guttation poses a danger to beneficial insects like ladybugs and bees, because they use guttation drops as a water source (communication from Bayer representatives to University of Göttingen, Poehling, 1992; Schmidt, 1992b).“

Toxic dust problem known since 2002

Italy, Sept. 2002, ICPBR
Presentation of investigation in Udine:

„ … the filter paper was … colored pink and frequently contained small flakes …



Scientific Publications since 2003

1. **Minutes and list of attendees of ICPBR**

2.

Bulletin of Insectology ***56*** *(1): 69-72, 2003*
ISSN 1721-8861

Risk of environmental contamination by the active ingredient imidacloprid used for corn seed dressing. Preliminary results

Moreno GREATTI[1], Anna Gloria SABATINI[2], Renzo BARBATTINI[3], Simona ROSSI[2], Antonella STRAVISI[3]
[1]*Laboratorio Apistico Regionale, Dipartimento di Biologia applicata alla Difesa delle Piante, Università di Udine, Italy*
[2]*Istituto Nazionale di Apicoltura, Bologna, Italy*
[3]*Dipartimento di Biologia applicata alla Difesa delle Piante, Università di Udine, Italy*

3.

Bulletin of Insectology ***56*** *(1): 73-75, 2003*
ISSN 1721-8861

Honey bee safety of imidacloprid corn seed treatment

Heinz Friedrich SCHNIER[1], Guido WENIG[1], Frank LAUBERT[1], Volker SIMON[1], Richard SCHMUCK[2]
[1] *Bayer CropScience, Seed Treatment Application Centre, Monheim, Germany*
[2] *Bayer CropScience, Institute for Environmental Biology, Monheim, Germany*

Scientific Conference 2004

Proceedings

of the

First European Conference of Apidology

EurBee

Udine, Italy
19-23 September 2004

170 Attendees:

Scientists from all over Europe.

EURBee 2004 Session: Bees & Pesticides

Bees and Pesticides

Symposium organized by Anna Gloria Sabatini and Klaus Wallner

Bees and pesticides

Presentation and Publication in the Proceedings

Loss of imidacloprid during sowing operations using Gaucho® dressed corn seeds and contamination of nearby vegetation

M. Greatti [1], A.G. Sabatini [2], R. Barbattini [1], S. Rossi [2], A. Stravisi [1]

[1] Dipartimento di Biologia applicata alla Difesa delle Piante, Università di Udine, via delle Scienze 208, 33100 Udine, Italy; [2] Istituto Nazionale di Apicoltura, via di Saliceto 80, 40128 Bologna, Italy; E-mail of the corresponding Author: Moreno.Greatti#aass.uniud.it

Publication in 2006

Bulletin of Insectology ***59*** *(2): 99-103, 2006*
ISSN 1721-8861

Presence of the a.i. imidacloprid on vegetation near corn fields sown with Gaucho® dressed seeds

Moreno GREATTI[1], Renzo BARBATTINI[1], Antonella STRAVISI[1], Anna Gloria SABATINI[2], Simona ROSSI[2]
[1]*Dipartimento di Biologia applicata alla Difesa delle Piante, Università di Udine, Italy*
[2]*Consiglio per la Ricerca e la Sperimentazione in Agricoltura (CRA), Istituto Nazionale di Apicoltura, Bologna, Italy*

Effect on debate about neonicotinoids in other parts of the world.

Beekeepers from other parts of the world are contacting us because they suffer from of “unexplained” colony losses.

Industry experts and experts close to industry pretend not to know anything and are leaving it up to beekeepers to figure out the connection.

"It's déjà vu all over again” – in the aftermath of the major bee die off in Germany and Italy 2008 the experts pretended not to know anything – but it is on record that they did.

We will do our best to share our experience with beekeepers in other countries.

Effect on debate about neonicotinoids in other parts of the world.

In the lobbying fight around the neonicotinoid ban no arm was left untwisted, no favour was left uncalled, no study was left unpresented.

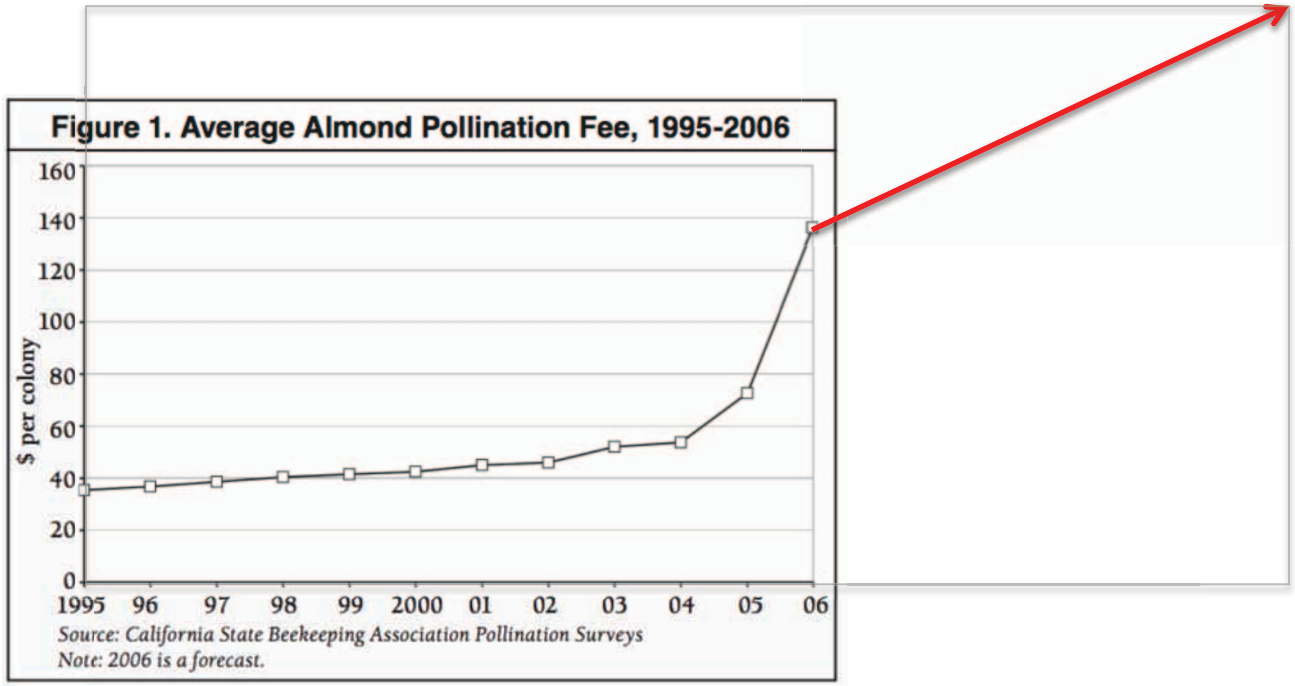
The EFSA process involved not just agency staff scientists but also risk assessors from member states including those, who were opposed to the ban.

The case of the neonicotinoids has clearly demonstrated, that the standard tests used internationally to assess the risk to bees are insufficient and outdated.

During a recent EFSA conference it became clear, that sublethal effects need to be considered and that other pollinators need to be included.

Bee-conomics and the Leap in Pollination Fees

by Daniel A. Sumner and Hayley Boriss, UC Davis, 2006



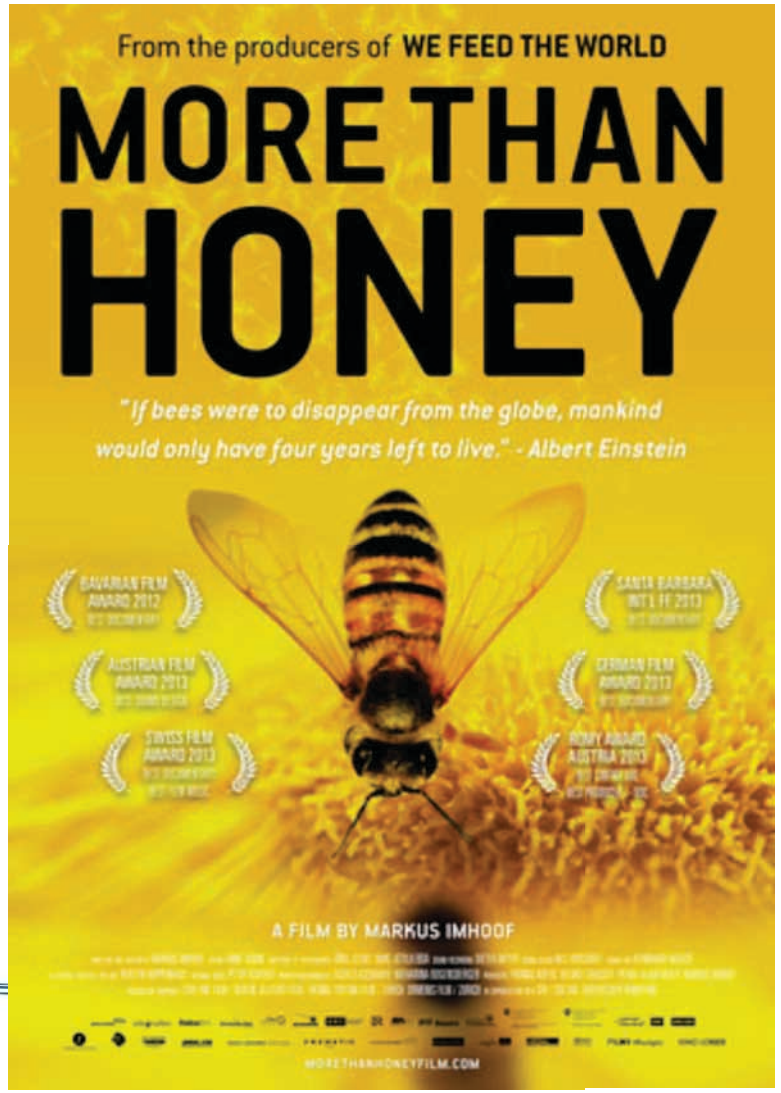
Spring 2013: $220

If agricultural landscape is hostile to pollinators, there are two options left:

Migratory beekeepers

or

migratory farm workers

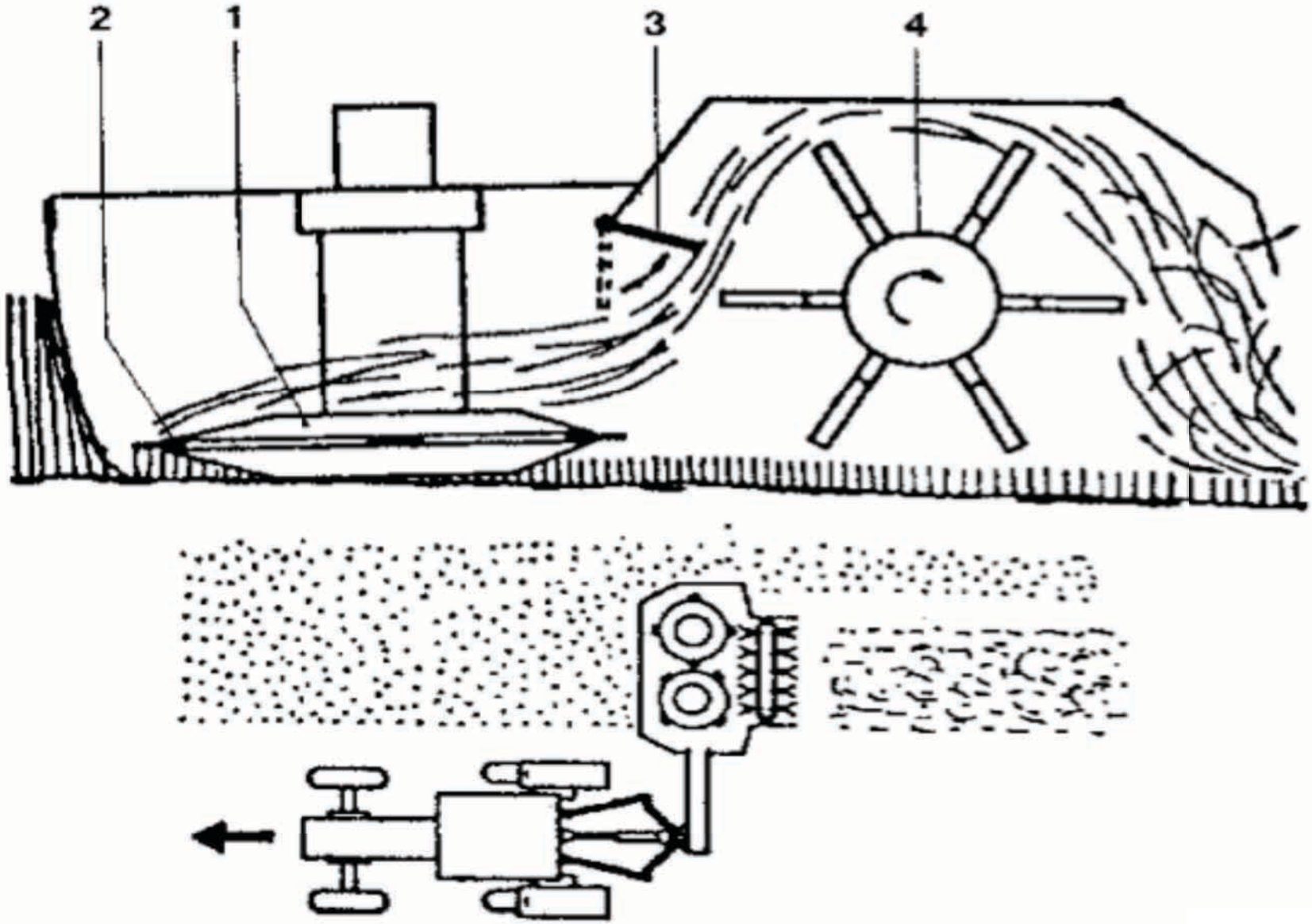


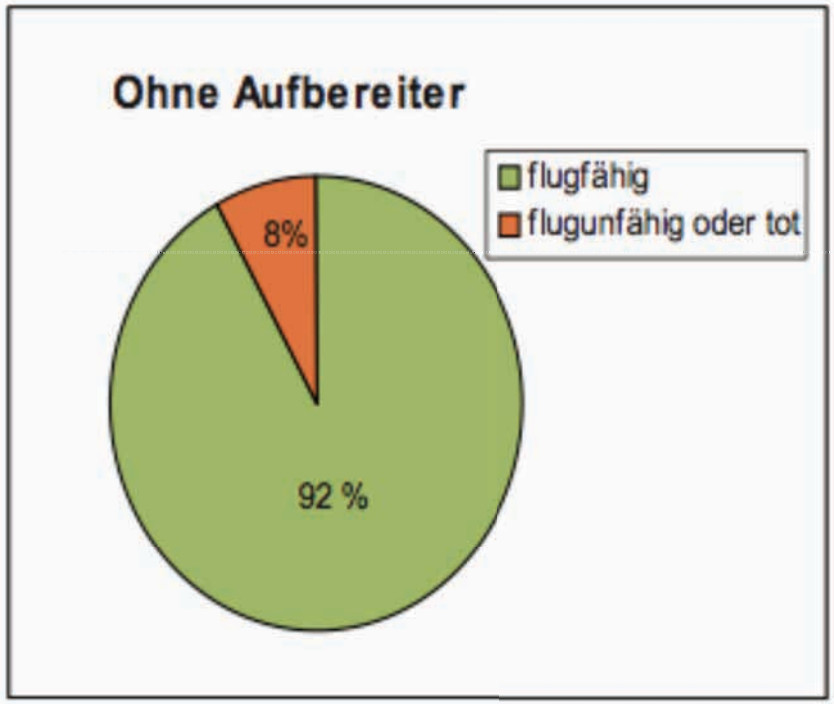
Pesticide use not the only intensive farming practice killing bees

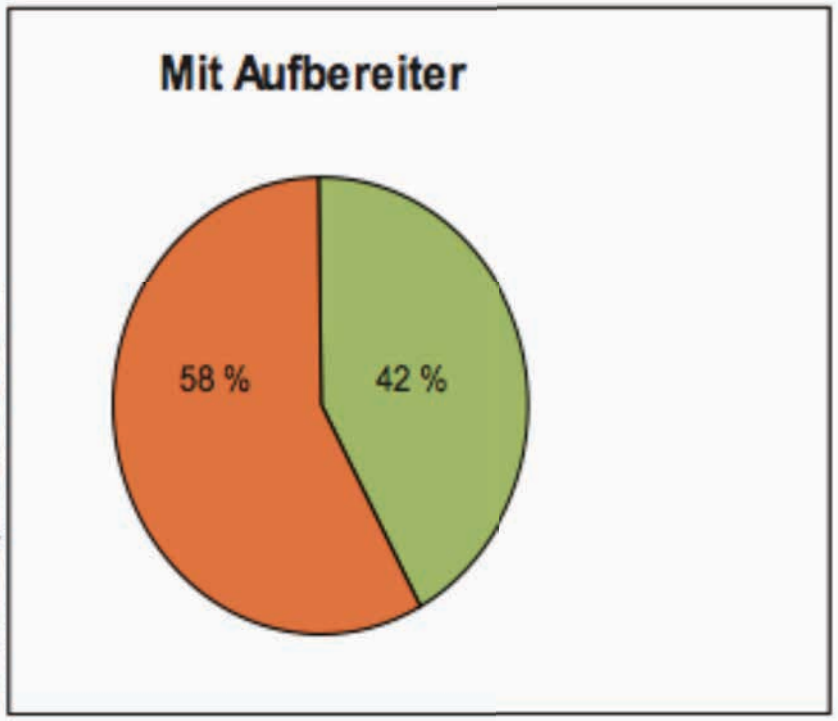
School for young farmers in Bavaria:
This pasture is mowed too late for maximum protein content.

Disc mower with conditioner: No chance for our bees

Disc mower with conditioner: No chance for our bees







GRAFIK: ZBF, AGROSCOPE ALP

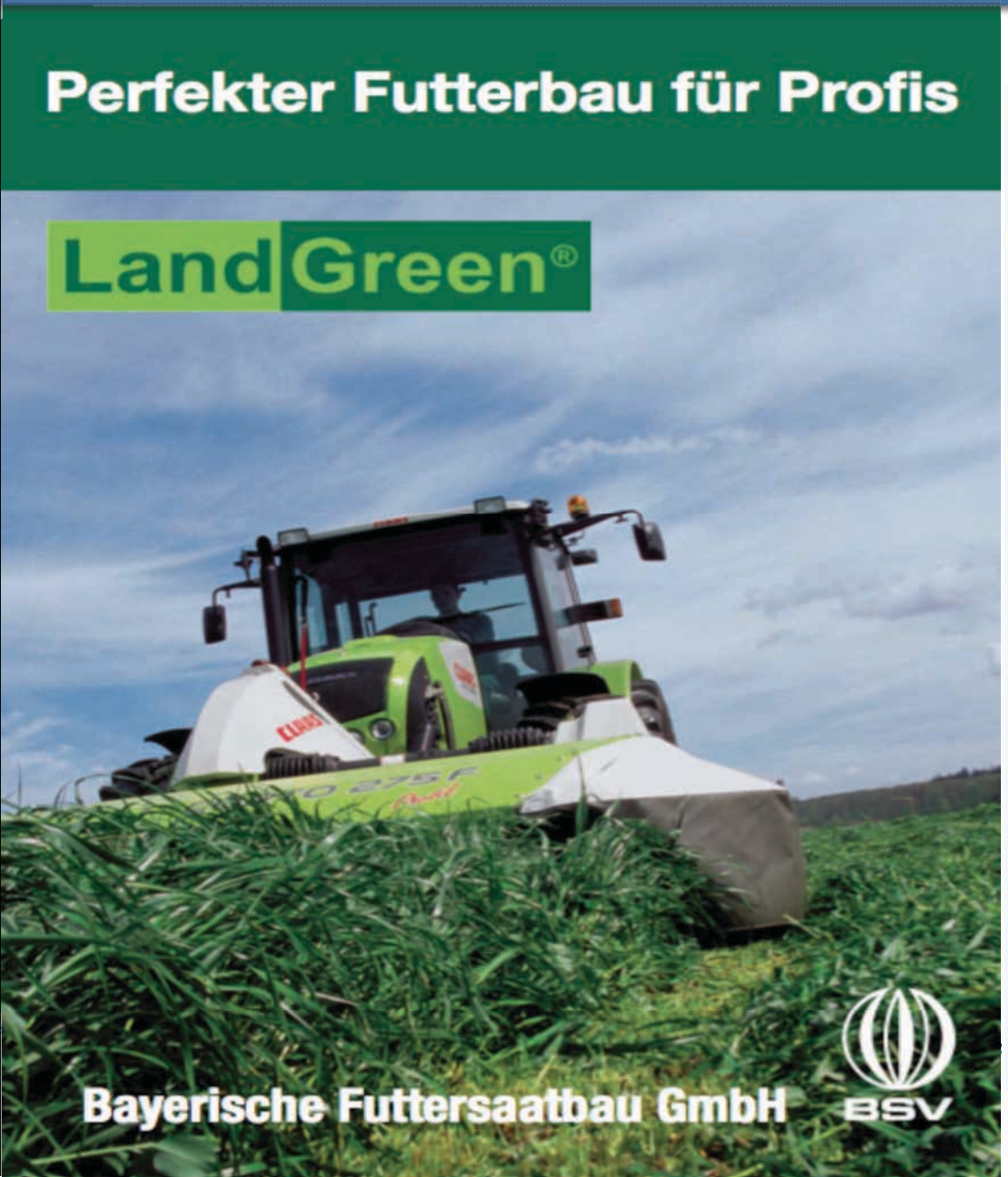
Honigbienen-verluste: Wirkung des Aufbereiters auf die Bienen-verletzungen beim Mähen.

agroscope

Traditional mowing equipment

Textbook case for farmers

From green pasture to silage.



Ausdauer (9 = Daueranlage)		
Standort		
Nutzung (Schnitte pro Jahr)	5–6 Schnitte	Neuanlage
		Nachsaat
	4–5 Schnitte	Neuanlage
		Nachsaat
	3–4 Schnitte	Neuanlage
		Nachsaat

Comparative study of agricultural landscapes (Canada)

Comparison of colony losses and the presence of pathogens in three agricultural landscapes in Quebec showed the highest colony losses and largest number of pathogens in areas with intensive GMO maize cultivation.

CHAGNON Madeleine, Monique Boily, Genevieve Beaunoyer Impacts of pesticides used in Quebec (Canada) corn fields on honeybee colonies (Apimondia, 2009)

Comparative study of agricultural landscapes (USA)

Journal List > Proc Natl Acad Sci U S A > v.99(26); Dec 24, 2002

Proc Natl Acad Sci U S A. 2002 December 24; 99(26): 16812–16816. PMCID: PMC139226
Published online 2002 December 16. doi: 10.1073/pnas.262413599.

Ecology

Crop pollination from native bees at risk from agricultural intensification

Claire Kremen,*† Neal M. Williams,* and Robbin W. Thorp‡

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†To whom correspondence should be addressed. E-mail: ckremen@princeton.edu.

Edited by Paul R. Ehrlich, Stanford University, Stanford, CA, and approved November 4, 2002

Received July 11, 2002.

ABSTRACT

Are cities the last refuge for bees?

- In many countries bees are doing better in cities.
- In intensively used agricultural landscapes other species are often worse off than the honeybee.
- There is no single cause for the bee problems.
- In a "agricultural desert“ many factors come together to form a "perfect storm“.

“A land flowing with milk and honey”

(Bible, 2. Moses 3.8)

Why is the crisis in the dairy market of concern for beekeepers?

Intensive dairy production from the dairy farmers perspective

- World market prices for world market milk
- Regulation of production volume is prevented by EU
  - Unused quota by one farmer can be used by others
  - EU sets quota well above demand
  - Quota system is being phased out
- Anti trust rules make it hard for farmers to set production limits.
- Result: Many farmers will give up entirely or switch to biogas.

Intensive dairy production from the beekeepers perspective

- Maize with neonicotinoid seed treatments (Poncho) or granulate (Santana)
- "Green Desert" due to silage production
- Harvesting shock (a whole county mowed in a few days)
- Flight bee losses in mowing equipment (> 1 Kg per hive)
- Switch to biogas would transform the "green desert" into a „maize desert".

Our proposal to the dairy farmers

- Control production volume by “calling off the arms race”.
- Less intensive production methods to lower costs while increasing the quality and decreasing the quantity.
- Extensive methods have many secondary benefits and high public acceptance.
- "Bee-friendly milk" has support from beekeepers' associations.

What is milk quality

- Bacteria count
- Cell count
- Fat content
- Protein content
- Freeze point
- Inhibitors

Regulatory requirements are beeing met by almost 100 % of the products. It is no longer relevant for the consumer !

Qualtiy for the consumer

Primary quality factors

- Taste
- Price
- Functional properties

Sekundary quality factors

- Regionality
- Organic
- Fair Trade
- Sustainable
- Carbon footprint
- **Bee friendly production**

The grazing cow only exists in TV commercials

Milkreport Bavaria 2006/07 (499 Farms, Dorfner et al. 2007)

Milchproduction:	7.400 kg
Base feed performance:	2.500 kg

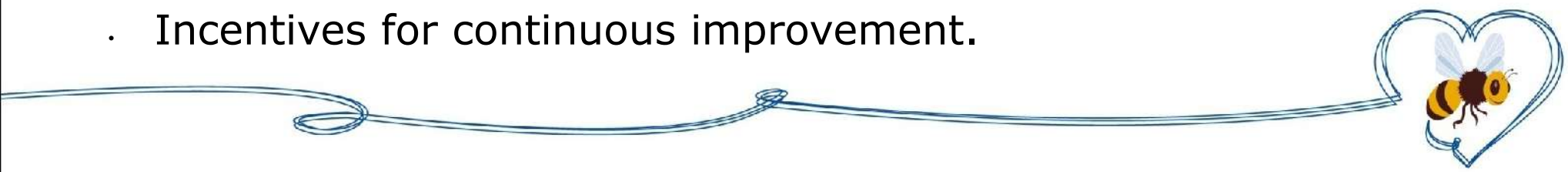
Feed ration (Average in farms surveyed):

Corn:	30 %
Silage:	30 %
High protein feed:	31 %
Other:	8 %

Grazing on pasture: 0,6 %

Goals of the fair milk

- Increased roughage (hay) to achieve higher Omaga 3 fatty acids
  = health benefit to consumer.
- Efficient production with lower input cost.
- Fair price for the farmer for every liter sold as fair milk to the consumer.
- Regional production and sourcing of feed.
  = less impact on beekeepers in South America.
- Healthy cattle with lower veterinary cost and longer life span.
- Optimal product quality.
- Bee friendly production
- Incentives for continuous improvement.



Fair Milk Criteria

- GMO-free feed. Helps beekeepers in South America
- Feed only from the EU
- No use of pesticides harmful to bees in cultivation of feed.
- maximum 1.500 kg of high protein feed per cow.
- maximum 30 % corn silage in the feed ration.
- minimum 60 % green pasture in feed cultivation.
- Documentation of all feed components.
- Beefriendly production methods
  - Flowing pastures and strips
  - Avoidance of mowing losses and harvest shock
  - No use of pesticides dangerous to bees

Launched January 2010 in about 1500 Supermarkets in Southern Germany.

Gut Fair

Die faire Milch

BEE FRIENDLY LABEL

- International Label
  - Easy to understand
  - Universal
  - Friendly
  - Credible:
    - Owned by the beekeeping community.
    - Beekeepers have no interest in allowing green washing.
    - Only awarded if real positive impact.
    - Tool to engage with farmers to solve problems.
    - Beekeepers asking their customers to buy certified bee friendly products.

The first products are in the supermarkets

Gut Fair

Die faire Milch

CERTIFIED BEE FRIENDLY

Certified Bee Friendly Textiles from Cotton

Spanish farmers and beekeepers want GMO free and neonicotinoid free cotton.

FlowerPower: Certified Bee Friendly Energy

FlowerPower: Certified Bee Friendly Energy

Fachverband Biogas e.V.
German Biogas Association · Association Allemande du Biogaz · Asociación Alemana de Biogas

"With flowering plants we can use the area three times, to produce energy, to enhance biodiversity and to produce honey as food."

Horst Seide, President of the German Biogas Association.

French Minister of Agriculture
Filmmaker Markus Imhoof – “More than honey”

French Minister of Agriculture with President of the European Milk Board and President of European Professional Beekeepers Association

Political Support:
Members of European and German Parliament

What’s good for our bees is also good for ourselves.

Thank you very much for your kind attention.

Walter Haefeker
Member of the Board of Directors, Deutscher Berufs und Erwerbsimkerbund (DBIB)
President, European Professional Beekeepers Association (EPBA)
Coordinator, AWG10 - GMOs and impact on beekeeping sector (Apimondia)