



**Pesticide
Action
Network**
Europe

**Time for the EU to show leadership on the concept of
smart, inclusive and sustainable growth.
*The Case of Corn Rootworm Borer.***

In 2003, the European Commission introduced *Diabrotica* as a regulated harmful organism with quarantine status and introduced emergency measures to control this organism -Commission Decision 2003/766/EC- obliging member states and farmers to monitor and take preventative measures in safety zones in order to avoid spread. Since more than one year, the European Commission is under pressure from some Member States and Union farmers and maize growers' associations, asking a repeal of these EU laws, as it is considered no longer possible to eradicate the so-called "billion dollar bug" pest from the EU territory nor to block its further spread into the current pest-free area. While PAN Europe recognises that it is no longer possible to suppress the spread of this pest in the EU we call for the EU to show leadership and maintain the legislation aiming at "smart, inclusive and sustainable growth".

The pest in question is called the Western Corn Rootworms (WCR) - its Latin name *Diabrotica virgifera virgifera*- also known as the "billion dollar bug", an important pest of maize whose soil-inhabiting larvae can seriously damage roots of maize -*Zea mays*- leading to yield losses.

European maize growing covers around 14 million hectares, and is mainly used for animal feed. On average, around 22% of maize cultivation in the EU is on monoculture -without crop rotation-. Maize is one of the most intensively grown crops and is widely linked to a range of environmental problems ranging from biodiversity loss to overconsumption and pollution of water caused by pesticides heavy use.

The WCR was first introduced in 1992 in Serbia (ex-Yugoslavia) and started to spread at a rather rapid pace in Danube basin. In 2011, WCR was present in 12 of the 27 Member States (Hungary, Slovakia, Slovenia, Romania, Bulgaria, Czech Republic and into large parts of Italy, Poland and Austria, France, Luxembourg, Germany, Belgium).

Moreover, because of the 2002 WCR spread in Italy, France and Austria, the EU introduced since 2003 a plant health protection system that requires Member States and farmers to control the pest (2).

PAN Europe asked some years ago for access to documents to the European Commission

to know more about how Member States have applied the EU rules, and as can be easily noticed from the attached overview, there are huge variations among what Member States are doing (3):

- Hungary, who produced 1.4 Mha of maize, clearly stated in their 2011 survey report that they sent to the European Commission that they have not implemented any of the three directives!
- Germany, who produced 2.295 Mha of maize in 2011, clearly stated in their 2011 survey report that they sent to the European Commission that it is not necessary to apply crop rotation –as well as insecticide control- as monitoring in the security zone is enough.
- Instead countries like Poland and Italy do recognise in their reports the importance of using crop rotation as a tool to combat spread...

All member states are taking actions to keep pest pressure lower, but some of these are being done in a way which is very harmful for the environment and public health. It is definitely not sustainable, inclusive or smart.

Especially not when taken into account that Member States already need to apply sustainable agricultural practices as part of Directive 2009/128/EC of 21 October 2009 on sustainable use of pesticides¹. Member States already need to do monitoring and surveillance as part of Directive 2009/128/EC of 21 October 2009².

Furthermore, in 2013, the European Commission decided to protect bees by banning several insecticides -3 neonicotinoids and 1 phenylpyrazole- on many crops. In parallel, NGOs noticed that, according to the data that Member States provided to the European Commission, crop rotation is mandatory in some Member States but not in all of them. In fact crop rotation is a good alternative to chemicals to combat WCR.

In the countries, such as Hungary, where crop rotation is not put into practice, farmers use neonicotinoids -now forbidden on maize-, pyrethroids (deltamethrin, cypermethrin) and organophosphate (chlorpyrifos) to combat WCR. The first group is now banned but the other two are still authorized and are also highly toxic to bees. Furthermore, by giving up on making crop rotation a mandatory technique to fight WCR, the European Commission incites farmers to use bee-harmful chemicals. In addition, the European Commission is not encouraging farmers to use biological control of WCR based on entomoparasitic nematodes.

¹ Article 14 **makes it mandatory for all EU farmers to apply Integrated Pest Management as from 1 January 2014**, stating that *'Member states shall take all necessary measures to promote low pesticide-input pest management, giving wherever possible priority to non-chemical methods, so that professional users of pesticides switch to practices and products with the lowest risk to human health and the environment among those available for the same pest problem.'*

² *"Member states shall establish or support the establishment of necessary conditions for the implementation of integrated pest management. In particular, they shall ensure that professional users have at their disposal information and tools for pest monitoring and decision making, as well as advisory services on integrated pest management."*, with annex III, point 2 highlighting that *Such adequate tools should include observations in the field as well as scientifically sound warnings, forecasting and early diagnosis systems where feasible as well as the use of advice from professional qualified advisers."*

Therefore, as European Environmental NGOs, we strongly believe that the European Commission is being in total contradiction with its ban pronounced earlier this year.

In this time of financial crisis, the only **‘smart, inclusive and sustainable’** way forward is up keeping WCR as a quarantine status, but make sure that Commission Decision 2003/766/EC finally gets implemented.

To ensure that society is not paying twice, it is crucial that any aid given as part of the 2 billion in the multiannual framework for food safety...meant to help member states and farmers to ensure plant health, combating potential pest attack. The same goes for the aid part of the mutual fund offered within the rural development programme; They should be given only when farmers are able to proof having taken sufficient agronomic prevention.

Furthermore, for more than one year now, European Commission is under pressure from some Member States and Union farmer’s and maize grower’s associations, asking a repeal of the current rules, in the light of the ongoing spread of the pest in the past years into new regions of the Union, arguing that they have learned to live with the yield losses caused by WCR.

PAN Europe recognises that it is no longer possible to eradicate the pest, but think that it is a very bad idea to leave it up to Member States to find the right approach: as just “letting it go” is neither smart, nor inclusive or sustainable!

The chemical control of the WCR is based on soil insecticides such as those used in seed treatment - to kill the larvae, which is known to be toxic to bees (Genetically Modified Organisms) and aerial spraying with broad spectrum insecticides such as pyrethroids and organophosphates -foliar sprays aimed at killing flying insects, but instead contaminates surface water and soils far away from the application as well as kill other insects-. So in principle seed treatment is no longer possible, GMOs are only allowed in few MS, and aerial spraying has been banned introducing the Sustainable Use Directive.

Instead another way is possible: application of good agronomic practices such as crop rotation, application of cultural practices including early sowing with an application of a starter fertiliser. A new tool for biological control of *Diabrotica* based on entomoparasitic nematodes is also available, while tolerant or resistant maize varieties are being developed and they could soon become available to EU farmers

Therefore, if the European Commission would really aim to show EU leadership applying their slogan “smart, inclusive and sustainable growth” the way forward would go through a solid implementation of the Common Agricultural Policy, the new plant health regime and the Sustainable Use Directive proposing the following combination of actions:

- Make sure that Member States who already have crop rotation as part of their cross compliance rules, keep on having it even in the new CAP -no watering down of the rules-(1)
- Swiftly and correctly implement the Sustainable Use of Pesticides Directive which requires an obligatory move toward Integrated Pest Management, including

Member States and farmers to keep on monitoring *Diabrotica* population by adequate methods and tools, making it mandatory for maize farmers to apply rotations as well as early sowing and start fertilizers.

- Make sure that Member States as part of the Rural Development Policy support farmers who take a holistic approach applying a combination of agronomic practices, use traps and if needed nematodes and
- Establish operational groups as part of the European Innovation Partnership to finally start testing the positive research result concerning uptake of biological control measures and of risk prevention through appropriate agronomic practices.

The arguments used by the European Union are the typical ones, saying that sustainable agriculture has to be defined at the regional level and therefore, it is a duty of the regional authorities to take “appropriate” actions... But this is a quite crazy approach to take. In fact PAN Europe, it is time for the EU to be proactive, and show the way forward a more sustainable European agriculture. It is time for the EU to show the way to the entire EU and not only to the regions who dare to regulate locally, Giving more attention to agronomic control not only as a tool to combat spread of the WCR but also more generally by applying crop rotation – already applied in traditional, conventional and organic agriculture for its feasibility and multiple beneficial effects (e.g. more efficient nutrient use over the years, better soil structures and better pest management)

- ENDS -

Notes:

(1) Germany, Italy, Poland, UK, Romania and others currently offer regional or national standards for crop rotation under GAEC; See FoEE (2009) Overview of Member States applying crop rotation as one of their ‘good agricultural and environment conditions’ (GAEC) in 2009 based on information from DG AGRI with countries and their type of crop rotation,
http://www.foeeurope.org/sites/default/files/foee_ms_gaec_overview_crop_rotation_2009.pdf

(2) EU legislation Commission Decision 2003/766/EC defines that Member States as from December 2003 shall apply emergency measures to prevent the spread within the Community of *Diabrotica virgifera* Le Conte” including reporting the presence of WCR to own official body; conduct surveys to control presence of WCR in their territory, and report of presence to Commission and other member states. Member States shall define demarcated zones defining where WCR is present, and use pheromone traps to follow closely, and ensure that: no movement of plants, soil to outside the infected zones. Furthermore, in the demarcated zones, member states need to ensure that farmers apply a one in three year rotation for maize, while farmers in the safety zone needs to apply a one in two years rotation for maize AND chemical treatment. Commission Decision 2006/564/EC foresees that member states makes sure that following measures is introduced in areas with high possible risk of infestation, starting with airports : Crop rotation one in two year OR Intensive monitoring. Commission Recommendation 2006/565/EC foresees, among others, that member states in infested areas make sure

that following measures are taken: Crop rotation one in two with maize; Crop rotation two in three years with maize

(3) Overview of how member states implement Commission Decision 2003/766/EC according to the national reports that Member States sent to European Commission

	Insecticides (combat WCR adults)	Pesticides for seed treatment and soil treatment (combat larval injury)	Toxicity
<i>Belgium (2006)</i>	6 Recognized pesticides to eradicate WCR Decis EC 2,5 Decis 2,5 EC Decis micro Karate Keshet Splendour		Decis and Keshet (Deltamethrin) highly toxic to bees: EDC Karate (lambda-cyhalothrin): highly toxic to bees
<i>Czech Republic (2006)</i>	Karate Zeon 5 Vaztak 10 EC Decis EV 15 Decis EV 50 Decis flow 2,5	Cruiser 350 Dursban 10 G Marchal 25 EC	Vaztac (alpha cypermethrin): highly toxic to bees, EDC. Dursban (chlorpyrifos): highly tox to bees, EDC Marshal (carbosulfan)
<i>Hungary</i>	Karate Zeon 5 Karate 2,5 WG SumiAlpha 5C Sumi-Guard Lema-Guard 100 Fury 10 C Bancol 50 WP Mospilan 20 SP Diabro CS Danadim 40 EC	Gaucho 600 FS Cruiser 350 Poncho 350 Chinufur 40 Counter 5G Dursban 480 EC Force 1,5G Force 10 CS Furadan 10 G Marchal 25 EC Pyrinex 48 EC Trimet 10G	Sumiapha and sumiguard (esfenvalerate): Fury (cypermethrin): highly tox to bees, EDC Pyrinex (chlorpyrifos): toxic to bees, EDC Chinufur (carbofuran) Force (tefluthrin)
<i>Austria (2006)</i>	Decis	Poncho Poncho pro Cruiser 250 FS Furudan Granulat Force 1,3G	Poncho (clothianidin, banned), highly toxic to bees. Cruiser (thiam): same as chlothianidin.