Court of Justice of the European Union- Palais de la Cour de Justice Boulevard Konrad Adenauer Kirchberg L-2925 Luxembourg Luxembourg

Lucerne, Switzerland, July 24th, 2015

Re: Statement on the submitted readmission of three neonicotinoids

Legal case T- 429/13 Lawsuit - Bayer CropScience AG

Legal case T- 451/13 Lawsuit - Syngenta Crop Protection AG

Legal case T- 584/13 Lawsuit - BASF Agro BV

Ladies and gentlemen Honorable Judges

In the coming months you will rule on the perpetuation of the ban of three pesticides based on the active component group of neonicotinoids (active agents: Imidacloprid, Clothianidin and Thiamethoxam), the use of which the European Commission prohibited for two years in 2013. These pesticides are suspected of causing considerable harm to bees and other non-target organisms. The manufacturers of these pesticides, Syngenta Crop Protection AG, BASF Agro BV and Bayer CropScience AG are now filing suit against this decision, wanting to once again sell their products on the European market.

You, as the Judges, speak for Europe. We are part of you, because you speak for us and you represent us, and therefore we feel entitled to offer you our consultatory statement on such an urgent matter.

Basically, you are asked this question: Is it legal to kill countless useful, feral insects with neurotoxins, even though they are not those organisms one would like to kill as so-called "pests" in agriculture?

Would you admit a pesticide carrying the risk that, in case of improper use, all farmers in the neighbourhood could lose their cows, as has already happened? What is the difference between a beekeeper losing 100 bee colonies at one blow and a farmer suddenly losing 100 cows? Here, we would like to remind you of a case in spring 2008, when, in a single stroke, at the Upper-Rhine in Germany 11,500 bee colonies were poisoned with the caustic Clothianidin (the readmission of which you will now decide on) and perished. Accidents such as this will happen again, when the use of such agents is legalized. Who gives us the right to kill pollinating insects, which are needed by nature as a whole and, not least, by us humans in order to sustain our food production and plant variety, just so that some individuals can generate more profit short-term? Anything jeopardising the life of the bees to such an extent as neonicotinoids should be categorised as a threat to the welfare of humanity, because we, all of nature and, of course, also agriculture, depend on the irreplaceable pollinating service of the bees and other insects.

The original motivation for the decision to ban the neonicotinoids for two years was to gain time to examine more closely their effects on nature in the (two) ensuing years. The researchers have now published their results and have come to an unambiguous conclusion. The use of neonicotinoids threatens the survival of innumerable non-target organisms and a negative impact on the food chain has been proven. These toxins are distributed into the air, the soils, the rivers and the oceans by the cycles of matter and are only disintegrated very slowly. Below, we would like to present to you the most important research reports. In the report "Beyond the Birds and the Bees" from the Xerces Society for Invertebrate Conservation (Hopwood et al. 2013) the authors write:

• Numerous studies demonstrate the negative impact of these insecticides on honey bees and native bees such as bumble bees (Hopwood et al. 2012, Blacquiere et al. 2012, Goulson 2013). Studies also show that neonicotinoids are detrimental to aquatic organisms (Mineau and Palmer 2013), and they have now been found in surface waters as well as groundwater in several states. Lower use rates do not always correspond to reduced risk to non-target organisms."

In 2014, the "World Wide Integrated Assessment" (WIA) Group published the results of their research on pesticides with emphasis on the active component groups of neonicotinoids and Fipronil. This comprehensive study (Van der Sluijs et al. 2014) came to the following conclusions:

- "As a result of their extensive use, these substances are found in all environmental media including soil, water and air."
- "Persistence in soils, waterways and non-target plants is variable but can be long; for example, the half-lives of neonicotinoids in soils can exceed 1,000 days."
- "This fate profile provides multiple routes for chronic and multiple acute exposure of non-target organisms."
- "In bees, field-realistic exposures in controlled settings have been shown to adversely affect individual navigation, learning, food collection, longevity, resistance to disease and fecundity. For bumblebees, colony-level effects have been clearly demonstrated, with exposed colonies growing more slowly and producing significantly fewer queens (Whitehorn et al. 2012)."
- "At field-realistic environmental concentrations, neonicotinoids and fipronil can have negative effects on physiology and survival for a wide range of non-target invertebrates in terrestrial, aquatic, wetland, marine and benthic habitats (Pisa et al. 2014)."
- "Nevertheless, our review shows a growing body of published evidence that these systemic insecticides pose a serious risk of harm to a broad range of non-target invertebrate taxa often below the expected environmental concentrations. As a result, an impact on the many food chains they support is expected."

The existing studies prove that neonicotinoids not only effectively kill their target organisms but also useful insects like bees. For this reason, all pesticides based on neonicotinoids must be banned. Neonicotinoids are the most dangerous pesticides man has ever created.

The European Academies' Science Advisory Council (EASAC) is enabled by the EU Member States to collaborate with each other in giving advice to European policy-makers. It thus provides a means for the collective voice of European science to be heard. In their newest publication "Ecosystem Services, Agriculture and Neonicotinoids" (EASAC 2015) they list their finding in chapter 6. In list number 1 to 4 they state some general results on pollination service and bee decline. In list number 5 to 8 they conclude from their findings about neonicotinoids the following:

- "5. There is an increasing body of evidence that the widespread prophylactic use of neonicotinoids has severe negative effects on non-target organisms that provide ecosystem services including pollination and natural pest control."
- "6. There is clear scientific evidence for sublethal effects of very low levels of neonicotinoids over extended periods on non-target beneficial organisms. This should be addressed in EU approval procedures."
- "7. Current practice of prophylactic usage of neonicotinoids is inconsistent with the basic principles of integrated pest management as expressed in the EU's Sustainable Pesticides Directive."
- "8. Widespread use of neonicotinoids (as well as other pesticides) constrains the potential for restoring biodiversity in farmland under the EU's Agrienvironment Regulation."

Furthermore, the study group BEAD (Biological and Economic Analysis Division) of the US Environmental Protection Agency (Myers et al. 2014) found that:

• "BEAD concludes that these seed treatments provide negligible overall benefits to soybean production in most situations. Published data indicate that in most cases there is no difference in soybean yield when soybean seed was treated with neonicotinoids versus not receiving any insect control treatment."

This means that these poisons do not even have an economic benefit when used. Agriculture does not depend on them. In a natural agriculture the use of pesticides is not necessary, as through variegated cultivation methods the mass spread of diseases is prevented and useful insects and birds are fostered, too.

52.2 percent of Germany's wild bees species are on the Red List (Binot-Hafke et al. 2011), hence are endangered, extremely rare or already extinct. In the case of locusts it is 41.3 percent (Binot-Hafke et al. 2011), large butterflies 37.5 percent (Binot-Hafke et al. 2011), and birds 42.3 percent (Suedbeck et al. 2007). These numbers from Germany are representative for other European countries. Pesticides account largely for the continuing decrease of these insect and bird populations. We do not know what consequences their extinction will have for the ecosystems because each animal and each plant has its own purpose, which in some cases cannot be replaced. All life is connected and interacting. For some years now, there has been observed a worldwide decline of pollinating insects that has already led to visible crop losses (Tylianakis, J. 2013). The pollinating task of the bees, which is threatened by the use of neonicotinoids, is indispensable and must not be imperiled.

At present, the bees are struggling with many problems. The readmission of neonicotinoids would dramatically aggravate the bees' situation. Read more about the many impairments the bees face, also through microwave and mobile phone radiation, among other things, in our fact sheet (WFNS 2014). The readmission of neonicotinoids would intensify extremely their problems. It is absolutely essential to prohibit the use of pesticides, above all of neonicotinoids, worldwide, in order to allow for the bees' survival in today's environment.

As judges of the European Court and defenders of what is <u>right</u>, the crucial question you have to ask yourselves is the following:

Is the killing of a human being moral? Is the killing of a small insect, "legal" or not, moral? Of course not. To give license to this killing is just as immoral as doing it yourself. It is our responsibility to sustain and protect life, and not to destroy it. The use of neonicotinoids kills millions upon millions of useful insects and is therefore unethical.

If, before the court, money, and power, and human laws were worth more than the survival of a single living being, as small as it might be, then the law would not be right in putting itself ahead of life. Serve justice, ban these life-threatening toxins once and for all and set an example for the protection of the bees and for all life. You are the last resort that is able to stop ruthless private firms in our man-made system; companies, who consciously accept damage to nature and the death of innumerable organisms in order to increase their profit. Show these companies the moral boundaries of their actions. Please live up to your responsibility and argue for the perpetuation of the ban on neonicotinoids – not only for two years, but forever. Life is going to thank you for this.

We of **The World Foundation for Natural Science** put our trust and our hope in you and the European Court to curb these ruthless chemical companies.

To encourage you in your service to truth and morality and to remind you of the power of pure moral aspects we offer to you our Moral Compass for Life's Journey. Hold true to these aspects for the rest of your life and you will become a master of those qualities as an example for mankind.

We are writing this consultatory statement in deepest respect of each one of you, who have the privilege to serve on the bench of the European Court. Thank you very much for reading this statement.

May God bless you and direct all your steps.

The World Foundation for Natural Science

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The Very Rev. Dean Paul Probst, em. SF

European President of The World Foundation for Natural Science

References

Binot-Hafke, M.; Balzer, S.; Becker, N.; Gruttke, H.; Haupt, H.; Hofbauer, N.; Ludwig, G.; Matzke-Hajek, G.; Strauch, M. (Red.) (2011): Rote Liste gefährdeter Tiere, Pflanzen und Pilze Deutschlands. Band 3: Wirbellose Tiere (Teil 1). Bundesamt für Naturschutz, Bonn-Bad Godesberg. - Naturschutz und Biologische Vielfalt 70 (3), 716 S., Euro 49,95. ISBN 978-3-7843-5231-2

Blacquiere, T., G. Smagghe, C. A. M. van Gestel, and V. Mommaerts. 2012. Neonicotiniods in bees: a review on concentrations, side-effects and risk assessment. Ecotoxicology 21(4) 973-992.

Goulson, Dave; Kleijn, David (2013): REVIEW: An overview of the environmental risks posed by neonicotinoid insecticides. In: J Appl Ecol 50 (4), S. 977–987.

Hopwood, J., S. H. Black, M. Vaughan, and E. Lee—Mader. 201 3. Beyond the Birds and the Bees. Effects of Neonicotinoid Insecticides on Agriculturally Important Beneficial Invertebrates. 32 pp. Portland, OR: The Xerces Society for Invertebrate Conservation.

Hopwood, I., M. Vaughan, M. Shepherd, D. Biddinger, E. Mader, S. H. Black, and C. Mazzacano. (2012): Are Neonicotinoids Killing Bees? A Review of Research into the Effects of Neonicotinoid Insecticides on Bees, with Recommendations for Action. 44 pp. Portland, OR: The Xerces Society for Invertebrate Conservation.

Mineau, C., and C. Palmer. 2013. The Impact of the Nations Most Widely Used Insecticides on Birds. 96 pp. The Plains, VA: American Bird Conservancy. Available at: http://www.abcbirds.orglabcprogramslpolicyltoxins/Neonic FINAL.

Myers, C.; Hill, E.; Jones, A.; Kiely, T. (2014): Benefits of Neonicotinoid Seed Treatments to Soybean Production. The Biological and Economic Analysis Division (BEAD). United States Environmental Protection Agency. Office of Chemical Safety and Pollution Prevention. Peer Review Date: October 3, 2014

Pisa L., Amaral-Rogers V., Belzunces LP., Bonmatin J.-M., Downs C., Goulson D., Kreutzweiser D., Krupke C., Liess M., McField M., Morrissey C., Noome D.A., Settele J, Simon-Delso N., Stark J., van der Sluijs, van Dyck H., Wiemers M. (2014) Effects of neonicotinoids and fipronil on non-target invertebrates. Environ Sci Pollut Res

Südbeck P, H-G Bauer, M Boschert, P Boye & W Knief (2007): Rote Liste der Brutvögel Deutschlands, 4. Fassung, 30.11.2007. Ber. Vogelschutz 44, 23-81.

The World Foundation for Natural Science (WFNS) (2014): Fact Sheet. The worldwide disappearance of the bees. Why their dying threatens our own survival. October 2014

Tylianakis, J. (2013): The Global Plight of Pollinators. Science 339: 1532 - 1533

Van der Sluijs, J. P.; Amaral-Rogers, V.; Belzunces, L. P.; van Bijleveld Lexmond, M. F. I. J.; Bonmatin, J-M; Chagnon, M. et al. (2014): Conclusions of the Worldwide Integrated Assessment on the risks of neonicotinoids and fipronil to biodiversity and ecosystem functioning. In: Environ Sci Pollut Res. Available at: DOI 10.1007/s11356-014-3229-5.

Whitehorn P.R., O'Connor S., Wackers FL, Goulson D. (2012) Neonicotinoid pesticide reduces bumble bee colony growth and queen production. Science 336:351 – 352

European Academies' Science Advisory Council - EASAC (2015): Ecosystem Services, Agriculture and Neonicotinoids. EASAC policy report 26. April 2015. ISBN: 978-3-8047-3437-1