



Dec. 22, 2014

OPP Docket
Environmental Protection Agency Docket Center
Washington, DC
Filed online at: www.regulations.gov

Re: Benefits of Neonicotinoid Seed Treatments to Soybean Production; Docket No. EPA-HQ-OPP-2014-073

Dear Sir/Madam,

We are pleased to submit this comment on the above-referenced docket on behalf of the **Center for Food Safety**, together with: **American Bird Conservancy, Beyond Pesticides, Beyond Toxics, California State Grange, Center for Biological Diversity, Ecological Farming Association, Endangered Species Coalition, Farm and Ranch Freedom Alliance, Food and Water Watch, Friends of the Earth, Institute for Agriculture and Trade Policy, National Family Farm Coalition, Northwest Center for Alternatives to Pesticides, Pesticide Action Network and Toxic Free North Carolina**. Our 16, non-profit, public interest groups address the assessment dated Oct. 15, 2014, by Myers and Hill, entitled: *Benefits of Neonicotinoid Seed Treatments to Soybean Production* (hereinafter, the “Assessment”).

Introduction to Comment:

According to EPA's Assessment, neonicotinoid seed coatings are used on more than 23 million acres of soybeans in the United States, and more than one million pounds of these registered insecticides were applied to soybean seeds from 2008 - 2012. The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) generally prohibits EPA from registering a pesticide, or from

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maintaining past registrations such as in the present situation, if their use would cause “unreasonable adverse effects on the environment.” Under longstanding FIFRA practice, determining this involves weighing costs of the pesticides versus their benefits. We on the whole commend the Assessment as an indication of the agency taking its duty to weigh the actual benefits seriously.

Specific Comments:

1. EPA’s Assessment is very well-documented and reliable, but it is also long past due.

The strong findings in EPA’s expert Assessment led to this fundamental conclusion (p. 13):

This analysis provides evidence that U.S. soybean growers derive limited to no benefit from neonicotinoid seed treatments in most instances. Published data indicate that most usage of neonicotinoid seed treatments does not protect soybean yield any better than doing no pest control. Given that much of the reported seed treatment usage in the U.S. on soybeans is not associated with a target pest, BEAD concludes that much of the observed use is preventative and may not be currently providing any actual pest management benefits.

We highlight some other key findings in the Assessment based on EPA’s survey of efficacy research and extension experts nationwide (pp. 9-10; emphasis added):

- *When asked how the use of neonicotinoid-treated seeds affected soybean yields, 74% of respondents (14/19) responded that **yield either stayed the same or decreased.** (p. 9)*
- *When asked if the use of seed treatments affected the amount of foliar pesticide applications on soybeans, 100% of the respondents indicated that foliar sprays (both aerial and ground) either **stayed the same or actually increased.***
- *With regard to specific pest efficacy, there was **almost universal agreement** that neonicotinoid seed treatments are **not typically effective against soybean aphids.***
- *Similarly, neonicotinoid seed treatments are **not effective in controlling bean leaf beetles** as this pest occurs too late in the season*

However, this excerpt from the paper is highly concerning as it suggests EPA may have known for many years that at least 65% of U.S. soybean farmers were using coated seeds with no reason to do so (p. 11).

- *EPA proprietary data show that on average from 2004 to 2012, approximately 65% of soybean growers in the U.S. indicated that they had no pest they were targeting when using neonicotinoid-treated seed.*

We also note that our review of the calendar year of publication of the 36 efficacy studies EPA lists as “References” in its Assessment reveals the average age of those studies to be **over 6 years old**. In other words, the bulk of information indicating lack of efficacy has long been available and should have been acted on years earlier. Given the long delays in acting on the available information to date there can be no justification for further delays in acting on EPA’s findings now.

2. The Assessment understates the published science showing lack of efficacy.

The Center for Food Safety’s (CFS) report, *Heavy Costs: Weighing the Value of Neonicotinoid Insecticides in Agriculture*, was released in March 2014. The report documents the lack of independent science supporting the efficacy of insecticidal seed coating products and tallies the vast scope of the costs those products impose to the nation.¹ *Heavy Costs* is entirely consistent with EPA’s assessment with respect to soybean seeds (although not cited by EPA).

Of the ten journal-published soybean efficacy articles in the CFS report, EPA’s Assessment cites nine of them. EPA should also have considered the missing Esker and Conley (2012) article.² As described in *Heavy Costs*, the authors explored the economic considerations for seed treatment by looking at the probability that a positive crop yield response will at least cover the cost of treatment in typical Wisconsin soybean fields. They focused on whether they could make robust recommendations about using the treatments. The authors found there were no strong conclusions to be made from their “treated versus control” testing, noting:

...the complexity of the results regarding the probability of breaking even with the application of seed treatments suggests that making specific recommendations is difficult.

EPA also disregarded the section of *Heavy Costs* that quoted from the seminal Goulson (2013) article, “An overview of the environmental risks posed by neonicotinoid insecticides.”³ Goulson reiterated similar results on lack of efficacy, citing many of the same studies in EPA’s

¹ Stevens S, and P Jenkins. 2014. *Heavy Costs: Weighing the Value of Neonicotinoid Insecticides in Agriculture*. Report by the Center for Food Safety, Washington, DC. Online at: www.centerforfoodsafety.org/reports/2999/heavy-costs-weighing-the-value-of-neonicotinoid-insecticides-in-agriculture.

² Esker PD and Conley SP. 2012. Probability of yield response and breaking even for soybean seed treatments. *Crop Science*, 52: 351-359.

³ Goulson D. 2013. An overview of the environmental risks posed by neonicotinoid insecticides. *Journal of Applied Ecology*, 50: 977-987.

Assessment. Goulson also relied on a published study from Brazil that EPA's Assessment did not take into account, but should have:⁴

Bueno et al. (2011) compared managing soya pests in Brazil using either an IPM approach or prophylactic use of insecticides (the latter primarily based on imidacloprid). Crop yields were indistinguishable in the two treatments, but pesticide use and costs were much lower in the IPM treatment, demonstrating that this remains the best alternative in this system.

EPA also disregarded this assertion in *Heavy Costs*, quoting an Ontario government official:⁵

Tracy Baute, an Ontario Ministry of Agriculture and Food entomologist and IPM expert, stated: "Based on my experience, only 10 to 20% of the corn and soybean acres are actually at risk of most of the soil pests on the [neonicotinoid] product labels." In other words, 80 to 90% of the use is unnecessary. Ontario's corn and soybean growing practices are similar to those in the northern portions of the US Midwest corn and soybean regions.

As EPA is aware, because of heavy impacts on honey bees and the environment, Ontario recently announced its intent to reduce neonicotinoid use by 80% province-wide as of 2017; the decision to do so relied heavily on the lack of efficacy for farmers.⁶ Ontario's action provides an important precedent for similar action from EPA based on its similar U.S.-based Assessment.

3. Registrants of the soybean coating products were required to have efficacy information on hand and they violated that requirement.

The primary clothianidin and thiamethoxam coating products for soybean seeds are listed below with their EPA registration number.⁷ All of these products have been in use for several years. (Note: there are newer products also, however public information on them is difficult to access; EPA itself of course has that information; the comments in this section apply to all neonicotinoid

⁴ Bueno AD, Batistela MJ, Bueno RCO, Franca-Neto JD, Nishikawa MAN, and Liberio, A. 2011. Effects of integrated pest management, biological control and prophylactic use of insecticides on the management and sustainability of soybeans. *Crop Protection*, 30: 937–945.

⁵ Baute, T. 2013. *Using Fungicide-Only Treated Seed and Following IPM*. Ontario Ministry of Agriculture and Food. Online at: www.omafr.gov.on.ca/english/crops/field/news/croptalk/2013/ct-0913a1.htm .

⁶ Links to Ontario's announcement and detailed Discussion Paper on sharply reducing the use of these insecticides, issued on Nov. 25, are here, issued by the Minister of Agriculture, Food and Rural Affairs and the Minister of the Environment and Climate Change. Press release: *Reducing Pesticide Use and Protecting Pollinator Health - Ontario Sets Goal to Reduce Neonicotinoid Use by 80 Per Cent* http://news.ontario.ca/ene/en/2014/11/reducing-pesticide-use-and-protecting-pollinator-health.html?utm_source=ondemand&utm_medium=email&utm_campaign=p ; Discussion paper: *Pollinator Health. A Proposal for Enhancing Pollinator Health and Reducing the Use of Neonicotinoid Pesticides in Ontario*; <http://www.omafr.gov.on.ca/english/pollinator/discuss-paper.pdf> .

⁷ Source: EPA's Pesticide Product Label System; online at: <http://iaspub.epa.gov/apex/pesticides/f?p=PPLS:1>.

soybean coating products in use, old or new, including any other compounds in use beyond clothianidin and thiamethoxam.) Per the Assessment, imidacloprid is the other major soybean coating. **The Commenters have not done additional research on all of the imidacloprid products, but the illustrative assertions here regarding thiamethoxam and clothianidin coating products apply equally to the imidacloprid products.**

Thiamethoxam Soybean Seed Coatings (11)

Cruiser Insecticide, 100-941
THX/MXM/FDL CZ, 100-1283
Four-Way VAP, 100-1384
THX_MXM_FDL_TBZ FS, 100-1426
CruiserMaxx EZ, 100-1427
Adage Delux, 100-1449
Adage Premier, 100-1450
CruiserMAXX Vibrance, 100-1508
Avicta Complete Beans, 100-1457
SYT0113, 100-1459
SYT0511, 100-1460

Clothianidin Soybean Seed Coatings (3)

Poncho/Votivo, 264-1109
V-10170 5 FS Insecticide, 59639-151
Inovate Seed Protectant, 59639-176

As far as these and other registered products, EPA’s “efficacy” regulation, under “Product performance data requirements” at 40 CFR § 158.400(e)(1), states (in pertinent part):

...each registrant must ensure through testing that his [sic] product is efficacious when used in accordance with label directions and commonly accepted pest control practices.

As indicated above, a large body of published information showing lack of efficacy of coated soybeans has been available for many years. The registrants of the 14 illustrative coating products above were long on notice of the need to “ensure” efficacy “through testing”. Yet, the Assessment as well as independent research, including via the Freedom of Information Act, reveals the registrants of those products submitted no reliable tests for publication or to EPA that showed efficacy. The registrants’ violation of the mandate in the efficacy regulation provides additional grounds for suspension of the coating products above, as well as any other registrations, in particular those with imidacloprid, which suffer from the same defect.

4. The newly-developed pesticide industry-submitted “studies” are not reliable and do not meet the requirements of EPA’s efficacy regulation.

Again, the requirements of 40 CFR § 158.400(e)(1) are (emphasis added):

.....each registrant must ensure through testing that his [sic] product is efficacious....

There is a slew of recent, unpublished, non-peer-reviewed, industry-funded information claiming efficacy. However, it is contrary to the vast majority of peer-reviewed journal articles and other reliable studies. Further, the industry information does not satisfy the mandate in 40 CFR § 158.400(e)(1) for efficacy to be shown by “testing,” i.e., controlled field studies.

Farmer surveys and “focus groups” in which the industry controlled the questions and the respondents were compensated for their answers do not satisfy EPA’s “testing” directive. Economic reports that claim to show benefits, yet are not peer-reviewed publications and are built upon dense, vague, self-serving methods and assumption are not adequate to meet the terms of the efficacy regulation either. Further, polished industry PR campaigns and individual “case studies” do not satisfy EPA’s “testing” requirement.

In sum, the information that pesticide registrants have pointed at to date alleging economic benefits is non-falsifiable, thus it is unscientific, and it appears designed to find benefits even where they may not exist. EPA should disregard such information.

The so-called “testimonials” that the pesticide registrants have obtained from various soybean farmers are particularly unreliable. It is apparent that many farmers will say they prefer coated seeds as “cheap insurance”– it also appears those same farmers are heavily influenced by advertising and other information beyond crop yields. That stated “option preference” by a subset of soybean farmers does not render the coating products “efficacious” within the meaning of 40 CFR § 158.400(e)(1). To the extent EPA nevertheless considers individual farmer statements, we submit these recent excerpts from the Canadian *Globe and Mail* newspaper article entitled, “Neonic efficacy in spotlight as Ontario plans to curb usage”.⁸ Addressing soybeans among other crops, the article provides a non-industry funded counterpoint on what truly drives the alleged popularity of this “insurance” (emphasis added):

*The seed treatments, which became popular in the past decade, have become an **insurance policy for farmers** trying to protect their yields. In Ontario, they are used on almost all corn and canola and most soybean seeds, in addition to greenhouse vegetables and flowers.*

For Mr. McGivern, whose family has grown grains and raised cattle near Owen Sound, Ont., for 27 years, relying on neonics is akin to treating a person’s high blood pressure without tackling their weight problem.

⁸ Atkins E. 2014. *The (Toronto) Globe and Mail*. Dec. 14. Online at: <http://www.theglobeandmail.com/report-on-business/neonics-sowing-seeds-of-discontent/article22078266/>.

“Rather than changing up the model to alleviate these pressures, they’re treating the side-effects of a broken system. There are a lot of farmers out there who get it, but there are a lot of farmers who get all their advice from the multinationals that are selling them all the products,” said Mr. McGivern, who heads a group called Practical Farmers of Ontario, which bills itself as a voice for family farms.

“There’s no money made in giving people advice on how to do things that don’t cost something to do. So now we’ve gone to a system where we have multinational, petro-agricultural companies saying ‘You don’t need to have crop rotation. We’ll just sell you the technology and the seed that will allow you to grow corn in the same field for five years.’”

Will Trudell, owner of De Dell Seeds Inc. in London, Ont., said neonic-treated seeds account for just 10 per cent of his sales, but he is the exception in a seed-selling business that is dominated by such chemical companies and their retail divisions.

“The big players all say the farmer is going to lose yield if they don’t use this. That’s not true. It doesn’t increase the yield at all, by putting on the neonicotinoid; it only reduces the harmful effects by insect damage,” Mr. Trudell said.

He pointed to an Ontario government study that found just 10 to 20 per cent of the province’s fields require neonic-treated crops to guard against pests. “If there’s no insect pressure, there’s no yield loss,” Mr. Trudell said. *“That’s a huge part of this story that needs telling.”*

The only information that could satisfy the legal requirement in EPA’s own regulation is controlled testing reported in peer-reviewed literature or in gray literature with indicia of independence and high reliability. For the registrants to rebut EPA’s Assessment, their information would need to outweigh the currently overwhelming weight of published tests showing lack of efficacy. A fair review will show that the registrants have failed to submit testing that rebuts the published studies or rebuts the vast bulk of the other independent and reliable information EPA relied on its expert Assessment.

5. EPA should warn Mid-Atlantic soybean farmers who use coated seeds of yield reduction risks and undertake prompt suspension of those misleading products.

The Assessment commendably recognized the importance of recent Pennsylvania State University soybean yield research even when those results could only be cited in “Unpublished” form (Assessment, p. 10, citing Douglas et al.). Use of coated soybean seeds **reduced** crop yields in a typical Mid-Atlantic soybean agriculture setting by **5 percent** compared to the uncoated control seeds.

That alarming research has since been published.⁹ As EPA already is aware of the study, we here highlight some subsequent comments from the authors that shed further light on their findings. According to John Tooker, Associate professor of Entomology:

*Our research suggests that neonicotinoids can have unintended costs, even within crop production....Slugs are among the most challenging pests faced by Mid-Atlantic no-till growers. Our research reveals that neonicotinoids can indirectly increase slug damage to crops by poisoning insects that eat slugs....*¹⁰

*.....This lack of a yield benefit from neonicotinoid seed treatments on soybeans has also been found repeatedly by colleagues at Universities across the cornbelt. Layered on top of this lack of a yield benefit is mounting evidence that neonicotinoids from seed treatments can pollute water and decrease populations of native insects and even insect-eating birds.*¹¹

The lead author, Margaret Douglas, has stated:

*Seed applications of neonicotinoids are often viewed as cheap insurance against pest problems, but our results suggest that they can sometimes worsen pest problems and should be used with care.*¹²

No farmers would knowingly purchase “insurance” that actually or foreseeably will cost them 5% of their crop, with associated economic loss. That fact indicates the farmers are being misled. None of the labels on the thiamethoxam or clothianidin coating products, listed above, advises farmers of these real financial loss risks (CFS has reviewed all of the 14 product labels).

At a minimum the agency has a duty to warn farmers in the Mid-Atlantic Region that using these products can have major “perverse” results as discussed above. As EPA demonstrated in the 2011 case of the highly damaging herbicide, “Imperial,” the agency has substantial control under FIFRA over pesticides that cause significant harmful effects that are not indicated on the product

⁹ Douglas MR, Rohr JR, Tooker JF. 2014. Neonicotinoid insecticide travels through a soil food chain, disrupting biological control of non-target pests and decreasing soybean yield. *Journal of Applied Ecology* doi: 10.1111/1365-2664.12372.

¹⁰ LaJeunesse S. 2014. Insecticides foster 'toxic' slugs, reduce crop yields. *Penn State News*. State College, PA. Dec. 4, Online at: http://news.psu.edu/story/336981/2014/12/04/research/insecticides-foster-toxic-slugs-reduce-crop-yields?utm_source=newswire&utm_medium=email&utm_term=337084_HTML&utm_content=12-04-2014-21-04&utm_campaign=Penn%20State%20Today.

¹¹ Tooker JF. 2014. *The Questionable Benefit of Neonicotinoid Seed Treatments to Soybeans*. Online Extension publication, Penn State College of Agriculture Sciences. Online at: <http://extension.psu.edu/plants/crops/news/2014/11/the-questionable-benefit-of-neonicotinoid-seed-treatments-to-soybeans>.

¹² LaJeunesse S. 2014, *supra*.

labels.¹³ In this case, the agency should again act via a Stop Sale, Use, or Removal Orders to prohibit the products from at least the Mid-Atlantic Region market altogether.

6. The economic costs of these products to the nation sharply exceed their marginal or non-existent benefits.

There is mounting evidence of environmental persistence and direct and indirect harms including to honey bees, other beneficial insects, organic agriculture, water quality, wildlife and ecosystem sustainability. The Assessment does not address or weigh the costs; no other EPA document that we have seen does so either. The CFS *Heavy Costs* report provides the key categories that EPA must consider as plainly foreseeable costs of systemic neonicotinoid use on seeds:¹⁴

- 1) honey bee colony impacts and resulting reduced yields of pollinated crops,
- 2) reduced production of honey and other bee products,
- 3) financial harm to beekeepers and consumers,
- 4) loss of ecosystem services, and
- 5) market damage from contamination events.

Indeed, the *Heavy Costs* report makes the case that the sum of these costs totals well into the **billions** of dollars. The percentage attributable to soybean coatings is not precisely calculable. But again, these products are used on about 23 million acres nationally, per the Assessment. They are second only to coated corn seeds in terms of the land area they impact. There is a high likelihood that their combined negative economic impacts total in the billions of dollars. This far outweighs even the illusory “modelled” benefits to farmers that are claimed by the products’ registrants.

Of note also, in July 2014, the U.S. Fish and Wildlife Service announced it will phase out neonicotinoid insecticides, including coated soybeans, in all National Wildlife Refuges across the country by January 2016.¹⁵ This is an indication of the costs of these products in terms of impacts on native wildlife. This includes Endangered Species Act (ESA)-listed threatened and endangered species. It is well-understood by Federal agencies that they are prohibited from contributing to the jeopardy of ESA-listed species. EPA must weigh the contribution of 23 million acres of coated soybeans to water contamination and other direct and indirect effects on

¹³ EPA Region III, *In re E.I. du Pont de Nemours & Co.*, Stop Sale, Use, or Removal Order, Docket No. FIFRA-03-2011-0277SS (Aug. 11, 2011).

¹⁴ Stevens and Jenkins. 2014, *supra* at 1.

¹⁵ July 17, 2014, Memorandum “Use of Agricultural Practices in Wildlife Management in the National Wildlife Refuge System,” issued by the Chief of the FWS NWR System, James W. Kurth, to all Regional Refuge Chiefs. Online at: http://www.centerforfoodsafety.com/files/agricultural-practices-in-wildlife-management_20849.pdf.

ESA-listed birds, invertebrates and other species in its consideration. Notably, our research has revealed that EPA has never once consulted under the ESA Sec. 7(a)(2) on the effects of these soybean seed products on ESA-listed species.

A vast array of new scientific information released since the *Heavy Costs* report shows mounting environmental and economic costs of neonicotinoids. Most of our organizations submitted detailed recent comment letters to EPA and the White House Pollinator Task Force, which reiterate those costs.¹⁶ It would be too lengthy to reiterate all of this mounting cost information here. We request that EPA consider those prior comments and find that the costs of neonicotinoid soybean seeds vastly exceed their marginal, indeed in most cases, non-existent benefits – and in the case of the Mid-Atlantic Region, their actual harm to yields. This finding should result in their prompt suspension.

7. Prophylactic insecticidal seed coatings conflict with Integrated Pest Management.

It should be clear that Integrated Pest Management (IPM) – which EPA frequently claims it supports as a policy matter – does not include a role for blanket use of prophylactic neonicotinoid-coated seeds as “insurance”. This practice violates fundamental tenets of IPM, including the use of action thresholds, monitoring and resistance management. The incompatibility of these seed coatings and IPM is not only based on what many experts, such as Professors Christian Krupke of Purdue University and David Goulson of the University of Sussex, have stated.¹⁷ It also is supported directly by what the multi-stakeholder Corn Dust Research Consortium (CDRC) stated in its January 2014 Report.¹⁸ The same CDRC recommendation about minimizing unnecessary use of coated seeds and adhering to IPM practices also applies to soybean seeds.

Over recent decades, many farmers’ adherence to IPM or organic practices has preserved important ecosystem values across the nation by reducing unneeded pesticide use and enabling pollinators and other beneficial species to flourish in those areas. EPA’s weighing of the coated seeds technology must take into account their negative impacts on IPM and on neighboring organic operations as well.

¹⁶ Comment on EPA Assessment of neonicotinoid insecticides, dated Sept. 24, 2014, submitted to Gina McCarthy and forwarded to White House Pollinator Task Force submitted on behalf of 17 NGOs: American Bird Conservancy, Beyond Pesticides, Beyond Toxics, Center for Biological Diversity, Center for Environmental Health, Center for Food Safety, Family Farm Defenders, Food and Water Watch, Friends of the Earth, Maryland Pesticide Network, Midwest Organic Sustainable Education Service, Northwest Center for Alternatives to Pesticides, Organic Consumers Association & Via Organica, Pesticide Action Network North America, Sierra Club, Slow Food USA and Women, Food and Agriculture Network. Online at: http://www.centerforfoodsafety.org/files/comment-epa-ngos-neonicotinoids_56534.pdf.

¹⁷ Stevens and Jenkins. 2014, *supra* at 10-11.

¹⁸ Corn Dust Research Consortium. 2014. *Preliminary Report: Initial Findings for 2013, Provisional Recommendations, Timetable*. Pollinator Partnership. Online at: www.pollinator.org/PDFs/CDRCfinalreport2013.pdf.

8. EPA must not wait to address this issue until Registration Review for clothianidin and thiamethoxam has been completed.

EPA's announcement of the soybean efficacy Assessment stated how the agency appeared to see the regulatory reforms that could result:

This analysis is an important part of the science EPA will use to move forward with the assessment of the risks and benefits under registration review for the neonicotinoid pesticides. Registration review, the periodic re-evaluation of pesticides to determine if they continue to meet the safety standard, can result in EPA discontinuing certain uses, placing limits on the pesticide registration, and requiring other label changes.

It would be irresponsible to delay until completion of the planned Registration Review (now targeted vaguely between 2016-19) to actually take the needed steps as far as the registrations or labels for coated soybean seeds. That would allow as many as five additional planting seasons (2015-19) for damaging and unnecessary insecticidal products to be used. Instead, EPA should take the needed steps now. Imposing registration suspensions or very strong label restrictions would be exceedingly appropriate "actions" to include in the agency's response to President Obama as part of the White House Pollinator Health Task Force process, the results of which are expected by no later than April 2015. As the agency is aware, Sec. 3.1 of the President's Memorandum states (in pertinent part; emphasis added):

*.... the Environmental Protection Agency shall assess the effects of pesticides, including neonicotinoids, on bee and other pollinator health and **take action, as appropriate, to protect pollinators.***

If the agency were to refuse to take needed action to protect pollinators from coated soybean seeds for several years, it would conflict with the terms and spirit of the President's Memorandum, in addition to being contrary to the mandates of FIFRA as outlined above.

9. EPA should release a similar analysis for corn and other coated seeds.

The findings in the CFS *Heavy Costs* report for corn and other neonicotinoid-coated seeds on lack of efficacy mirror those that EPA made for soybeans. We are aware that noted efficacy experts in the national IPM programs provided information over the past year to EPA on the lack of efficacy for corn that was very similar to the information they provided on soybeans. Yet, EPA has issued no comparable efficacy Assessment for any other neonicotinoid-coated seeds.

Corn in particular must be addressed as almost all of it is coated with clothianidin or thiamethoxam, with an area extent nationally likely at least four times the area planted with coated soybean seeds, close to 100 million acres. Corn seed is by far the largest single use of these damaging insecticides. It would be strongly in the public interest for EPA to engage in a comparable public comment process for that crop as it is engaged in here for soybeans. We note that in Ontario the government's decision (referred to above) to seek to restrict coated seeds applies to both crops equally and is driven not only by the high costs to beekeepers, but also by the lack of benefits including for corn.

10. EPA's liberal policies and regulatory missteps have allowed the excessive costs to occur.

The current high costs in relation to the lack of benefits for coated soybean seeds did not “just happen”. This unacceptable situation is a direct result of EPA's excessively liberal policies under FIFRA and related regulatory missteps. This Comment is not the forum to delineate all of these problems, but we will sketch them here. The agency itself is fully aware of these facts; many of our groups have commented on them at length in prior letters, comments and Petitions too numerous to list.

EPA's remarkable four-fold list of regulatory laxness and missteps that allowed this situation to unfold is as follows. Our investigation has shown that for all of the 14 coating products listed above, EPA did not:

- 1) require the products' registrants to possess or submit “testing” information showing efficacy, per 40 CFR § 158.400(e)(1); or
- 2) comply with the ESA Sec. 7(a)(2) as far as readily foreseeable effects on threatened and endangered species.

While EPA did:

- 3) improperly apply the “treated article exemption” in 40 CFR § 152.25(a) on *Exemptions for pesticides of a character not requiring FIFRA regulation*, to exempt the insecticidal soybean seeds themselves from registration or mandatory FIFRA labeling, despite the harmful impacts of the sloughed or blown-off coatings and contaminated dust occurring far beyond the seeds; and
- 4) allowed Conditional Registrations, under 7 U.S.C. § 136a(c)(5) and § 136a(c)(7)(C), for the majority of the coating products without compelling satisfaction of key

conditions, such as completion of the ten-year-delayed adequate Pollinator Field Test condition.¹⁹

In short, the agency has repeatedly taken a tragically multiplied “hands off” approach in authorizing these environmentally dangerous pesticides without adequate economic benefits. This has neither served the public interest nor the requirements of FIFRA or the ESA.

In conclusion, EPA finally has set the stage for corrective action by solidly demonstrating that the claimed benefits of the neonicotinoid soybean seed coating products are illusory. Overall, it is clear their use must be suspended.

For further information and to respond to this Comment, please contact: Peter T. Jenkins, Attorney/consultant, CFS, at 202.547.9359 or pjenkins@centerforfoodsafety.org .

Sincerely,

/s/ Peter T. Jenkins

On behalf of:

**American Bird Conservancy
Beyond Pesticides
Beyond Toxics
California State Grange
Center for Biological Diversity
Center for Food Safety
Ecological Farming Association
Endangered Species Coalition
Farm and Ranch Freedom Alliance
Food and Water Watch,
Friends of the Earth
Institute for Agriculture and Trade Policy
National Family Farm Coalition
Northwest Center for Alternatives to Pesticides
Pesticide Action Network
Toxic Free North Carolina**

CC: White House Pollinator Task Force c/o Michael Stebbins, Assistant Director, Biotechnology, Office of Science and Technology Policy

¹⁹ Per EPA’s Pesticide Product Label System, cited *supra*, only 4 of the 14 clothianidin and thiamethoxam soybean seed coating products at issue here are “unconditional” registrations: Poncho/Votivo, Inovate Seed Protectant, THX_MXM_FDL_TBZ FS and CruiserMaxx EZ. The other 10 are “conditional”.