March 13, 2018

Brian Leahy, Director
California Department of Pesticide Regulation
1001 I Street
Sacramento, CA 95814

Dear Director Leahy,

We, the undersigned scientists, are writing to express our concerns about neonicotinoid contamination in surface waters. Many studies have now identified significant risks that neonicotinoids pose to terrestrial and aquatic ecosystems.[1] We are bringing this issue to the California Department of Pesticide Regulation (CDPR) because imidacloprid is already found in California waterways at levels that exceed the freshwater invertebrate aquatic life benchmarks and could harm or kill many sensitive aquatic invertebrate species.[2]

Adverse effects from imidacloprid and other nitroguanidine neonicotinoids have been documented in many non-target species. The best available scientific evidence demonstrates that imidacloprid is highly toxic to numerous freshwater invertebrates, and that these pesticides are entering waterways at concerning levels from current uses. Freshwater contamination with neonicotinoids can have consequences for broader ecosystems. Declines in aquatic invertebrates put other species at risk, particularly insectivorous fish, amphibians, and birds. Changes in aquatic invertebrate communities resulting from exposure to insecticides can also affect ecosystem functions, potentially leading to increased methane production or upsurges in pest species like mosquitoes.[3]

The Environmental Protection Agency (EPA), with support from CDPR, recently released a draft ecological risk assessment for imidacloprid, which identified risks to aquatic ecosystems.[4] Based on these findings, the EPA has now revised its aquatic life benchmarks downward. A review of imidacloprid samples in California from 2010-2015 showed that 42% (197 of 468) of detections exceeded the acute invertebrate benchmark and all of the detections exceeded the chronic invertebrate benchmark.[5] Furthermore, EPA recently found that the other nitroguanidine neonicotinoids may pose similar risks to aquatic invertebrates as imidacloprid.[6] Based on these findings of risk and the revised benchmarks, CDPR should consider actions to limit imidacloprid contamination and assess the risks the other nitroguanidine neonicotinoids may pose in the state.

Thank you for considering our comments.

Sincerely,

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