

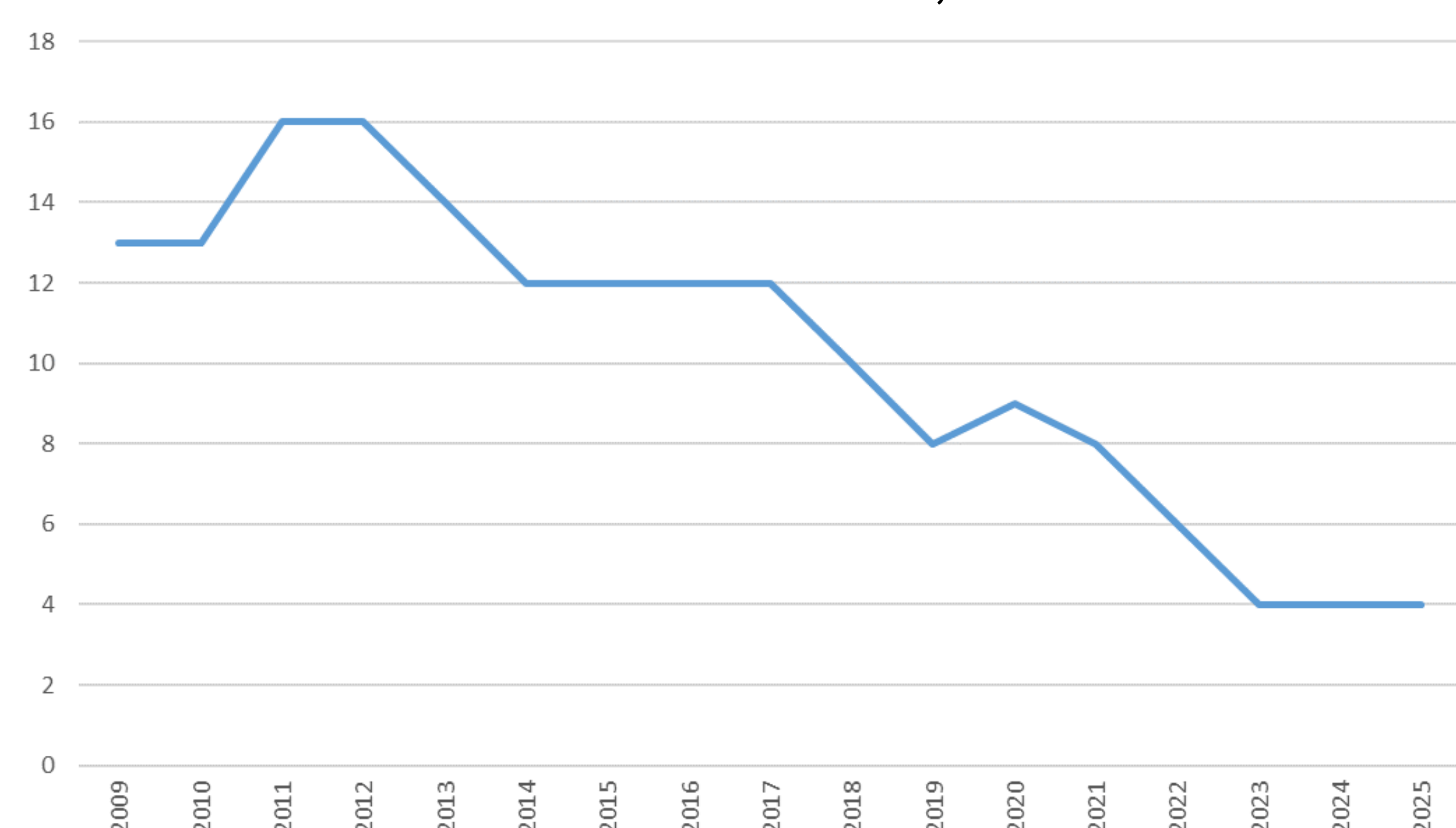
Insecticide Bans Drive Declines in Aquatic Toxicity

Insights from 16 Years of Monitoring in Sweden

Increasing number of insecticides banned

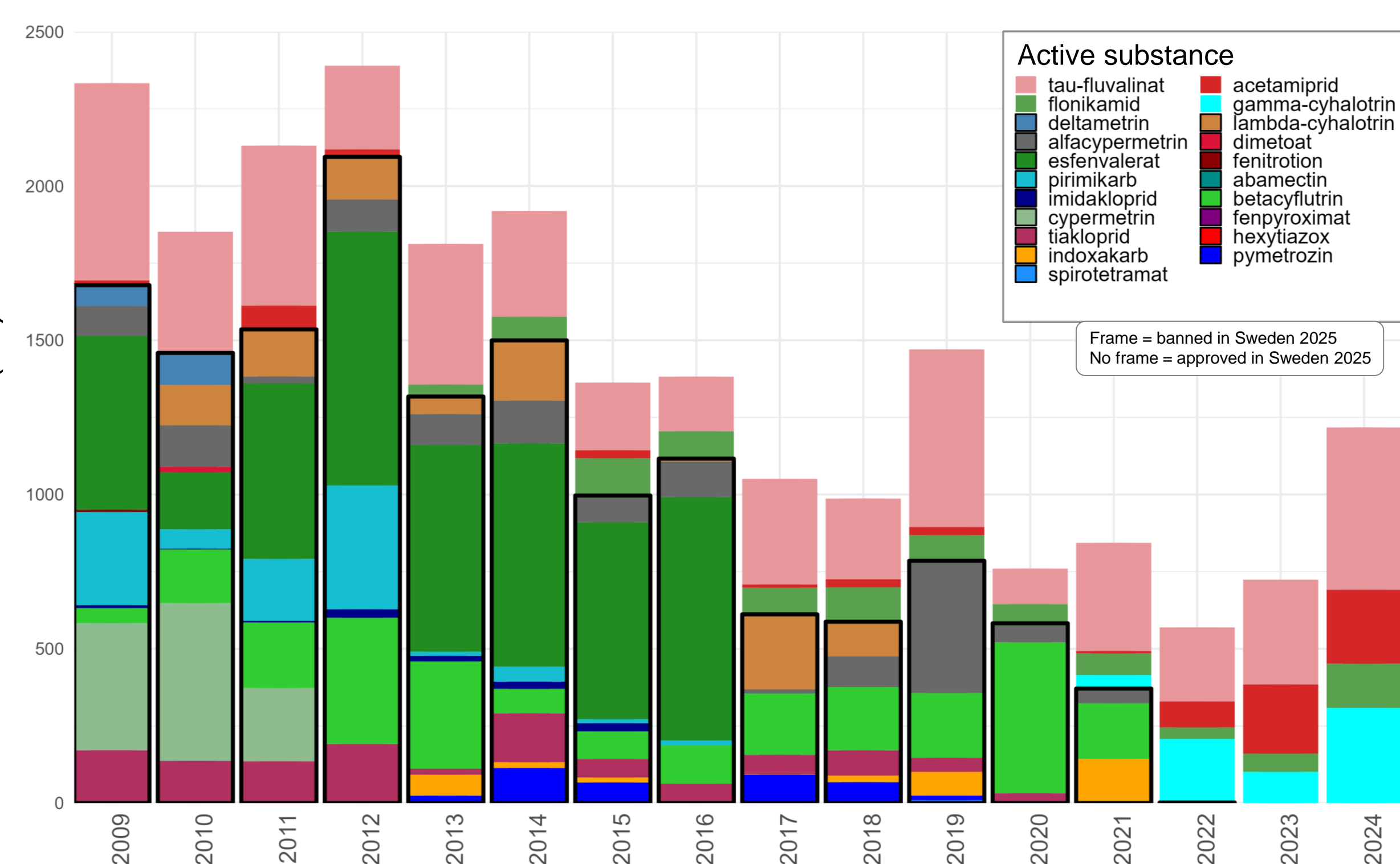
- While chemical plant protection products are commonly used in agriculture to protect crops from pests and weeds, many insecticides have been shown to pose unacceptable risks to both human health and the environment.
- Over the past decade, several insecticides have been banned within the EU and in Sweden in order to reduce impacts on ecosystems.
- Through national environmental monitoring of pesticides in four agricultural streams, combined with data on pesticide use in the same catchment areas, the effects of these bans can be followed over time.

Insecticides authorized for use, 2009-2025



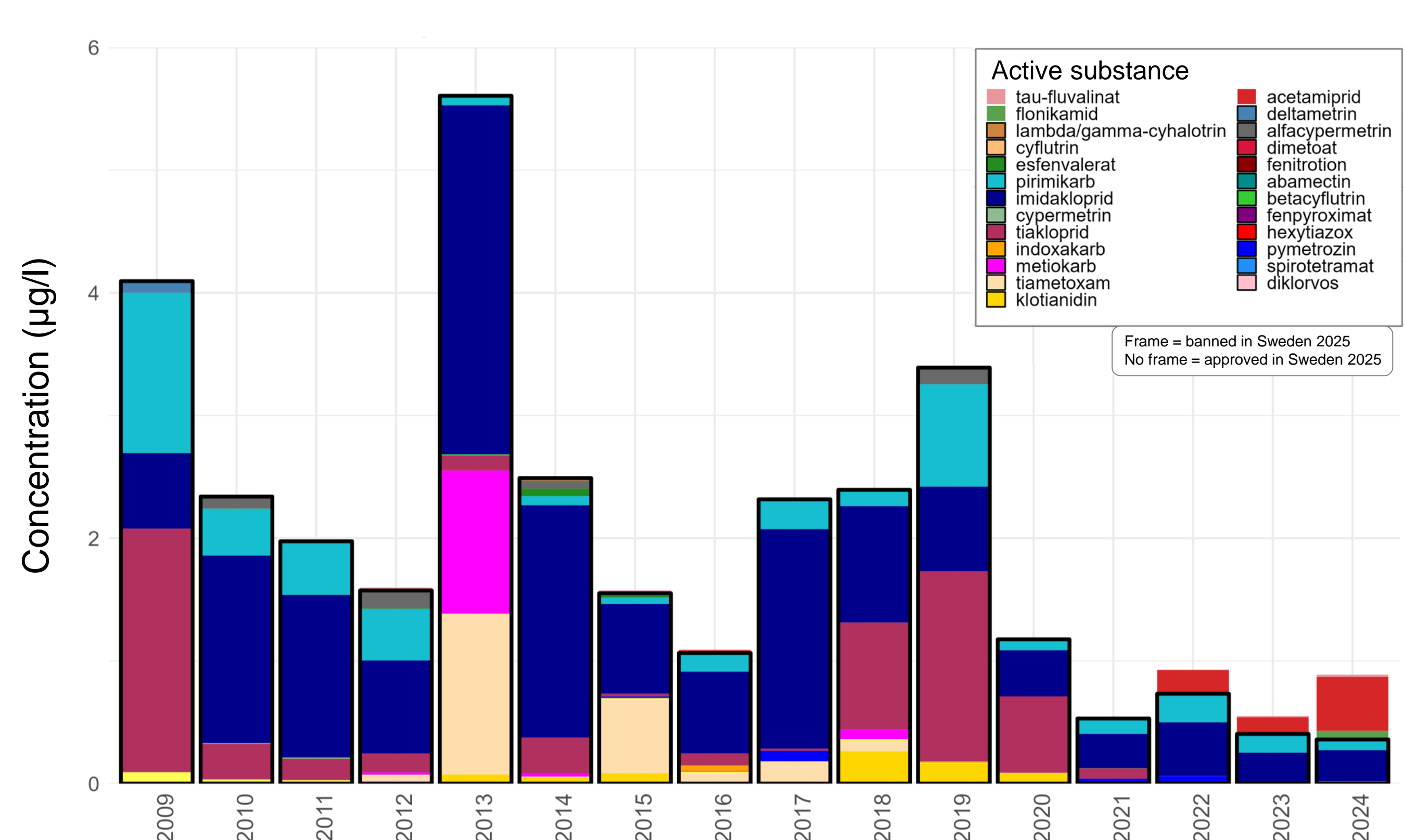
Number of insecticides authorized for use on agricultural land in Sweden among those used in the catchment areas within the national environmental monitoring program and/or analyzed within the program (2009–2025).

Insecticide use in catchment areas

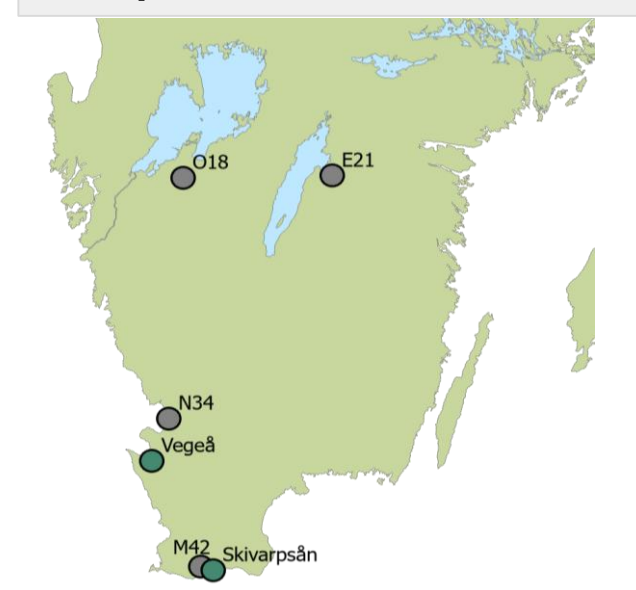


Increased use of **acetamiprid** and **gamma-cyhalotrin** in recent years

Summed concentrations of insecticides in surface water

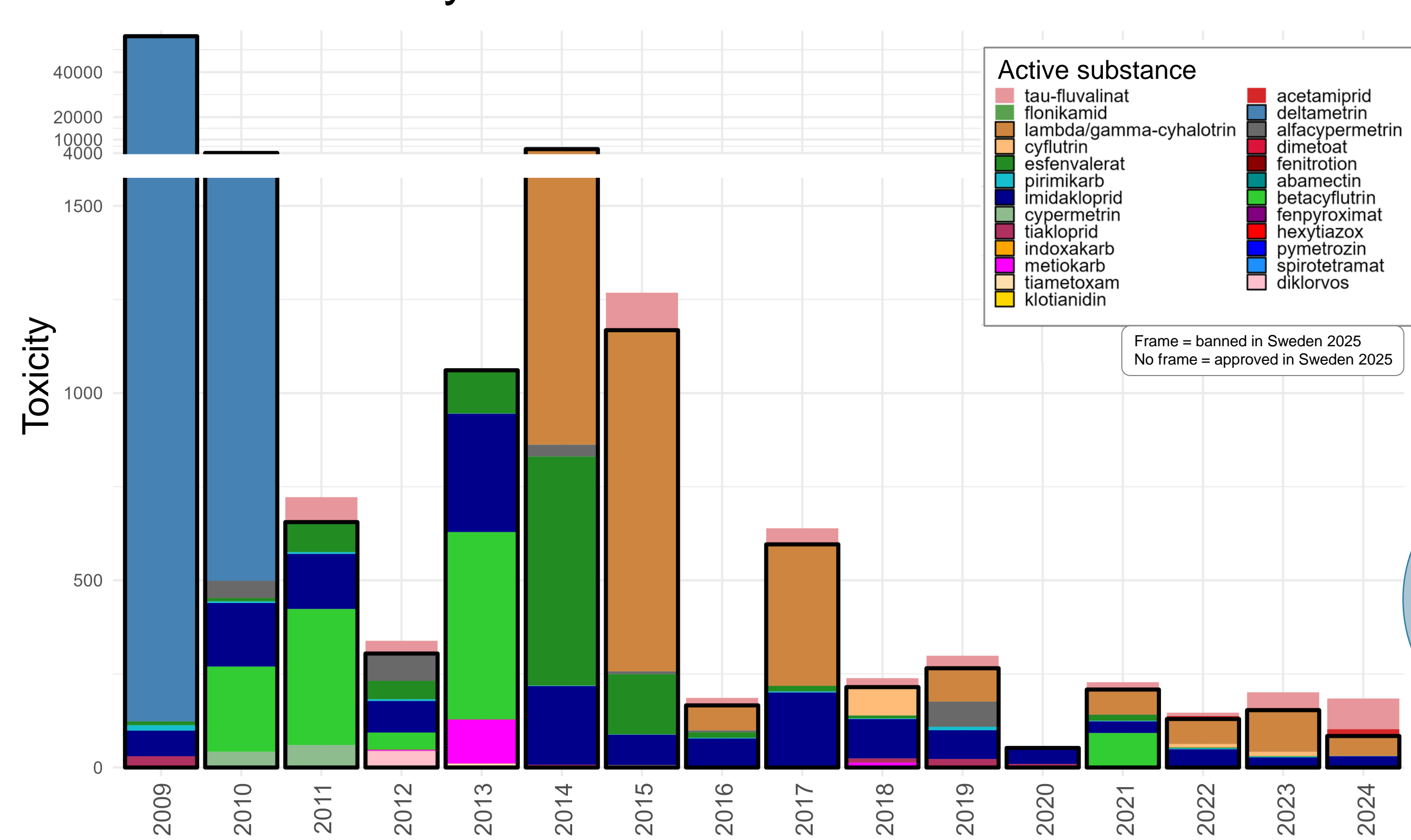


Data from the Swedish national environmental monitoring program for pesticides



Increasing concentrations of **acetamiprid** in surface water samples

Summed toxicity from insecticides in surface water



*Lambda/gamma-cyhalotrin can not be separated in the chemical analyses. Gamma-cyhalotrin is authorized for use until October 2026.

Reduced toxicity in streams

Environmental improvements

- Data from the Swedish national environmental monitoring of pesticides show that the bans have had an effect, with concentrations of insecticides declining markedly over time. This is also reflected in an overall reduced toxicity in the streams.
- **Acetamiprid**, an insecticide that is currently approved, is used more frequently in recent years. However, it is considerably less toxic to aquatic organisms than many of the substances that have been banned.



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Find more information about the Swedish national environmental monitoring program for pesticides:



CENTRE FOR PESTICIDES IN THE ENVIRONMENT