Devastating Pesticide in Streams.

A just published scientific study on levels of pesticides in New Zealand streams has found that the most frequently detected pesticide is the organophosphate insecticide chlorpyrifos, in 87% of samples from South Island streams. Chlorpyrifos is highly toxic to amphibians and very toxic for aquaculture fish and bees.



First registered in 1965 and marketed by Dow Chemical under the tradenames Dursban, Lorsban and Renoban, chlorpyrifos was a well known home and garden insecticide, and at one time it was one of the most widely used household pesticides in the US.

Dr Meriel Watts of Pesticide Action Network Aotearoa New Zealand said the findings were "devastating."

"Pregnant women and small children should not be exposed to chlorpyrifos as at very low levels it interferes with brain development in the unborn foetus and newborn infants, resulting in altered brain structure, lowered IQ, and behavioural changes including pervasive developmental disorder, leading to potential long-term consequences for social adjustment and academic achievement. "

Chlorpyrifos is persistent in the environment and bioaccumulative. Residues of chlorpyrifos are widespread in the Arctic, even more common than endosulfan which New Zealand banned in 2008, and there are worldwide efforts to get it listed under the Stockholm Convention on Persistent Organic Pollutants for a global ban.

Residues of chlorpyrifos have been found in the air over the Southern Alps, and this latest study found it in pine needles on organic farms where it is not used, indicating both its ability to move away from where it is used and its persistence in the environment.

Yet the pesticide has the blessing of a government environmental watchdog. The Environmental Protection Authority recently reassessed chlorpyrifos and gave it the green light even for aerial spraying despite its volatility.

"But they failed to assess it for persistence and bioaccumulation. They failed to assess it for long range transport, and they failed to properly assess it for neurodevelopment effects," said Dr Watts. "The EPA did an appalling job of its reassessment and now we have even more evidence that this chemical must go. What will it take before the EPA decides to protect the environment and people's health rather than chemicals?"

<u>Overseas</u>, where its use is banned or restricted anywhere near waterways, its presence in rivers has been found to wipe out all insect life in large stretches of rivers.



July 2013