

Persistent organochlorine pesticides (OCPs) in river waters of Southern part of Okinawa Island, Japan.

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We investigated eight chlorinated pesticides in the rivers of Southern part of Okinawa. The mean concentrations for Σ BHC ($\alpha, \beta, \gamma, \delta$ -BHC) in four rivers was $5.67 \pm 118 \text{ ngL}^{-1}$ (mean \pm SD). The highest concentration of BHC detected in river water sample was 9.10 ngL^{-1} . Some endocrine disrupting OCPs such as Aldrin, Dieldrin, Heptachlor epoxide (Isomer B) and Methoxychlor were also detected in most river water samples with their mean concentrations of 4.96 ± 80 , 2.33 ± 59.9 , 2.16 ± 55 and $2.01 \pm 57.6 \text{ ngL}^{-1}$. Within the five month period, the concentration of OCPs increases in October and November (Aldrin, α -BHC and β -BHC).

The possible sources of these OCPs might be the effluents and dust from residential areas. In contrast, OCPs were measured in the atmosphere at the Northern part of Okinawa, thus long range atmospheric transport of OCPs directly from Asia [1]. The OCPs levels in rivers of Southern Okinawa were generally below the guideline values in Japan, however some sites shows level which exceeded the World Health Organization (WHO) standards for α -BHC and β -BHC.

This is preliminary documentation of OCPs in rivers in Okinawa, thus suggest more studies on contamination in order to protect wildlife in aquatic bodies.

References

[1] Primbs, T. (2004), EPA STAR GRADUATE FELLOWSHIP CONFERENCE