School students working as environmental scientists-"Global POP"

Dioxins in fish with BDS CALUX

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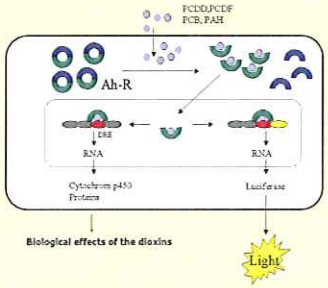
Objectives

- Increase youth's interest for environmental issues and natural sciences
- Pupils participate with field work and data publishing in a research project
- Investigate dioxins and dioxin-like compounds (CALUX) in fish common for consumption

BDS DR CALUX use a line of liver cells from rat to analyze dioxins

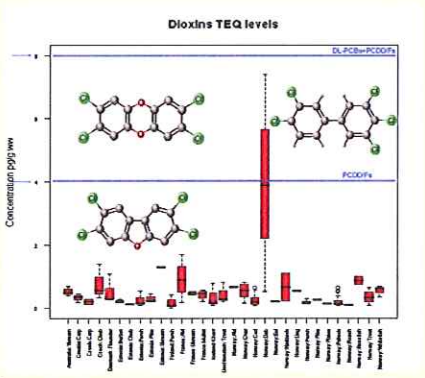


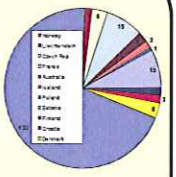
Cells are modified with a gene that produces luciferase
The cells give light under exposure with dioxins
Quantity of light given by cells is a measure of dioxins

School activities

- Registration on the project web site sustain.no/projects/globalpop
- Fishing- 3 fish of same species- common as food item
- Scientific correct sampling of 3 fish filets with clean (sterile) scalpel and gloves
- Record and publish important field- and fish-data to project web site
- Packing, marking and shipment of sample to NILU
- NILU analyses the samples (BDS CALUX method)
- NILU publishes results on the web site with corresponding data reported from schools
- School reports and presentations on the project web site

Results

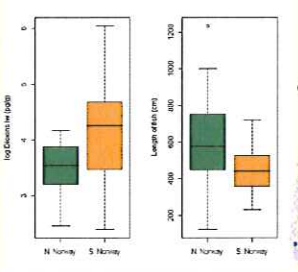


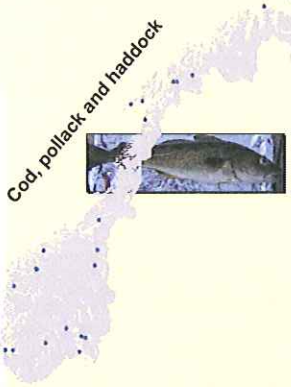


May 2009:
Countries: 11
Schools: 51
Fish samples: 192

Results

N Norway: n=27, S Norway n=43





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sustain.no/projects/globalpop

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