



Technology's description

The used chemicals which protect the wood of the bioticks damages contain substances which are often highly toxic.

In a context of more and more restrictive regulations as for the treatments of the contaminated materials, the stemming solutions of bio-remediation are studied. More specifically mushrooms benefit from an interest growing on cleanup's issues.

The researchers of the CIRAD (French agricultural research and international cooperation organization) finalized a collection of mushrooms used for wood bio-remediation treated with pentachlorophénol (PCP) or composed of copper chrome-plate arsenic (CCA), such as electric poles, crossbars of railroad, lumber, etc...

The objective is to set up a kit of cleanup in order to create centers of decontamination directly on the industrial sites. Wood are then treated thanks to the association of species of mushrooms according to the type of pollution.

Advantages

- Total degradation of pollutants instead of a classic extraction
- Natural tools and comparative advantages on other techniques (tight storage, incineration)
- Diversity which can cover numerous pollutants
- Expert know-how associated with tools in metagenomics for the validation of the resistance

Intellectual property

- Know how

State of development

- Tested and realized in an operational field



Industrial applications

- Environment
- Bio remediation

Technology transfer

- Co-development with licensing agreement
- Know how
- Licence

