



**Institute for Integrated Plant Protection**  
Federal Biological Research Center for Agriculture and Forestry



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# TNT-Decontamination With Trees !

## Problem:

- Large areas are contaminated with explosives of low and middle degree
- Other Sanitation methods are very expensive and must be restricted to higher polluted areas

## Idea:

- Select TNT-tolerant tree clones
- Test their TNT-uptake capacity
- Plant selected trees on weapon sites

## First Results:

- TNT is tolerated by few Clones
- TNT is taken up by these tolerant trees
- Degradation products of TNT are found in different plant parts

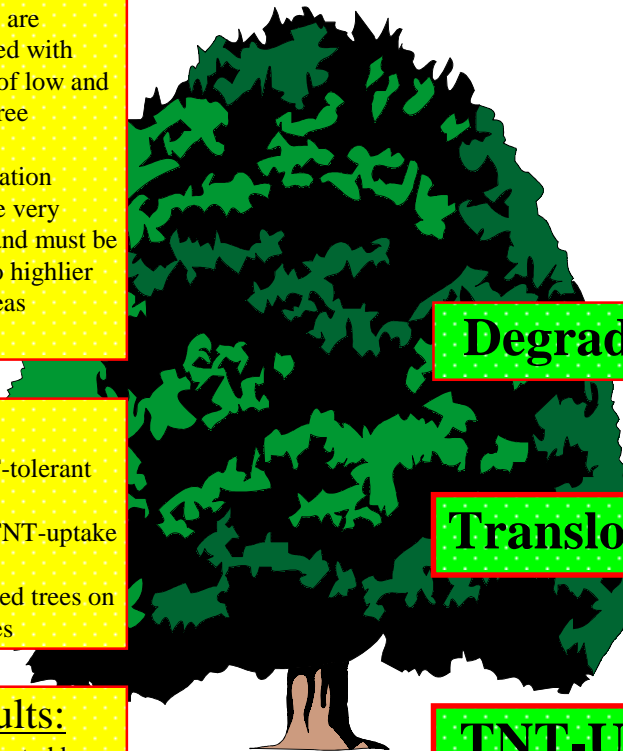
## Why trees ?

- longliving
- deep rooting

## Which trees ?

- tolerant to TNT
- with good regenerativ potential
- easy to propagate
- non-food plants
- combustible

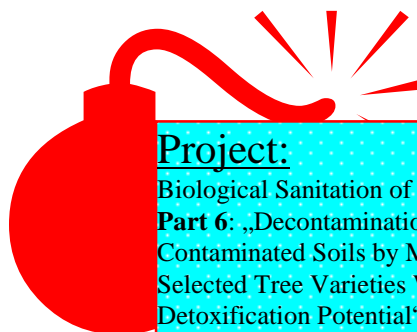
**Patented Poplar and Willow Clones**



**Degradation**

**Translocation**

**TNT-Uptake**



## Project:

Biological Sanitation of Old Weapon Sites  
**Part 6:** „Decontamination of Explosive Contaminated Soils by Means of Special Selected Tree Varieties With a High Detoxification Potential“

**Financier:** BMFT  
**Coordinator:** Umweltbundesamt  
**Time:** 1.3.1993 - 28.2.1996

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