

Enhancing Phytoremediation - Why and How

1. Transgenics (Lectures 5&6)
2. Endophyte-Assisted Phytoremediation (Lecture 7)

Why Enhance Phytoremediation?

- Pollutants are phytotoxic
 - Plant species that can degrade the pollutant sometimes cannot grow in the required environment
 - Phytoremediation is too slow and transient
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- Plant species with the desired activities (hyperaccumulators) are of low biomass
 - 64% of polluted sites have mixed pollutants
 - Pathway does not exist in plants?

Some References

- Special issue on phytoremediation in Current Opinion in Biotechnology (2009) volume 20, issue 2
 - Pgs 204-206: Editorial
 - 207-212: Selenium
 - 213-219: Mercury
 - 220-224: Arsenic
 - 225-230: Herbicides
 - 231-236: Explosives
 - 237-241: Small organics
 - 242-247: PCBs