

Seventh International Phytotechnologies Conference

September 26-29 Parma, Italy

Call for Abstracts

The Seventh International Phytotechnologies Conference (www.phytosociety.org) is open for registration and inviting abstracts for speakers and poster presentations. This conference is for regulators, researchers, consultants and site owners. The purpose of this conference is to understand which technologies using plants for environmental goals are currently effective, how best to integrate research science and field application, and what questions need further research.

The subject of the abstract must include the use of plants, plant matter, or planted systems to address environmental problems. Phytotechnologies have been successfully applied in many places, but many questions remain- this conference is intended to answer some of those questions.

Topics of particular interest include:

- Phytoremediation Projects
- Ecorestoration and habitat creation
- Bioenergy
- Nanoparticles and plants
- Passive Housing, Greenbuilding, Greenroof technology
- Carbon sequestration
- Sustainability
- Health benefits from Phytotechnologies
- Metabolomics of pharmaceutical breakdown
- Fate or transport of contaminants through plants and associated eco-risk
- Vegetative Covers
- Constructed Wetlands

The abstract should tell the reader the subject of the presentation, the purpose of the project, and the measurement methods used to assess whether the project achieved that purpose. In addition, the abstract should identify the scale and technology of the project.

Abstracts for speakers and poster presentations are due by May 10, 2010.

- § Abstracts must be in English, one standard-size page, 12-point font with 1-inch margins.
- § Abstracts must include title, author, and author affiliation. Designate the author with whom the selection committee should correspond, and include full address, phone, and email.
- § Abstract must include 3-8 keywords related to the proposed presentation.
- § Abstracts are to be submitted in electronic form, via e-mail to Jason.White@ct.gov

Please designate whether you would like to be considered for a platform presentation, a poster, or both.

Receipt of the abstract will be acknowledged by e-mail within one week. Additional questions on abstract submission or review can be addressed to Jason C. White, Ph.D. at Jason.White@ct.gov, 203-974-8523. Abstracts received by the deadline will be reviewed for technical merit and relevance to the Conference. By June 30, 2010 the Session Chairs will email the committee's decision to the corresponding/presenting author.

Phytotechnology for Contaminate Reduction and Habitat Creation: Conflicting Goals? An Engineer's Perspective

Steve Rock, USEPA ORD*; Ann Whelan, USEPA Region 5, Jocelyn Clark, USEPA Region 5

Biological remedies for environmental concerns often encounter biological threats that limit the efficacy of the project. Habitat creation, a worthwhile goal in the abstract, often involves animals, which are difficult to factor into equations and models, and which tend to decrease the rate and extent of contaminant remediation. A streambank project along the Indiana Harbor canal system used poplar and willow species for remediation of oil in soil and sediments. Trees were installed along one mile of canal in 2001, in 2002, and again in 2003. This project tended to either attract or spontaneously generate *Rodentium flattailii voracious*, causing subsequent reduction of the planned vegetation cover. Trees, while shown to be effective in hydrocarbon reduction and stabilization, and are statistically less effective when consumed by local wildlife, as tiny gnawed stumps have greatly reduced Leaf Area Index (LAI), and correspondingly less transpiration and photosynthetic activity. Site monitoring, through regular tree counts and measurements of tree height, were conclusive and cause for near clinical depression. Institutional controls proved to be of limited effectiveness as signs were ignored and physical barriers were undermined. *Rodentium* control is typically done through controlled application of high velocity lead injection, although a proposed genetic manipulation to cross *Salix* and *Capsicum habernaria* may prove to be an effective deterrent to phyto consumption while preserving the wildlife portion of wildlife habitat.

Keywords: soil, sediment, habitat restoration, beaver whacker, hot pepper poplar

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