

Abstract

[LINK TO PAPER](#)

Interactive Web-Based Modeling of Pesticide Loss in a Watershed Using GIS

Track: Agriculture

Author(s): Deepinder Deol, Tim Udoyara

This paper describes the development of an interactive, Web-based, spatially explicit modeling environment for predicting pesticide runoff losses in a watershed. More specifically, this paper shows how embedding the pertinent modeling equations within the GIS facilitates the application of the system to large areas and improves the user friendliness by eliminating the use of computer programs for input/output data transfer. This simplifies the modeling process and enhances detailed display and visualization of model outputs. The model also improves environmental decision making by providing for analysis of "what-if" land-use, land management, and pesticide use options.

Deepinder Deol

Iowa State University

ABE

100 Davidson Hall

Ames , IA 50011

USA

Phone: 515-294-3153

Fax: 515-294-4250

E-mail: deol@iastate.edu

Udoyara Tim

Iowa State University

ABE

215 Davidson Hall

Ames 50011

USA

Phone: 515-294-0466

Fax: 515-294-2552

E-mail: tim@iastate.edu