

Methods of reducing the fate and transport of nutrients from agricultural fields

ABSTRACT

Control of pollutant loading is an important issue with respect to environmental conservation, and the loading of nitrogen and phosphorus from agricultural areas is well known to be a major contributor to the accelerated eutrophication of rivers and lakes which lead to harm human health. Also, leaching is the main cause of chemical losses from surface to sub-surface. Thus, it is vital to understand nutrient leaching from paddy fields. From the reviewed literature, there is a need to reduce the fate and transport of agro-chemicals from agricultural fields particularly from paddy fields. However, nutrient loss through surface and sub-surface drainage could be achieved by adapting several techniques, this includes: water-saving system (WSI), drainage control (DC), and recycling irrigation system (RI).

Keyword: Nutrients; Water-saving irrigation; Drainage control; Cycling irrigation; Agro-chemicals