Impact Of Excessive Nitrogen Fertilizers On The Environment And Associated Mitigation Strategies.

ABSTRACT

The soaring rise in the anthropological production of nitrogen (N) fertilizers has been notable in the field of crop production. Despite several advantages the world is deriving from the use of reactive N, many environmental hazards including water and soil acidification, pollution of groundwater surface and other water mineral resources and accelerated ozone depletion have arisen as a result of the recurring use of excessive environmental N. The purpose of this paper is to highlight the impact of N in the environment. In addition, mention is made of management practices, such as manure storage and handling solutions, livestock management, pasture management for reduced N losses, balanced N application rates, proper irrigation strategies, efficient N cycling at the field level, runoff, drainage and wastewater management and other mitigation strategies. Conclusively, the use of Varian’s Mathematical model, a model that dutifully delineates system theory in deterring over-fertilization will be considered.

Keyword: Atmospheric deposition, Wet deposition, Watershed, Nitrate, Excessive-fertilization