Effect of Urban Landscape Type on Nutrient Leaching and Runoff. (C05-snyder145856-Oral)

Authors:

- G.H.Snyder University of Florida
- J.L.Cisar University of Florida

Abstract:

Due to concern about N runoff and leaching from home lawns into Sarasota Bay in Florida, the Florida Yard program has been widely promoted to reduce nutrient losses from lawns. The Florida Yard program discourages the use of turfgrass, emphasizing instead the use of trees, shrubs, and various groundcovers. A 2-year comparison was made of inorganic-N surface runoff and leaching between a St. Augustinegrass (Stenotaphrum secundatum) monoculture and a mixed-species Florida Yard on a sloped sand soil. The turfgrass was fertilized at 5 g N m-2 6 times annually, and the mixed-species at the same rate 3 times annually. Little surface runoff was observed. During the establishment year, N leaching was much greater in the mixed-species landscape. Although considerably less leaching was observed in the second year, N leaching from the mixed-species landscape exceeded that from the turfgrass. Inorganic-N leaching from the turfgrass totaled 5.4 and 1.2 kg ha-1 in the first and second year, respectively.

Corresponding Author Information:

john Cisar phone: 561-993-1574 University of Florida fax: 561-993-1582

EREC e-mail: ghs@gnv.ifas.ufl.edu

Belle Glade, FL 33430

Presentation Information:

Presentation Date: Thursday, November 14, 2002

Presentation Time: 8:00 am

Keywords:

Nutrient Leaching, urban landscapes, water quality