Agrochemicals Transport in Calcareous Soils of South Florida. (S11-jayachandran082239-Oral)

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Abstract:

The retention and transport of atrazine and phosphorus (P) in calcareous soils by three types of compost: biosolid, municipal solid waste, and bedminister were analyzed by using a column-leaching study and batchequilibrium method. Concentrations of atrazine and P in leached and in different layers of the column were analyzed. Data from the study show that the retention and transport of atrazine and P was affected by the presence of the compost layers. The column study demonstrated that atrazine and P leached out at one pore volume slower in soil with compost than in soil without compost. Bedminister had the lowest atrazine and P leaching rate compared to other amendments. Extractable atrazine and P concentrations did not change with soil depth; however there was a significant difference between compost treatments. This study suggests that amending compost to the calcareous soil reduced leaching potential of atrazine and P, and thereby possibly avoiding groundwater contamination.

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