

The Use of Composts to Increase Nutrient Utilization Efficiency in Agricultural Systems and Reduce Pollution from Agricultural Activities

FREP Contract # 92-0628

Project Leader

Mark Van Horn
Student Experimental Farm
UC Davis

Objectives

The objectives of the project were to educate farmers, livestock producers, industry, governmental and university representatives in the following areas:

1. Composts and manure - what they are, advantages, disadvantages; their effects on soil properties, N dynamics, plant nutrients and crop growth; comparisons of composts, manure and inorganic materials and inorganic fertilizers; how to evaluate and use them.
2. Composting - biological processes and effects, management techniques, tools and equipment.
3. Legal aspects - of agricultural "wastes" management, composting operations, and pollution. Emphasis was placed on the management and utilization of composts, other organic materials and inorganic fertilizers to maximize nutrient use efficiency and minimize environmental pollution or groundwater.

Summary

The project provided the agricultural sector with the best available information to make intelligent decisions about the production and use of compost. The objectives were met in three ways. Eighteen presentations were made at events sponsored by groups and organizations throughout the Central Valley and South Coast regions reaching more than 1,000 people. Three in-field demonstrations of compost production were conducted in the same regions. These were highly successful as attendance figures far surpassed initial goals. The document *Compost Production and Utilization* is available from FREP and the UC DANR Communication Services at (800) 994-8849.

Project Publication

van Horn, M. 1995. Compost Production and Utilization. University of California, Division of Agriculture and Natural Resources Publication 21514. DANR, Oakland, CA.