

# **Nutrient Management Software for the Tropics: NuMaSS. (A06-osmond081615-Poster)**

## **Authors:**

- D.L.Osmond\* - *NC State Univ.*
- T.J.Smyth - *NC State Univ*
- R.S.Yost - *Univ. of Hawaii*
- D.L.Hoag - *Colorado St. Univ.*
- W.S.Reid - *Cornell Univ.*
- W.Branch - *Understanding Systems*
- X.Wang - *Univ. of Hawaii*
- H.Li - *Univ. of Hawaii*

## **Abstract:**

Soil acidity and nutrient deficiencies limit crop yields in most developing countries. However, the knowledge requirements to properly diagnose and prescribe best management alternatives for location-specific nutrient problems in these areas are often limited by the lack of adequate technical resources. Nutrient interaction problems are of such complexity that they need to be addressed simultaneously. Over the past five years, in conjunction with participants from over 21 countries, we have developed an integrated nutrient management decision support system (NuMaSS) that diagnoses soil N, P, and acidity constraints and selects the appropriate management practices, based on agronomic, economic and environmental criteria, for location-specific conditions. The NuMaSS software is broken into five distinct programmatic sections - Geography, Diagnosis, Prediction, Economic Analysis, and Results. At a minimum, users can obtain a diagnosis of nutrient problems. With additional information, users can obtain lime and nutrient recommendations based on biophysical relations and/or economic analyses. The NuMaSS software will be available during this post session.

## **Corresponding Author Information:**

Deanna Osmond	phone: 919-515-7303
NC State Univ.	fax: 919-515-7494
Box 7619	e-mail: deanna_osmond@ncsu.edu
Raleigh, NC 27695-7619	

## **Presentation Information:**

Presentation Date: Tuesday, November 12, 2002  
Presentation Time: 2:00-4:00 pm  
Poster Board Number: 627

**Keywords:**

nutrient management, soil fertility, software