

**Soil and Water Sciences Department
Invited Speaker Seminar**

- Speaker:** [George Hochmuth, Ph.D.](#)
Professor Emeritus
Plant Nutrition and Soil Fertility
Soil and Water Sciences Department
University of Florida
- Title:** **Perspectives on BMP Issues in Crop Production Agriculture in Florida**
- Date:** Monday, October 16, 2017
- Time:** 3:00 pm – 4:00 pm
- Location:** McCarty Hall A, Room G186

Agriculture makes a great impact on the state's economy, accounting for 10 to 15 % of the gross state domestic product. Fertilizer inputs are necessary for the successful and profitable production of nearly all crops in Florida, especially vegetables. Fertilizer represents from 10% (vegetables) to 20% (some row crops) of the costs of production of crops. When I came to UF more than three decades ago my job was to review the published research behind the vegetable fertilizer recommendations, revise and update (continually) the recommendations, teach nutrient management to county agents and growers, and conduct research to fill in gaps. Along the way there was fun to be had - good colleagues and students – and progress was made. Farmers see fertilizer as inexpensive “insurance” against reduced yields and many farmers use amounts of fertilizer in excess of the University of Florida Extension recommendations. More than 75 years of replicated field fertilizer studies have been conducted by UF scientists for vegetable crops, and research continues today. I have been involved in studies with many colleagues for almost half of this period. Three decades ago research focused on how much fertilizer was needed for optimal crop production and quality, hoping to help farmers become more efficient in their use of fertilizers and grow better crops. As time progressed there was more emphasis on the environmental impacts of overfertilization. Since the 1980s, studies of P runoff and nitrate leaching, and irrigation management became important components of nutrient management studies. We started talking about best management practices (BMPs). TMDLs and BMAPs are “encouraging” farmers to adopt BMPs for applied nutrients and water. Extension has played a large role in encouraging farmers to adopt BMPs through on-farm demonstrations. BMAPs, for example, the draft Middle Suwannee River BMAP show the heavy load farmers need to pull to reduce the nitrate load ascribed to agriculture. I will discuss some of the history of fertilizer recommendation research and Extension, some of the technologies facilitating more efficient fertilizer use, and some of the factors that can muddle the progress toward meeting a BMAP in an agricultural watershed.

For our off-campus students, off-campus faculty, and on-campus students who cannot attend, this seminar can be viewed via live or watched at a later date via this link: [Dr. George Hochmuth](#). In addition, all seminars are archived for viewing on our [SWSD Seminar Page](#).