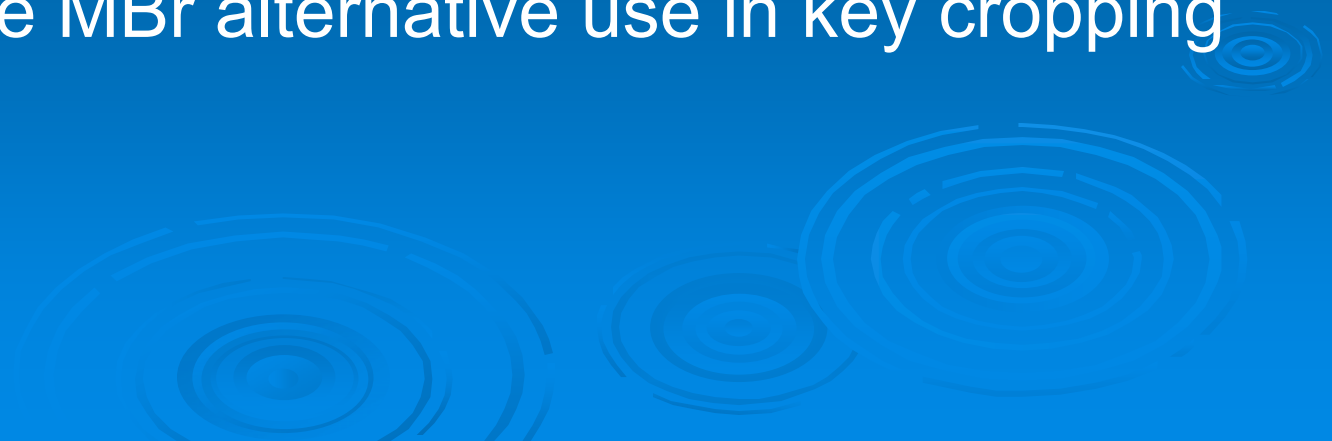



Area-wide Pest Management Project: Methyl Bromide Alternatives



USDA Area-wide Pest Management Project: Methyl Bromide Alternatives

- USDA – ARS Funded Program
 - \$5,000,000 dollars earmarked for Critical Use Exemption (CUE) holders
 - South Atlantic & Western Region
 - Conduct replicated large-scale field trials
 - Demonstrate MBr alternative use in key cropping systems
- 

USDA Area-wide Pest Management Project: Methyl Bromide Alternatives

- Compare best available, industry appropriate MBr alternatives
 - Fit the needs and constraints of CUE holders' specific production systems
 - Conduct comprehensive assessments of MBr alternatives
 - Demonstration of positive impacts and advantages of alternatives
- 

USDA Area-wide Pest Management Project: Methyl Bromide Alternatives

- Past cropping history
- Previous pest problems
- Soil and weather conditions prior to, during & after application of alternatives
- Economic and management costs related to alternatives
- Fumigant concentration and dissipation in soil
- Permeability of plastic
- Incidence and severity of soilborne pests
- Seedling yields
- Pest incidence over two years

AU - Nursery Cooperative

- Tom Starkey and Scott Enebak put together a proposal and submitted to USDA-ARS in November 2006
- Worked its way through the review system and the Nursery Cooperative was awarded 5-yr grant: \$630,000
- Monies for 1 full-time Research Technician, half-time Laboratory Aide, Travel, Supplies & Equipment
- Direct MBr alternative research

Other Area Wide Projects

Tarp Permeability Testing - Yates

Pepper / Tomato / Vegetable Trials - Chellemi

Florida Strawberry Trials - Noling

Georgia Vegetable Trials - Culpepper


North Carolina Vegetable Trials - Louws

Turf Grass - Unruh

Ornamentals - Roskopf/Burelle

Forest Tree Nurseries - Enebak/Starkey

AU - Nursery Coop's Proposal

- Two, large-scale field trials per year in Coop Nurseries; 2007, 2008, 2009 and 2010.
 - Pre- & Post-fumigation soilborne fungi incidence, soil characteristics, & weather conditions.
 - Data collected over 2-yr seedling production system for yield / cost & economic value.
- 

Introductions & Needs

- Visit first two demonstration plots
Wednesday
- Identify Cooperators for next 3 years
- Welcome
- Marietji Quicke



Marie (Marietjie) Quicke

- Grew up in Cape Town, South Africa
- Immigrated to USA in 1971
- BS Forestry – Iowa State University, 1981
- MS Forestry – Auburn University, 1989



Experience

- Research Scientist
 - Government Forestry Department, South Africa
 - Graduate Research Assistant
 - Auburn University
 - Consultant
 - Field study management
 - Data base management
 - Research Associate
 - Auburn University
- 

Forest Nursery - Time table

2007	2008	2009	2010	2011
Install demonstration plots at Plum Creek and Rayonier	Install demonstration plots in SC Nursery	Install demonstration plots in TX and MS Nursery	Install demonstration plots in AL Nurseries	Collect and evaluate 2-yr seedling data from AL Nurseries
Collect and evaluate seedling data from Plum Creek and Rayonier Nurseries	Collect and evaluate seedling data from SC Nursery	Collect and evaluate seedling data from SC Nursery	Collect and evaluate seedling data from AL Nurseries	Finalize 5-yr demonstration plots from 7 nurseries
	Collect and evaluate 2-yr seedling data from GA Nurseries	Collect and evaluate 2-yr seedling data from SC Nursery	Collect and evaluate 2-yr seedling data from TX and MS Nurseries	

Alternatives Proposed & Installed 2006

Alternative	Formulation	Rate
MBr : Chloropicrin	67%:33%	350 lb/acre
Chloropicrin	100%	300 lb/acre
Pic +	Chloropicrin + solvent	300 lb/acre
MBC 70/30	70% (98:2) 30% solvent	300 lb/acre
DMDS	100% di-methyl di- sulfide	400 lb/acre
Chlor 60	60% Chloropicrin 30% 1, 3-D (telone)	300 lb/acre
Pic + Plus	Chloropicrin + solvent + solvent	300 lb/acre