

United States Department of Agriculture
Natural Resources Conservation Service

NRCS Programs Supporting Biofuel Production

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Pacific Islands Area



Natural Resources Conservation Service (NRCS)

Helping people help the land

- Began during the dustbowl era as the SES
- Providing technical and financial assistance to private landowners
 - Develop Conservation Plans
 - Administer Farm Bill Programs
 - Plant Materials Program

NRCS and Sustainable Biofuel Production

- Conservation Practices for Sustainable Ag
 - Conservation plan development and implementation
- Farm Bill Implications
- Hawaii Plant Materials Center's Role

Guidelines for Biofuels Crop Production

- What amount can be sustainably grown and harvested?
- A conservation plan would consider:
 - tillage practices
 - crop selection, rotation
 - soils
 - slopes
 - climate

2008 Farm Bill Energy Implications

- Environmental Quality Incentives Program
 - NRCS has historically promoted conservation practices through EQIP.
 - Purposes expanded to include energy conservation and fuels management.
 - Practices have been developed that specifically address erosion control of biofuels crops.
 - Conservation Innovation Grants (CIG)
 - FY09 – Bioenergy & Biomass 6 Projects \$1.8 million

2008 Farm Bill Energy Implications

- Conservation Reserve Program
 - Allows managed harvesting of biomass crops according to appropriate vegetation management requirements and specified harvesting periods.....
 - Need to develop specifications to ensure environmental conservation concerns are addressed.

National Plant Materials Centers

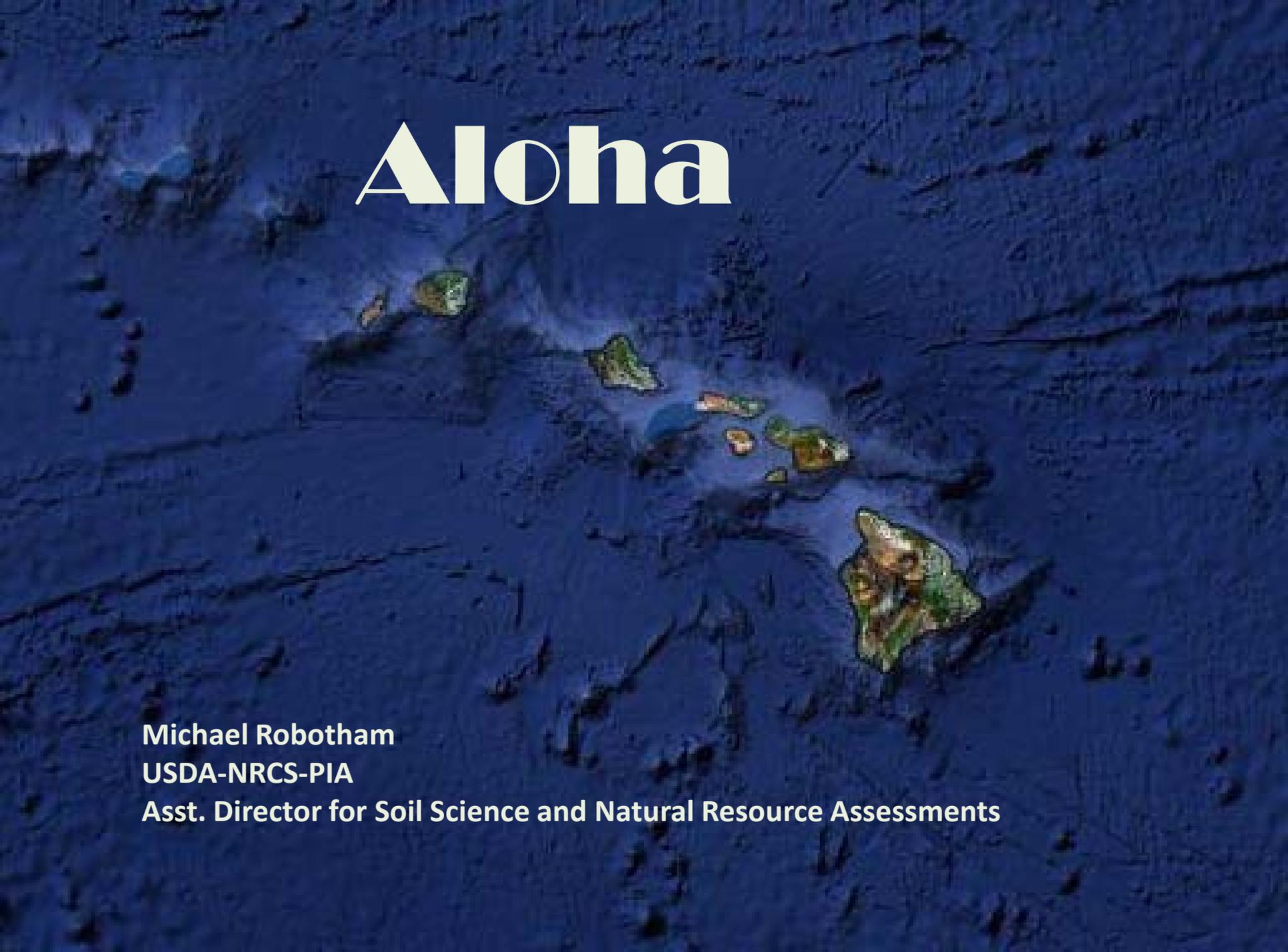
- **Fiscal Year 2010 – Biomass Development \$550,000**
- Evaluation of plants having potential feedstock applications in biomass energy applications
- Evaluation of biomass energy crops for adaptation to new regions and potential invasive characteristics.
- Identification and demonstration of agronomic practices to obtain maximum productivity and quality of harvested feedstock.
- Identification and evaluation of potential environmental impacts.
- Identification and evaluation of biomass energy plants for adverse or beneficial impact on adjacent crop.

Hawaii PMC - Molokai

- *Pennisetum* sp. (PM Hybrid) - A hybrid Napiergrass developed by the PMC in the early 1990s as a combination biofuel plant, windbreak, and forage for cattle.
- The napier hybrid grass is a potential candidate because of its high biomass yields, rapid growth, and non invasive (sterile) attributes.
- The HI PMC has just started working with Hawaii Agricultural Research Center, (HARC) and the University of Hawaii on the potential use of a napier hybrid grass for biofuel studies.



Aloha

An aerial photograph of the Hawaiian Islands, showing the main islands and surrounding smaller islets. The islands are green and brown, contrasting with the deep blue ocean. The perspective is from a high angle, looking down on the islands.

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