

# Anaerobic Soil Disinfestation for Enhancing and Advancing the Sustainability of Organic Specialty Crop Production Systems (ASD-EASY ORGANIC)

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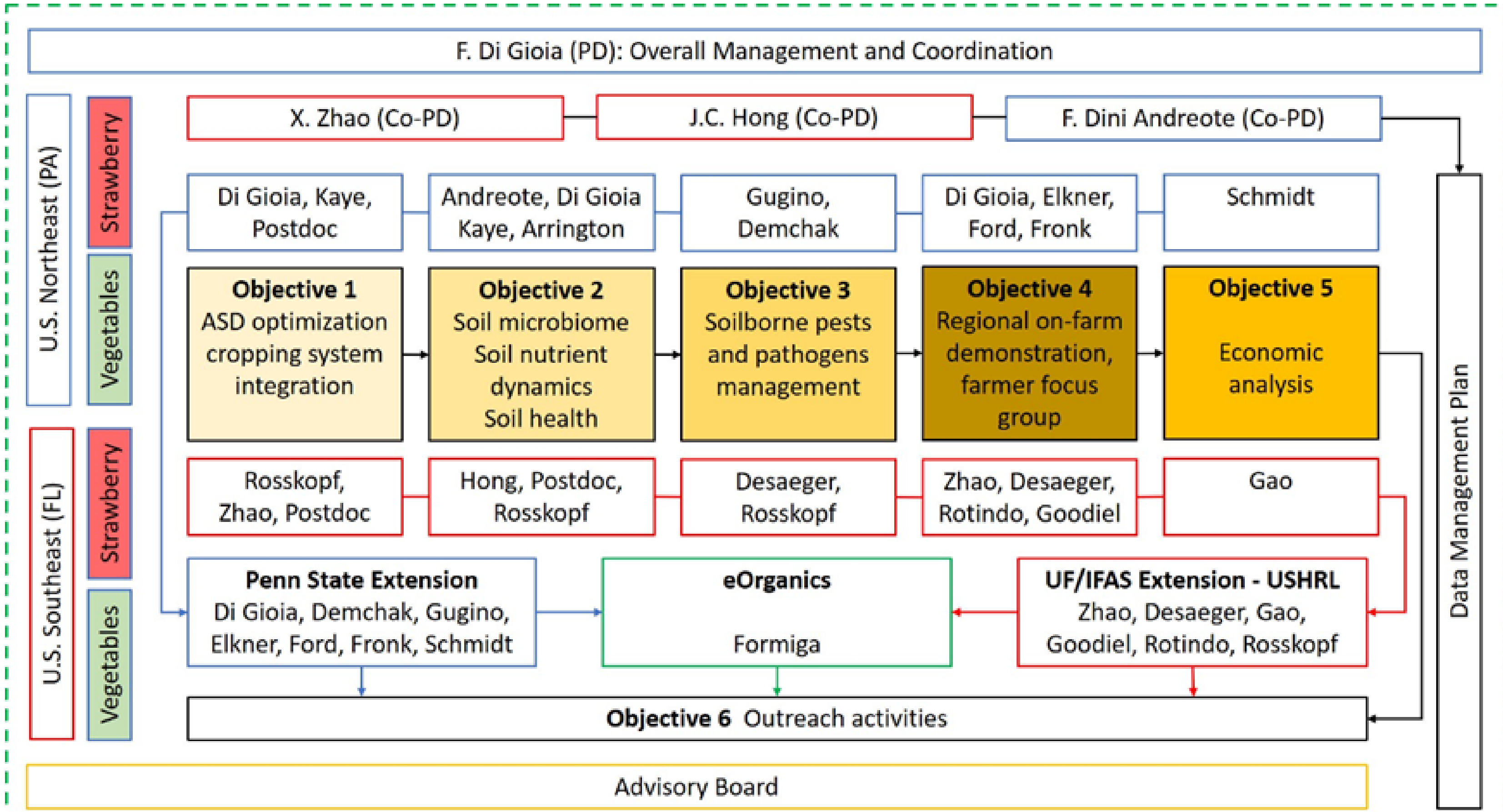
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## Introduction

The expansion of the organic small fruit and vegetable industries is often limited by the lack of viable and effective practices for managing soilborne pests and pathogens. Anaerobic Soil Disinfestation (ASD) is increasingly being recognized as a biological approach for building a healthy soil system. However, limited information is available on the impact of ASD on the soil microbiome and the proper implementation of ASD in organic production systems requires (i) its integration with other organic crop management practices, (ii) the definition of optimal carbon sources, and (iii) application rates for specific crops and growing systems.

## Objectives

- 1) Optimize and integrate ASD in organic specialty crop systems.
- 2) Assess the short- and long-term impact of ASD on soil ecology and microbiome dynamics and overall soil health.
- 3) Assess the efficacy of ASD in managing soilborne pests and pathogens.
- 4) Conduct on-farm ASD evaluations in different organic specialty crop systems involving growers in the optimization of ASD and transferring the method to them.
- 5) Evaluate the economic viability and identify barriers to adoption and integration of ASD in organic specialty crop systems across the U.S. Northeast and Southeast region.
- 6) Conduct a range of Extension and outreach activities on ASD employing multiple delivery methods.



## Examples of experimental activities conducted in Florida and Pennsylvania



## Preliminary results from the first field study conducted in Pennsylvania

