

A Joint Project to Study the Effects of Ecological Farming Practices on the Quality, Production and Ecological Health of *Cannabis sativa* Grown for Marijuana Products



VISION STATEMENT

Our Vision

Our vision is a practical knowledge-base demonstrating the effects and effectiveness of applying ecological agriculture and integrated pest management to growing high-quality commercial *Cannabis sativa* for marijuana products, emphasizing product quality and ecological quality of the growing space and farm.

Mission

Our mission is to design and plan a research framework for on-going study, carry out research, and collect, compile, and analyze data and report on data and useful information (data-translation).

Goals and Sub-Goals

1. Define conceptual scope of research

- 1.a. Write brief definition of ecological agriculture (EA) and Integrated Pest Management (IPM)
- 1.b. Write brief definition of ecological agriculture (EA) and Integrated Pest Management (IPM)
- 1.c. Write a brief operation description of the target cultivar(s), its production and the ecological/horticultural environment.
- 1.d. Conceptually link these characterizations to proposed research.
- 1.e. Describe EA techniques and approaches upon which the research will focus
 - 1.e.i. Compile a list of ecological agricultural configurations and their expected effects.
 - 1.e.ii. Compile a list of integrated pest management techniques.
 - 1.e.iii. Create a list of questions relevant to test application of a geographical information system (relational database).

2. Identify research environment.

- 2.a. Spatial/Geographical attributes.
- 2.b. Resources (soil, water, equipment, buildings, facilities, biological resources).

2.c. Potential problems, obstacles and constraints (including legalities and neighbor issues, chemical and biological contamination, geological features, etc.).

3. Create research framework and preparations.

3.a. Establish research framework.

3.a.i. Identify research topics in ecological agriculture, integrated pest management, and GIS application.

3.a.ii. Establish research framework and methodology for hypothesis testing.

3.a.iii. Formulate preliminary hypotheses.

3.a.iv. Formulate specific test questions for IPM study.

3.a.v. Formulate specific test questions for GIS case-study.

3.b. Create computer folder system to coordinate file and data-types.

3.c. Create spatial/ecological model and design on geographical information system.

3.d. Create data-logs. (My thought is that we can start with spread-sheets which we eventually express in the relational database making up our GIS file. MySQL works best with Manifold, and it's free.)

3.e. Create research reporting framework.

4. Plan research administration.

4.a. Disaggregate goals into objectives, and then disaggregate further into processes and tasks.

4.b. Identify critical paths.

4.c. Create a schedule.

4.d. Identify necessary equipment and facilities (based on known resources).

4.e. Create a detailed budget.