

2022 GHA Hemp Variety Evaluation Trials

Introduction

Hemp is a promising and effective crop in terms of climate change mitigation and potential solution in offsetting greenhouse gas emissions (GHG) and replacing less efficient crops that are used for bioenergy production. However, limited research has been done in the United States to provide accurate production information to farmers on best management practices of hemp. Also, there is limited research-based information on the agronomic performance of many varieties that are currently promoted to farmers. The evaluation of different hemp varieties in different regions in the US can provide the needed information about the suitability of these varieties in different conditions and the acceleration of their adoption within the current cropping systems in the US and Globally. In order to address this need or gap in information, the Global Hemp Association will work with an independent research team in 2022 to conduct variety trials to bridge research-based information to farmers and the hemp industry. The results will help build a sustainable supply chain that is crucial for the success of hemp businesses and pressing needs for our and future generations.

Purpose

The Global Hemp Association (GHA) unites thousands of hemp professionals around the world who are working to explore and expand the usage of hemp. The limited availability of research-based data / information that will serve the farmers and

hemp industry nation-wide that can be replicated and withstand peer-review, have caused the GHA to make it a priority in 2022. To allow the hemp industry to thrive and progress, these variety trials are critically important to establish a solid foundation for quality hemp production.

Objectives

There will be 10 research sites throughout 6 regions in the US (North, Central, South, Midwest, East Coast, and West Coast). Each research site has an area of approximately 400 square feet that contain 10 varieties that will be used in each region. At each of the 10 research sites, field cooperators will:

1. Evaluate 10 major hemp varieties' performance across 6 US regions using comprehensive agronomic indicators,
2. Assess agronomic yield per variety based upon overall tonnage of the plant and,
3. Present accessible variety evaluation trial results to farmers, sponsors, and for educational efforts.

Research Partners

GHA will contract variety trials research with Performance Crop Research, LLC, who will work and coordinate research activities with independent researchers/ scientists at six regions in the US, these research entities, who are members of the National Association of Independent Crop Consultant (NAICC) will execute the research objectives of this project according to protocol developed by the GHA Research Committee.

The NAICC, founded in 1978, is the 501c(6) national society of agricultural professionals who provide research and advisory services

to clients. They have over 700 members working from bases in 40 states and several foreign countries and have expertise in most crops grown around the world.

North Carolina:
Joseph Hunter, Turning Leaf Farms

Missouri:
Austin Bennett, Bennett Ag Research

Texas:
Tim Case, Great Plains Crop Services

South Dakota:
Matt Eich, Centrol Crop Consulting

Kansas:
Melissa Nelson, Performance Crop Research

Pennsylvania:
Daniel Ramsdell, Odonata 360

New York:
Chris Becker - BAAR Scientific

Wisconsin:
Derek Potratz - Tilth Agronomy Group

Louisiana:
Grady Coburn - Pest management Enterprises

Long-term Goals

The 2022 GHA Hemp Variety Trials will serve as the initial step in providing and building a database that will serve farmers and the hemp industry. This research platform will be the basis for developing future data and information not available currently and will be critical to the advancement of this industry. This may include but is not limited to hemp

characterization, grading, and many other emerging information needs of farmers and industry. Furthermore, the information generated by this study will benefit small and large farmers and industry for future innovation and allow them to harness the potential of hemp.

GHA Research Committee:

- Dr. Mahdi Al-Kaisi, Professor Emeritus of Soil Science, Iowa State University
- Rusty Peterson, Owner of Align Agro, Co-Owner of Essen Atlas
- Drew Kitt - iHempX, Project Manager
- Melissa Nelson, Owner / Field Scientist at Performance Crop Research, LLC, Co-Owner at SBIH
- Caren Wilcox, Retired, USDA

Budget

Research \$175,000
Education and Outreach \$25,000
Personnel: \$25,000

TOTAL - \$225,000 for year 1