

## 22. Industrial Hemp Production Systems

Mentors: [Kathleen Russell](#), [Greg Felsen](#), [Gus Westerman](#), and [Mark Uchanski](#)

Location: Southwestern Colorado Research Center, Yellow Jacket, CO

### 1. Name of faculty/research scientist mentor and contact information, including Department.

Mentor: Kathleen Russell Ph.D., Research Scientist/Manager, Southwestern Colorado Research Center (CSU Agricultural Experiment Station) Yellow Jacket, CO.

[Katie.Russell@colostate.edu](mailto:Katie.Russell@colostate.edu). (970)-562-4255

### 2. In what region will the student be working (county/region/state)?

Montezuma and Dolores Counties, Southwestern Colorado

Extension Personnel: Greg Felsen (Montezuma Co.) and Gus Westerman (Dolores Co.)

### 3. In less than 150 words, please describe the proposed internship goals, scope, and objectives.

An internship at the Southwestern Colorado Research Center will include a student-led research study, exposure to research and extension programs regionally, and opportunities to work one-on-one with local farmers and community groups. The research study will be focused on industrial hemp production systems. The specific goals of the project are to quantify irrigation needs, pest management and weed control. Participation in a hemp-based research project will allow all the student to be immersed in the processes involved in applied field research from concept to presentation of results at local meetings and field days. The region is defined by a high-desert environment, proximity to tribal lands (Ute Mountain and Navajo reservations), and multiple National Parks (Mesa Verde, Arches, Canyonlands). Our area production includes irrigated and dryland crop commodities, orchards, small-acre vegetables, and livestock. A major goal of the internship will be a comprehensive view of agriculture in southwest Colorado.

### 4. What student learning outcomes do you anticipate and are there opportunities for professional development (e.g., attending conferences or stakeholder convenings)?

Our intern can expect to learn how to work as a team-member with the research center staff and extension personnel. These employees will integrate the intern into the everyday activities of both the research center and their local extension offices. Among the various groups that we interact with frequently are the local conservation districts (High Desert Conservation District and Dolores Conservation District), Four Corners Farmer and Rancher Coalition, Master Gardeners, and school groups. Our intern can expect to attend these local stakeholder meetings, as desired, and have the opportunity to travel to a regional conference. Our project at Southwestern Colorado Research Center is a collaboration with Western

Colorado Research Center (Fruita). Our intern will be traveling to meetings and field tours in conjunction with this research group.

By the end of the internship, our intern will have a season of research data to present in either a poster or oral format at a research conference, a diversity of contacts throughout the region, and experience working in both small-plot research and landscape-level projects with our team.

**5. Does this project already include collaboration with a specific Extension agent/office? If yes, please describe the ongoing collaboration.**

This project includes collaborations with both Dolores County and Montezuma County Extension offices. There is a 3 acre on-site orchard at the Southwestern Colorado Research Center that is an on-going collaboration among CSU Extension and CSU AES. The research center staff and Extension personnel work together year-round on this project. Additionally, these groups have recently worked together on a planning proposal for an 'Industrial Hemp in the Colorado Plateau' strategic plan. The intern will work collaboratively with Extension and AES staff throughout the summer as we develop this plan. This will include a field day in which local producers and stakeholders will be invited to the Research Center to tour our field plots and learn about our active research projects. There will be a break-out session planned for those attendees who are interested in industrial hemp production to discuss production constraints, to identify distribution and processing needs and opportunities, and to differentiate consumer demands and preferences to direct research needs.

**6. How does this internship support identified stakeholder needs?**

This internship will help support CSU Extension and AES staff in their continued efforts to support regional stakeholders in their work to promote a profitable and sustainable agricultural economy in southwestern Colorado. The intern will work alongside the diversity of groups that work collaboratively towards these common goals. The agricultural profile in this region is diverse and remote. Our stakeholders face difficulties in production ranging from: a challenging climate, distance from markets, increasing land values and water availability. We value the opportunity to work with a CSU student who has the opportunity to bring their interests and education to our region to help enhance our research and Extension efforts.

**7. Are travel funds available? Opportunities to provide student assistance with housing?**

Yes, travel funds and housing assistance will be available to the intern. We have on-site housing accommodations available at the Research Center. We can provide a room that will serve as a bedroom with a futon bed and desk. There is a kitchenette and a bathroom in the main building. There is a bathroom with a shower available in our shop building. We also have outdoor power available for a camper/RV. There is a Ph.D. graduate student (female) who lives at the Research Center, in a separate room, when working on their research project. There is wi-fi available on-site as well as a large TV that can be used by the students.

Travel assistance will be made available for any travel to off-site locations and to a regional research conference during the internship.