

## **BIOAG PROJECT PROGRESS REPORT**

**TITLE:** WSU Plasticulture website development

### **PRINCIPAL INVESTIGATOR(S):**

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### **ABSTRACT**

The term “plasticulture” refers to the use of plastic for the benefit of agricultural production. In practice, plasticulture may be used to describe agricultural systems that utilize plastic-covered structures to extend growing seasons and protect crops from excess moisture, extreme weather, and other threats; ground-laid plastic mulch films; plastic-based precision irrigation systems (i.e. drip irrigation); and, greenhouse and nursery production utilizing plastic containers; among others. While the technologies used in plasticulture systems are similar across the globe, the sources, methods of use, maintenance, and end-of-life strategies of those technologies are dependent on geographic and climatic constraints. For this reason, a Washington-centric repository of plasticulture knowledge and resources would benefit growers in Washington state, and the Pacific Northwest, in general. As such, we have developed a web-based resource, plasticulture.wsu.edu to archive and disseminate information on plasticulture in Washington state.

### **PROJECT DESCRIPTION**

A web-based resource was created to archive and disseminate information on certain plastics-based technologies for application in Washington state and Pacific Northwest agriculture. This website includes links to publications and other resources of specific interest to agricultural producers, consultants, Extension professionals, and others seeking information on plasticulture technologies and practices.

### **OUTPUTS**

#### **Work Completed:**

The website developed for this project (<http://plasticulture.wsu.edu>) was originally deployed in January 2015 and populated with information and resources on high tunnels and plastic mulches. Additional resources have been identified and added to the site. In June of 2016, the site was migrated to the new, updated WSU template. Appropriate human resources have been identified to maintain the website.

#### **Publications, Handouts, Other Text & Web Products:**

Plasticulture webpage, <http://plasticulture.wsu.edu>, deployed 13 January 2015.

**Outreach & Education Activities:**

None to date

**IMPACTS**

**Short-Term:** A web-based resource was created to archive and disseminate information on certain plastics-based technologies for application in Washington state and Pacific Northwest agriculture. The structure of this website will allow for easy updates to existing resources, and the addition of new resources and categories. This web-based resource is up-to-date, searchable, and indexed to improve its usability and visibility to the general public.

**Intermediate-Term:** Washington and Pacific Northwest producers will utilize the information and tools provided on the plasticulture website to plan, implement, and evaluate the use of various plastics-based agricultural technologies. Where utilized appropriately, plastics-based technologies will improve crop quality and the economic sustainability of Washington state and Pacific Northwest farms.

**Long-Term:** As plastics-based technologies find a greater presence in Washington state agriculture, the bank of practical knowledge will expand into new communities. Consequently, Washington state growers will extend their growing seasons, reduce the need for chemical interventions, conserve water, and improve their overall operations.

**ADDITIONAL FUNDING APPLIED FOR / SECURED**

None

**GRADUATE STUDENTS FUNDED**

Not applicable

**RECOMMENDATIONS FOR FUTURE RESEARCH/WORK**

Add additional information and resources to the website about agricultural-plastics recycling and disposal, and new and novel plastics-based technologies for agriculture.

Identify and publish links to video resources on the deployment of various plastics-based technologies in agriculture.

Promote plasticulture.wsu.edu through search engine optimization techniques, links in emails and other web-based resources, and in references in presentations.