



# RESEARCH PROTOCOLS

**Cauliflower Variety Trial** 

**Objective:** Determine which cauliflower variety: Snow Crown, Amazing, or Denali produces the highest yield and quality fall cauliflower in Iowa. Skywalker can be trialed as an optional variety.

**Hypothesis:** Some farmers expect Snow Crown to produce the most curds, and best quality curds.

#### **Farmer-Cooperator will:**

- Follow Research Protocols for study
- Take photos throughout the project
- Keep in contact with PFI with updates and questions
- Turn in all data by November 2019

#### **Practical Farmers of Iowa will:**

- Help set up research protocol.
- Monitor progress of project and provide support when needed.
- Publish results in a PFI research report, on PFI website, and potentially other outlets.
- Provide \$550 cooperator payment at conclusion of project year.

### **Project Design:**

- Each farm will set up a randomized, replicated trial with 1-2 successions. Each succession will have 4 replications.
- 3 or 4 varieties x 4 replications (per succession)
  - o Snow Crown, Amazing, Denali, (Skywalker, optional)
  - At least 10 plants/plot

Example layout:

Rep1	Rep2	Rep3	Rep4
Snow Crown	Amazing	Denali	Snow Crown
Amazing	Denali	Snow Crown	Amazing
Denali	Snow Crown	Amazing	Denali

#### Data to Collect (see excel workbook):

- At harvest, Score plot for color, riciness/fuzziness, curd compactness, and curd bracts.
- Harvest cauliflower as mature, keep records by plot and harvest date. Record weight, diameter of three curds, and count harvested by plot.
- Take photos of harvested curds (each variety), and the plants in the field.
- See excel workbook for pick sheets, scoring, and data entry.
- More info on cauliflower grading: Cole Crop Disorders: https://agdev.anr.udel.edu/weeklycropupdate/?p=2502



## **Project Timeline:**

March	April - Oct.	November
Edit/Approve Protocol     Complete MOU & pre- survey     Liz will order seed	<ul> <li>Layout plots</li> <li>Update other cooperators and PFI with progress of trial</li> <li>Conduct trial and collect data! Take photos!</li> </ul>	<ul> <li>Turn in data and photos</li> <li>Take post- survey</li> </ul>

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