



# Cauliflower Variety Trial

## Preliminary Observations

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### INTRODUCTION

Cauliflower (*Brassica oleracea* var. *botrytis*) is a cool-season crop that is not commonly grown in Hawaii. The optimal temperature range for growth and development is 65 F° to 68 F° during the day. Temperatures in this range are not common on Oahu and heat stress may adversely affect the cauliflower ability to form large white heads. Heat tolerance can play a pivotal role in the adaptability of cauliflower head production in warmer seasons as well as lower elevations. The primary objective of this trial was to evaluate the yield of 12 commercially available cauliflower varieties for their potential commercial production in Hawaii.

### METHODS

This trial evaluated 12 cauliflower varieties for their potential production in Hawaii (Table 1). Varieties were seeded into seedling trays December 2016. Seedlings were transplanted at the Whitmore Research Field (1000ft Elev.) on January 2017. Seedlings were spaced 18 inches between plants within the row and three feet between rows with five plants per plot. Each variety plot was replicated four times. The field was fertilized with 50lbs of nitrogen as 16-16-16 plus minor elements pre-plant and fertigated with a total of 50lbs of nitrogen as 20-20-20 plus urea weekly after transplanting. Diamond back moth and imported cabbage butterfly was the primary pests and was treated with Coragen preplant and Crymax as needed. Five plants were harvested per plot on March 20, 2017, approximately 78 days after transplanting and evaluated for head fresh weight.

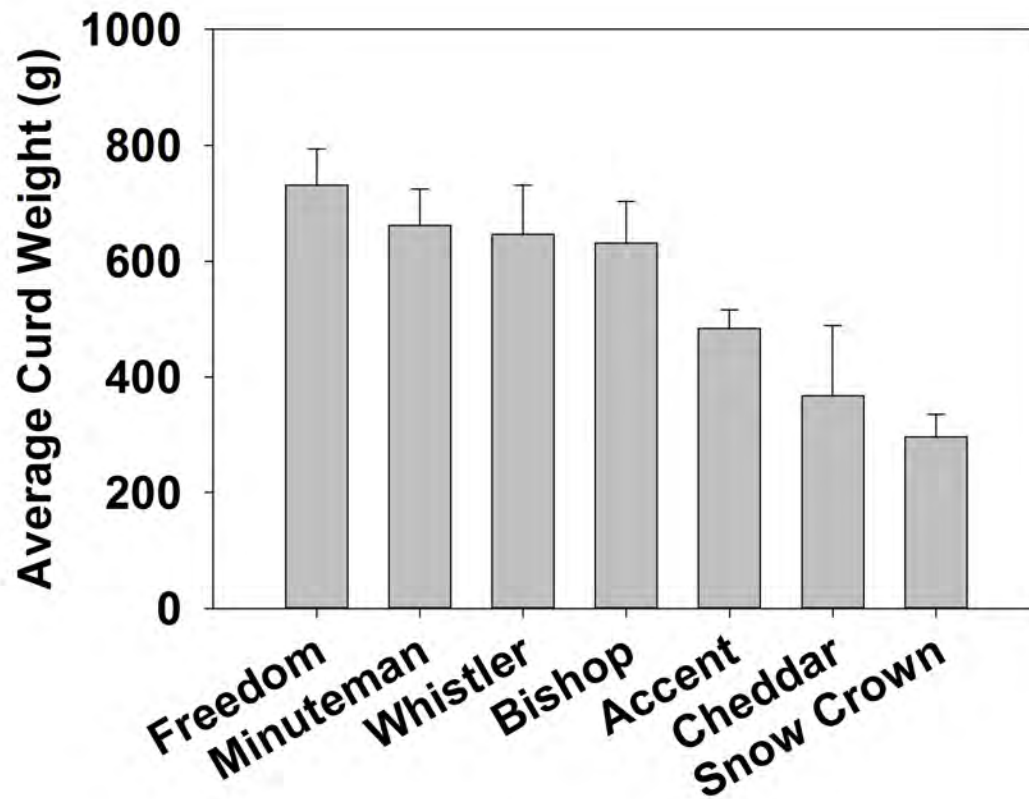


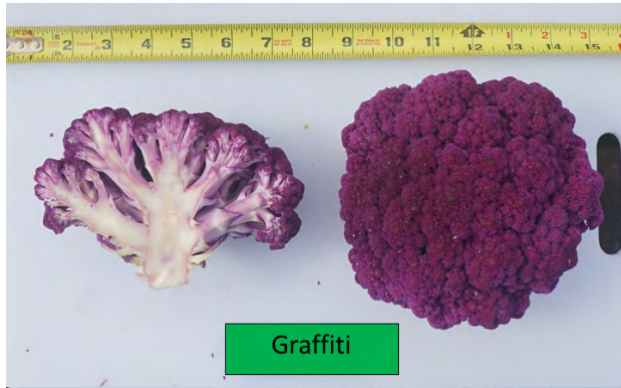
Table 1. Cauliflower Varieties Evaluated.

	<u>Variety</u>	<u>Seed Company</u>
1	Snow Crown	Johnny's Seed
2	Bishop	Johnny's Seed
3	Amazing	Johnny's Seed
4	Denali	Johnny's Seed
5	Cheddar	Johnny's Seed
6	Graffiti	Johnny's Seed
7	Vitaverde	Johnny's Seed
8	Whistler	Holmes Seed
9	Romanesco	Holmes Seed
11	Freedom	Holmes Seed
10	Minute Man	Stokes Seed
12	Accent	Stokes Seed



Figure 1. Images of marketable head size and cross section of cauliflower varieties harvested March 20, 2017 (78 DAT).





Graffiti



Cheddar



Vitaverde