Report to the Oregon Processed Vegetable Commission 1991-1992

1. <u>Title</u>: Cauliflower variety observations

2. Project Leaders: J.R. Baggett, Horticulture

J.R. Stang, Horticulture

3. Project Status: Terminating June 30, 1992

4. Project Funding: \$3,500

\$1,944 supplementary technical support

Funds were used primarily for research farm expenses and labor for transplanting, weeding, and harvesting.

5. Objectives:

Evaluate head quality, maturity time and total yield of 10 promising (based on 90-91 observations) cauliflower varieties at a wide range of planting times; relate timing of maturity to turning of curd initiation and the period between curd initiation and harvest; screen additional cauliflower varieties to identify those having head characteristics suitable for processing.

6. Report of Progress (preliminary):

Harvest was not finished in time to complete the analysis of data before this report was due. The trial was conducted as follows:

Three replicated (4x) plantings of 10 promising varieties were established using transplants grown in seedbeds on the research farm. Planting 1 was seeded on 23 April and transplanted 11 June. Planting 2 was seeded on 31 May and transplanted 9 July. Planting 3 was seeded on 24 June and transplanted 31 July. The second and third plantings included twenty additional varieties planted in unreplicated screening trials. Transplanting was done mechanically at 1.5 feet within the rows and 3 feet between rows. About 450 lbs/acre of 12-29-10 fertilizer was banded prior to transplanting. An additional 120 lbs of N

in the form of urea was sidedressed between 4 and 5 weeks of transplanting. Overhead irrigation was applied about once each week in amounts sufficient to promote vigorous growth.

Four plant samples were collected from the 10 varieties in the replicated trials around the time of curd initiation for use in growth analysis. Data collected included stem diameter, leaf number, whether or not a curd had been initiated, and meristem/curd size.

Twenty heads were harvested from each plot. Harvesting occurred weekly, with heads cut at a stage of maturity judged to be comparable to the industry standard. Data obtained from the harvested heads included: external and internal color, shape, riciness and fuzziness, dimensions, weight, curd depth and curd solidity and chunkiness. This data currently is being statistically analyzed.

The following is a list of varieties that were evaluated, and their sources:

A. Replicated trial of promising varieties

Crystal Petoseed Snowball Y improved Harris Moran Profil Zwaan **Olympus** Asgrow Snowman Harris Moran Snowflower Asgrow Harris Moran Imperial 10-6 Snowpak Petoseed Snowball 123 Harris Moran Castlegrant Yates

B. Screening trial

Aubade Nickerson Zwaan Floriade Nickerson Zwaan Rushmore **Royal Sluis** RS 84374 Royal Sluis S 88001 Royal Sluis 045-16-03 Zwaan Seeds, Inc. 045-17-04 Zwaan Seeds, Inc. 045-15-03 Zwaan Seeds, Inc. 045-22-02S Zwaan Seeds, Inc. 045-23-048 Zwaan Seeds, Inc.

Screening trial (continuted)

045-19-02S	Zwaan Seeds, Inc.
045-21-02S	Zwaan Seeds, Inc.
045-14-02S	Zwaan Seeds, Inc.
Tulchan	Yates
Taymount	Yates
Balmoral	Yates
Woomera	Yates
Batsman	Elsoms Seeds, Ltd.
Lateman	Elsoms Seeds, Ltd

7. <u>Summary</u>: To be included in final report.

8.	Signatures: Project Leaders:	Redacted for Privacy	
		Redacted for Privacy	
	Department Head:	Redacted for Privacy	