

# **SILAGE MANAGEMENT PRACTICES ON CALIFORNIA DAIRIES**

Noelia Silva-del-Rio<sup>1</sup>, Jennifer M. Heguy<sup>1</sup> and Alfonso Lago<sup>2</sup> University of California Cooperative Extension Tulare, Stanislaus and San Joaquin Counties<sup>1</sup> APC Inc., Ankeny, Iowa<sup>2</sup>

### ADSA 2010, #T336

## INTRODUCTION

Corn silage is a common ingredient of California dairy rations. In well managed corn silages, dry matter losses can be as low as 8 -10%. However, when poor management practices are implemented dry matter losses can be as high as 20 - 40%.

## **OBJECTIVES**

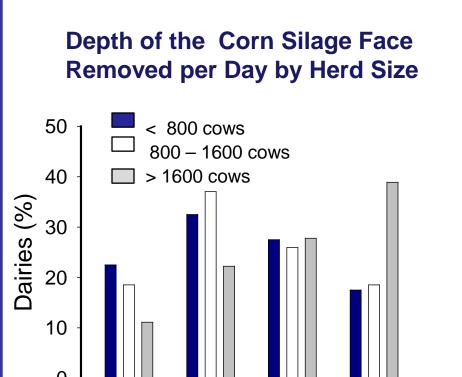
The aim of this study was to describe current corn silage management practices in California's Central Valley dairies.

### **METHODS**

In summer 2009, a feed management survey was mailed to dairy producers in Tulare, Stanislaus, and San Joaquin counties; the first, third and seventh largest dairy counties in California, respectively. Producers received an envelope containing an invitation letter to participate in the study, a one-page survey, and a pre-paid return envelope. Response rate was 16.9% (120/710). Herd size ranged from 160 to 6,600 cows (median=950).

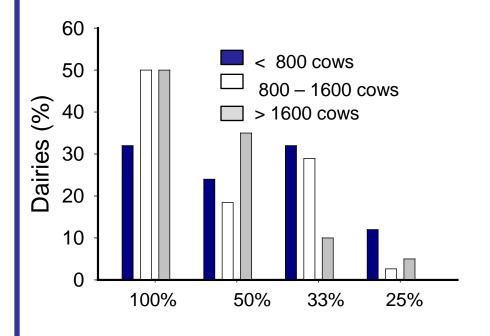


### **RESULTS: Removal Rate**



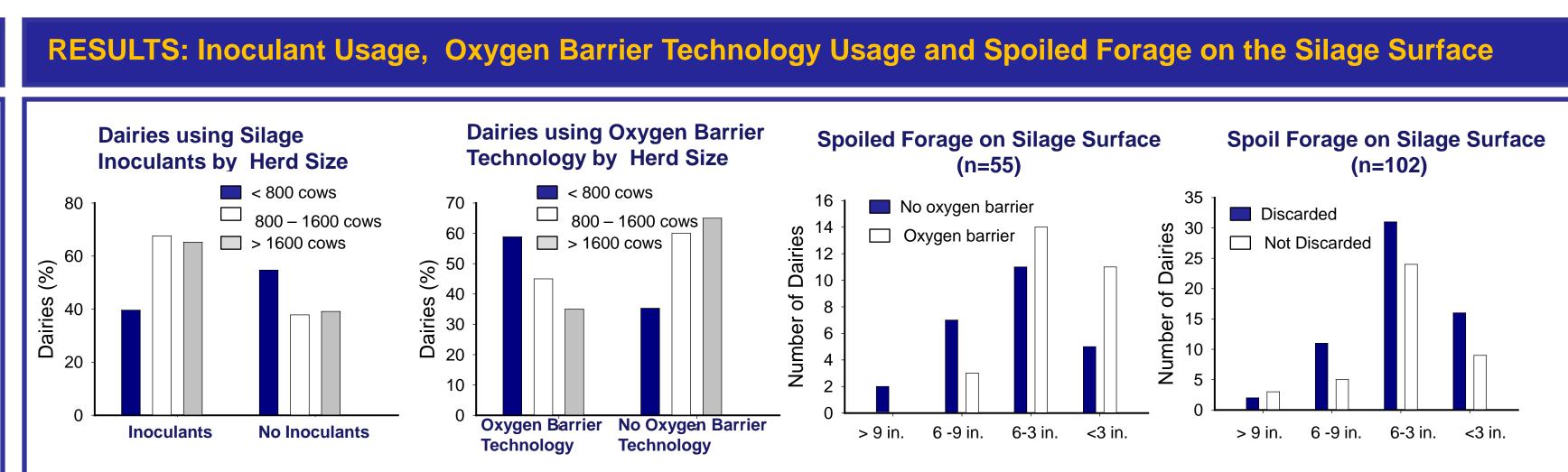
#### Width of the Corn Silage Face **Removed per Day by Herd Size**

< 6 in. 6 -12 in. 12 -18 in. >18 in.



### Width and Depth of Face Removed (% of dairies)

Width of Face		Depth Removed (in.)					
Removed		< 6	6-12	12-18	> 18		
	whole		9.6	12.0	7.2	7.2	36.1
	half		2.4	9.6	6.0	8.4	26.5
	third		4.8	10.8	10.8	3.6	30.1
	fourth		2.4	0.0	2.4	2.4	7.2
			19.3	32.5	26.5	21.7	



**RESULTS** 

**Storing Corn Silage** 



Silage in California was more frequently stored in piles (85.0%) versus bunkers.

### **Mycotoxins**

A total of 25.0% of dairies suspected mycotoxins in 2008. Top surface spoiled forage was discarded by 70.4% of dairies suspecting mycotoxins, and by 55.8% of those that did not suspect mycotoxins.



Most respondents (73.4%) considered that silage faces were maintained smooth. Only five of 109 producers used face shavers.

### **Dry Matter Determination**

Corn silage dry matter (DM) was conducted at least once a month in 52.3% of dairies. Only 8.3% of dairies determined DM weekly, or more often. Most dairies delegated DM determination to an outside nutrition consultant (86.6%).

### Silage Additives

Bacterial inoculants of various types were used in 54.0% of corn silages.





### **SUMMARY**

Although dairy owner and manager responses are subjective, results indicate areas where corn silage management can be improved, such as removal rate, surface spoilage, and sizing of silage structure.

### ACKNOWLEDGEMENTS

Authors would like to thank dairy producers from Tulare, Stanislaus and San Joaquin Counties that participated in the survey.

