

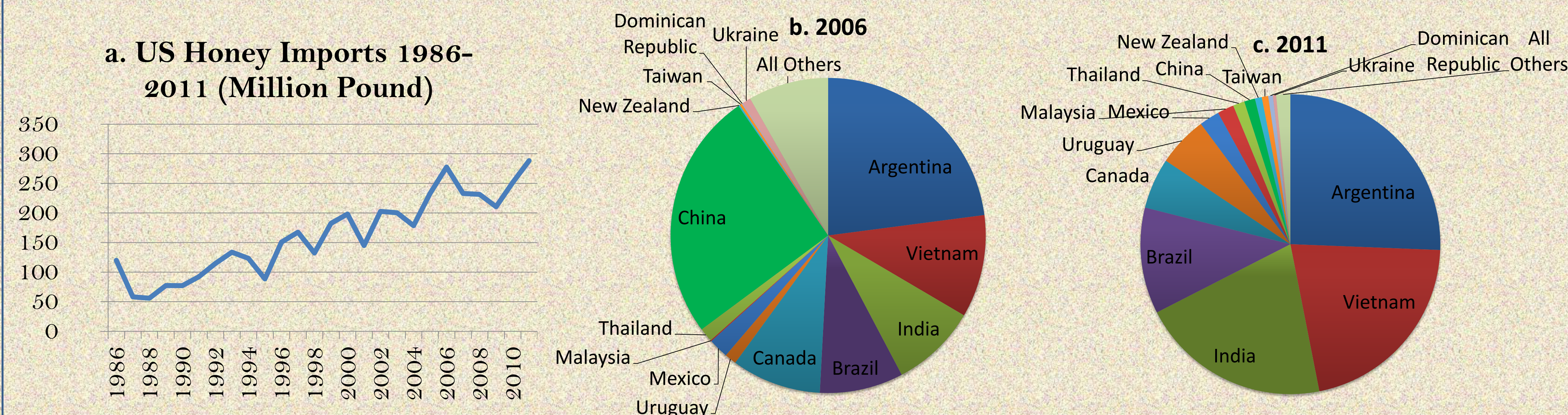
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## Introduction

The US is one of the major honey producing countries in the world. In 2011, US honey production was 148.4 million pound. However, the production still could not meet the demand. Most of the honey consumed in the US is imported from other countries (Chart a). The leading origins of imported honey in 2006 and 2011 are shown in the following pie charts (Chart b and c).



Sources: Honey, National Agricultural Statistics Service, USDA, and Bureau of the Census, U.S. Dept. of Commerce

Recently, news reports have touted that a large portion of honey comes from potentially unsafe or adulterated international sources. “A Food Safety News investigation has documented that millions of pounds of honey banned as unsafe in dozens of countries are being imported and sold here in record quantities.”<sup>1</sup>

How will consumers’ react to the risk related to consuming international honey? Will consumers have a price premium for honey that is produced locally? How can honey producers best price and market their honey to manage food-scare related risks? This project seeks to address the needs of honey producers by conducting focus groups with producers to understand their primary marketing concerns, performing economic experiments with honey consumers to see how they react to different information and marketing strategies, and delivering these results to the producers to help them develop more effective marketing strategies.

1. “Asian Honey, Banned in Europe, Is Flooding U.S. Grocery Shelves.” Food Safety News, Aug 15, 2011

## Research Approach

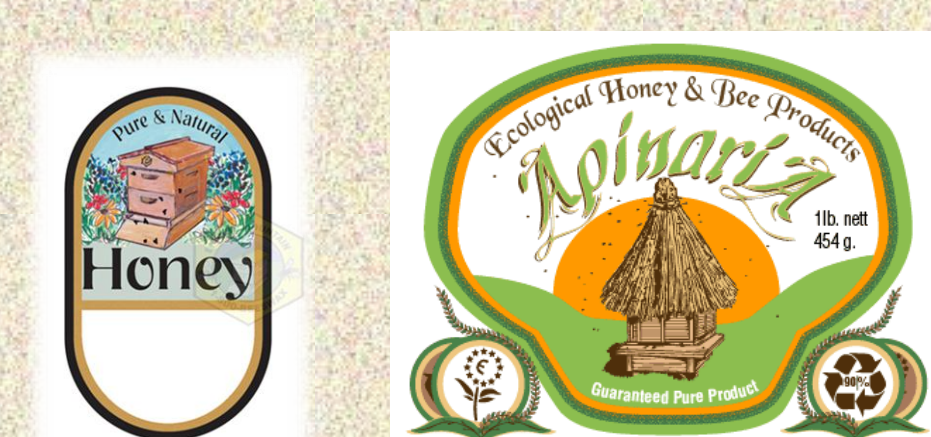
We organized a Honey Producers Working Group that consists of 40 local or regional honey producers from Delaware, Maryland, Pennsylvania and West Virginia and gathered their opinions on what characteristics they are most interested in about honey consumers and incorporated those into our study.



Packaging



Origin



Information

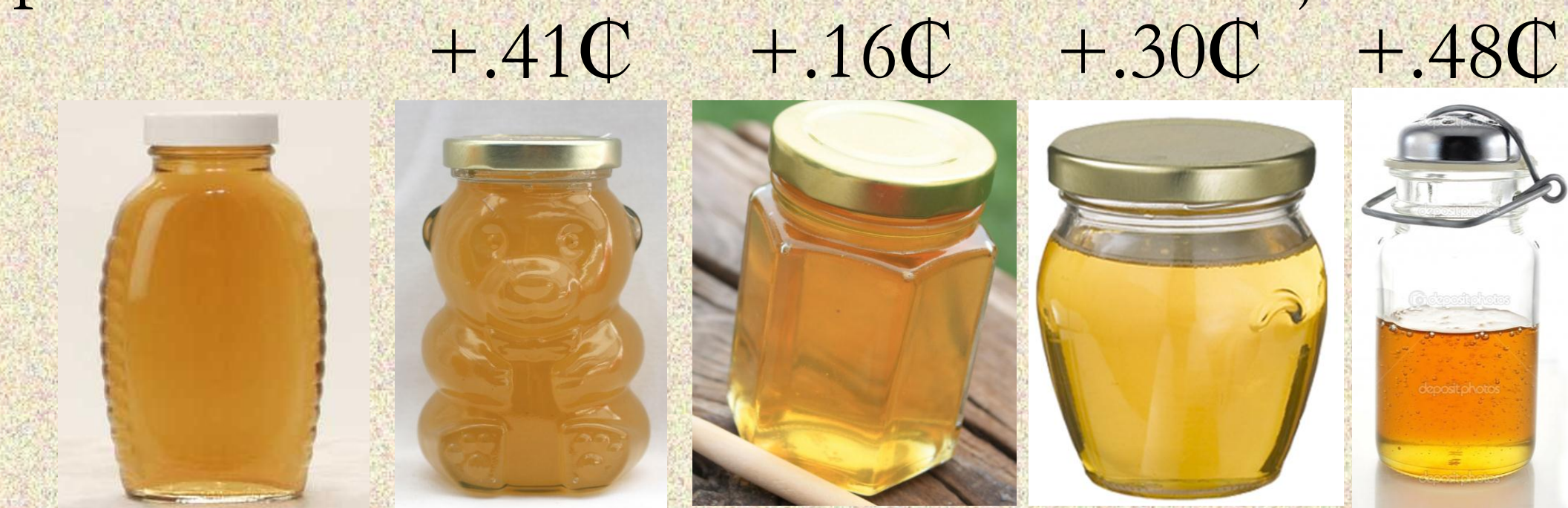
Using these characteristics we conducted economic experiments with 115 adult consumers to measure their willingness to pay for honey with different packaging, origin information, and informational labeling. We measured these using incentive compatible auctions in which participants reveal their demand for different attributes by bidding on and purchasing jars of honey.

## Results and Implications

The main questions of interest to the Honey Producers Working Group were the effects of packaging, origin labeling, and information on consumers’ willingness to pay for honey. Based on the economic experiments we observed several results.

### Packaging:

We found that the traditional “Queenline” jar most commonly used by small producers was the least appealing to consumers. Of the five jars that we offered to consumer research participants, they were willing to pay a premium of 0.16 to 0.48 for alternative jars.

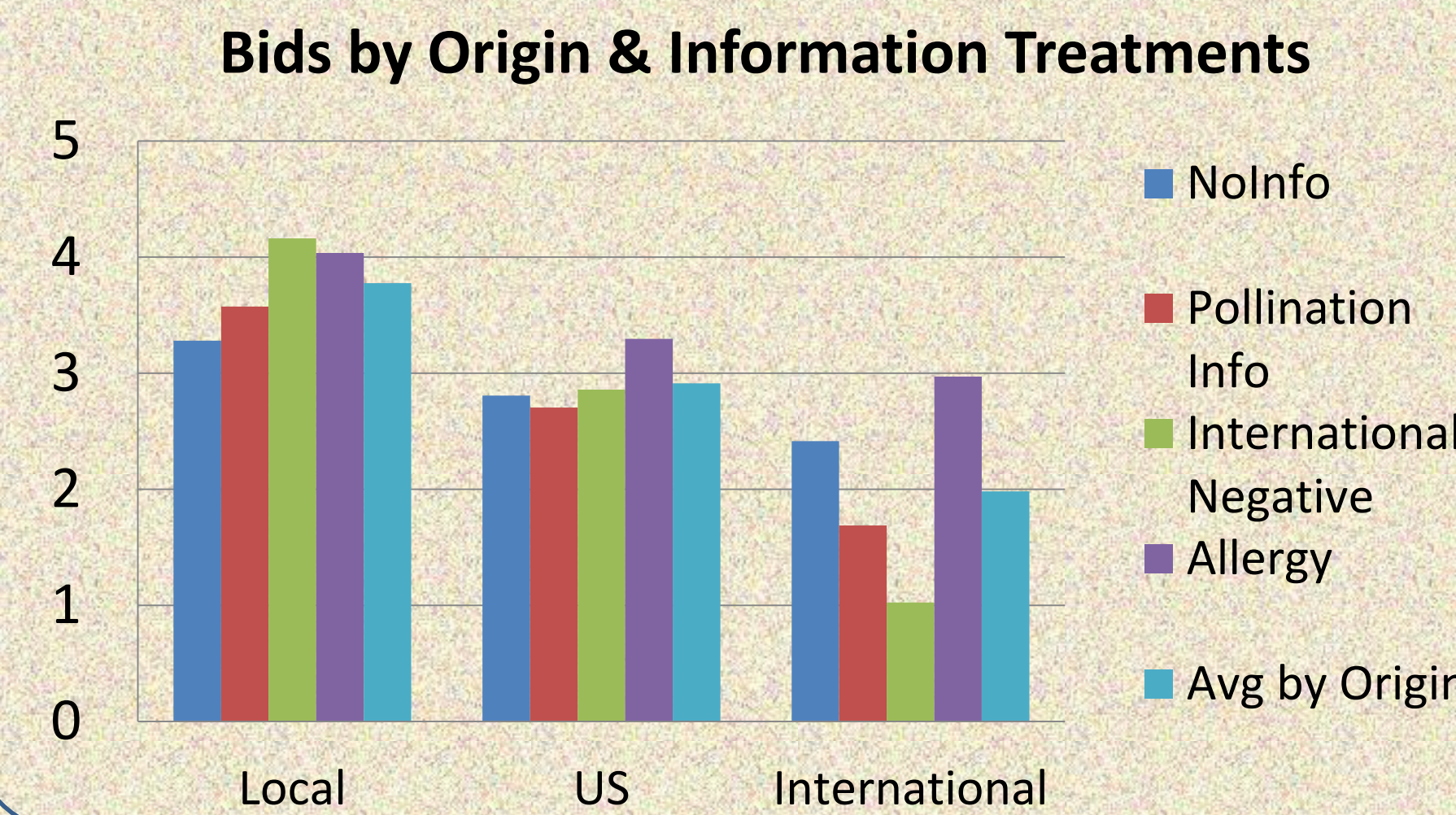


### Origin Labeling:

When honey was labeled as either “Local,” “US,” or “International” with no other information, effects consumers were willing to pay 0.47 more for US honey, and 0.97 more for local honey as compared to international honey.

### Effects of Information

Using small tags that could be affixed to the honey jars we offered consumer participants one of four different information treatments: no information, negative information about impurities in international honey, positive information about bee pollination, and positive information about purported effects of local honey on allergies. The results are displayed below:



Notably, the allergy information is largely ineffective relative to the no information treatment. However when given the negative treatment, consumers were willing to pay an additional \$1.89 premium for US honey, and \$2.77 for local honey (on top of the origin labeling premium), while for the pollination information consumers were willing to pay an additional \$0.67 premium for US honey, and \$1.07 for local honey.

## Next Steps

The preliminary results of this research have already been presented at beekeepers association meetings. The Honey Producers Working Group will reconvene this spring to discuss the results and develop pilot marketing strategies. Members of the working group will implement these strategies for several months and meet once again to determine what strategies were successful. The results of this will be compiled into an extension publication and be incorporated into Dr. Delaney’s extension activities.

