

Predicting Willingness-to-Pay a Premium for Integrated Pest Management

Produce: a logistic approach – Comment

Paul J. Ferraro

Department of Economics

Andrew Young School of Policy Studies

Georgia State University

University Plaza

Atlanta, GA 30303-3083

(T) 404-651-1372; (F) 404-651-0425

pferraro@gsu.edu

Kristin Rowles

Department of Applied Economics & Management

Cornell University

Ithaca, NY 14853-7801

Current address:

301 Drexel Ave., Decatur, GA 30030

(T) 404-377-1808; (F) 404-651-0425

krowles@mediaone.net

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Abstract

Much has been written about consumer willingness-to-pay for eco-labeled products. Govindasamy, Italia and Adelaja show that consumers are willing to pay a premium for produce labeled to indicate it was grown with integrated pest management (IPM) techniques. The fact that IPM-labeled products offer farmers net financial benefits, however, does not imply that farmers will adopt IPM labels. Despite having already adopted IPM techniques, apple growers and processors in New York are resistant to IPM labeling. We argue that the eco-labeling issue is far more complex than many of the analyses in the literature suggest.

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In the October 2001 edition of *Agricultural and Resource Economics Review*, Govindasamy, Italia and Adelaja (hereafter GIA) make a valuable contribution to the eco-labeling literature with their econometric analysis of consumer willingness-to-pay for produce labeled to indicate that it was produced under Integrated Pest Management (IPM) methods. In explaining the motivation for their analysis, GIA note that “[t]he fact that IPM produced products offer farmers environmental and financial benefits does not imply that consumers will automatically view such products from a win-win perspective.” The authors therefore go on to estimate consumer demand for IPM-labeled produce.

Our motivation for writing this comment derives from a parallel sentiment: the fact that IPM produced products offer farmers environmental and financial benefits does not imply that farmers will automatically view IPM labeling from a win-win perspective. Our observations of the growers’ perspective of the IPM-labeling debate come in part from work with apple growers in New York.¹

As GIA point out, many farmers support IPM research and have adopted IPM techniques. Most apple growers in New York use at least some IPM practices.² As GIA and others (Blend and van Ravenswaay 1999; references in GIA) have observed,

¹ K. Rowles was a marketing researcher for the project “Development of an Environmentally Sound, More Profitable System for Production and Marketing of Value Added Processing Apple Products in the Northeastern United States” conducted as a multidisciplinary effort at Cornell University between 1997 and 2002.

² According to the New York Apple Association, there are 674 apple growers in New York. A 1996 survey of 136 New York apple growers found that more than 85% of growers used scouting, cultural, and chemical IPM techniques (Kovach et al. 1997).

consumers may be willing to pay a premium for IPM-labeled produce. At least one major grocery chain, Wegman's, hopes to supply this demand by creating an IPM labeling program. Many apple growers in NY, however, are opposed to IPM-labeling. The state's leading apple grower trade associations have passed resolutions questioning the pursuit of IPM labeling strategies by state extension programs (Donahue, 1997a; Donahue, 1997b; Gempler's, 1997). Furthermore, in the 2000-2001 growing season, only four New York apple growers participated in the only existing apple IPM labeling programs in the Northeast U.S., *Core Values*. Like the growers, apple processors generally are also not interested in IPM labels for apple products (Rowles, 2001). If apple growers are already using IPM methods and could receive a price premium by adding an inexpensive label indicating that the apples are grown under IPM, why wouldn't they want to adopt the label?

From the perspective of NY apple growers, the issues of *growing* apples with IPM and *labeling* apples as IPM-grown are completely different. Growing apples with IPM is a farm-level production decision dictated by financial concerns. Labeling apples as IPM-grown, however, is a marketing decision that implicitly recognizes consumer fears about pesticides. GIA note that "[n]umerous studies have placed pesticide residues as a top concern for consumers relative to other food safety issues. Regardless of whether these fears are legitimate or exaggerated, public perceptions of the risk posed by pesticides translate into very real effects in the marketplace." The poster child for public pesticide fear is the Alar "scare" of the late 1980s, which had a large negative effect on the US apple industry and is still prominent in the minds of many apple growers.

Many apple growers believe that consumer fears about pesticides are unwarranted and are being fanned by organizations committed to a ban of synthetic pesticides. To label produce as “IPM-grown” is to suggest that reductions in pesticide use are a good thing for consumers and society, thereby implicitly validating the fears of the public and the activities of anti-pesticide organizations. Apple growers are concerned that future regulation of pesticides will be driven by consumer fears about pesticides, and not by objective scientific information. By labeling produce as IPM-grown, many apple growers may believe they are indirectly sowing the seeds of their own costly future regulations.

They also fear that consumer reaction to IPM labels may be more complex than consumer studies have indicated. Apple growers and processors are wary that IPM labels may raise fears about pesticide use with consumers who are not currently concerned about the issue. As one processor noted in an industry survey, “it draws attention to something that shouldn’t be an issue” (Rowles, 2001). Consumer response may also be more complex than willingness to pay studies indicate. For example, Blend and van Ravenswaay (1999) found that consumers with prior familiarity with IPM concepts were less likely to buy IPM labeled apples than those that did not have this prior knowledge. In addition to these concerns, apple growers are also concerned about the institutional difficulties of creating a label that consumers trust. The potential complexity of consumer response adds additional risk to the decision to use an IPM label.

Labeling is thus not simply an issue of comparing the price premium from labeling to the direct costs of labeling. Labeling also plays an important role in the larger social debate about the safety of pesticide residues in the food supply. In the language of

game theory, IPM-labeling is a dynamic game with payoffs other than the price premium at the supermarket. Labeling affects the future actions of other important players in the game, such as consumers, lawmakers and regulators, and thus can affect future payoffs.

What makes the case of NY apple growers all the more intriguing is that most apple growers in New York use some form of IPM to manage their orchards. It would seem clear that an *individual* farmer would have a strong incentive to label his or her apples as IPM-grown if he or she is already using IPM and can receive a higher price per bushel.³ Yet despite salient individual incentives for labeling, the coalition of farmers against IPM-labeling has held fast. We observe few transparent, powerful mechanisms for punishing defectors from the collective strategy and thus conclude that individual farmers likely perceive the future costs of IPM-labeling – i.e., more public fear of pesticides and more action to restrict their use – to be substantial compared to the current benefits from labeling in the form of higher prices for their apples.

We are not passing judgment on the validity of the apple growers' perspective nor do we wish to suggest that all NY apple growers share the perspective we have outlined above. Our observations do, however, suggest that the issue of eco-labeling is more complex than how much consumers are willing to pay for eco-labeled produce, and we believe they offer insights into new paths for further research on eco-labeling.

³ Other surveys have also found that growers perceive individual benefits to labeling from greater differentiation of their product from third party approval, access to new markets, and, in some cases, greater control over the marketing and sales of their product (Green 2000).

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