Product Differentiation Protection: 
Developing a Strategy for Multiple Producers 
of Regional Specialty Crops

by

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Abstract

Specialty crops grown by multiple producers are often viewed by consumers as differentiated products that command a price premium. Since price premiums are dependent upon differentiation of an item from generic counterparts, specialty crops must have distinctive identities that cannot be copied or mimicked by others. Trademarks are normally employed to differentiate and protect products, but the limitation of trademarks to products from a single source means that differentiation of specialty crops grown by multiple producers may involve difficulties in precluding free riders from adopting the same name. Through a case study of Georgia’s Vidalia Onions and an examination of producer price data, this article explores the problem of the protection of product differentiation of regional specialty crops grown by multiple producers.

Statement of Problem

As the market prices of traditional agricultural commodities have fallen through much of the 1980s, specialty crops have become more important to the rural economy (French; Rathwell). Some authors have noted consumer demand for exotic and unusual produce such as oriental vegetables and tropical fruit (Galanti; Green; Hamm; Sanok; Schwartz-Creech; Skenazy; Zarwell). Kline and Miskell have classified organically grown produce, baby vegetables, and out-of-season vegetables as specialty crops. Specialty crops may also include traditional crops that have distinguishing characteristics, such as regional produce and tree-ripened fruit (Acuff).

While differentiation is not difficult for some specialty products, such as exotic or non-traditional produce, other products can only be distinguished from facsimiles by distinctive labels or other written information. Specialty crops may be particularly vulnerable to fraud since often the differentiating feature is not
Product differentiation is popular with many vegetable and fruit crops, and has achieved some success as a viable procedure to promote an otherwise homogeneous product (Marks; Miskell; Zarwell). Examples include Florida Oranges, Idaho Potatoes, Washington State Apples, and Georgia Peaches. In the sweet onion market, regionally grown onions include Walla-Walla Onions from Washington State, the Hawaiian Maui, Texas 1015s, Imperial Sweets from California, and Vidalia Onions. These names imply certain quality characteristics and geographical sources.

Consumer demand for specialized products is often accompanied by a willingness to pay a premium for these products. To meet this demand, merchandisers, commodity groups, and state legislative bodies have developed rules which delineate impermissible activities, preclude unfair practices concerning the use of names and symbols by others, and provide legal redress against the appropriation of a name or description by competitors (Fletcher; Hobbs). Product differentiation enables consumers to make an informed decision based on the quality and price of a product. In the absence of adequate product differentiation, consumers may be limited to price information in selecting a product, and often purchase the lowest priced good. Assuming that higher quality products cost more to produce, the result is that lower-priced goods may drive higher quality products out of the marketplace. This situation has been referred to as the "lemons problem" (Akerlof). If the lemons problem exists, the market for the superior product is jeopardized.

Product differentiation is accompanied by reduced consumer search costs in the selection of items for purchase. Through an analysis of trademarks, Landes and Posner have shown that trademark law not only serves as an incentive to improve a product's quality but also promotes the production of higher quality products. Moreover, as a product's trademark increases in strength, price per unit of quality will increase so that a stronger trademark results in greater benefits to the seller. In the absence of adequate differentiation, such as the fraudulent use of a trademark, product confusion may lead to
a price reduction of the product having the superior quality. For example, if consumers think they are buying product A, a quality product, but in fact are purchasing an inferior product B, product confusion exists. The continued infringement by product B will tend to decrease the price consumers are willing to pay for product A which will decrease the incentive to produce a high-quality product (Landes and Posner).

Price and Premium Examination

Producer price data on Vidalia Onions and competing onions during the major marketing period for Vidalia Onions are examined to show the Vidalia Onion price premium. The primary competing sweet onions come from the Texas Rio Grande Valley and are referred to as 1015 supersweet onions (10 15s). Daily price and shipment data on Texas and Vidalia Onions at the producer level were collected for 1982-89 (USDA 1982-89). Because of the short harvest period and storage life of Vidalia Onions, only sales during the Vidalia Onion season, generally from early May to the middle of June, were examined.

Table 1 presents Vidalia Onion price information at the producer level. Over an eight-year period, the annual mean Vidalia producer price ranged from a high of $26.18 per 50 lb. bag in 1984 to a low of $8.20 per 50 lb. bag in 1988. The 1989 data are especially interesting because of the existence of a temporary federal marketing order for Vidalia Onions. The 1989 mean price was $14.13, which approaches the mean of the eight-year total. But the 1989 Vidalia Onion price variance was 4.694, which was the lowest variance of any of the years examined, except the atypical years of 1982 and 1984 when extremely cold winter temperatures damaged the Vidalia crop.

Table 2 shows the average, Vidalia price premium at the producer level, with the number of daily market observations per year varying from a low of 9 in 1982 to a high of 34 in 1983. For each of the years examined, the Vidalia premium at the producer level was significantly different from zero at the .01 level. Table 2 also presents total shipments of 50 lb. bags per year for Georgia and Texas onions up through 1988. As is evident, large increases in shipments of Vidalia Onions decreased the mean premium. The doubling of Georgia acreage planted in 1983 resulted in the next to smallest mean premium ($5.44) of the eight years. Poor Georgia growing conditions in 1982, 1984, and 1985 precipitated the greatest mean premiums of the eight years. In recent years, the mean Vidalia premium has decreased to atypical lows, although the 1989 mean premium rebounded to the $10 level. This has occurred as Georgia shipments have increased to record levels.

Since the first discovery of fraudulent Vidalia onions in 1985, the mean Vidalia premium decreased annually until 1989. It is feasible to hypothesize brand infringement was one of several causal factors in this decrease. At present, the Vidalia Onion database is not sufficient to test various hypotheses concerning past brand infringement and the effect of fraudulent use of the Vidalia name. Furthermore, it would be difficult to evaluate these influences on price when many factors are changing in an industry. This was especially true for 1989 where the Vidalia marketing season began earlier than usual (April 15th), a temporary federal marketing order existed, and there was a trial use of Vidalia onion storage facilities. However, the data does support the examination of institutional responses that could assist in the protection of the price premium.

Institutional Responses

The United States' legal system has adopted several institutional devices to foster product differentiation. Devices include marks, trademarks, brand names, trade names, certification marks, collective marks, and marketing legislation. Institutional devices are designed to protect consumers by providing producers legal redress against competitors who may try to benefit from the use of confusing, deceiving, or misleading labels and devices. Thus, institutional devices provide producers a means of protecting their investment in the costs of producing and marketing quality products.

Multiple producers who do not belong to a common organization cannot employ the common devices of trademarks and brand names, as legal provisions require the products come from a single source (Centner). Thus, the multiple producers of Georgia's Vidalia Onions cannot obtain a trademark for this appellation, nor can the term "Vidalia Onions" qualify as a brand name. However, three specialized institutional responses are available. Multiple producers may join a marketing cooperative, seek marketing legislation to differentiate their products, or employ certification marks.

Cooperatives have historically provided a means for multiple producers to come together to accomplish common goals. Sunkist and
### Table 1
Price Information at the Producer Level per 50 lb. Bag for Vidalia Onions, 1982-89

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
<td>Mean ($)</td>
<td>23.30</td>
<td>9.83</td>
<td>26.18</td>
<td>23.56</td>
<td>15.02</td>
<td>16.82</td>
<td>8.20</td>
</tr>
<tr>
<td></td>
<td>No. of Obs.</td>
<td>18</td>
<td>39</td>
<td>25</td>
<td>15</td>
<td>26</td>
<td>25</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Variance</td>
<td>0.5882</td>
<td>24.6655</td>
<td>0.1016</td>
<td>5.6380</td>
<td>9.9784</td>
<td>9.8308</td>
<td>16.44</td>
</tr>
<tr>
<td></td>
<td>Maximum Value ($)</td>
<td>24.00</td>
<td>22.00</td>
<td>27.00</td>
<td>27.00</td>
<td>19.00</td>
<td>20.00</td>
<td>21.00</td>
</tr>
<tr>
<td></td>
<td>Minimum Value ($)</td>
<td>22.00</td>
<td>5.25</td>
<td>26.00</td>
<td>21.00</td>
<td>9.50</td>
<td>10.00</td>
<td>5.00</td>
</tr>
<tr>
<td></td>
<td>Std. Error of Mean</td>
<td>0.1807</td>
<td>0.7952</td>
<td>0.0637</td>
<td>0.6130</td>
<td>0.6195</td>
<td>0.6270</td>
<td>0.7804</td>
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</table>

*U.S. Department of Agriculture, Southeastern Fruit and Vegetable Report.

### Table 2
Premium Information at the Producer Level per 50 lb. Bag for Vidalia Versus Texas Onions, 1982-89

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
<td>Mean ($)</td>
<td>16.63</td>
<td>5.44</td>
<td>20.89</td>
<td>18.90</td>
<td>13.96</td>
<td>6.35</td>
<td>4.65</td>
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<tr>
<td></td>
<td>No. of Obs.</td>
<td>9</td>
<td>34</td>
<td>24</td>
<td>13</td>
<td>14</td>
<td>21</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Standard Deviation</td>
<td>1.87</td>
<td>5.30</td>
<td>0.436</td>
<td>2.36</td>
<td>2.92</td>
<td>1.23</td>
<td>3.93</td>
</tr>
<tr>
<td></td>
<td>Minimum Value ($)</td>
<td>14.50</td>
<td>0.00</td>
<td>20.00</td>
<td>16.00</td>
<td>4.50</td>
<td>4.50</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Maximum Value ($)</td>
<td>19.00</td>
<td>18.25</td>
<td>21.25</td>
<td>22.50</td>
<td>16.00</td>
<td>8.50</td>
<td>16.00</td>
</tr>
<tr>
<td></td>
<td>Std. Error of Mean</td>
<td>0.6237</td>
<td>0.9093</td>
<td>0.0889</td>
<td>0.6569</td>
<td>0.7826</td>
<td>0.2697</td>
<td>0.7576</td>
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<tr>
<td></td>
<td>t-Value</td>
<td>26.67</td>
<td>5.99</td>
<td>234.99</td>
<td>28.78</td>
<td>17.84</td>
<td>23.56</td>
<td>6.15</td>
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<tr>
<td></td>
<td>Bags Shipped Georgia*</td>
<td>300,800</td>
<td>812,800</td>
<td>339,200</td>
<td>330,400</td>
<td>560,000</td>
<td>728,800</td>
<td>932,000</td>
</tr>
<tr>
<td></td>
<td>Bags Shipped Texas**</td>
<td>NA</td>
<td>5,932,000</td>
<td>4,608,800</td>
<td>3,985,600</td>
<td>5,519,200</td>
<td>4,839,200</td>
<td>5,316,000</td>
</tr>
</tbody>
</table>

*U.S. Department of Agriculture, Southeastern Fruit and Vegetable Report.

**U.S. Department of Agriculture, Texas Vegetable Report.

NA = Not Available.
National Grape Co-operative Inc. disclose how effective this form of business may be for producers (Kirkman). Furthermore, successful new marketing cooperatives are still being formed (Arthur). However, given the independent and competing Vidalia Onion marketing programs already developed by several producers, this alternative does not appear to offer a feasible response for this particular regional specialty crop.

The second institutional device available to multiple producers of specialty crop products is state and federal marketing legislation. Such legislation may establish quality control requirements to provide a means for producers to differentiate products, or in addition, legislation also may authorize marketing orders. Marketing orders can establish and maintain research, minimum standards on maturity and grading, and packing and inspection requirements for enumerated agricultural commodities. The major purpose for most federal fruit and vegetable marketing orders is to establish common grades, quality standards, and promotional funds (Jesse and Johnson).

The case study of Georgia Vidalia Onions shows that although producers may convince a state legislature to address this problem through state legislation (Official Code), such legislation only applies to activities within the state's geographical jurisdiction. Thus, the Vidalia Onion legislation does nothing to preclude out-of-state producers from selling onions labelled Vidalia Onions in other states. A federal marketing order could operate to preclude producers and merchandisers from other regions from using the same appellation. With respect to Vidalia Onions, growers approved a temporary federal marketing order in March 1989 (Federal Register), but the specific language of the order does not appear to protect the appellation "Vidalia Onions." However, the federal marketing order contains provisions to generate reserves for promotional activities so that all producers share advertising costs.

A certification mark is a variation of a trademark available to non-producers of a product to certify its origin, quality, or other characteristics that distinguish the product from others. Certification marks may be registered by persons, nations, states, municipalities, or other groups who exercise legitimate control over the use of the mark sought to be registered (U.S. Code). Although producers using a certification mark do not own the mark, they benefit from its existence because a registered certification mark allows non-qualifying infringers to be precluded from adopting the same or similar appellation. In this manner, a certification mark addresses the identification characteristic to preclude free riders from marketing facsimiles that would confuse consumers.

A search of the Dialogue information service disclosed 32 certification marks for natural agricultural products. These include the following certification marks owned by the listed groups:

- "A Taste of Iowa" - Iowa Development Commission;
- "Michigan Asparagus" - Michigan Asparagus Advisory Board;
- "Grown in Idaho" - The State of Idaho;
- "Florida" - State of Florida Department of Citrus;
- "Island Bakers" - Prince Edward Island Market Development Corp.;
- "State of Maine" - Department of Agriculture of Maine;
- "Grown in NY State" - New York Department of Agriculture;
- "Tennessee Certified" - Tennessee Crop Improvement Association; and

These examples disclose that a state department of agriculture may serve as an appropriate owner for a certification mark. Georgia's Vidalia Onions could be registered as a certification mark by the State of Georgia or the Georgia Department of Agriculture. Such registration would provide federal protection for the term Vidalia Onions so that onion producers from other states could not label their onions as Vidalia Onions without violating federal law.

Implications

The purpose of this research has been to investigate devices and procedures that might be adopted to assist multiple producers of specialty crops in differentiating their products to protect a price premium. The findings are not only relevant to specialty crops, but apply to all products that need legal protection to preclude free riders from appropriating the product's appellation in the marketplace. This is important not only to producers but also to con-
sumers, retailers, and wholesalers who might inadvertently purchase fraudulent products.

An examination of Georgia's Vidalia Onions confirmed that these onions were a specialty product with a price premium. Specialty crop producers with a recognizable and strong appellation are subject to fraudulent infringement of their appellation in the absence of legal protection. Free riders may attempt to obtain premiums associated with a stronger appellation. Fraudulent use of an appellation of an unregistered product will lead to consumer confusion about the quality of the specialty product which may contribute to the decrease of the price premium of the product with the stronger appellation.

The inability of multiple producers of a specialty product to obtain a trademark means that federal certification marks and marketing orders offer the most viable means of achieving product differentiation. A certification mark registered by a state commodity group or state department of agriculture would preclude other producers throughout the country from lawfully using that mark. In the alternative, a federal marketing order may effectuate product differentiation protection for qualifying products if approved by producers.

The two alternative protection devices suggested are not mutually exclusive. Multiple producers of a specialty crop might obtain a federal certification mark to prevent product name infringement and a federal marketing order that could respond to other marketing problems, such as quality or advertising issues. A certification mark would provide for rapid protection of the appellation without any major commitment of time, political capital, and money, as required for a marketing order. Specific conditions and personalities will dictate which alternative or combination of alternatives is most feasible.

Endnotes

1 Data are from the Texas Vegetable Report for onions from the Rio Grande Valley rather than specifically for 1015s.

2 The order refers to "Vidalia Onions grown in Georgia" and "Georgia Vidalia Onions" which leaves open the inference that Vidalia Onions may come from somewhere other than Georgia (Federal Register).

References


