For Some, The Price is Right

by Bridget Behe and Tom Dudek

Pricing products has the appearance of being cost-based and somewhat mathematical until you realize the art involved in finding the right price. When is the price right? When you not only cover all of the costs involved, but you also generate your profit goal.

The cost is one part of the equation, but not the only part. Knowing your costs (of production, transportation, marketing, overhead, etc) is the first step to finding the right price. Many horticultural professionals don’t make the time to develop systems to help them calculate costs on a regular basis. And it is a system that is needed, since costs change about as often as gasoline prices.

Often, retailers will mark-up items using a standard percentage to identify the retail price of the item. A simple mark-up on cost formula uses a set percentage and multiplies that by the item’s cost. If the standard percentage mark-up on cost for a 4-inch container is 200 percent, and a pot is $1.29, then the retail price is calculated by:

\[ \text{Retail Price} = \frac{2.00 \text{ (or 200\%)}}{1.29} \]

\[ = \frac{2.58}{1.29} \]

\[ = \text{Retail Price} \]

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The mark-up on cost percentage may vary by product line. For example, the mark-up on fertilizer might be 150 percent, the mark-up on annuals might be 300 percent, and the mark-up on perennials might be 250 percent. But how do you know if that is the right price?

Another way to determine if the price is right is by the product life cycle. Products, like plants and people, go through distinctive phases of growth in sales and profits (Figure 1). In the introduction stage, sales are slow and profits are negative due to high initial costs of product development. Prices are often high, since little competition exists and the real product innovators are excited to buy the new product, even at a high price. Once more people buy the product, sales grow rapidly in the growth phase of the product life cycle. Pressure from an increasing number of competitors drives prices down, the pace of which is set by how many competitors come in and how quickly they speed up their production. This is the phase in which most profits are made for most businesses, since they can keep prices relatively high and glean profits before too many competitors enter the market. In the mature stage of the product life cycle, sales growth slows and profits dry up, largely due to the overproduction of the product which drove prices down so low that they’re no longer profitable (Figure 1).
Pricing Affects Everyone

Prices can be higher earlier in the product life cycle, but we all know in which direction they'll go. Profits need to be made early, or they can only be made by selling a tremendous volume of the product. We know the pattern of sales and profits, but the unknown is the length of time the product will be on the market. It is that unknown that makes pricing like a game of chess.

We looked at a practical way to see whether the price was right by surveying prices of five common annual plant container sizes in spring 2007. Prices were obtained through a convenience sample of 79 businesses in a six-county area of Western Michigan, primarily Grand Rapids, and represents 98 percent of the businesses asked for prices. All businesses were independent retailers; no chain or box stores were included. Prices were from the first week of May, 2007.

One goal of the investigation was to show retailers how some pricing strategies are detrimental to everyone, including their own business. Another objective was to show retailers the upper end of possible prices, giving them some objective information on which to base next year's pricing decisions.

Figure 2 shows the price range for a 4-inch single species container. Retail prices ranged from $1.50 to $4.99 with an average or mean retail price of $2.83. What can account for a $3.50 range in retail prices? Cost of production cannot account for all of that difference. Neither can geography since the retailers were all within a 25-mile radius of a point in Western Michigan. There were 19 businesses with a retail price higher than the mean. How could those businesses charge a higher retail price? They likely have the customers who are willing to pay those premium prices. A more important question might be asked of the 35 businesses that sold 4-inch containers below $2.83. Could they be leaving some profits on the table at such a low price, especially the two businesses with retail prices at $1.49?

For a 36-count flat (Figure 3), prices ranged from $5.29 to $12.29 or a $7 range. The average price for a 36-count flat was $9.02. There was a similar range in prices for a 48-count flat (Figure 4). Those prices ranged from $5.99 to $12.00 with an average of $9.90. Some retailers are likely selling flats at below-cost prices. What does this strategy do to the entire market?

It is difficult for some customers to differentiate between products. When they can't tell a big difference between Behe's flats and Dudek's flats, they will differentiate purely on price. Our inability as an industry to differentiate between products is exaggerated by retailers who do sell at or below cost. It only pushes everyone closer to the mature stage of the product life cycle where profits only exist to those who sell massive quantities.

We saw an even greater range in the price of a 10-inch hanging basket (Figure 5). Prices ranged from $5.98 to $21.95 or a $15.97 retail price range. For the 12-inch hanging basket (Figure 6), prices ranged from $12.00 to $25.99, with an average of $19.46. Again, cost of production cannot account for the entire $14 to $16 price differential.

Discounts

One more pricing component is discounts. What happens when a retailer discounts prices? Psychologically, we teach some customers to expect this again next year. Nearly every American who buys Christmas gift wrap does so in the days after Christmas because we expect the price to be heavily discounted.
What revenue is possible at that price? If all 500 plants were sold, total revenue would be $4.99 x 500 = $2,495. This gives the retailer a profit of $1,850 or $2,495 - $645 = $1,850. If the target profit goal was $1,600, the retailer would only need to sell 450 units. Calculate that by adding $1,600 to $645 cost ($2,245) and dividing it by the price ($4.99).

Let's imagine the retailer wants to discount price by 10 percent to $4.49. Typically 10 percent off isn't enough to stimulate much more demand, but it's something to consider. The break-even point goes up to 144 units at this new lower price, meaning they have to sell 15 more plants before total costs are recovered, but they would achieve a $1,600 profit goal at this price selling all 500 plants. Consider next a 20 percent discount to $3.99. This price moves the break-even point up 33 plants to 162 plants and changes both sales and profits. If the retailer wanted to achieve $1,600 in profits at this price, one must have to sell 63 more plants than at $4.49! Discounting even more takes a greater toll on profits. At a 25 percent price reduction, they would have to sell 100 more plants to achieve the profit goal of $1,600. At a 30 percent reduction, they have to sell 643 plants, not 500 to achieve a profit of $1,600. And at 50 percent the number of units doubles to achieve the same profit goal.

Who has the right price? The grower or retailer who can cover all of the costs of production and generate sufficient profit to sustain the business is the one with the right prices. If you sell out of product too quickly, did you set the price high enough? If there is a surplus on the market, do you have a competitive price to move enough units to make this item profitable? With all of your costs on the rise, have you taken a long, hard look at your prices? Maybe it's time to devote some new energy this winter so that come spring your customers will say (and buy to show) that the price is right!

discounted. Why would we buy at any other time? Table 1 shows the effect heavy discounting can have on profits. If a retailer has 500 4-inch containers to sell (with a cost of $1.29 each) and is considering a $4.99 price point, what is the break-even point? Total cost is $645 and break-even is calculated by dividing total cost by the price of $4.99. So, the retailer literally breaks-even when the 129th unit is sold, and profits will be generated on the 130th unit sold.

Table 1. Effect of discounting on profits generated and the number of units needed to be sold to achieve a specified profit goal.

<table>
<thead>
<tr>
<th>Retail Price (cost=$1.29)</th>
<th>Units available for sale</th>
<th>Break-even units (total cost $645)</th>
<th>Sales revenue generated if all 500 were sold</th>
<th>Profit generated if all 500 were sold (sales-cost $645)</th>
<th>How many units do I need to sell to achieve $1,600 in profit?</th>
</tr>
</thead>
<tbody>
<tr>
<td>$4.99</td>
<td>500</td>
<td>129</td>
<td>$2,495</td>
<td>$1,850</td>
<td>450</td>
</tr>
<tr>
<td>$4.49 (10% off)</td>
<td>500</td>
<td>144</td>
<td>$2,245</td>
<td>$1,600</td>
<td>500</td>
</tr>
<tr>
<td>$3.99 (20% off)</td>
<td>500</td>
<td>162</td>
<td>$1,995</td>
<td>$1,350</td>
<td>563</td>
</tr>
<tr>
<td>$3.74 (25% off)</td>
<td>500</td>
<td>172</td>
<td>$1,870</td>
<td>$1,225</td>
<td>600</td>
</tr>
<tr>
<td>$3.49 (30% off)</td>
<td>500</td>
<td>185</td>
<td>$1,745</td>
<td>$1,100</td>
<td>643</td>
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<td>500</td>
<td>259</td>
<td>$1245</td>
<td>$600</td>
<td>901</td>
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</tbody>
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