



April 12, 2011

Dr. Tracy Leskey  
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Dear Dr. Leskey:

This letter is in response to your request for an estimate on losses caused by the Brown Marmorated Stink Bug (BMSB) to the 2010 apple crop in the Mid Atlantic region. While we are not aware of any loss estimate that is based on actual measurements of production, we believe that using our own collected data and data provided by USDA's National Agricultural Statistics Service (NASS), an estimate of BMSB damage to the Mid Atlantic crop can be made.

USApple collects inventory data on apple storage facilities throughout the U.S. on a monthly basis beginning in November, and reports on U.S. apple inventories monthly from November through June of each year in our monthly *Market News* publication. The December 1 inventory report is the most appropriate series to utilize because it represents the first inventory after harvest is complete. Mid Atlantic states with significant apple production in the area where BMSB damage was extensively reported are **Maryland, Pennsylvania, Virginia and West Virginia**. These four states, which represent 9 percent of total U.S. apple production, were used to develop the loss estimate.

Two separate methods were used in generating the BMSB loss estimate. The first method involved comparing December 1, 2010 inventories reported by storage facilities in the 4 states with the inventory figures from December 1, 2009, and adjusting the figures based on USDA NASS production estimates and NASS reports of actual production. NASS issues the first estimate of apple production on August 12 of each year, and reports actual production in July of the following year. With the exception of the 2008 apple crop, when NASS underestimated the actual crop by 5 percent, over the past 20 years, NASS August 12 estimates of the apple crop have been within 2.5 percent of the final production figure.

For the 2010 crop, the NASS August 12 estimate was for a U.S. crop of 226 million (42 #) bushels. The August estimate for the 4 Mid Atlantic States was slightly more than 20 million bushels. Like much of the eastern U.S production area, Mid Atlantic states experienced dry weather late in the growing season that reduced the size of the crop from the original August estimate. In February, 2011, NASS reduced the estimate of the 2010 crop to 221 million bushels, a reduction of 2 percent.

USApple's December 1, 2010 *Market News* Mid Atlantic apple inventories were 23 percent below inventories on the same date in 2009. Adjusting for a 5% reduction in the USDA crop estimate – 3 percent for an annual production adjustment and a 2 percent reduction to account for losses from late

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season dry weather - apple inventories were 18 percent below what would have been expected, implying losses attributable to the BMSB at 18 percent of the 2010 crop in the Mid Atlantic region. A second method of calculating using the previous 5 year average December 1 holdings as the basis for comparison results in a very similar loss estimate of 17.8 percent. An 18 percent loss translates to 3.7 million bushels of fresh and processing apples. Using USDA average prices for fresh and processed apples in the 5 months from October – February gives an estimated loss to growers of \$37 million. It should be kept in mind that the impact of the BMSB is still being realized, and it is uncertain how long it may take to develop adequate controls. The loss to apple growers of \$37 million in income in a single year is a serious matter, but experiencing an 18 percent production loss over multiple years is not sustainable.

### More Crops Than Apples Affected

The \$37 million loss to apple growers is bad enough in itself, but the BMSB attacks virtually all tree fruits, vegetable crops and row crops as well. Below is a table containing the total value of various tree and vine fruit production as reported by USDA NASS for the 4 Mid Atlantic States in 2009. Assuming relatively stable production for 2010, and using a BMSB damage total 18% - the same as estimated for apples - grower losses for tree and vine crops in the 4 Mid Atlantic states in 2010 would be over \$50 million. It should be noted that the 4 Mid Atlantic states represent 9 percent of the total U.S. apple production and we are at an early stage in the expansion of the BMSB across the country. ***If the entire U.S. apple industry sustained losses of 18 percent, the loss figure for the U.S. apple industry alone would be in excess of \$411 million.***

<b>Mid Atlantic States Production of Other Tree and Vine Crops in 2009<sup>1</sup></b>	
Peaches	\$32,104
Grapes	\$37,881
Pears	\$1,786
Tart Cherries	\$1,658
<b>Total</b>	<b>\$73,429</b>
<b>Value in 000's</b>	
Other Tree Fruit loss to BMSB (Est at 18%)	\$13,217
Apple loss to BMSB	\$37,000
<b>Total Tree and Vine Fruit Losses to BMSB</b>	<b>\$50,217</b>

The current growing season continues with uncertainty over what the magnitude of BMSB damage might be this year. The above estimate of losses sustained by growers during the 2010 season calls for a continued concentrated effort towards developing control methodologies for this destructive pest.

Please feel free to contact me with any questions you may have.

Sincerely yours,



Mark W. Seetin  
Director, Regulatory and Industry Affairs

<sup>1</sup> USDA, National Agricultural Statistics Service, Noncitrus Fruits and Nuts Summary and USDA Crop Estimate August 12, 2010