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FCIC-25550 (11-2010)  
FCIC-25550-1 (8-2012)

# **BLUEBERRY LOSS ADJUSTMENT STANDARDS HANDBOOK**

## **2013 and Succeeding Crop Years**



**UNITED STATES DEPARTMENT OF AGRICULTURE  
WASHINGTON, D.C. 20250**

<b>TITLE: BLUEBERRY LOSS ADJUSTMENT STANDARDS HANDBOOK</b>	<b>NUMBER: FCIC-25550 (11-2010) FCIC-25550-1 (8-2012)</b>
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**REASONS FOR AMENDMENT**

Major Changes: Refer to changes or additions in text which have been **highlighted**. Three stars (\*\*\*) identify where information has been removed.

- A. Section 9, Table A, page 39: Added a method to reduce the number of bushes required per sample when excessive uniform hail damage occurs on a field or subfield with a heavy fruit load. The page numbers in the Table of Contents were updated accordingly.

# BLUEBERRY LOSS ADJUSTMENT STANDARDS HANDBOOK

## SUMMARY OF CHANGES/CONTROL CHART (Continued)

Control Chart For: Blueberry Loss Adjustment Standards Handbook							
	SC Page(s)	TC Page(s)	Text Page(s)	Reference Material	Exhibits	Date	Directive Number
Remove	1-2	1-2	-	39-40	-	11-2010	FCIC-25550
Insert	1-2	1-2	-	39-42	-	8-2012	FCIC-25550-1
Current Index	1-2	1-2	1-37	38 39-42	-	8-2012 11-2010 8-2012	FCIC-25550-1 FCIC-25550 FCIC-25550-1

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- (3) The appraised production from at least 60 percent of the samples indicates there will be a “zero” value for production to count.

**EXAMPLE:** Five samples are to be taken. The first 3 samples have insurable damage resulting in a “zero” appraisal, the remaining 2 samples are optional. Where quality adjustment applies and the quality for the samples is comparable, use of the remaining 2 samples is optional.

- B. Pick, sample, and, if applicable, calculate the quality adjustment percentage from each sample for production damaged by insured causes. Record the results separately for each sample on the appraisal worksheet (refer to subsection 5).

### **Supplemental Sample Size and Appraisal Information – Uniform Hail Damage Only; Bushes have Heavy Fruit Loads**

- A. When damage is due to hail, use of less than the “Recommended Minimum Number of Samples” is authorized on a unit basis if the criteria below are met and the bushes selected for sampling are representative of the unit, field, or subfield (refer to subsection 4). This method is NOT allowed to be used in conjunction with the “Supplemental Sample Size and Appraisal Information” method above that permits foregoing the remaining 40 percent of required samples.

(1) Hail damage must be uniform throughout the field or subfield.

(2) Damage from hail only must meet or exceed the 20% level provided in the SP and be uniform across the sample(s) (a combination of disease or other type of damage, and hail damage, cannot be used to meet the SP level).

a. These determinations will be made from the first “full” sample(s) conducted (all four bushes of the first sample(s) must be picked). The number of samples for which a full sample will be required is the greater of 1 sample or 20% (rounded to the nearest whole number) of required samples. For example, if you have a large field that requires 9 samples, this would mean that you must take 2 full samples of 4 bushes each to verify damage level and uniformity ( $20\% \times 9 = 1.8$ ; 1.8 rounded to the nearest whole number is 2, which is greater than 1).

b. The average hail damage from all four bushes of the initial full sample must be equal to or greater than the 20% level provided in the SP. When more than one full sample is required, the average will be calculated using all bushes from the full samples.

c. The percent of hail damage from each bush of the initial full sample must be within 10% of the average of all four bushes. When more than one full sample is required, the percent of damage from each bush must be within 10% of the average calculated in b above.

**EXAMPLE:** the damage level provided in the SP is 20%; nine total samples and two full samples are required, producing the following results:

	Full Sample No. 1				Full Sample No. 2			
	Bush 1	Bush 2	Bush 3	Bush 4	Bush 1	Bush 2	Bush 3	Bush 4
A. % Hail Damage	22.0%	21.0%	22.0%	23.0%	22.0%	21.0%	20.0%	23.0%
B. Avg. Damage for all (8) Bushes	<b>21.8%</b>	<b>21.8%</b>	<b>21.8%</b>	<b>21.8%</b>	<b>21.8%</b>	<b>21.8%</b>	<b>21.8%</b>	<b>21.8%</b>
C. Each Bush's % of Avg. (B/A)	101.1%	96.6%	101.1%	105.7%	101.1%	96.6%	92.0%	105.7%
D. Difference from Avg. (100% - C)	<b>-1.1%</b>	<b>3.4%</b>	<b>-1.1%</b>	<b>-5.7%</b>	<b>-1.1%</b>	<b>3.4%</b>	<b>8.0%</b>	<b>-5.7%</b>

The average damage level from all 8 bushes is 21.8% (found in line B), which is greater than the 20% found in the SP. Additionally, the difference in the percent of damage of each bush compared to the average from all 8 bushes (found in line D) is within  $\pm 10\%$ . As such, for this example, the requirements of (2) have been met.

- (3) The initial harvest has yet to begin or has only just begun (for example, the initial harvest has been going on for about a day, when a hail storm comes through damaging the crop and ceasing harvest).
- (4) It is estimated that if not for hail damage, production would meet or exceed the approved yield.
- (5) Document all pertinent information and calculations in the Remarks section of the appraisal worksheet or on a Special Report form.

B. When the criteria in A are met, this method reduces the required number of bushes per sample from four to one for remaining required samples. For example, when the criteria in A are met, and nine total samples are required, after all four bushes in each of the first two full samples have been picked, the remaining seven samples will require picking of only one bush, not four.



**TABLE B - REPRESENTATIVE SAMPLE REQUIREMENTS FOR  
MACHINE HARVESTED HIGHBUSH AND RABBITEYE  
BLUEBERRIES**

Harvest sample berries from the entire length of row in the field or subfield.

Harvest a minimum 5 percent of the rows in the field or subfield for sampling. Calculate percentages and round decimals up to the next whole number.

A minimum of 1 row per field or subfield will be sampled.

**EXAMPLE:** 20 rows in the field times 5% = 1.0 or 1 sample row. 23 rows in the field times 5% = 1.2 (round up to nearest whole number or 2 sample rows).

**TABLE C - REPRESENTATIVE SAMPLE REQUIREMENTS FOR  
MAINE LOWBUSH BLUEBERRIES**

Acres in Field or Sub-field	Number of Transects*	Samples Required
0.1 to 10.0	3	6
10.1 and above	Add 1 transect (2 samples) for each additional 5 acres (or fraction thereof) in the field or sub field	
* Take one sample (one square meter) at the 100 foot measurement and a second sample at the 200 foot measurement of each transect, two samples per transect.		

**TABLE D - NUMBER OF BUSHES PER ACRE**

		Distance Between Bushes (in feet)									
		1	2	3	4	5	6	7	8	9	10
Distance Between Rows (In feet)	1	43560	21780	14520	10890	8712	7260	6223	5445	4840	4356
	2	21780	10890	7260	5445	4356	3630	3111	2726	2420	2178
	3	14520	7260	4840	3630	2904	2420	2074	1815	1613	1452
	4	10890	5445	3630	2723	2178	1815	1556	1361	1210	1089
	5	8712	4356	2904	2178	1742	1452	1245	1089	968	871
	6	7260	3630	2420	1815	1452	1210	1037	908	807	726
	7	6223	3111	2074	1556	1245	1037	889	778	691	622
	8	5445	2723	1815	1361	1089	908	778	681	605	545
	9	4840	2420	1613	1210	968	807	691	605	538	484
	10	4356	2178	1452	1089	871	726	622	545	484	436
	11	3960	1980	1320	990	792	660	566	495	440	396
	12	3630	1815	1210	908	726	605	519	454	403	363
	13	3350	1675	1117	838	670	558	479	419	372	335
	14	3111	1556	1037	778	622	519	444	389	346	311
	15	2904	1452	968	726	581	484	415	363	323	290
	16	2723	1361	908	681	545	454	389	340	303	272
	17	2562	1281	854	641	512	427	366	320	285	256
	18	2420	1210	807	605	484	403	346	303	269	242
	19	2293	1146	764	573	459	382	328	287	255	229
	20	2178	1089	726	545	436	363	311	272	242	218

For spacing not shown on the chart, multiply the distance between bushes (to the nearest tenth of a foot) times the distance between rows (to the nearest tenth of a foot) and divide the result into 43,560 square feet (round result to the nearest whole number). Refer to the LAM for additional information on calculating the number of trees per acre.

**Example:** 6.5 ft. between bushes X 10.0 ft.