

Exhibit Name: Indemnity Calculations
 Exhibit Number: P21-9, Plan 90
 Record Name: Acreage Claim
 Record Code: P21

Reinsurance Year: 2023
 Version: Draft
 Release Date: 12/14/2023

Insurance Plan Code

90 Actual Production History

<u>Commodity Code</u>	0012 Blueberries	0053 Grapes	0107 Alfalfa Seed	0233 Dark Air Tobacco
	0013 Onions	0054 Apples	0114 Buckwheat	0234 Cigar Filler Tobacco
	0016 Oats	0055 Cultivated Wild Rice	0132 Cucumbers	0235 Cigar Binder Tobacco
	0017 Millet	0058 Cranberries	0147 Pumpkins	0236 Cigar Wrapper Tobacco
	0019 Avocados	0059 Silage Sorghum	0156 Sweet Potatoes	0255 Banana
	0022 Cotton Extra Long	0060 Figs	0158 Triticale	0256 Coffee
	0023 Macadamia Nuts	0064 Green Peas	0201 Grapefruit	0257 Papaya
	0028 Almonds	0067 Dry Peas	0202 Lemons	0309 Mandarins/Tangerines
	0029 Walnuts	0069 Mustard	0203 Tangelos	0333 Camelina
	0031 Flax	0072 Cabbage	0218 Fresh Apricots	0396 Sesame
	0033 Forage Production	0074 Mint	0219 Processing Apricots	0467 Pomegranate
	0034 Peaches	0079 Clary Sage	0220 Fresh Nectarines	0470 Pistachios
	0036 Prunes	0084 Potatoes	0221 Processing Cling Peaches	0501 Olives
	0038 Sugar Cane	0086 Fresh Tomatoes	0222 Processing Freestone	1302 Tangors
	0039 Sugar Beets	0087 Tomatoes	0223 Fresh Freestone Peaches	1218 Hemp
	0042 Sweet Corn	0089 Pears	0227 Oranges	6000 Caneberries
	0046 Processing Beans	0092 Fresh Plums	0229 Flue Cured Tobacco	
	0047 Dry Beans	0094 Rye	0230 Fire Cured Tobacco	
	0049 Safflower	0102 Grass Seed	0231 Burley Tobacco	
	0052 Table Grapes	0105 Fresh Market Beans	0232 Maryland Tobacco	

Calculations

Field Name

Record Number

Field Number

Field Format

Field Rounding

Rules

Section 1: Stage Guarantee Calculation

Without Acreage Limitation:

$$\text{Guarantee Per Acre1} = \frac{\text{Approved Yield} * \text{Coverage Level Percent} * \text{Stage Percent Factor}}{\text{Percent Factor}}$$

Guarantee Per Acre1	Internal		99999999.99	When Unit of Measure equals Pounds, "LBS", then round to whole number. When Unit of Measure equals Tons, "Tons", then round to 2 decimals. Otherwise, round to 1 decimal.	Guarantee Per Acre1 should be rounded to whole pounds for Dry Beans, "0047" (all types), and Dry Peas, "0067" (all types).
Approved Yield	P11	42	99999999.99	None	
Coverage Level Percent	P14	34	9.9999	None	
Stage Percent Factor	P21	47	9.99	None	Edit with ICE Stage Factor, "D00069".

Exhibit Name: Indemnity Calculations
 Exhibit Number: P21-9, Plan 90
 Record Name: Acreage Claim
 Record Code: P21

Reinsurance Year: 2023
 Version: Draft
 Release Date: 12/14/2023

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Without Acreage Limitation for Onions, "0013", Sugar Beets, "0039", Tomatoes, "0086", and Texas Citrus, "0201" and "0227": $\text{Guarantee Per Acre1} = \text{Round}(\text{Approved Yield} * \text{Coverage Level Percent, lbs to 0, ton to 2, all others to 1}) * \text{Stage Percent Factor}$	Guarantee Per Acre1	Internal		99999999.99	When Unit of Measure equals Pounds, "LBS", then round to whole number. When Unit of Measure equals Tons, "Tons", then round to 2 decimals. Otherwise, round to 1 decimal.	
	Approved Yield	P11	42	99999999.99	None	
	Coverage Level Percent	P14	34	9.9999	None	
	Stage Percent Factor	P21	47	9.99	None	Edit with ICE Stage Factor, "D00069". Onions "0013", only, if stage code equal "1" or "2" percent will be submitted on P21 and verified with ICE Stage Factor, "D00069". If Commodity Code equals "0013" or "0039" and Insurance Option Code equals "NS" (Stage Removal Option) values from ICE D00069 will not be used and Stage Percent Factor will be defaulted to 1.00 as to not reduce the guarantee amount.
Cottonseed Endorsement Option "SE": $\text{Modified Yield} = \text{Approved Yield} * \text{Option Conversion Factor}$	Modified Yield	Internal		99999999.99	Round to whole number.	Information (Approved Yield and Insured Share Percent) will be obtained from Cotton P11 record.
	Approved Yield	P11	42	99999999.99	None	
	Option Conversion Factor	ADM		9.9999	None	Edit with ADM Option Rate, "A01060".
$\text{Guarantee Per Acre1} = \text{Modified Yield} * \text{Coverage Level Percent}$	Guarantee Per Acre1	Internal		99999999.99	Round to whole number.	
	Coverage Level Percent	P14	34	9.9999	None	

Exhibit Name: Indemnity Calculations
 Exhibit Number: P21-9, Plan 90
 Record Name: Acreage Claim
 Record Code: P21

Reinsurance Year: 2023
 Version: Draft
 Release Date: 12/14/2023

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
With Acreage Limitation - Onions, "0013" (when provided by Special Provisions) and Potatoes "0084"(Certified Seed): $\text{Guarantee Per Acre1} = \text{Round}(\text{Approved Yield} * \text{Coverage Level Percent, lbs to } 0, \text{ all others to } 1) * \text{Yield Conversion Factor} * \text{Stage Percent Factor}$	Guarantee Per Acre1	Internal		99999999.99	Round to 1 decimal.	
	Approved Yield	P11	42	99999999.99	None	
	Coverage Level Percent	P14	34	9.9999	None	
	Yield Conversion Factor	P11	59	9.999	None	
	Stage Percent Factor	P21	47	9.99	None	Edit with ICE Stage Factor, "D00069". Onions "0013", only, if Stage Code equal "1" or "2" percent will be submitted on P21 and verified with ICE Stage Factor, "D00069". If Commodity Code equals "0013" and Insurance Option Code equals "NS" (Stage Removal Option) values from ICE D00069 will not be used and Stage Percent Factor will be defaulted to 1.00 as to not reduce the guarantee amount.
With Acreage Limitation - Cabbage (except processing), Camelina, Fresh Market Beans, Sweet Potatoes, Silage Sorghum, and Hawaii Tropical Fruit: $\text{Guarantee Per Acre1} = \text{Round}(\text{Approved Yield} * \text{Coverage Level Percent, lbs to } 0, \text{ tons to } 2, \text{ all others to } 1) * \text{Yield Conversion Factor}$	Guarantee Per Acre1	Internal		99999999.99	When Unit of Measure equals Pounds, "LBS", then round to whole number. When Unit of Measure equals Tons, "Tons", then round to 2 decimals. Otherwise, round to 1 decimal.	
	Approved Yield	P11	42	99999999.99	None	
	Coverage Level Percent	P14	34	9.9999	None	
	Yield Conversion Factor	P11	59	9.999	None	

Exhibit Name: Indemnity Calculations
 Exhibit Number: P21-9, Plan 90
 Record Name: Acreage Claim
 Record Code: P21

Reinsurance Year: 2023
 Version: Draft
 Release Date: 12/14/2023

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
$\text{Acre Stage Guarantee Amount} = \text{Guarantee Per Acre} \times \text{Guarantee Adjustment Factor}$	Acre Stage Guarantee Amount	P21	58 65	99999999.99	When Unit of Measure equals Pounds, "LBS", then round to whole number. When Unit of Measure equals Tons, "Tons", then round to 2 decimals. Otherwise, round to 1 decimal.	Acre Stage Guarantee Amount should be rounded to whole pounds for Dry Beans, "0047" (all types), and Dry Peas, "0067" (all types).
	Guarantee Adjustment Factor	P11	69	0 9.999	None	
Section 2: Loss Guarantee Calculation						
$\text{Loss Guarantee Amount} = \frac{\text{Acre Stage Guarantee Amount} \times \text{Determined Acreage}}{\text{Liability Adjustment Factor}}$	Loss Guarantee Amount	P21	60 67	99999999.99	When Unit of Measure equals Barrels or Tons then round to 1 decimal. Otherwise, round to whole number.	
	Determined Acreage	P21	18	99999999.99	None	
	Liability Adjustment Factor	P21	39	9.999999	None	
For Mustard (commodity, "0069"): $\text{Loss Guarantee Amount} = \text{Round}(\text{Lesser of "Determined Pounds or Acre Stage Guarantee Amount"} \times \text{Determined Acreage}, 0) \times \text{Liability Adjustment Factor}$	Loss Guarantee Amount	P21	60 67	99999999.99	Round to whole number.	
	Determined Pounds	P21	20	9999999999	None	
	Determined Acreage	P21	18	99999999.99	None	
	Liability Adjustment Factor	P21	39	9.999999	None	

Exhibit Name: Indemnity Calculations
 Exhibit Number: P21-9, Plan 90
 Record Name: Acreage Claim
 Record Code: P21

Reinsurance Year: 2023
 Version: Draft
 Release Date: 12/14/2023

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules	
Section 3: Indemnity Calculation							
Unit Deficiency Quantity = Loss Guarantee Amount – Production to Count Quantity	Unit Deficiency Quantity	P21	59-66	S99999999.99	Round to 1 decimal		
	Production to Count Quantity	P21	34	99999999.99	None	If Commodity Code equals Cucumbers, "0132", the 'value of production to count' will be divided by price election to arrive at a 'bushel' production to count that will be reported in this field.	
Preliminary Indemnity Amount = Unit Deficiency Quantity * Price Election Amount * Stage Price Percent Factor * Insured Share Percent	Preliminary Indemnity Amount	P21	62-69	S9999999999	Round to whole number.		
	Price Election Amount	P11	45	99999.9999	None		
	Stage Price Percent Factor	ICE		999.99	None	Edit with ICE Stage Factor, "D00069". Stage Price Percent Factor for Potatoes, "0084" will not apply if Stage Code is "C" or "NC". Only Stage Codes "P, C, and NC" applicable if Insurance Option Code List "CL" or "CH".	
	Insured Share Percent	P11	43	9.9999	None		
For Grapes "0053" : Preliminary Indemnity Amount	When Stage Code is Unharvested, "UH": = Unit Deficiency Quantity * (Price Election Amount - Harvest Cost Amount) * Insured Share Percent	Preliminary Indemnity Amount	P21	62-69	9999999999	Round to whole number.	
		Price Election Amount	P11	45	99999.9999	None	
	When Stage Code is Unharvested- Machine Harvested, "UM": = Unit Deficiency Quantity * (Price Election Amount - Harvest Cost Amount Machine) * Insured Share Percent	Harvest Cost Amount	ADM		99999.9999	None	Edit with ADM Price A00810.
		Harvest Cost Amount Machine	ADM		99999.9999	None	Edit with ADM Price A00810.
	When Stage Code is Unharvested- Hand Harvested, "UN": = Unit Deficiency Quantity * (Price Election Amount - Harvest Cost Amount Hand) * Insured Share Percent	Harvest Cost Amount Hand	ADM		99999.9999	None	Edit with ADM Price A00810.
		Insured Share Percent	P11	43	9.9999	None	
For Camelina (-, "0333")-only: Indemnity Amount = MAX(0, ROUND(Preliminary Indemnity - Minimum Payment Amount, 0))	Indemnity Amount	P21	13	S9999999999	Round to whole number.		
		Minimum Payment Amount	P21	62	99999.9999	None	If Minimum Payment is NULL then Indemnity Amount = Preliminary Indemnity

Exhibit Name: Indemnity Calculations
 Exhibit Number: P21-9, Plan 90
 Record Name: Acreage Claim
 Record Code: P21

Reinsurance Year: 2023
 Version: Draft
 Release Date: 12/14/2023

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Section 4: Replant Payment Guarantee Calculation						
When Stage Code equals: Replanted, "R", Replanted Seed, "RS", Replanted Transplant, "RT" Guarantee per Acre1 = Approved Yield * Coverage Level Percent	Guarantee Per Acre1	Internal		99999999.99	When Unit of Measure equals Pounds, "LBS", then round to whole number. When Unit of Measure equals Tons, "Tons", then round to 2 decimals. Otherwise, round to 1 decimal.	Guarantee Per Acre1 should be rounded to whole pounds for Dry Beans, "0047" (all types), and Dry Peas, "0067" (all types).
	Approved Yield	P11	42	99999999.99	None	
	Coverage Level Percent	P14	34	9.9999	None	
Round(Guarantee Per Acre1 * Yield Conversion Factor, Guarantee Per Acre2 = lbs to 0, tons to 2, all other 1) * Guarantee Adjustment Factor	Guarantee Per Acre2	Internal		99999999.99	When Unit of Measure equals Pounds, "LBS", then round to whole number. When Unit of Measure equals Tons, "Tons", then round to 2 decimals. Otherwise, round to 1 decimal.	Guarantee Per Acre2 should be rounded to whole pounds for Dry Beans, "0047" (all types), and Dry Peas, "0067" (all types).
	Yield Conversion Factor	P11	59	9.999	None	
	Guarantee Adjustment Factor	P11	69	9 -9.999	None	

Exhibit Name: Indemnity Calculations
 Exhibit Number: P21-9, Plan 90
 Record Name: Acreage Claim
 Record Code: P21

Reinsurance Year: 2023
 Version: Draft
 Release Date: 12/14/2023

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
<p>Commodity Code <u>not</u> equal to Sugar Beets, "0039" ,-0F- Cabbage, "0072" or Cucumber, "0132":</p> <p>Lesser of:</p> <p>Insured's Actual Cost</p> <p>= Or</p> <p>AIP Acre Stage Guarantee Amount</p> <p>Guarantee Per Acre2 * 0.20 (0.10 for Dry Beans, 0.07 for Onions, 0.25 for Calif. Tomatoes)</p> <p>Or</p> <p>Maximum Replant Guarantee Per Acre</p>	AIP Acre Stage Guarantee Amount	P21	36	99999999.99	<p>When Unit of Measure equals Pounds, "LBS", then round to whole number.</p> <p>When Unit of Measure equals Tons, "Tons", then round to 2 decimals.</p> <p>Otherwise, round to 1 decimal.</p>	<p>The 'lesser of' amount will be submitted in the AIP Acre Stage Guarantee field.</p> <p>AIP Acre Stage Guarantee Amount should be rounded to whole pounds for Dry Beans, "0047" (all types), and Dry Peas, "0067" (all types).</p>
	Insured's Actual Cost	P21 Internal	36	99999999.99		Insured's Actual Cost will be submitted in AIP Acre Stage Guarantee Amount field if lesser of.
	Guarantee Per Acre2	Internal		99999999.99		
	Maximum Replant Guarantee Per Acre	ICE				Edit with ICE "D00129".
<p>Commodity Code equals For Cabbage, "0072":</p> <p>Lesser of:</p> <p>Insured's Actual Cost</p> <p>AIP Acre Stage Guarantee Amount = Or</p> <p>Maximum Replant Guarantee Per Acre</p>	AIP Acre Stage Guarantee Amount	P21	36	99999999.99	Round to 1 decimal.	The 'lesser of' amount will be submitted in the AIP Acre Stage Guarantee field.
	Insured's Actual Cost	P21 Internal	36	99999999.99		Insured's Actual Cost will be submitted in AIP Acre Stage Guarantee Amount field if lesser of.
	Maximum Replant Guarantee Per Acre	ICE				Edit with ICE "D00129".

Exhibit Name: Indemnity Calculations
 Exhibit Number: P21-9, Plan 90
 Record Name: Acreage Claim
 Record Code: P21

Reinsurance Year: 2023
 Version: Draft
 Release Date: 12/14/2023

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Commodity Code equals For Sugar Beets, "0039": Lesser of: $AIP \text{ Acre Stage} = \text{Insured's Actual Cost Guarantee Amount}$ Or Maximum Replant Guarantee Per Acre	AIP Acre Stage Guarantee Amount	P21	36	99999999.99	Round to nearest dollar and cents.	The 'lesser of' amount will be submitted in the AIP Acre Stage Guarantee field.
	Insured's Actual Cost	P21 -Internal	36	99999999.99		Insured's Actual Cost will be submitted in AIP Acre Stage Guarantee Amount field if lesser of.
	Maximum Replant Guarantee Per Acre	ICE				Edit with ICE "D00129".
Commodity Code equals For Cucumbers, "0132": Lesser of: Insured's Actual Cost Or $AIP \text{ Acre Stage Guarantee Amount} = \text{Round}(\text{Guarantee Per Acre}^2 * 0.20, 1)$ Or Maximum Replant Guarantee Per Acre	AIP Acre Stage Guarantee Amount	P21	36	99999999.99	Round to 1 decimal.	
	Insured's Actual Cost	P21 -Internal	36	99999999.99		Insured's Actual Cost will be submitted in AIP Acre Stage Guarantee Amount field if lesser of.
	Guarantee Per Acre ²	Internal		99999999.99		
	Maximum Replant Guarantee Per Acre	ICE				Edit with ICE "D00129".
Section 5: Replant Payment Loss Guarantee Calculation						
$\text{Loss Guarantee Amount} = \frac{\text{Acre Stage Guarantee Amount} * \text{Determined Acreage}}{\text{Liability Adjustment Factor}}$	Loss Guarantee Amount	P21	60 67	99999999.99	When Unit of Measure equals Barrels or Tons, then round to 1 decimal. Sugar Beets will be rounded to nearest dollar and cents. Otherwise, round to whole number.	
	Determined Acreage	P21	18	99999999.99	None	
	Liability Adjustment Factor	P21	39	9.999999	None	

Exhibit Name: Indemnity Calculations
 Exhibit Number: P21-9, Plan 90
 Record Name: Acreage Claim
 Record Code: P21

Reinsurance Year: 2023
 Version: Draft
 Release Date: 12/14/2023

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Section 6: Replant Payment Indemnity Calculation						
Indemnity Amount = $\frac{\text{Loss Guarantee Amount} * \text{Price Election Amount}}{\text{Insured Share Percent}}$	Indemnity Amount	P21	63-70	S9999999999	Round to whole number.	
	Price Election Amount	P11	45	99999.9999	None	
	Insured Share Percent	P11	43	9.9999	None	
Commodity Code equals For Sugarbeets, "0039": Indemnity Amount = Loss Guarantee Amount * Insured Share Percent	Indemnity Amount	P21	63-70	S9999999999	Round to whole number.	
	Insured Share Percent	P11	43	9.9999	None	
Section 7: Replacement Payment Loss Guarantee Calculation for Sugarcane, "0038"						
When Stage Code equals: Plant Cane Current Year, "PC"; Plant Cane Subsequent Year, "PS"; Plant Cane Not Replaced, "PD"; First Year Stubble Current Year, "SC"; First Year Stubble Subsequent Year, "SS"; First Year Stubble Not Replaced, "SD" $\text{Loss Guarantee Amount} = \frac{\text{Base Payment Amount} * \text{Coverage Level Percent}}{\text{Insured Share Percent} * \text{Determined Acres} * \text{Depreciation Factor} * \text{Liability Adjustment Factor}}$	Loss Guarantee Amount	P21	60-67	99999999.99	Round to whole number.	
	Base Payment Amount	Internal		99999999.99	None	Base Payment Amount for the area.
	Coverage Level Percent	P14	34	9.9999	None	
	Insured Share Percent	P11	43	9.9999	None	
	Determined Acreage	P21	18	99999999.99	None	
	Depreciation Factor	Internal		9.999	None	Depreciation Factor by Stage Code, ICE D00069. If "Insurance Option Code List" equals "RD" then Depreciation Factor will equal 1.000.
	Liability Adjustment Factor	P21	39	9.999999	None	
Section 8: Replacement Payment Indemnity Calculation for Sugarcane, "0038"						
Indemnity Amount = AIP Indemnity Amount	Indemnity Amount	P21	63-70	S9999999999	Round to whole number.	
	AIP Indemnity Amount	P21	13	S9999999999	Round to whole number.	AIP Indemnity Amount cannot exceed Loss Guarantee Amount.