



Use BLOCK CAPITALS
 Complete all fields.
 Circle relevant descriptions shown in *italics*.

MSB Serial Number:
 NRCS PLANTS Code:
 Cleaning Facility:

Date(s) Collected (DD/MM/YY): Seed Collection Reference Number:

Collector(s):

Country: Ecoregion (T,O, B): State: County:

Location Details:

Lat. (dg/min/sec) (ex: 40° 34' 19.5" N): GPS Used?: If no, please see other side.

Long. (dg/min/sec) (ex: 107° 36' 51.54" W): GPS Datum:

Elevation (feet): Landowner Details (Permission?):

HABITAT DATA

Habitat, Associated Species & Ecological Site Descriptor:

Modifying Factors:

Land Form: Slope°:

Land Use: Aspect:

Geology:

Soil Texture: Soil Color:

COLLECTION DATA - If plant has been identified by a specialist, please see other side.

Family: No. of Plants Sampled (min. 50):

Genus: No. of Plants Found (approx.):

Species: Area Sampled (acres):

Subspecies/Variety:

12/18/08

Seeds Collected From:

Plant Habit: Plant Height (feet):

Native plant materials development and research this accession will be used for:

Notes to assist identification of pressed specimen (e.g. flower color, odor, presence of closely related species):

Common Name(s) of Plants:

Photograph Taken: Reference (PLANTS Code, Coll. Number, Pic. No.): Where Image will be Filed:

PRE-COLLECTION CHECKLIST

(Check box to right if condition indicated by **boldface** is met or is the most frequently occurring condition.)

Assess Population & Seed Dispersal Stage				
Approximate area of population:	100 x 100	(feet, <u>yards</u> , miles.....)		
Approximate total number of individual plants present and accessible:	0-50	50-500	500-5000	> 5000
Evidence of disturbance or damage:	<i>Resown</i>	<i>Burnt</i>	<i>Sprayed</i>	No damage
Readiness of population for collecting: give percentages or circle the most frequently occurring:				
	<i>Vegetative</i>	In flower	<i>Immature seeds</i>	Around natural dispersal
			<i>Post dispersal</i>	
Estimate the number of individual plants at natural dispersal stage:	<50	>50		
Is the population:				
	A single population	A population with distinct sub-populations (Can you sample separately or from the most suitable?)		

Assess Seed Quality & Availability	
On a typical individual, where on the plant/branch/fruit is the seed at natural dispersal stage:	Recognized
Using a cut test on the seeds at this stage, give percentages or circle the most frequently occurring:	
	Healthy <i>Insect-damaged</i> <i>Empty</i> <i>Moldy</i> <i>Malformed/other damage</i>
Estimate the number of healthy seeds per fruit:	25-35
Estimate the number of fruits per individual plant:	3

Should Seed Be Collected On This Trip?
Using the above information, if you only collect 20% of the healthy seeds available today, will this result in a collection of >10,000 healthy seeds?

OTHER DATA

If GPS was not used, please state method of obtaining lat. and long.:

Map Publisher:

Series: Scale:

Map Coordinates: Map Date (DD/MM/YY):

Herbarium voucher specimens:

Number of Pressed Specimens: or more Date Voucher Was Taken (DD/MM/YY):

Circle one:

- a. All Herbarium duplicates will be sent to Kew to arrange labeling, verification and distribution (default)
- b. One duplicate will be sent to _____ herbarium for verification, other duplicates will be sent by the collector to Kew to arrange labeling and distribution.
- c. All Herbarium duplicates will be sent to _____ herbarium that has agreed to arrange labeling, verification and distribution.
- d. **A herbarium voucher has been sent to the National Herbarium at the Smithsonian, and the remaining will be distributed by the UT931 collecting team to regional herbaria: BYU, UofU.**

By default, besides any herbaria mentioned above, one specimen will be sent to Kew and one to the Smithsonian. If you would like to request that additional specimens be sent to regional and/or local herbaria, please fill in the following information:

Regional Herbarium:	Stanley L Welsh Herbarium Brigham Young Univ. 378-MLBM Provo, UT 84602	Local Herbarium:	Garrett Herbarium (UT) Utah Museum of Natural History University of Utah 1390 E. Presidents Circle, Rm. 102 Salt Lake City, Utah 84112-0050 U.S.A.
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If collection has been identified by a specialist, please complete sections below:

Material Identified:

Date identified (DD/MM/YY):

Identified by: Organization:

Seed Test/Packaging Record

SOSUT-93108-02

CAAN7-SOSUT-931-103-08
 Castilleja angustifolia
 Northwest Indian paintbrush
 BLMS .065 P

PRE-PACKAGING CHECKLIST

Tag Count Complete	# of Tags ~1	Date/Initials 2-13-09 AC
OSU Sample Taken	# of pounds	
Sample Sent	(Y)/N	TZ

Test Results: Both in-house and/or OSU

100 Seed X-ray	70%	REMARKS ENTERED
Moisture Content	Too few seed	
Seed Count	2,387,300	
GERM	TZ OSU	Strat Time: NC ___ 4C ___ 8C ___ 13C ___
PURITY	88%	or NOXIOUS WEED only ___

MOISTURE CONTENT (use one of three methods below)

Dole Meter			**Moisture Analyzer**			**HygroPalm**			
Dial Reading	M.C.	Grams	Temp °C	Time Used	% M.C.	Time	Air Temp	ERH	M.C.
							Too few seed		

X-Ray Results

70 % Filled
Results from 100 Seed X-Ray

PURITY (Use OSU sample chart to determine wt. of sample)

Wt. of Sample: _____ gms	Wt. of All Impurities: .012 gms
Wt of Impurities:	Wt. of Clean Seed .087 gms
• Crops _____ gms	TOTAL (Impurities + Clean Seeds) .099 gms
• Inerts .012 gms	Percent Purity = $\frac{\text{Wt. of clean seeds}}{\text{Wt. of Total}} \times 100 = 88\%$
• Weeds _____ gms	
• Noxious _____ gms	

SEEDS PER POUND

Weight to three decimal places, when possible
 Wt. of 5 reps of 100 seeds each (in grams).

.017	.019	
TOTAL of ALL Reps: _____		
Average: _____		

** NOTE: If difference between max and min is less than 10% of the average samples, data is acceptable

Difference between max & Min wt. _____ 10% of average _____

NOTE: Seeds/Pound = $\frac{453600}{1000 \text{ seed wt.}}$ (453.6 grams = 1 pound)

To calculate M seed wt, take Total of 5 samples times 2.
 $2 \times \text{Total of 5 reps} = .19 = 1000 \text{ seed wt.}$
 Seeds per Pound = $\frac{2,387,300}{.19} = 2,387,300$

FINAL PACKAGING for Seed Storage/Transfer

Bag # 1	Bag Wt. .007	Bag #	Bag Wt.
Bag # 2			
Bag # 3			
Bag # 4			
Bag # 5		Last Bag	
TOTAL Wt.			.007

✓ ID card needed
 - 10M to PPMC _____ wt.
 → wait +2! before pull

SEED TRANSFER Log Number			
Date	Wt. Shipped	Ship via	Purpose Remarks

DATE	Start	Stop	Process	Initials
2-13-09	1050		226-test	AC
		1135	2270-pkg	AC

done	ID card file sample
	Regional Office ID file

POSTED TO: Lot Completion Logbook _____ Computer NMIS _____