

Use BLOCK CAPITALS

MSB Serial Number:

Complete all fields.

NRCS PLANTS Code: HEBO

Circle relevant descriptions shown in *italics*.

Cleaning Facility: BEND

Date(s) Collected (DD/MM/YY): 28/07/2008-12/08/2008

Seed Collection Reference Number: UT931-109

Collector(s): Daniel Cloward

Country: USA

Ecoregion (T,O, B):

COLORADO
PLATEAU,
20, (O)

State: UTAH

County: EMERY

Location Details:

SR 29 FROM JOE'S VALLEY RESERVOIR DAM DOWN CANYON 2 MILES ON UPHILL SIDE OF ROAD.

Lat. (dg/min/sec) (ex: 40° 34' 19.5" N):

39 17' 17.60"N

GPS Used?:

Yes No

If no, please see other side.

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

111 15' 37.99"W

GPS Datum:

NAD83 NAD27 WGS84 *Other:*
Google earth

Elevation (feet): 2100M

Landowner Details (Permission?):

USFS

HABITAT DATA

Habitat, Associated
Species & Ecological
Site Descriptor:

FIR TREES AND MOUNTAIN SHRUBS COMMUNITY- PURSHA, RHUS AROMATICA, BIRCH TREES. INTO RIPARIAN COMMUNITY.

Modifying Factors:

Mowed Burned Grazed Flooded Seeded Trampled Other:

Land Form:

RIVER CANYON

Slope°:

50-75

Land Use:

RECREATION

Aspect:

N NE E SE S SW W NW

Geology:

SANDSTONE AND SHALE

Soil Texture:

Clay Silt Sand Other:

Soil Color:

WHITE TO TAN

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

Family:

FABACEAE

No. of Plants Sampled (min. 50):

200

Genus:

HEDYSARUM

No. of Plants Found (approx.):

400

Species:

BOREALE

Area Sampled (acres):

2

Subspecies/Variety:

Seeds Collected From:

Plants Ground Both

Plant Habit:

Tree Shrub *Forb* Succulent Grass/Grasslike

Plant Height (feet):

2.5

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:

UTAH SWEETVETCH

Photograph Taken:

Digital 35mmReference
(PLANTS Code, Coll.
Number, Pic. No.):HEBO_UT93
1-109_A,B,D

Where Image will be Filed:

RED BUTTE
GARDEN

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:	2	x	.5	(feet, yards, 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>	<u>No damage</u>
Readiness of population for collecting: give percentages or circle the most frequently occurring:	<i>Vegetative</i>	<i>In flower</i>	<i>Immature seeds</i>	<u>Around natural dispersal</u> <i>Post dispersal</i>
Estimate the number of individual plants at natural dispersal stage:	<50	>50		
Is the population:	<u>A single population</u> <i>A population with distinct sub-populations (Can you sample separately or from the most suitable?)</i>			
Assess Seed Quality & Availability				
On a typical individual, where on the plant/branch/fruit is the seed at natural dispersal stage:	<u>Recognized</u>			
Using a cut test on the seeds at this stage, give percentages or circle the most frequently occurring:	<u>Healthy</u>	<i>Insect-damaged</i>	<i>Empty</i>	<i>Moldy</i> <i>Malformed/other damage</i>
Estimate the number of healthy seeds per fruit:	4			
Estimate the number of fruits per individual plant:	500			
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? yes				

OTHER DATAIf 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: 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.

If collection has been identified by a specialist, please complete sections below:

Material Identified:

In Field *From Pressed Specimen on Day of Collection*
From Pressed Specimen on Another Date *From Photograph*

Date identified (DD/MM/YY): Identified by: Organization:

Seed Test/Packaging Record

SOSUT-93108-07

HEBO-SOSUT-931-109-07
Hedysarum boreale
sweet vetch
BLMS .78 P

PRE-PACKAGING CHECKLIST		
Tag Count Complete	# of Tags	Date/Initials
	0	2/9/09
OSU Sample Taken	# of pounds	
	1.8g	
Sample Sent	YN	TZ

Test Results: Both in-house and/or OSU		REMARKS
100 Seed X-ray	90%	ENTERED
Moisture Content	6.01	
Seed Count	50,400	
GERM <u> </u> TZ <u>OSU</u> Strat Time: NC <u> </u> 4C <u> </u> 8C <u> </u> 13C <u> </u>		
PURITY <u>98</u> % or NOXIOUS WEED only <u> </u>		

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.
							68°	27.4	6.0

X-Ray Results
90 % 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: <u>.225</u> gms
Wt of Impurities:	Wt. of Clean Seed <u>13.425</u> gms
• Crops _____ gms	TOTAL (Impurities + Clean Seeds) <u>13.65</u> gms
• Inerts <u>.225</u> gms	Percent Purity = $\frac{\text{Wt. of clean seeds}}{\text{Wt. of Total}} \times 100 = $ <u>98</u> %
• Weeds _____ gms	
• Noxious _____ gms	

SEEDS PER POUND	** NOTE: If difference between max and min is less than 10% of the average samples, data is acceptable
Weight to three decimal places, when possible Wt. of 5 reps of 100 seeds each (in grams).	Difference between max & Min wt. _____ 10% of average _____
<u>.895</u> <u>.905</u>	NOTE: Seeds/Pound = $\frac{453600}{1000 \text{ seed wt.}}$ (453.6 grams = 1 pound)
TOTAL of ALL Reps: _____	To calculate M seed wt, take Total of 5 samples times 2.
Average: _____	2 x Total of 5 reps = <u>9.00</u> = 1000 seed wt.
	Seeds per Pound = <u>50,400</u>

FINAL PACKAGING for Seed Storage/Transfer			
Bag #	Bag Wt.	Bag #	Bag Wt.
Bag # 1	<u>.045</u>		
Bag # 2			
Bag # 3			
Bag # 4			
Bag # 5		Last Bag	
TOTAL Wt.			<u>.045</u>

10M to PPMC .226 #

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

DATE	Start	Stop	Process	Initials
<u>2/9/09</u>	<u>1145</u>		226-test	<u>AC</u>
		<u>1215</u>	2270-pkg	<u>AC</u>

<u>have</u>	ID card file sample
	Regional Office ID file

POSTED TO: Lot Completion Logbook Computer NMIS