

# Recommendations for Great Basin Target Species

- The best method for collection is to hand strip the seed from the plant.
- The more plant material that is collected the higher the susceptibility for damage to the seed, presence of non-target seed, decreased overall purity, decrease in yield, and increased processing cost.
- Species are organized by difficulty of processing and increased damage to seed when stems are present.

Seed must be stripped from plant. No stems



## Achnatherum thurberianum - Thurber's needlegrass

- Machine extraction is necessary to remove awns and hair
- This seed fractures and/ or strips easily in a machine
- Seed naturally matts into a ball and stems compound this problem



## Elymus elymoides - squirreltail

- Machine extraction is necessary to remove awns
- Seed is abraded easily
- Due to same size/shape we are unable to remove cheatgrass or medusahead from this species



## Chaenactis douglasii - Douglas' dustymaiden

- Machine extraction is necessary to remove pappus
- This seed is slender and fragile; tips fray easily
- Due to same size/shape we are unable to remove cheatgrass or medusahead from this species



## Machaeranthera canescens - hoary tansyaster

- Machine extraction is necessary to remove pappus
- This seed varies in size/shape making processing difficult; tips fray easily
- Initial fill percent can be low

Stems, up to 3" are manageable but not ideal



## Crepis acuminata - tapertip hawkbeard

- Machine extraction is necessary to remove pappus
- Insect damage is high with this species
- Due to same size/shape we are unable to remove cheatgrass or medusahead from this species



## Pseudoroegneria spicata - bluebunch wheatgrass

- Machine extraction is necessary to remove awns
- Initial fill percent for this species is typically low
- Due to same size/shape we are unable to remove cheatgrass or medusahead from this species



## Achnatherum hymenoides - Indian ricegrass

- Machine extraction is necessary to remove seed from stem and pubescence
- Initial fill percent for this species is can be low
- Due to same size/shape we are unable to remove bulbous bluegrass



## Leymus cinereus - basin wildrye

- Can bypass machine extraction if it is stripped from the stem
- Stems on this species are particularly tough and can cause damage to seed
- Initial fill percent for this species is typically lower than expected

Stems 3" to 6" are manageable



## Poa secunda - Sandberg's bluegrass

- Can bypass machine extraction if seed is stripped from the stem
- Machine extraction results in a greater percentage of exposed seed
- Initial fill percent for this species is can be low



## Sphaeralcea sp. - globemallow

- Machine extraction necessary to remove seed from schizocarp, depending on species this is not always possible
- This seed is relatively easy to separate from the majority of its plant material



## Cleome sp. - beeplant

- There are lots of options for extraction of this seed
- This seed is relatively easy to separate from the majority of its plant material

## **BSE COLLECTION AND PACKAGING RECOMMENDATIONS**

### **PREFERRED COLLECTION METHODS**

#### **Grasses:**

- It is preferred if grasses are stripped from the stem, especially if it is a collection larger than 10 pounds. If the stems must be included, please keep it to as little stem material as possible (less than 6").
- It is essential that grass collections be exposed to no-pest strips for 48 hrs. If they have not been, please say so clearly on the bag.

#### **Asteraceae family:**

- Include as few stems and leaves as possible in the collection. This is especially important for thin long seed such as Chaenactis, Ericameria, and Chrysothamnus.

#### **Fleshy fruits:**

- Include as few stems and leaves as possible. Collect as you would for edible fleshy fruit.
- Keep sealed in plastic bags and refrigerated until shipment.

#### **All other species:**

- It is preferred to shake seed into a bag or strip seed from stem rather than cutting stems and/or pods and including them in the collection.
- We understand there are situations where this will not work (some species of Penstemon, Oenothera, Clarkia, Lupinus, Asclepias etc).

### **PACKAGING/LABELING/SHIPPING RECOMMENDATIONS**

#### **Dry collections**

- Use paper bags with bottom seams sealed from the outside with packing tape. Fold over top at least 2 times and staple (or tape sealed if shipping is involved and seed is small and loose in the bag).
- Reference number and species code or name written in permanent marker on the outside of the bag.
- Only 1 field form needed - doesn't need to be in the bag or attached to the bag as long as the reference number is visible on the outside.
- Mark multiple bags of the same collection as follows: 1/2, 2/2 etc.
- Mark multiple boxes in a shipment as follows: 1/2, 2/2 etc.
- Indicate on bag or paperwork or box that the collections have been treated with no-pest strips.
- Please notify us immediately if a bag is to be added to a collection that we have already received.
- Please notify us ASAP if the species name has changed after the paperwork/collection has been sent.

#### **Fleshy fruit**

- Labeling and paperwork is the same as non-fleshy fruit.
- Package in Ziploc bags (double bagged if very juicy).
- Send or deliver to BSE ASAP, keeping them refrigerated and moist until shipment or delivery.
- If shipping, include an ice-pack in the box and ship overnight. Try to ship Mon – Wed only so that there is little chance of the package getting delayed and sitting over the weekend unrefrigerated.
- Please let us know when fruit is scheduled to arrive.
- Do not ship in a box with dry collections in case the bag leaks or breaks.
- No-pest strips are not necessary for fleshy fruit.