New Mexico Pre-Varietal Germplasm Certification Procedure

For natural-track and manipulated-track germplasm, the New Mexico State University Seed Certification and Noxious Weed Free Program (SCNWFP) will require seed collectors and producers to adhere to the New Mexico Pre-Variety Germplasm Certification and Species Standards and the Certification Procedures detailed below. Pre-Varietal Germplasm (PVG) certification of wildland collected seed and seed increased in production fields ensures identify and purity for seed users.

Wildland Seed Collection

Wildland collected seed may be sold directly to end users, used for establishment of field/nursery production, or entered into plant germplasm development programs. Certification procedures for wildland collected seed are as follows, and the applicant or developer is responsible for each step unless stated otherwise:

- 1. Contact SCNWFP representative before collecting to obtain pre-collection applications and site identification logs for wild-collected seed.
- 2. File the Pre-Variety Germplasm Application before harvest and file permits for collecting on public and private lands.
- 3. Complete Site Identification Log or Seeds of Success collection form at the time of harvest.
- 4. SCNWFP representative verifies the collection site and identifies and evaluates plant and seed samples before, during, and/or post-harvest.
- 5. Clean seed or have seed cleaned by an approved processor.
- 6. Applicant stores seed in clean bins or bag in new, clean sacks.
- 7. SCNWFP representative draws a sample for analysis in an accredited seed lab.
- 8. SCNWFP representative tags the seed lot after compliance with applicable requirements and standards; seed purity and viability analysis may be required.

Field Production

The applicant or developer may limit the number of generations for any field produced seed. Certification procedures for field production are as follows, and the applicant or developer is responsible for each step unless stated otherwise:

- 1. File the Pre-Variety Germplasm Tag Request Form
- 2. SCNWFP representative verifies origin and generation of planting stock.
- 3. SCNWFP representative completes seedling inspection.
- 4. SCNWFP representative completes field inspection before harvest to check compliance with species requirements for isolation and genetic purity. Control of prohibited and other specified weeds or other species may be required.
- 9. SCNWFP representative tags the seed lot after compliance with applicable requirements and standards; seed purity and viability analysis may be required.

Source Verification

AOSCA PVG standards allow for the individual SCA to verify the source of an accession by "whatever means is deemed efficient and enforceable." A number of factors influence the ease of verification and dictate the structure of an SCA's verification program; such factors may include the accessibility or distance to collection sites, plant phenology and timing of the inspection, cost, or agency staffing and capacity. Any decisions made by the SCA regarding source verification should be supported by clear and

consistent documentation. A SCNWFP representative will complete a thorough review of documentation for all collections in the accession prior to conducting site visits to verify a seed source.

The collector or developer is required to submit a Site Identification Log or Seeds of Success (SOS) Field Data Collection form for each collection site. The data form or log must have the following information:

- State, county, and elevation of the collection site
- Driving directions (number of miles, to the tenth, along a named road, measured from an identified intersection; highway mile posts and remote cattle guards may be referenced)
- Description of the collection site by cardinal direction from the access road, and roughly its shape and size
- Name of EPA (Omernik's) Level III Ecoregion or Seed Zone
- Plant photos at the time of collection that include one in bloom and one in seed
- A site photo when the target species is in bloom (site photo will include the horizon and the location of the plant photo in the foreground).

The review of each collection should involve a detailed plotting and comparison of all of the collections for accurate concurrence, as well as an examination of site and plant photos to confirm that they appear to fit the location. Any errors in documentation must be addressed by the collector. In cases where a specific accession has been found to not be from a location that was actually within the intended seed zone, or the location cannot be confirmed, those collection would be excluded from the seed lot. The SCNWFP representative may use on-line resources to support the review of Site Identification logs or SOS Field Data Collection forms, including:

- Photos of species from a reliable source (SEINet, online herbarium, etc.)
- USGS topographic maps
- Google Earth
- New Mexico Department of Transportation highway mapping to plot lat/long coordinates and display mile markers.

Where G0 seed collections are made by federal agency or by an NGO on behalf of a federal agency, and where Seeds of Success (SOS) protocols and documentation requirements are followed, a qualified inspector will verify twenty percent of the seed collection sites in the accession for the accession to be eligible for certification. The inspector may obtain specimens from wildland collections or seed increase fields to take to a university herbarium for identification.

Tagging

A tag, which documents final certification of the seed, will include:

- Species scientific and common names
- Accession number
- State, county, and elevation range
- EPA (Omernik) Level III Ecoregion or Seed Zone
- Seed lot number
- A statement indicating that the tag is based on submitted documentation
- Where applicable, a Southwest Seed Partnership label reading: "SWSP Diversity Germplasm"

Fees

Fees are set by the SCNWFP and are subject to change. The SCNWFP may choose to reduce or waive fees for governmental organizations or for non-profit organizations working on behalf of a governmental entity. Baseline fees will be charged for all activities related to certification, inspection, or source verification.

Baseline fees

- Driving time = \$25.00/hour
- Inspection time = \$25.00/hour
- Mileage = \$0.54/mile
- Labels = \$0.60 each (when appropriate for packaging purposes)
- Hotel & airfare will be charged when incurred & fees are subject to change.

Field certification or inspection fees

- \$6.00/acre (less than 10,000 total acres)
- \$5.00/acre (10,000 to 20,000 total acres).

PVG source verification fees

• \$50 per inspection site. An inspection site includes all collection sites within a county, and inspection sites can include more than one species.