

Wild Species Committee Annual Report

Gil Waibel – Wild Species Committee (WSC) Chair



Wild Species Committee Members/Officers

- Gil Waibel – Chair USA
- Ruoqing Wang – Vice Chair Canada
- Karen Sommerville – Vice Chair Australia
- Sergio Pasquini – Member and Liaison Officer Italy
- Ernest Allen – Liaison Officer USA
- Sue Alvarez – Member USA
- Riad Baalbaki – Member USA
- Edith Daboue – Member Burkina Faso
- Rachael Davies – Member UK
- Stefanie Kramer – Member Germany
- Fabricia Cristina dos Reis – Member Brazil
- Adele Scott – Member New Zealand
- Razia Sultana – Member India

Retired Members

Victor Vankus

Heidi Larson

THANK YOU!

Wild vs Native Species

Not bred

Not selected over many generations

Wild seeds collected at site of origin

Native seeds may be:

- Collected as above

- Increased for future cultivation in a nursery

Basically, wild and native seeds have not been genetically altered

Testing wild/native seeds has different goals:

- Not for harvest

- Dormancy increased the value of the seed

Testing challenges:

- Dormancy

- Higher levels of contamination and inert matter

Reason for this website and WSC

Wild/Native species seed industry is growing fast worldwide

Many varying uses for these species

Rule (ISTA and AOSA) have these goals

- Measure the seed lot's ability to provide a uniform stand

- Uniform maturity at harvest

- Dormancy is not a good trait

Wild/Native species testing has these goals:

- Provide a mature stand in 5 to 6 years for many mixes

- May or may not be planted on cultivated fields

- Not for harvest – meant for land management/ecosystems

- Dormancy is a highly valuable trait

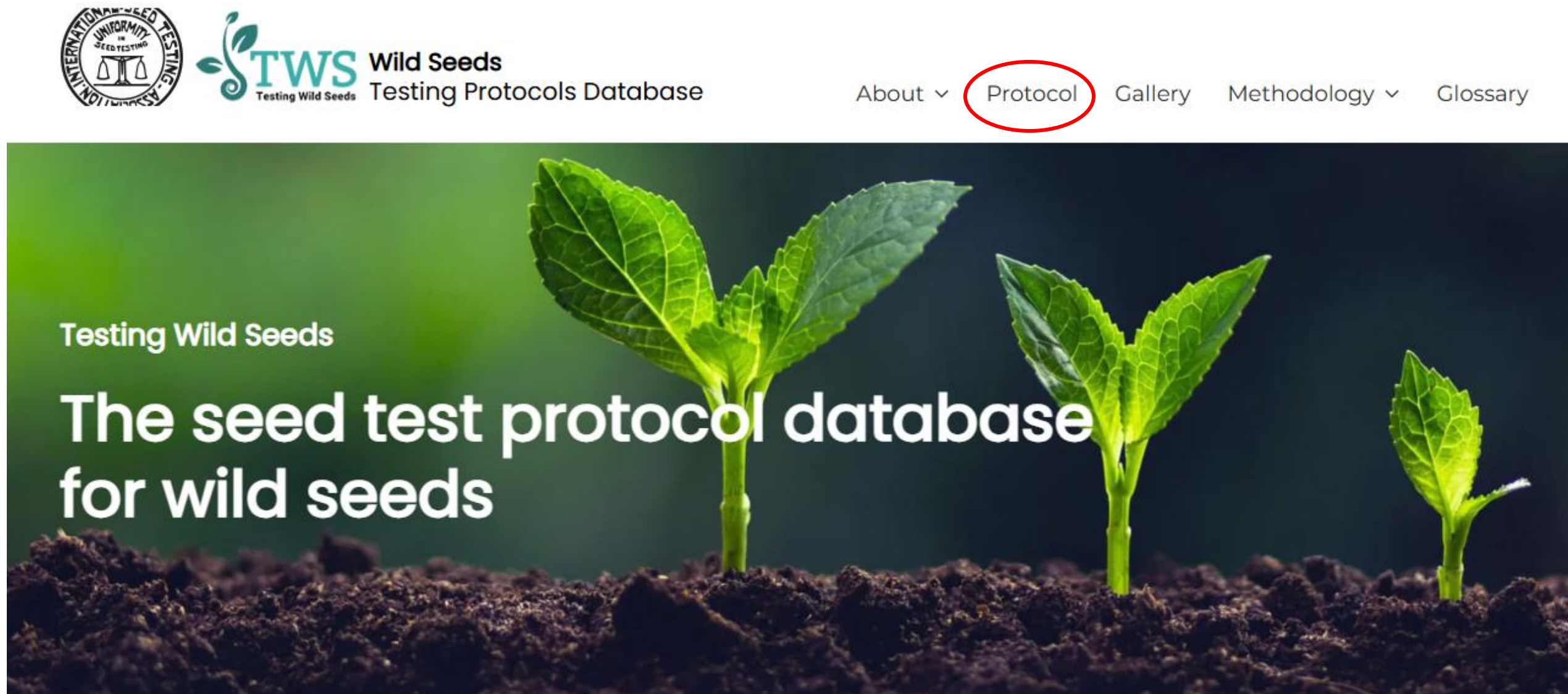
Current Goals of WSC

1. Create website
2. 'e-Submission Form'
3. Other improvements to website as funds are available
4. Methodology chapters about testing wild species:
 - a. Purity
 - b. Germination
 - c. Tetrazolium (TEZ) – Not completed yet
 - d. Moisture testing

Current Goals of WSC – page 2

5. Protocols: (not Rules) by species (limited to Angiosperms):
 - A. Provide needed purity, germination and TEZ information
 - a. Encourage protocol submissions worldwide
 1. Include image(s) of seed (Gallery images can be used)
Also:
 2. Add images of seedlings to protocols
 3. Add images of TEZ stained seeds to protocols
6. Gallery: Publish seed images (8,000+ images of over 3,000 species)
 - a. Encourage submissions worldwide (open for unlimited species)
7. Glossary
 - a. Needs to be maintained, and increased as needed
 1. Looking for volunteers (images and/or drawings)

Home Screen – address: www.wild-seeds.net



Search for protocols by clicking 'Protocol' at the top of the home page to search for a protocol -or-

Scroll down on home screen...

Testing Wild Seeds

The seed test protocol database for wild seeds

How to use the wild seeds data



Search protocols

Search for testing protocols of wild seeds species that are not provided by ISTA or AOSA



Search images

Search for images of wild seeds species in our extended gallery

Click on 'Search protocols' above

This is the protocol search tool...

Protocols

Search

Search for species, genus, family, synonyms or common names



Clear all

Family

- Select Family - x



Genus

- Select Genus - x



Taxon

- Select Species - x



Results 1 - 50 of 94

Order by

ID Desce



Per page

50



ID▲ Species

Genus

Family

Synonyms

Common names

Searching for Atriplex...

Protocols

Search

Search for species, genus, family, synonyms or common names



Clear all

Family

- Select Family - ×



Genus

Atriplex ×



Taxon

- Select Species - ×



Results 1 - 11 of 11

Order by

ID Ascen ↓

Per page

50



ID▲	Species	Genus	Family	Synonyms	Common names	
27	<i>Atriplex confertifolia</i>	Atriplex	Chenopodiaceae	--	3 common names	VIEW DETAILS
28	<i>Atriplex gardneri</i>	Atriplex	Chenopodiaceae	--	1 common names	VIEW DETAILS
29	<i>Atriplex gardneri</i> var. <i>aptera</i>	Atriplex	Chenopodiaceae	--	3 common names	VIEW DETAILS

Click on *Atriplex gardneri* (in olive letters) or click on 'VIEW DETAILS' to go to the protocol for *Atriplex gardneri*

Nomenclature and seed image section

Protocol

Atriplex gardneri

Overview

Genus	Atriplex
Family	Chenopodiaceae
Synonyms	
Common names	Gardner saltbush



Purity section

Purity

Purity working weight

12 g

ISTA PSD

PSD 2

Other species (OSD)/Noxious working weight

120 g

AOSA PSU

PSU 38

Germination section

Germination and dormancy breaking method

No images found.

About this Method

Applicable for:

Media Agar or paper: top of blotters in tight moisture containing box

Moistened with H₂O normal moisture level

Additional dormancy breaking process Not needed

Germination Temperature 15°C

Day/Night Temperature 12 and 12 hours °C

Hours Light/Dark 12 and 12 hours °C

Days in warm 21 days

Other things that may be included in the Germination Section:

Seedling evaluation descriptions

Over 180 families and four basic classes of seeds:

Monocotyledon

Dicotyledon

Gymnosperm

Magnolianaes

Dormancy breaking notes

Other germination notes

Seedling images

Tetrazolium Section

You will find notes discussing:

General preparation for staining process

Discussion of key structures

Pre-treatment notes

Preparation for staining

Staining notes

Evaluation interpretation notes

Images of stained seed –viable and not viable

Find the seed gallery



Wild Seeds
Testing Protocols Database

About ▾

Protocol

Gallery

Methodology ▾

Glossary

Testing Wild Seeds

The seed test protocol database
for wild seeds



Gallery

Search

Search



Clear all

Family

- Select Family - ×

Genus

- Select Genus - ×

Taxon

- Select Species - ×

Results 1 - 50 of 8161

- Bou
- Bouteloua aristidoides** Press to select
- Bouteloua barbata var. rothrockii
- Bouteloua chondrosioides
- Bouteloua curtipendula
- Bouteloua dactyloides**
- Bouteloua eriopoda
- Bouteloua gracilis



Click on Bouteloua dactyloides to select all seed images on the website

Images of *Bouteloua dactyloides*

Results 1 - 10 of 10

Per page

50



Bouteloua dactyloides
Family: Poaceae



Bouteloua dactyloides
Family: Poaceae



Bouteloua dactyloides
Family: Poaceae



Bouteloua dactyloides
Family: Poaceae



Bouteloua dactyloides
Family: Poaceae



Bouteloua dactyloides
Family: Poaceae



Bouteloua dactyloides
Family: Poaceae



Bouteloua dactyloides
Family: Poaceae



Pure Seed Units

Bouteloua curtispindula

Images similar

Inert material
'Staminate inflorescence'

Click on image to enlarge



Bouteloua dactyloides

Family: Poaceae, Genus: Bouteloua

Staminate inflorescence

© 2026 Gil Waibel, United States of America

We all know how fun it is to scroll thru seed images



Andropogon hallii
Family: Poaceae



Eustachys petraea
Family: Poaceae



Ehrharta erecta
Family: Poaceae



Cenchrus longisetus
Family: Poaceae



Plantago ovata
Family: Plantaginaceae



Amberboa moschata
Family: Asteraceae



Layia platyglossa
Family: Asteraceae



Liatris punctata
Family: Asteraceae

Glossary



Wild Seeds
Testing Protocols Database

About ▾

Protocol

Gallery

Methodology ▾

Glossary

Testing Wild Seeds

The seed test protocol database
for wild seeds

Methodology Chapters

Germination

Purity

Moisture testing

Seed ID – link to ISMA

Imaging seeds and photoshopping

Coming...

Tetrazolium

X-ray seed evaluation

Glossary



Wild Seeds
Testing Protocols Database

About ▾

Protocol

Gallery

Methodology ▾

Glossary

Testing Wild Seeds

The seed test protocol database
for wild seeds

Glossary linked to text in website

Glossary

Search



Clear all

Index

A B C D E **F** G H I J K L M N O P Q R S T U V W X Y Z Alle

Results 1 - 23 of 23

Order by

Term Asc ↓

Per page

50



Fascicle, fascicls

- Fascicle. A tuft of branches arising from about the same place. 2020 International Rules for Seed Testing (ISTA)
- Fascicle. A little cluster. Fenwick, J.R. revised 1995. Laboratory Manual for General Crops- Glossary. Unpublished class notes. Dept. of Soil and Crop Sciences, Colorado State University. Pages 104-111
- Fascicle. In grasses: A group of spikelets subtended by bristles. Association of Official Seed Analysts (AOSA) Rules for Seed Testing, Volume 1, 2019
- [Image](#)

Click

Glossary

Search

Index

Results 1 - 23 of 23

Fascicle, fascicls

- Fascicle. A tuft of branches arising
- Fascicle. A little cluster. Fenwick, J. Sciences, Colorado State University
- Fascicle. In grasses: A group of spi
- Image

spikelet, spikelets

- **Spikelet.** The unit of a grass inflorescence comprising one or more florets subtended by one or two sterile glumes. For the purposes of the Rules, the term spikelet includes, as well as a fertile floret, either one or more additional fertile or completely infertile florets, or glumes. **2020 International Rules for Seed Testing (ISTA)**
- **Spikelet.** Part of a grass inflorescence including one or more florets subtended by one or two glumes. **ISTA Handbook on Pure Seed Definitions, Glossary. 3rd Edition 2010**
- **Spikelet.** In grasses: One or more attached florets usually subtended by one or more bracts (glumes). **Association of Official Seed Analysts (AOSA) Rules for Seed Testing, Volume 1, 2019**
- **Spikelet.** The unit of a grass inflorescence that consists of a pair of empty glumes that enclose one or more florets arranged around a rachilla. Fenwick, J.R. revised 1995. **Laboratory Manual for General Crops- Glossary.** Unpublished class notes. Dept. of Soil and Crop Sciences, Colorado State University. Pages 104-111

Still in development

- Online submission form (when available)
 - If you are testing a wild species
 - Submit your method
 - Once approved it will be published on the website
 - If you have a seed image you wish to share
 - Submit your image
 - Once approved it will be published on the website
- Our goal is to publish methods being used by seed labs worldwide.

Training – Testing Wild Seeds

Continuously expanding on our methodology chapters – these should always be a ‘work in progress’

Virtual training for in-house analysts.

To help labs test these species uniformly

Hands-on training for seed testing workshops

Anyone can contribute...

Write additions to methodology chapters

Submit seed testing protocols of species tested in your lab

Commercial or regulatory labs

Seed bank labs

Submit seed images to be added to our seed image gallery.

Help others learn how to submit protocols to share how they a test wild species.

Our goal is to publish methods for testing many wild/native species from seed labs worldwide!

www.wild-seeds.net