

# Purity Committee



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Working programme, activities, special projects

Maria Rosaria Mannino

# Committee composition

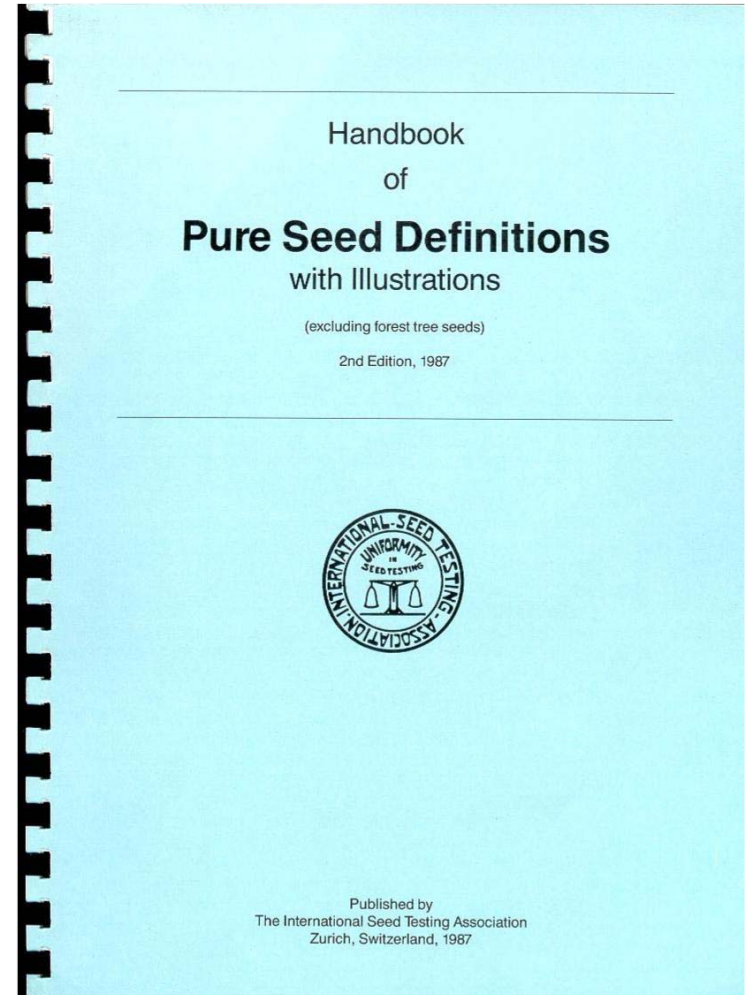
1. Maria Rosaria Mannino (Chairperson) FR-France
  2. Jane Taylor (Vice-Chairperson) UK-United Kingdom
  3. Ken Allison CA-Canada
  4. S.C. Aswathanarayana IN-India
  5. Gerarda de Boer NL-Netherlands
  6. Fabio Ferrari IT-Italy
  7. Axel Goeritz DE-Germany
  8. Steve Jones UK-United Kingdom
  9. Monica Moreno AR-Argentina
  10. Deborah Meyer US-United States
  11. Andreas Ratzenboeck AT-Austria
  12. Zita Ripka HU-Hungary
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# Pure Seed Definitions Working Group

- **Leader** : Steve Jones (UK)
  - **Participants** :  
Ken Allison (CA), Fabio Ferrari (IT), Zita Ripka (HU),  
Corinne Sahuguède (FR), Jane Taylor (UK),  
Helen Appleyard (UK), Debbie Meyer (USA),  
Bettina Kalert (ISTA)
  - 2004-2007 new edition of handbook with illustrations
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# Pure Seed Definitions Working Group

The PSD handbook is an  
essential lab guide  
Last revised in 1987



# Pure Seed Definitions Working Group

## **Objectives of the working group**

Review the existing handbook

Is a handbook still needed?

**YES**

Look to ways to improve it

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# Pure Seed Definitions Working Group

## **New handbook**

- Loose-leaf format
  - Statements about species that cannot be easily distinguished, e.g. *Brassica* sp., *Lolium* sp.
  - PSD number on the side of pages for easy access
  - Up to six images per page
  - Include images of seed from tropical countries
  - Glossary with illustrations
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# Pure Seed Definitions Working Group

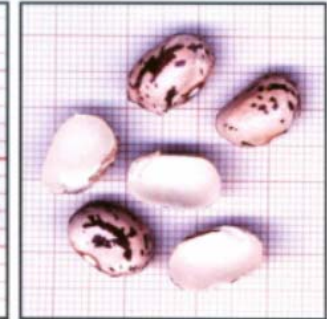
## New handbook draft pages

### PURE SEED DEFINITION: 10

- Seed with or without testa
  - Piece of seed larger than one half the original size, with or without testa.
- Fabaceae (Leguminosae), Brassicaceae (Cruciferae), Cupressaceae, Taxaceae, Taxodiaceae:* seeds and pieces of seed without testa are regarded as inert matter.
- For *Fabaceae (Leguminosae)*: Separated cotyledons are regarded as inert matter irrespective of whether or not the radicle-plumule axis and/or more than half the testa may be attached.



Seeds of *Vicia sativa* with and without testa



Separated cotyledons of *Phaseolus vulgaris*

Family	Genera	Chaffyness	Part reference in Table 2.A.	Notes
Acanthaceae	<i>Thunbergia</i>	Non chaffy	3	
Aizoaceae	<i>Dorotheanthus</i>	Non chaffy	3	
Amaranthaceae	<i>Celosia</i>	Non chaffy	3	
	<i>Amaranthus</i>	Non chaffy	3	
Amaryllidaceae	<i>Hippeastrum</i>	Non chaffy	3	
Araliaceae	<i>Fatsia</i>	Chaffy	3	
	<i>Schefflera</i>	Non chaffy	3	
Apocynaceae	<i>Vinca</i>	Non chaffy	3	
Asclepiadaceae	<i>Asclepias</i>	Chaffy	3	
Balsaminaceae	<i>Impatiens</i>	Non chaffy	3	
Begoniaceae	<i>Begonia</i>	Non chaffy	3	
Brassicaceae	<i>Alyssum</i>	Chaffy	3	
	<i>Arabis</i>	Non chaffy	3	
	<i>Aubrieta</i>	Non chaffy	3	
	<i>Aurinia</i>	Chaffy	3	
	<i>Brassica</i>	Non chaffy	1	
	<i>Camelina</i>	Non chaffy	1	
	<i>Cheiranthus</i>	Non chaffy	3	
	<i>Eruca</i>	Non chaffy	1	

# Pure Seed Definitions Working Group

New handbook draft pages

*Brassica oleracea*



*Raphanus sativus*



*Cucurbita pepo*



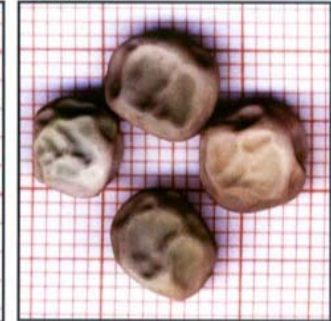
*Hedysarum coronarium* (seeds and fruits)



*Medicago sativa*

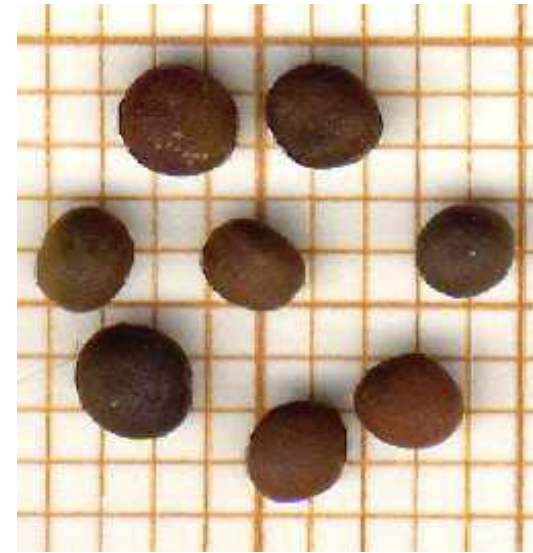
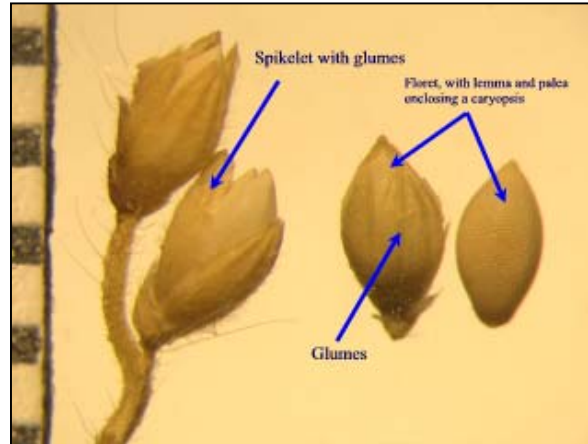


*Pisum sativum*



# Pure Seed Definitions Working Group

## Images in a range of formats and a glossary



# Pure Seed Definitions Working Group

**Any questions or ideas?**

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# Blowing Working Group

- Leader: Gerarda de Boer (NL)
- Participants: Corinne Sahuguède (FR), Deborah Meyer (US), Jette Nydam (DK), Jane Taylor (UK), Dorothy van Horsen (CA)
- 2004-2007 programme: blowing split samples of *Poa* spp. and *Dactylis glomerata*; blowing of mixtures; compare the ISTA and AOSA calibration samples.



# Blowing Working Group

## Progress

- Blowing of split samples (half working samples) of *Poa* spp. and *Dactylis* spp.
  - Question: can the *Poa* or *Dactylis glomerata* half working sample be blown using a "whole" calibration sample?
  - List procedures in use: questionnaire before a collaborative study to test different blowing methods and define a procedure to be suggested to ISTA laboratories



# Blowing Working Group

## Progress

- Blowing of seed mixtures
  - Question: grass species of seed mixtures should be blown or not and how?
  - Comparative study including laboratories with experience in mixtures analysis
  - Practices in use evaluation: questionnaire



# Blowing Working Group

## Progress

- Questionnaire
  - ISTA, AOSA and SCST laboratories
  - Sending to laboratories: June 05
  - Questionnaire outcome: September 05
- With general information, information about *Poa* spp. and *Dactylis glomerata* and blowing of seed mixtures
- Send to laboratories with species to be blown in scope



# General information

- What species and how many?
- What kind of apparatus do you use?
- Calibration of the apparatus?



# Blowing of *Poa* spp. & *Dactylis glomerata*

- Whole or half-working samples
- Procedure to split calibration samples
- Procedure of checking the calibration sample



# Blowing of seed mixtures

- What kind of samples?
- Procedure (particularly on blowing)



# Rules Development Working Group

- Leader: M.R. Mannino (FR)
  - Participants: Purity Committee Members
  - 2004-2007 programme: purity rules improvement.
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# Rules Development Working Group

## Progress

- Proposal of purity rules changes
  - After technical discussion among Purity Committee Members
  - Aim:
    - clarify the purity rules
    - harmonise some paragraphs of chapter 3
    - improve PSDs 4, 10, 21, 23 and 25.



*Cichorium* sp. PSD 4



*Onobrichis viciifolia* PSD 21

# Rules Development Working Group

## Progress

- Rules amalgamation proposal

- After technical discussion among Purity

Committee Members:

- amalgamation of Chapter 3 and Annexe (excluding lists of 3.2.1.A.1 Part 1 & Part 2. and glossary)
  - division of Chapter 11 (coated seeds) in the relevant Chapters 2, 3, 4, 5.
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# Tropical and sub- tropical species Working Group

- Leader: Monica Moreno (AR)
  - Participants : S.C. Aswathanarayana (IN), P. Balamurugan (IN), Rosilma Pelsoni (BR), Pamela Strauss (ZA), Izelle Allison (ZA)
  - 2004-2007 programme
    - work on *Chloris gayana*
    - liaison with task force: e.g. find adapted PSD for tropical and sub- tropical species, study other related purity analysis problems
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# Tropical and sub-tropical species Working Group Progress

- The group participates to the revision of the PSD handbook by finding images and seeds of tropical and sub-tropical species to be included on the new version
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# Seed identification Working Group

- Leader: M.R. Mannino (FR)
  - Participants: Ken Allison (CA), Liciniu Dragos (FR), Fabio Ferrari (IT), Axel Goeritz (DE), Monica Moreno (AR), Andreas Ratzenboeck (AT), Zita Ripka (HU)
  - 2004-2007 programme
    - Finalize Universal List
    - Seed descriptions for UL species with glossary and images
    - Bibliography, list of seed specialists, list of botanical gardens
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# Seed identification Working Group

## Progress

- Universal List of Weeds and Crops
    - Feed back from EC on the work made
    - Problem to be resolved
      - presence on the list of species typical of particular regions
      - requirements for laboratory seed collections
    - Proposal approved by the EC for two types of list :
      - one basic list including a limited number of very common species
      - Different complementary lists, each including typical species of one particular region
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# Workshop development and organisation Working Group

- Leader: Ken Allison (CA)
  - Participants: Maria Rosaria Mannino (FR), Zita Ripka (HU)
  - 2004-2007 programme
    - basic outline for workshop organisation
    - workshop organisation in 2005, 2006 and 2007
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# Workshop development and organisation Working Group Progress

- Report of the ISTA Purity Workshop in Budapest (May 11-12, 2004) for Seed Testing International No 128;
- Workshop organisation in 2006 and 2007



# 2005 and 2006 Committee Programme

- Finalise the new Pure Seed Handbook (2006)
  - Finalise the Universal List of Weeds and Crops (2006) and other items related:
    - List of seed specialists on seed identification
    - Bibliography for seed identification
    - Develop a list of botanical gardens holding seed samples for distribution
    - Training tests
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# 2005 and 2006 Committee Programme

- Blowing
    - Send the questionnaire and define a procedure for blowing (2005)
    - Compare the ISTA and AOSA calibration samples; provide a same supplier
  - Purity workshop organisation :
    - Develop a basic outline for workshop (2005)
    - Organise at least one Purity Workshop in 2006
  - Rules
    - Propose purity rules amendments for (2006)
    - Amalgamation (2006)
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# Committee Programme: Perspective for 2007

- Workshop organisation on identification of Universal List species
  - Training publication on identification of Universal List species
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