

**TRADE AND AGRICULTURE DIRECTORATE
COMMITTEE FOR AGRICULTURE**

**Annual Meeting of Representatives of the National Designated Authorities for the
Implementation of the OECD Schemes for the Varietal Certification of Seed Moving in
International Trade**

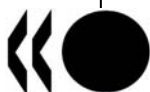
**ELIGIBLE SPECIES UNDER THE SCHEMES - UPDATED LIST AND SUGGESTIONS FOR
COMPLEMENTING THE REVISION OF THE GUIDELINES - PART IV.**

This document, prepared by the Co-ordinating Centre, revises Part IV of the "OECD Guidelines for Control Plot Tests and Field Inspection of Seed Crops". It includes characters for assessing varietal identity and varietal purity for a further 18 species.

It is circulated to Delegations, National Designated Authorities and Observers for information, and to the Members of the TWG for discussion and agreement at the 7th TWG Meeting (under item 4.2.3 of the draft agenda TAD/CA/S/A(2009)4), to be held in Paris on 10 June 2009.

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**DRAFT GUIDELINES FOR CONTROL PLOT TESTS AND FIELD INSPECTION OF SEED CROPS -
PART IV (Characteristics for assessing varietal identity and varietal purity for a further 18 species)**

Note by the Secretariat

1. The background for the on-going revision of the **OECD Guidelines for Control Plot Tests and Field Inspection of Seed Crops** is given in TAD/CA/S/RD(2008)3/REV3.

Document TAD/CA/S/RD(2008)12/REV2 initiated the revision of Part IV of the Guidelines, containing updated descriptions of species characteristics to be used for assessing varietal identity and varietal purity in post-control plots and during field inspections of seed crops for a total of 36 species. The descriptions of the characters were agreed and the revised final versions have now been published on the web site.

2. At the 6th meeting of the Technical Working Group on varietal identity and varietal purity, held in January 2009, the participants agreed the characters for a further 18 species and these will be published on the web site.
3. At the time of writing (30 March 2009) the characteristics for assessing varietal identity and varietal purity have not been received for the following species:

<i>Vicia benghalensis</i>	Portugal
<i>Bromus marginatus</i>	Czech Republic
<i>Bromus catharticus</i> Vahl	France
<i>Panicum maximum</i> Jacq.	Brazil

4. This paper gives details of the characters to be used for variety purity for a further 18 species which have been described by Australia, Kenya, New Zealand and the United States.

GUIDELINES
FOR CONTROL PLOT TESTS
AND FIELD INSPECTION OF SEED CROPS

Part IV.

CHARACTERISTICS FOR ASSESSING
VARIETAL IDENTITY AND VARIETAL PURITY

**PROVISIONAL LIST OF
SPECIES DESCRIPTION SHEETS**

GRASSES AND LEGUMES

Poaceae

ANNUAL RYEGRASS (*Lolium rigidum* Gaudin)
BERMUDAGRASS (*Cynodon dactylon* (L.) Pers)
CENTIPEDE GRASS (*Eremochloa ophiuroides* (Munro))
HARDING GRASS, PHALARIS, BULBOUS CANARY GRASS (*Phalaris aquatica* L. [incl *P. stenoptera* Hackel, *P. tuberosa* L.]
PEARL MILLET (*Pennisetum glaucum* (L.) R.Br.)
QUACK GRASS, WHEAT GRASS, COUCH GRASS, SCUTCH (*Elytrigia repens* (L.) Desv. ex Nevski)
WEeping ALKALIGRASS, REFLEXED SALT GRASS (*Puccinellia distans* (Jacq.) Parl
ZOYSIA TURFGRASS, JAPANESE LAWN GRASS, KOREAN LAWN GRASS (*Zoysia japonica* Steud)

Fabaceae

EASTERN STAR CLOVER (*Trifolium dasyurum* C. Presl)
GLAND CLOVER, GLANDULAR CLOVER (*Trifolium glanduliferum* (Boiss.))
SERRADELLA (*Ornithopus compressus*)
HYBRIDS OF SERRADELLA (*Ornithopus sativus* x *Ornithopus compressus*)
HYACINTH BEAN, LABLAB BEAN (*Lablab purpureus* (L.) Sweet)

CRUCIFER AND OTHER OIL OR FIBRE SPECIES

Other species

RIBWART PLANTAIN (*Plantago lanceolata* L.)

CEREALS

FINGER MILLET (*Eleusine coracana* (L.) Gaertn)

SUBTERRANEAN CLOVER AND SIMILAR SPECIES

BLADDER CLOVER, BLADDER-POD CLOVER (*Trifolium spumosum* L.)
BISERRULA (*Biserrula pelecinus* L.)
SPHERE MEDIC, SPHERE MEDICK (*Medicago murex* Willd)

ANNUAL RYEGRASS*(Lolium rigidum Gaudin.)*

Stage of examination	UPOV Character Number ¹	Character description
<u>PRIMARY</u>		
Vegetative	2	Plant: vegetative growth habit
	3*	Leaf: length
	4*	Leaf: width
	5	Leaf: intensity of green colour
Heading	9*	Plant: time of inflorescence emergence
	17*	Plant: length of longest stem (inflorescence included) Awns: absent/present
<u>SECONDARY</u>		
Heading	14	Flag leaf: length at emergence of inflorescence
	15	Flag leaf: width at emergence of inflorescence
	18*	Plant: length of upper internode (when inflorescence fully emerged)
	19	Inflorescence: length
	20	Inflorescence: number of spikelets
	22*	Inflorescence: length of glume on basal spikelet
Laboratory	23	Inflorescence: length of basal spikelet excluding awn
	1	Ploidy

¹ Please refer to the UPOV Guidelines for the Conduct of Tests for Distinctness, Uniformity and Stability Doc No. TG/4/8 (05.04.2006) for explanation and method of examination

BERMUDAGRASS*(Cynodon dactylon (L.) Pers)*

Stage of examination	UPOV Character Number ¹	Character description
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PRIMARY

Vegetative		Leaf colour
		Leaf: width
		Stolon: internode length
		Stem: first internode length
Heading		Inflorescence: number of racemes
		Inflorescence: length
		Peduncle: length

SECONDARY

Vegetative		Anthocyanin in stolons is an important identifier. Some varieties have no colour and some are dark red. This is best determined in juvenile growth
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¹There are no UPOV Guidelines for the Conduct of Tests for Distinctness, Uniformity and Stability for this species.

Source: USA January 2009

CENTIPEDE GRASS
(*Eremochloa ophiuroides* (Munro))

Stage of examination	UPOV Character Number ¹	Character description
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PRIMARY

Vegetative		Plant: height Leaf: width Leaf: length Leaf: pubescence Sheath: pubescence
Heading		Leaf and stem: anthocyanin. Note – cool temperatures will intensify anthocyanin colour Anther: colour (yellow or red) Panicle: length Florets: number per cm

SECONDARY

Vegetative		Note – stolon colour is best determined in the juvenile growth stage
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¹There are no UPOV Guidelines for the Conduct of Tests for Distinctness, Uniformity and Stability for this species.

Source: USA January 2009

HARDING GRASS, PHALARIS, BULBOUS CANARY GRASS*(Phalaris aquatica*L.[incl. *P.stenoptera* Hackel, *P. tuberosa* L.)

Stage of examination	UPOV Character Number ¹	Character description
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PRIMARY

Vegetative, late winter of the second year

Plant: tiller density

Leaf: length

Leaf: width

Plant: growth habit

Between head emergence and flowering
After floweringPlant: proportion of plants with hairs on outer glumes²

First leaf below flag leaf: length

First leaf below flag leaf: width

Stem: length of upper internode

Maturity

Plant: proportion of plants with intact rachilla seed retention³

Laboratory (seed)

Plant: proportion of plants with red root tips in germinating seedlings*

SECONDARY

Vegetative

Plant: vigour

Leaf: colour

Heading

Plant: time of inflorescence emergence

After flowering

Stem: length of longest stem

¹ There are no UPOV Guidelines for the Conduct of Tests for Distinctness, Uniformity and Stability for this species.

²Glumes are considered hairy even if they have only a few scattered hairs.

³Presence of intact rachilla seed retention can be inferred if most if not all florets in a fully mature head contain seed and these seeds cannot be removed by rapid spinning or flicking of the head.

*Red colour can range from very faint to intense.

Source: Australia, January 2009

PEARL MILLET*(Pennisetum glaucum (L.) R. Br.)*

Stage of examination	UPOV Character Number ¹	Character description
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PRIMARY

Vegetative	2	Flag leaf: anthocyanin colouration
	3	Flag leaf: intensity of anthocyanin colouration
	7	Stem: length of upper internodes
	10	Plant: natural height
Earing	9*	Spike: time of emergence
	15*	Spike: density
	19	Spikelets: shape
	21	Glume: anthocyanin colouration
Maturity	23	Grain: size
	24	Grain: shape
	25	Grain: colour

SECONDARY

Vegetative	1	Flag leaf: attitude of the blade
	4	Flag leaf: length
	5	Flag leaf: width
	6	Stem: number of nodes
	8	Stem: thickness of the internodes
Earing	13*	Spike: length
	14*	Spike: width
Maturity	26	Grain: presence of spotting
	27	Grain: size of spots

¹Please refer to UPOV Guidelines for Conduct of Tests for Distinctness, Uniformity and Stability Doc. No. TG/248/1 – Common millet- (2007-03-28) for explanation and method of examination.

QUACK GRASS, WHEAT GRASS, COUCH GRASS, SCUTCH*(Elytrigia repens (L.) Desv. ex Nevski)*

Stage of examination	UPOV Character Number ¹	Character description
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PRIMARY

Vegetative

Leaf: rate of growth

Rhizomes: rate of development

Growth: compact bunching

Tillering; tillers present and number

Heading

Time of flowering

Number of branches

SECONDARY

¹There are no UPOV Guidelines for the Conduct of Tests for Distinctness, Uniformity and Stability for this species.

Source: USA, January 2009

WEeping ALKALIGRASS, REFLEXED SALT GRASS*(Puccinellia distans (Jacq.) Parl.)*

Stage of examination	UPOV Character Number ¹	Character description
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PRIMARY

Anthesis		Leaf: shape Leaf: pubescence
Heading		Head: type
Maturity		Seed: shape and size

SECONDARY

Heading		Number of spikelets
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¹ There are no UPOV Guidelines for the Conduct of Tests for Distinctness, Uniformity and Stability for this species.

Source: USA January 2009

ZOYSIA TURFGRASS, JAPANESE LAWN GRASS, KOREAN LAWN GRASS*(Zoysia japonica Steud..)*

Stage of examination	UPOV Character Number ¹	Character description
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PRIMARY

Vegetative		Rhizomes: presence and growth
		Stolon and shoots: length
		Stolon and shoots: diameter
		Leaf: width
		Leaf : colour
		Leaf: pubescence length
Heading		Spike: length
		Spike: number
		Anther: colour
Seed		Glume: length
		Glume: width

SECONDARY

Vegetative		Anthocyanin in stolons
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¹ There are no UPOV Guidelines for the Conduct of Tests for Distinctness, Uniformity and Stability for this species.

Source: USA, January 2009

EASTERN STAR CLOVER*(Trifolium dasyurum C.Presl.)*

Stage of examination	UPOV Character Number ¹	Character description
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PRIMARY

Vegetative		Leaf marker
		Growth habit
Flowering		Time of flowering
		Seed: size
Maturity		Seed per head

SECONDARY

Vegetative		Leaf: anthocyanin
		Stem: hairiness
		Leaf: size
		Leaf: shape
Flowering		Calyx retention
Maturity		1000 seed weight

¹ There are no UPOV Guidelines for the Conduct of Tests for Distinctness, Uniformity and Stability for this species.
Source: Australia, January 2009

GLAND CLOVER, GLANDULAR CLOVER*(Trifolium glanduliferum (Boiss.))*

Stage of examination	UPOV Character Number ¹	Character description
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PRIMARY

Vegetative	Leaf: shape
	Leaf: size
	Leaf: margin
Flowering	Time of flowering
	Presence/absence of conspicuous floral bracts

SECONDARY

Vegetative	Density of glands on leaf margins
	Stipule: margin
	Calyx: margin
Flowering	Flower: colour
	Stipule: shape
Maturity	Seed dehiscence
	1000 seed weight

¹ There are no UPOV Guidelines for the Conduct of Tests for Distinctness, Uniformity and Stability for this species.
Source: Australia, January 2009

SERRADELLA*(Ornithopus compressus)*

Stage of examination	UPOV Character Number ¹	Character description
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PRIMARY

Vegetative		Leaflet: size
		Leaflet: number
		Leaflet: shape
Flowering		Flower: colour
Maturity		Plant: height

SECONDARY

Vegetative		Leaflet: hairs
Flowering		Flower: number in bunch
Maturity		Pod: length
		Pod: width
		Pod: number of seeds

¹ There are no UPOV Guidelines for the Conduct of Tests for Distinctness, Uniformity and Stability for this species.
Source: New Zealand, January 2009

HYBRIDS OF SERRADELLA*(Ornithopus sativus x Ornithopus compressus)*

Stage of examination	UPOV Character Number ¹	Character description
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PRIMARY

Vegetative	Leaflet: size
	Leaflet: number
	Leaflet: shape
Flowering	Flower: colour
Maturity	Plant height

SECONDARY

Vegetative	Leaflet: hairs
Flowering	Flower: number in bunch
Maturity	Pod: length
	Pod: width
	Pod: number of seeds

¹ There are no UPOV Guidelines for the Conduct of Tests for Distinctness, Uniformity and Stability for this species.
Source: New Zealand, January 2009

HYACINTH BEAN, LABLAB BEAN*(Lablab purpureus (L.) Sweet)*

Stage of examination	UPOV Character Number ¹	Character description
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PRIMARY

Vegetative		Plant: anthocyanin colouration of hypocotyl Plant: growth type Leaf: intensity of green colour Leaf: blistering
Flowering		Flower: colour of standard Flower: colour of wing Pod: length
Maturity		Seed: weight Seed: number of colours Seed: main colour Seed: predominant secondary colour Seed: distribution of predominant secondary colour

SECONDARY

Vegetative		Plant: height Plant: start of climbing Plant: speed of climbing Leaf: ground colour Leaf: size of terminal leaflet
Vegetative		Leaf: shape of terminal leaflet Leaf: apex of terminal leaflet
Flowering		Pod: maximum median width Pod: intensity of green colour Pod: degree of curvature Pod: shape of curvature Pod: shape of distal part excluding beak Pod: length of beak Pod: curvature of beak Time of 50% flowering
Maturity		Seed: shape of median longitudinal section Seed: shape of median cross-section Seed: veining

¹ There are no UPOV Guidelines for the Conduct of Tests for Distinctness, Uniformity and Stability for this species.

Source: Kenya, February 2009

RIBWORT PLANTAIN*(Plantago lanceolata L.)*

Stage of examination	UPOV Character Number ¹	Character description
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PRIMARY

Vegetative	Leaf: colour
	Leaf: hairs
	Leaf: tip
	Leaf: shape
Maturity	Petiole: length
	Head: shape

SECONDARY

Vegetative	Leaf: length
	Leaf: width
	Leaf: number of nerves
Maturity	Head: number per plant
	Head: length
	Head: width
	Head: colour
	Head: hairs

¹ There are no UPOV Guidelines for the Conduct of Tests for Distinctness, Uniformity and Stability for this species.
Source: New Zealand, January 2009

FINGER MILLET*(Eleusine coracana (L.) Gaertn)*

Stage of examination	UPOV Character Number ¹	Character description
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PRIMARY

Vegetative		Plant: growth habit
		Stem: pubescence
		Stem: anthocyanin colouration of sheath
		Stem: intensity of anthocyanin colouration of sheath
Earing		Ear: shape
		Ear: density
		Ear: branching
Maturity		Seed: glume colour
		Seed: colour

SECONDARY

Vegetative		Plant: height
		Plant: number of tillers
		Leaf: colour
		Flowering: time of 50% flowering
Earing		Ear: number of productive tillers
		Ear: length
		Ear: width
		Ear: size
		Ear: number of branches

¹ There are no UPOV Guidelines for the Conduct of Tests for Distinctness, Uniformity and Stability for this species.
Source: Kenya, February 2009

BLADDER CLOVER, BLADDER-POD CLOVER*(Trifolium spumosum L.)*

Stage of examination	UPOV Character Number ¹	Character description
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PRIMARY

Vegetative		Leaf marker (central pale spot, pale crescent)
		Size of central pale spot
		Growth habit
Flowering		Time of flowering
		Head: size
		Head: shape
		Seed per head

SECONDARY

Vegetative		Stem: thickness
		Leaf: size
Flowering		Flower: colour
Maturity		1000 seed weight
		Seed: colour

¹ There are no UPOV Guidelines for the Conduct of Tests for Distinctness, Uniformity and Stability for this species.

Source: Australia, January 2009

BISERRULA*(Biserrula pelecinus L.)*

Stage of examination	UPOV Character Number ¹	Character description
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PRIMARY

Vegetative		Leaflet: shape
		Leaflet: size
Flowering		Time of flowering
Maturity		Pod: shape
		Seeds per pod
		Seed: colour

SECONDARY

Vegetative		Shape of the first true leaf
Flowering		Flower: colour
Maturity		Pod: length
		Pod: colour
		Seed: shape
		1000 seed weight
		Seed: ornamentation

¹ There are no UPOV Guidelines for the Conduct of Tests for Distinctness, Uniformity and Stability for this species.

Source: Australia, January 2009

SPHERE MEDIC, SPHERE MEDICK*(Medicago murex Willd.)*

Stage of examination	UPOV Character Number ¹	Character description
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PRIMARY

Vegetative Leaf marking (flecks +/-)

Growth habit

Flowering Time of flowering

Maturity Pod: direction of spiral

Pod: shape

Pod: spines (size)

Pod: colour

SECONDARY

Maturity Seed: shape

1000 seed weight

Chromosome number (murex vs sphere)

¹ There are no UPOV Guidelines for the Conduct of Tests for Distinctness, Uniformity and Stability for this species.

Source: Australia, January 2009