Working Group on Medicinal and Aromatic Plants

November 2011

Draft Descriptor List *Salvia officinalis* L.

Highly discriminating descriptors in this descriptor list are marked with an asterisk [*].

Characterization should preferably be done during the second year after establishment to allow plants to fully express their characteristics. Characters should be recorded on an average of minimum 10 plants per accession.

Locality: Country, GPS

Date [YYYYMMDD]:

Specimen No. (In case of *in situ* characterization):

Accession No. (In case of *ex situ* characterization/evaluation):

		Descriptor	*In situ*	*Ex situ*

CHARACTERIZATION

7. Plant descriptors

7.1 Plant

Observations should be made on 10 randomly chosen, fully developed plants at inflorescence emergence.

			In situ	*Ex situ*
	7.1.1	**Plant growth habit** 3 Prostrate 5 Semi-erect 7 Erect	√	√
*	**7.1.2**	**Plant height** [mm] Measured on fully grown plants, from ground level to the tip of the plant.	√	√
	7.1.3	**Variability of populations** 3 Low (homogeneous) 5 Intermediate (relatively homogeneous) 7 High (heterogeneous)	√	√
*	**7.1.4**	**Plant diameter** [mm] Measured on fully grown plants.	√	√
	7.1.5	**Number of primary branches**	√	√

7.2 Stem

Observations should be made on 10 stems per plant.

			In situ	*Ex situ*
*	**7.2.1**	**Branching density** 3 Sparse 5 Intermediate 7 Dense	√	√

			In situ	*Ex situ*
*	**7.2.2**	**Shoot density** 3 Sparse 5 Intermediate 7 Dense	√	√
*	**7.2.3**	**Main stem length** [mm] Measured from the root collum to the point of flower insertion.	√	√
*	**7.2.4**	**Main stem diameter** [mm]	√	√
*	**7.2.5**	**Stem hairs** Observed before flowering. 0 Absent 1 Present	√	√
*	**7.2.6**	**Stem hairs type** 1 Pubescent 2 Villous	√	√
*	**7.2.7**	**Stem hairs density** 3 Sparse 5 Intermediate 7 Dense	√	√
	7.2.8	**Number of internodes (flowering node)** (from the ground to the first flowering node)	√	√

7.3 Leaf

Observations made on 10 leaves per plant if possible.

	7.3.1	**Leaf density** 3 Sparse 5 Intermediate 7 Dense	√	√
	7.3.2	**Colour of fully grown leaf** (as below or using RHS Colour Chart) 1 Pale green 3 Greyish green 5 Green 7 Dark green	√	√
*	**7.3.3**	**Leaf attachment** 1 Sessile 2 Sub-sessile 3 Petiolate	√	√
*	**7.3.4**	**Length of fully grown leaf** [mm] Measured at the middle of the plant.	√	√
*	**7.3.5**	**Length of petiole** [mm] Measured at the middle of the plant.	√	√
*	**7.3.6**	**Width of fully grown leaf** [mm] Measured at the middle of the plant.	√	√

			In situ	*Ex situ*
	7.3.7	**Ratio length/width of leaf blade**	√	√
	7.3.8	**Leaf arrangement** 1 Erect (up to 45° between stem and leaf) 3 Procumbent (45°-135° between stem and leaf)	√	√
*	**7.3.9**	**Leaf shape** 1 Simple 3 Two-lobed 5 Three-lobed	√	√
	7.3.10	**Blade shape** 1 Lanceolate 3 Ovate	√	√
	7.3.11	**Leaf peduncle at the upper part of stem** 0 Absent 1 Present	√	√
*	**7.3.12**	**Leaf – shape of apex** 1 Acute 3 Apiculate 5 Obtuse	√	√
*	**7.3.13**	**Leaf – shape of base** 1 Acute 3 Obtuse	√	√
	7.3.14	**Shoot leafiness** 1 Very scarce 3 Medium 5 Abundant	√	√
*	**7.3.15**	**Leaf – shape of margin** 1 Entire 3 Dentate	√	√
*	**7.3.16**	**Glands on upper side** 0 Absent 1 Present	√	√
*	**7.3.17**	**Glands density on upper side** 3 Sparse 5 Intermediate 7 Dense	√	√
*	**7.3.18**	**Glands on lower side** 0 Absent 1 Present	√	√
*	**7.3.19**	**Glands density on lower side** 3 Sparse 5 Intermediate 7 Dense	√	√

			In situ	*Ex situ*
	7.4 Inflorescence Observations made on 10 inflorescences per plant if possible.			
	7.4.1	**Flowering** 0 Absent 1 Present	√	√
*	**7.4.2**	**Length of inflorescence** [mm]	√	√
*	**7.4.3**	**Width of inflorescence** [mm]	√	√
*	**7.4.4**	**Number of flowers per inflorescence** Average of 3 randomly selected inflorescences.	√	√
*	**7.4.5**	**Date of flowering** [YYYYMMDD] Recorded when 50% of flowers are completely open.		√
*	**7.4.6**	**Date of full flowering** [YYYYMMDD] Recorded when 50% of seeds are ripe.		√
	7.5 Flower Observations made on 10 flowers per plant if possible.			
	7.5.1	**Corolla colour** (as below or using RHS Colour Chart) 1 White 3 Pink 5 Purple 7 Pale violet 9 Violet 99 Other (remarks)	√	√
	7.5.2	**Corolla length**(using stereo microscope) [mm]	√	√
	7.5.3	**Corolla width** (using stereo microscope) [mm]	√	√
*	**7.5.4**	**Corolla hairs** 0 Absent 1 Present	√	√
*	**7.5.5**	**Corolla hairs type** 1 Pubescent 2 Villous	√	√
*	**7.5.6**	**Corolla hairs density** 3 Sparse 5 Intermediate 7 Dense	√	√
*	**7.5.7**	**Type of stamens** 1 Included 2 Exserted 3 Both included and exserted	√	√

			In situ	*Ex situ*
	7.5.8	**Type of pistils** 1 Included 2 Exserted	√	√
	7.5.9	**Calyx shape** 1 All 5 teeth more or less equal 3 More or less bilabial	√	√
	7.5.10	**Length of calyx** (using stereo microscope) [mm]	√	√
	7.5.11	**Width of calyx** (using stereo microscope) [mm]	√	√
	7.5.12	**Ratio length/width of calyx** (using stereo microscope)	√	√
*	**7.5.13**	**Calyx gland hairs** 0 Absent 1 Present	√	√
*	**7.5.14**	**Calyx glands density** 3 Sparse 5 Intermediate 7 Dense	√	√

7.6 Seed

*	**7.6.1**	**1000-seed weight** [g] Harvested from each plant or per population.	√	√
	7.6.2	**Germination** [%] (ISTA: TP, 20/30°C (16h/8h), 21 d; TP, 20°C, 21 d) (AOSA: BP, S: 20/30°C (16h/8h), 14 d)	√	√
	7.6.3	**Seed yield per plant** [g/plant]	√	√

7.7 Remarks √

Any additional information, especially in the category “99 = Other”, may be specified here.

EVALUATION

8. Plant descriptors

8.1 Vegetative

8.1.1	**Fresh biomass per plant** [FWg]	√	√
8.1.2	**Leaves dry matter content** [DWg] In an oven set (artificial drying) at 30-35ºC ± 48 h until material breakable.	√	√
8.1.3	**Dry biomass per plant** [DWg] In an oven set (artificial drying) at 30-35ºC ± 48 h until plant breakable.	√	√

			In situ	*Ex situ*
	8.2 Chemical composition			
*	**8.2.1**	**Essential oil content in dry leaves** [% DW] [v/w] Main compound in the essential oil [%] (components>10%).	√	√
	8.2.1.1	**a-thujone content [%]**		
	8.2.1.2	**Camphor content [%]**		
	8.2.1.3	**1,8 Cineol (eucalyptol) content [%]**		
*	**8.2.2**	**Polyphenol content in dry leaves** [% DW] [v/w]	√	√
	8.3 Cytological characters			
*	**8.3.1**	**Chromosome number**	√	√
	8.4 Biotic stress susceptibility			
	8.4.1	**Presence of disease** 0 Absent 1 Present	√	√

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CONTRIBUTORS

Aegean Agricultural Research Institute, PO Box 9, Menemen, Izmir 35661, Turkey

Ali Osman SARI
Director
Current address:
Head of Field Crops, General Directorate of Agricultural Researches and Politics
Tarım Kampüsü, İstabbul Yolu Üzer No 38
06171 Yenimahalle, Ankara, Turkey
Email1: aosari@tagem.gov.tr
Email2: a_o_sari@hotmail.com

Tuncer TASKIN
Biologist, Plant Genetic Resources Department
Email: tuntaskin@yahoo.co.uk

Mehmet TUTAR
Head of Medicinal and Aromatic Plants
Email: mehmettutar1@gmail.com

Ayfer TAN
Head, Plant Genetic Resources Department
Email1: pgr@aari.gov.tr
Email2: ayfertan-pgr@hotmail.com
Email3: ayfer_tan@yahoo.com