Working Group on Medicinal and Aromatic Plants
November 2011

Draft Descriptor List *Origanum vulgare* 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):

		In situ	*Ex situ*
	CHARACTERIZATION		
	7. Plant descriptors		
	7.1 Plant Observations should be made on fully 10 randomly developed plants until inflorescence emergence.		
*	**7.1.1 Plant growth habit** 3 Prostate 5 Semi-erect 7 Erect	√	√
*	**7.1.2 Plant height** [cm] Measured on fully grown plants, from ground level to the tip of the plant.	√	√
	7.2 Stem Observations should be made on 10 stems per plant.		
*	**7.2.1 Number of stems per plant**	√	√
*	**7.2.2 Branching density** 3 Sparse 5 Intermediate 7 Dense	√	√

			In situ	*Ex situ*
*	**7.2.3**	**Stem pubescence** (non-glandular trichomes) 1 Smooth 3 Slightly hairy 5 Hairy 7 Dense	√	√
*	**7.2.4**	**Colour of stem** (as below or using RHS Colour Chart) 1 Green 2 Dark red and green 3 Dark red 4 Brown 99 Other (remarks)	√	√
	7.2.5	**Number of internodes** (from the ground to the first flowering node)	√	√
	7.3	**Leaf** Observations made on 10 fully grown leaves per plant if possible; measured leaves are those of the middle node of the leafy part.		
*	**7.3.1**	**Density of foliage** 3 Sparse 5 Medium 7 Dense	√	√
	7.3.2	**Colour of the upper surface** (as below or using RHS Colour Chart) 1 Pale green 2 Green 3 Dark green 4 Greyish green 99 Other (remarks)	√	√
*	**7.3.3**	**Ratio length/width of leaf** [mm]	√	√
*	**7.3.4**	**Length of petiole** [mm]	√	√
*	**7.3.5**	**Shape of blade** 1 Ovate 2 Roundish 3 Oblong 4 Rhomboid 99 Other (remarks)	√	√

			In situ	*Ex situ*
*	**7.3.6**	**Shape of leaf base** 1 Acute 2 Acuminate 3 Asymmetric 4 Rounded	√	√
*	**7.3.7**	**Leaf margin** 1 Entire 2 Denticulate 3 Dentate 99 Other (remarks)	√	√
*	**7.3.8**	**Pubescence (glandular trichomes) of upper surface** 0 Absent 1 Present	√	√
*	**7.3.9**	**Density of glandular trichomes on upper surface** 3 Sparse 7 Medium 9 Dense	√	√
*	**7.3.10**	**Pubescence** (glandular trichomes) **of lower surface** 0 Absent 1 Present	√	√
*	**7.3.11**	**Density of glandular trichomes on lower surface** 3 Sparse 7 Medium 9 Dense	√	√
*	**7.3.12**	**Pubescence** (non-glandular trichomes-hairs) **of leaf veins** 0 Absent 1 Present	√	√
*	**7.3.13**	**Density of non-glandular trichomes-hairs on leaf veins** 3 Sparse 7 Medium 9 Dense	√	√
*	**7.3.14**	**Shape of apex** 1 Acute 2 Obtuse 3 Rounded 4 Truncate 5 Emarginate	√	√

			In situ	*Ex situ*
	7.4	**Inflorescence**		
*	**7.4.1**	**Length of inflorescence** [mm]	√	√
*	**7.4.2**	**Width of inflorescence** [mm]	√	√
*	**7.4.3**	**Density of flowers** 1 Very sparse 3 Sparse 5 Medium 7 Dense 9 Very dense	√	√
*	**7.4.4**	**Colour of petals** (as below or using RHS Colour Chart) 1 Pink 2 White 3 Purplish red 4 Pale lilac 5 Purple	√	√
*	**7.4.5**	**Ratio length of petals/length of calyx tube** 1 Petals slightly exceeding the calyx tube 2 Petals twice as long as the calyx tube 3 Petals 3 times as long as the calyx tube 4 Petals 4 times as long as the calyx tube	√	√
*	**7.4.6**	**Shape of calyx tube** 1 Campanulate 2 Turbinate	√	√
*	**7.4.7**	**Type of calyx tube** 1 More or less equal teeth 3 Truncate and entire at apex 5 One-lipped, with a deep slit on one side 7 Two-lipped	√	√
	7.4.8	**Colour of calyx** (as below or using RHS Colour Chart) 1 Purple 2 Green 3 Green, cone purple 4 Green, 1/3 purple 5 Green, 1/2 purple	√	√
*	**7.4.9**	**Glandular trichomes on outer side of calyx** 0 Absent 1 Present	√	√
*	**7.4.10**	**Density of glandular trichomes on outer side of calyx** 3 Sparse 7 Medium 9 Dense	√	√

			In situ	*Ex situ*
*	**7.4.11**	**Number of bracts pairs per spike**	√	√
*	**7.4.12**	**Length of bracts** [mm]	√	√
*	**7.4.13**	**Ratio length of bracts/length of calyx** 1 Bracts twice as long as calyx 2 Bracts more than twice longer than calyx	√	√
*	**7.4.14**	**Shape of bracts** 1 Ovate 2 Lanceolate 4 Obovate 5 Elliptic 99 Other (remarks)	√	√
	7.4.15	**Texture of bracts** 1 Membranous 2 Herbaceous	√	√
	7.4.16	**Colour of bracts** 1 Purplish 2 Green 3 Green, 1/3 purple 4 Green,1/2 purple	√	√
*	**7.4.17**	**Glandular trichomes on outer side of bracts** 0 Absent 1 Present	√	√
*	**7.4.18**	**Density of glandular trichomes on outer side of bracts** 3 Sparse 7 Medium 9 Dense	√	√
	7.4.19	**Glandular trichomes on inner side of bracts** 0 Absent 1 Present	√	√
*	**7.4.20**	**Density of glandular trichomes on inner side of bracts** 3 Sparse 7 Medium 9 Dense	√	√
*	**7.4.21**	**Non-glandular trichomes on outer side of bracts** 0 Absent 1 Present	√	√

		In situ	*Ex situ*
*	**7.4.22 Density of non-glandular trichomes on outer side of bracts** 3 Sparse 7 Medium 9 Dense	√	√
	7.4.23 Non-glandular trichomes on inner side of bracts 0 Absent 1 Present	√	√
*	**7.4.24 Density of non-glandular trichomes on outer side of bracts** 3 Sparse 7 Medium 9 Dense	√	√
	7.4.25 Date of beginning of flowering [YYYYMMDD] Recorded when 50% of inflorescences have flower buds, per accession.	√	√
	7.4.26 Date of full flowering [YYYYMMDD] Recorded when 50% of flowers are completely open, per accession.	√	√
	7.5 Seed		
	7.5.1 Colour of seeds 1 Light brown 2 Brown 3 Dark brown 99 Other (remarks)	√	√
*	**7.5.2 Seed productivity** [g/per plant] (average of 10 plants)	√	√
*	**7.5.3 1000-seed weight** [g]	√	√
	7.6 Remarks Any additional information, especially in the category “99 = Other” under various descriptors above, may be specified here.	√	√

		In situ	*Ex situ*
	EVALUATION		
	8. Plant descriptors		
	8.1 Fresh biomass per plant [FW g]	√	√
	8.2 Dry biomass per plant [DW g]	√	√
*	**8.3 Winter hardiness** 1 Very low (95% of plants are damaged) 2 Low (75-94% of plants are damaged) 3 Intermediate (50-74% of plants are damaged) 4 High (5-49% of plants are damaged) 5 Very high (0-4% plants are damaged)	√	√
*	**8.4 Resistance to diseases and pests** 1 Very low (95% of plants are damaged) 2 Low (75-94% of plants are damaged) 3 Intermediate (50-74% of plants are damaged) 4 High (5-49% of plants are damaged) 5 Very high (0-4% plants are damaged)	√	√
*	**8.5 Biotic stress susceptibility: fungi** 0 Absent 1 Present	√	√
*	**8.6 Biotic stress susceptibility: insects** 0 Absent 1 Present	√	√
*	**8.7 Biotic stress susceptibility: viruses** 0 Absent 1 Present	√	√
*	**8.8 Chemical characters** (measured at full blooming)		
	8.8.1 Essential oil content [% DW]	√	√
	8.8.2 Essential oil composition		
	8.8.2.1 Ratio of carvacrol in essential oil [%]	√	√
	8.8.2.2 Ratio of thymol in essential oil [%]	√	√
	8.8.2.3 Ratio of phenolic monoterpenes [%]	√	√

			In situ	*Ex situ*
	8.9	**Cytological characters**		
*	**8.9.1**	**Chromosome number**	√	√
*	**8.9.2**	**Ploidy level**	√	√

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