



Minimum descriptors for leafy vegetables

ECPGR Working Group on Leafy Vegetables
First Meeting, 13-14 October 2005, Olomouc, Czech Republic

These descriptor lists have been agreed upon by the WG members and should not be seen as Bioversity International descriptors.

CONTENTS

Cultivated lettuce (<i>Lactuca sativa</i>)	1
Wild <i>Lactuca</i> spp. (<i>L. serriola</i> and related species from primary genepool, <i>L. saligna</i>, <i>L. virosa</i>).....	1
Spinach (<i>Spinacia</i> spp.).....	2
Leaf chicory (<i>Cichorium intybus</i>)	3
Witloof (<i>Cichorium intybus</i> var. <i>foliosum</i>).....	3
Endive – cut and plain chicory (<i>Cichorium endivia</i>).....	4
Root chicory (<i>Cichorium intybus</i>)	4

ECPGR Secretariat

January 2009

Cultivated lettuce (*Lactuca sativa*)

Descriptor name	Descriptor state	Note
Seed colour	1 = white/cream 2 = yellow 3 = brown 4 = black	
Flower anthocyanin content	0 = absent 1 = present	
Leaf anthocyanin content	0 = absent 3 = weak 5 = medium 7 = strong	At harvest maturity
Outer leaf colour	1 = yellow green 2 = green 3 = grey green 4 = blue green 5 = red green	At harvest maturity
Outer leaf colour intensity	3 = light 5 = medium 7 = dark	At harvest maturity
Head shape	0 = head not formed 1 = elliptic 2 = broad elliptic 3 = circular 4 = transverse elliptic	At harvest maturity in longitudinal section
Heart formation	0 = absent 3 = slight 5 = moderate 7 = well developed	At harvest maturity
Homogeneity	1 = completely heterogeneous 3 = slightly homogeneous 5 = moderately homogeneous 7 = very homogeneous 9 = completely homogeneous	At harvest maturity

Wild *Lactuca* spp. (*L. serriola* and related species from primary genepool, *L. saligna*, *L. virosa*)

Descriptor name	Descriptor state	Note
Seed colour	1 = white/cream 2 = yellow 3 = brown 4 = black	
Spines on stem	0 = absent 3 = few 5 = moderate 7 = many	
Spines on leaf midrib	0 = absent 3 = few 5 = moderate 7 = many	
Leaf incision of rosette leaves	1 = not incised 2 = pinnatilobed (up to 1/3) 3 = pinnatifid (1/2) 4 = pinnatipart (2/3) 5 = pinnatisect (more than 2/3)	Depth of incisions from blade margin to the main vein
Leaf incision of cauline leaves	1 = not incised 2 = pinnatilobed (up to 1/3) 3 = pinnatifid (1/2) 4 = pinnatipart (2/3) 5 = pinnatisect (more than 2/3)	Depth of incisions from blade margin to the main vein
Flower anthocyanin content	0 = absent 1 = present	
Flowering time (optional)		Number of days after sowing until first flower head

Spinach (*Spinacia* spp.)

Descriptor name	Descriptor state	Note
Seed spines	0 = absent 1 = present	
Stem anthocyanin content	0 = absent 3 = weak 5 = medium 7 = strong	
Leaf shape excluding basal lobes	1 = elliptic 2 = broad elliptic 3 = circular 4 = ovate 5 = broad ovate 6 = triangular	Score at 7th leaf stage
Leaf colour	1 = yellow green 2 = grey green 3 = dark green	Score at 7th leaf stage
Leaf colour intensity	3 = light 5 = medium 7 = dark	Score at 7th leaf stage
Leaf blistering	3 = weak 5 = medium 7 = strong	Score at 7th leaf stage
Bolting time		Number of days from sowing until 15% of plants have stem of 5 cm
Monoeciousness	0 = 0% 3 = 25% 5 = 50% 7 = 75% 9 = 100%	Percentage of monoecious plants

Leaf chicory (*Cichorium intybus*)

Descriptor name(*)	Descriptor state	Note
UPOV n°7: Leaf: colour (excluding midrib)	1 = green 2 = yellowish green 3 = reddish green 4 = red	
UPOV n°8: Leaf: intensity of colour	3 = light 5 = medium 7 = dark	
UPOV n°11 (modified): Leaf: anthocyanin coloration at harvest maturity	0 = absent 1 = present	
UPOV n°19 (modified): Plant: head formation	0 = absent 1 = present	
Head: colour of outer leaves	1 = green 2 = yellowish green 3 = reddish green 4 = red 99 = other (specify in descriptor Remarks)	Main colour of outer leaves
UPOV n°32: Time of beginning of bolting	1 = very early 3 = early 5 = medium 7 = late 9 = very late	
Morphotype (cultigroup)	1 = Barba di Cappuccino 2 = Améliorée 3 = Catalogna 4 = Pan di Zucchero 5 = Rossa di Treviso 6 = Rossa di Verona 7 = Palla rossa (Rossa di Chioggia) 8 = Variegata di Castelfranco 9 = Bianco di Mantova 99 = other (specify in descriptor Remarks)	
Remarks		Any original trait not taken into account by the above descriptors should be described here.

(*) UPOV numbers refer to UPOV TG/154/3 (Leaf Chicory)

Witloof (*Cichorium intybus* var. *foliosum*)

Descriptor name(*)	Descriptor state	Note
UPOV n°6: Leaf: length	1 = short 5 = medium 7 = long 9 = very long	
UPOV n°10: Leaf: intensity of green colour	3 = light 5 = medium 7 = dark	All observations on the leaf should be made on the full grown leaf.
Leaf: anthocyanin content	0 = absent 1 = present	All observations on the leaf should be made on the full grown leaf.
UPOV n°21: Bolting tendency (from an early sowing)	3 = weak 5 = medium 7 = strong	
Head: shape	1 = cylindrical 2 = cylindrico-globular 3 = globular	
UPOV n°27: Head: length	1 = very short 3 = short 5 = medium 7 = long 9 = very long	
Head: colour	1 = yellow 2 = red	All the observations on the head should be made at the time of harvesting of the heads before exposure to daylight.

(*) UPOV numbers refer to UPOV TG/173/3 (Witloof, Chicory)

Endive – cut and plain chicory (*Cichorium endivia*)

Descriptor name(*)	Descriptor state	Note
UPOV n°1: Plant: botanical type	1 = plain type 2 = intermediate type (between cut and plain types) 3 = cut type	
UPOV n° 2 (modified): Plain-type varieties only: Plant: sub-type	1 = Grosse Bouclée 2 = A cœur Plein 3 = Géante maraichère 4 = Cornet 99 = other (specify in descriptor Remarks)	
UPOV n° 3 (modified): Non-plain type varieties only: Plant: sub-type	1 = Wallonne type 2 = De Louviers type 3 = D'été à Cœur Jaune type 99 = other (including intermediate types between cut and plain types) (specify in descriptor Remarks)	
UPOV n°7: Heart: colour	1 = yellowish green 2 = green	
UPOV n°8: Heart: intensity of green colour	3 = light 5 = medium 7 = dark	
UPOV n°14: Leaf: colour	1 = yellowish 2 = green 3 = greyish green	All the observations on the leaf should be made just before harvest maturity on leaves excluding the outer and central leaves.
UPOV n°15: Leaf: intensity of green colour	3 = light 5 = medium 7 = dark	
UPOV n°28: Flower: colour	1 = white 2 = pink 3 = blue 4 = violet blue	
UPOV n°30: Time of bolting	3 = early 5 = medium 7 = late	
Remarks		Any original trait not taken into account by the above descriptors should be described here.

(*) UPOV numbers refer to UPOV TG/118/4 (Endive)

Root chicory (*Cichorium intybus*)

Descriptor name(*)	Descriptor state	Note
Root shape	3 = cylindrical, 5 = cylindro-conical 7 = conical	
Insertion of root crown	3 = raised 5 = flat 7 = depressed	
Dry matter content of root (optional)	3 = weak 5 = medium 7 = high	
UPOV n°3: Leaf: attitude	3 = erect 5 = semi-erect 7 = horizontal	
UPOV n°4: Leaf: length	3 = short 5 = medium 7 = long	3 = De Magdebourg 5 = Halles 7 = Flandres
UPOV n°5: Leaf: width	3 = narrow 5 = medium 7 = broad	3 = Dageraad 5 = Halles 7 = Flandres
UPOV n°18: Bolting tendency (from an early sowing)	3 = low 5 = medium 7 = strong	

(*) UPOV numbers refer to UPOV TG/172/4 (Industrial chicory)