

Commission Directive 72/168/EEC of 14 April 1972 on determining the characteristics and minimum conditions for inspecting vegetable varieties  
Official Journal L 103 , 02/05/1972 P. 0006 - 0024

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community;

Having regard to the Council Directive<sup>1</sup> of 29 September 1970 on the marketing of vegetable seed, as amended by the Directive of 30 March 1971,<sup>2</sup> and in particular Article 7 (2) thereof;

Whereas, in accordance with the provisions of the abovementioned Directive, Member States are obliged to compile one or more catalogues of the varieties accepted for certification and inspection of standard seed and marketing in their territory;

Whereas the acceptance of varieties is subject to Community conditions which must be enforced by means of official inspections and in particular by crop inspections;

Whereas the inspections must cover a sufficient number of characteristics to enable the varieties to be described;

Whereas the minimum characteristics which have to undergo inspection should be determined at Community level;

Whereas, moreover, the minimum conditions for carrying out the inspections must be laid down;

Whereas these characteristics and minimum conditions for inspection should be laid down in the light of the present state of scientific and technical knowledge;

Whereas the measures provided for in this Directive are in accordance with the Opinion of the Standing Committee on Seeds and Propagating Material for Agriculture, Horticulture and Forestry;

HAS ADOPTED THIS DIRECTIVE:

#### Article 1

Member States shall provide that official inspections carried out for the acceptance of vegetable varieties shall cover at least the characteristics listed in Annex I.

They shall ensure that the minimum conditions listed in Annex II are fulfilled at the time of the inspections.

#### Article 2

Member States shall bring into force not later than 1 July 1972 the laws, regulations or administrative provisions necessary to comply with this Directive. They shall forthwith inform the Commission thereof.

#### Article 3

This Directive is addressed to the Member States.

Done at Brussels, 14 April 1972.

For the Commission

The President

S.L. MANSCHOLT 1 OJ No L 225, 12.10.1970, p. 7. 2 OJ No L 87, 17.4.1971, p. 24.

#### ANNEX I

1. ONION *Allium cepa* L.

1. Leaves: 1.1 height

- 1.2 colour
- 1.3 glaucescence : presence or absence

- 2. Bulb: 2.1 colour of outer skin
- 2.2 colour of the flesh
- 2.3 ring formation of the flesh
- 2.4 shape
- 2.5 dry matter content

3. Classification of early maturity

2. LEEK *Allium porrum* L.

- 1. Leaves: 1.1 habit
- 1.2 shape of the lamina
- 1.3 surface appearance
- 1.4 colour
- 1.5 anthocyanin : presence or absence (to be measured after a cold spell)

- 2. Stem: 2.1 length
- 2.2 thickness
- 2.3 shape

- 3. Seed (ripe and dry) : size
- 4. Speed of growth
- 5. Resistance to cold

3. CHERVIL *Anthriscus cerefolium* (L.) Hoffm.

- 1. Habit of the plant
- 2. Leaf: 2.1 colour
- 2.2 surface
- 2.3 shape of the folioles
- 2.4 indentation of the folioles

3. Flower : length of the scape

4. CELERY *Apium graveolens* L

- A. Ribbed celery 1. Plant: 1.1 habit
- 1.2 suckers : presence or absence

- 2. Leaves: 2.1 colour
- 2.2 variegation : presence or absence

- 3. Petiole: 3.1 structure : solid or hollow
- 3.2 colour

- 3.3 anthocyanin : presence or absence
- 3.4 length
- 3.5 width
- 3.6 shape of cross-section

4. Propensity to whiten : natural or artificial

B. Celeriac 1. Leaves (at the beginning of tuber development): 1.1 habit

- 1.2 height
- 1.3 number
- 1.4 size of the folioles
- 1.5 anthocyanin on the petiole : presence or absence

2. Tuber: 2.1 size

- 2.2 shape
- 2.3 size of protrusions
- 2.4 type of insertion of roots
- 2.5 number of roots
- 2.6 thickness of roots
- 2.7 appearance of epidermis

3. Colour on cooking

5. ASPARAGUS *Asparagus officinalis* L.

- 1. Turion: 1.1 intensity of the anthocyanic colouring of the tip
- 1.2 diameter

2. Sexual distribution : bisexual or male variety

3. Classification of early maturity

6. SPINACH BEET, CHARD *Beta vulgaris* L. var. *cycla* (L.) Ulrich

- 1. Plant: 1.1 shoots : presence or absence
- 1.2 habit of the leaves

2. Leaf (at the adult plant stage): 2.1 length, including petiole

- 2.2 shape
- 2.3 blistering
- 2.4 colour
- 2.5 width of the main leaf-vein system
- 2.6 cross-section of the petiole

3. Monogerm

7. RED BEET or BEETROOT *Beta vulgaris* L. var *esculenta* L.

1. Leaves: 1.1 Leaf/root ratio
- 1.2 intensity of anthocyanic colouring

2. Root: 2.1 shape
- 2.2 shape of the base
- 2.3 appearance of cork on the skin
- 2.4 external colour
- 2.5 colour of the flesh

3. Monogerm

4. Classification of early maturity

8. CURLY KALE *Brassica oleracea* L. var. *acephala* D.C. subvar. *Laciniata* L.

1. Height of stalk
2. Leaf: 2.1 shape
- 2.2 colour
- 2.3 degree of curl

9. CAULIFLOWER *Brassica oleracea* L. convar. *Botrytis* (L) Alef. var. *botrytis*

1. Young plant : anthocyanin : presence or absence
2. Mature plant : size
3. Stalk : length
4. External leaves of mature plant: 4.1 habit
- 4.2 shape of the lamina
- 4.3 colour
- 4.4 curling of the ends
- 4.5 blistering
- 4.6 size of the main leaf-vein system

5. Flower: 5.1 size

- 5.2 shape
- 5.3 relief
- 5.4 firmness
- 5.5 pilosity : presence or absence
- 5.6 anthocyanin : presence or absence

6. Classification of early maturity

10. SPROUTING BROCCOLI or CALABRESE *Brassica oleracea* L. convar. *botrytis* L. Alef. var. *italica* Plenck

1. Stalk: 1.1 length
- 1.2 ramifications : presence or absence

- 2. Leaf: 2.1 undulation of edges of the lamina
- 2.2 anthocyanin : presence or absence

- 3. Inflorescence (before blooming of the first flower): 3.1 size
- 3.2 shape
- 3.3 firmness
- 3.4 colour
- 3.5 bracts : apparent or non-apparent
- 3.6 likelihood of second flowering

11. BRUSSELS SPROUTS *Brassica oleracea* L. var. *bullata* subvar. *gemmifera* D C.

- 1. Stalk : length (at the mature plant stage)
- 2. Leaf : colour
- 3. Sprout: 3.1 size
- 3.2 shape

4. Classification of early maturity

12. SAVOY CABBAGE *Brassica oleracea* L. var. *bullata* D C. et var. *sabauda* L.

13. CABBAGE *Brassica oleracea* L. var. *capitata* L.f. *alba* D C.

14. RED CABBAGE *Brassica oleracea* L. var. *capitata* L.f. *rubra* (I.) Thell

- 1. Plant 1.1 size
- 1.2 stalk : length

- 2. External leaf: 2.1 colour
- 2.2 curling : presence or absence
- 2.3 presence of wax

- 3. Head: 3.1 size
- 3.2 shape

4. Classification of early maturity

15. KOHLRABI *Brassica oleracea* L. var. *gongylodes* L.

- 1. Plant : size
- 2. Leaf : colour
- 3. Tuber: 3.1 shape
- 3.2 colour

4. Classification of occurrence of fibrousness

5. Classification of early maturity

16. SPRING TURNIP - AUTUMN TURNIP *Brassica rapa* L. var. *rapa* (L.) Thell

1. Leaves (to be noted just before harvesting and from mature plants): 1.1 type of leaf : whole or not

1.2 leaf/root ratio

2. Root: 2.1 shape

2.2 colour of top

2.3 colour of the flesh

17. CHILI, PEPPER, CAPSICUM *Capsicum annuum* L.

1. Seedling: 1.1 anthocyanin on the hypocotyl axis : presence or absence

1.2 intensity of green colouring on the hypocotyl axis

2. Plant : length between nodes

3. Fruit: 3.1 habit

3.2 size

3.3 shape (excluding the first fruit) 3.3.1 shape of longitudinal cross-section

3.3.2 shape of the peduncle

3.3.3 shape of the apex

3.4 colour 3.4.1 colour (before ripening)

3.4.2 colour (when ripe)

3.5 thickness of the flesh

3.6 appearance of the surface of the fruit

3.7 capsaicin : presence or absence

4. Classification of early maturity

18. ENDIVE *Cichorium endivia* L.

1. Habit of the plant

2. Leaves: 2.1 appearance of the heart

2.2 shape of young leaves of the heart (Scarole)

2.3 shape of the mature plant

2.4 colour of the leaf

2.5 shine of the leaf

2.6 appearance of the surface of the lamina (Scarole)

2.7 appearance of the edge of the lamina

2.8 anthocyanin on the principal leaf veins : presence or absence (Frisée)

3. Classification of early maturity

4. Resistance to bolting

19. CHICORY *Cichorium intybus* L. var. *foliosum* Bisch

A. Witloof chicory 1. Leaves: tendency to early drying (to be noted in the Autumn of the 1st year)

2. Head : shape

3. Classification of early maturity on forcing

4. Rate of growth of the heart

B. Large-leaved chicory (Italian chicory) 1. Leaf (vegetative phase): 1.1 shape

1.2 anthocyanin : presence or absence

2. Heart: 2.1 shape

2.2 shoots : presence or absence

2.3 anthocyanin : presence or absence

2.4 intensity of green colouring

2.5 blistering of the leaf

20. WATER MELON *Citrullus vulgaris* L.

1. Stalks: 1.1 anthocyanin : presence or absence

1.2 pilosity : presence or absence

2. Leaf (at the beginning of flowering): 2.1 depth of denticulation

2.2 pilosity : presence or absence

3. Flower (at the time of formation of the first fruits): 3.1 shape of the corolla

3.2 pilosity of the calyx : presence or absence

4. Sex

5. Fruit (at the stage preceding ripeness) 5.1 size

5.2 shape

5.3 ribs : presence or absence

5.4 basic colour of the rind (epicarp)

5.5 colour of marbling of the rind (epicarp)

5.6 colour of the flesh (endocarp)

5.7 flesh cavity : presence or absence

5.8 texture of the flesh

5.9 seeds : presence or absence

6. Seed : (ripe and dry) 6.1 size

6.2 shape

6.3 colour : unicoloured or multicoloured

## 7. Ploidy level

### 21. MELON *Cucumis melo* L.

1. Seedling: 1.1 length of the hypocotyl axis
- 1.2 size of the cotyledons

#### 2. Sex

3. Fruit: 3.1 size
- 3.2 shape
- 3.3 loosening of the peduncle
- 3.4 ribs
- 3.5 broderic
- 3.6 colour of the rind (before ripening)
- 3.7 colour of the rind (when ripe)
- 3.8 marbling and specks
- 3.9 colour of the flesh

4. Seed : (ripe and dry) 4.1 size
- 4.2 colour

#### 5. Classification of the sugar content of the fruit (when ripe)

#### 6. Classification of early maturity

### 22. CUCUMBER - GHERKIN *Cucumis sativus* L.

1. Seedling : bitterness : presence or absence
2. Inflorescence : number of female flowers at each female level
3. Sex
4. Fruit: 4.1 length
- 4.2 colour (before ripening and when ripe)
- 4.3 size and colour of thorns
- 4.4 size and colour of hairs
- 4.5 number and size of warts
- 4.6 grooves
- 4.7 broderic of the ripe fruit
- 4.8 neck : presence or absence
- 4.9 parthenocarpic development
- 4.10 bitterness : presence or absence

#### 5. Classification of early maturity

### 23. MARROW *Cucurbita pepo* L.

1. Type of growth of the plant
2. Stalks: 2.1 length between the nodes
- 2.2 cross-section

3. Leaf (at the beginning of flowering): 3.1 shape



- 3.2 depth of denticulations
- 3.3 stains : presence or absence
- 3.4 tendrils : presence or absence

- 4. Flowers: 4.1 length of the peduncle of male flowers
- 4.2 corolla of female flowers : persistence or non-persistence

5. Sexual distribution

- 6. Fruit: 6.1 shape (at the harvesting stage)
- 6.2 ribs : presence or absence (at the harvesting stage)
- 6.3 basic colour of the rind (at the harvesting stage)
- 6.4 colour of the marbling of the rind (at the harvesting stage)
- 6.5 colour of the rind (when fully ripe)
- 6.6 marbling : presence or absence (when fully ripe)

- 7. Seed (ripe and dry) : size
- 8. Classification of early maturity

24. CARROT *Daucus carota* L. ssp. *sativus* (Hoffm.) Hayek

- 1. Leaves : height
- 2. Root: 2.1 length
- 2.2 shape
- 2.3 external colour

- 3. Seed (ripe and dry)-pilosity : presence or absence
- 4. Classification of early maturity

25. FENNEL *Foeniculum vulgare* P. Mill.

- 1. Habit of the plant
- 2. Leaf : dimensions of laciniae
- 3. Grumolo: 3.1 shape
- 3.2 imbrications of sheaths
- 3.3 fibrousness of sheaths
- 3.4 shoots : presence or absence

26. LETTUCE *Lactuca sativa* L.

- 1. Seedling: 1.1 hypocotyl axis : anthocyanin : presence or absence
- 1.2 cotyledons : anthocyanin : presence or absence (before opening out)

- 2. Leaf : (to be noted from the 3rd and 4th leaf of the young plant) 2.1 habit
- 2.2 overall shape
- 2.3 shape of the base
- 2.4 shape of the tip
- 2.5 undulation of the edge of the leaf

- 2.6 contour of the upper half
- 2.7 contour of the lower half
- 2.8 intensity and shade of colouring
- 2.9 anthocyanin : presence or absence

- 3. Plant : (at the harvesting stage)
- 3.1 type of heart
- 3.2 profile of the heart
- 3.3 texture of the leaves
- 3.4 blistering of the external leaves
- 3.5 intensity and shade of colour of the external leaves
- 3.6 anthocyanin of the external leaves : presence or absence

- 4. Seed (ripe and dry) : colour
- 5. Classification of early hearting-up
- 6. Classification of speed of heading in long days

27. PARSLEY *Petroselinum hortense* Hoffm.

- 1. Leaves:
- 1.1 height
- 1.2 shape
- 1.3 colour

- 2. Type of root

28. RUNNER BEAN *Phaseolus coccineus* L.

- 1. Type of growth
- 2. Flower : colour
- 3. Pod: 3.1 length
- 3.2 fibres : presence or absence

- 4. Seed (ripe and dry) : colour

29. FRENCH BEAN *Phaseolus vulgaris* L.

- 1. Seedling : colour of the hypocotyl axis
- 2. Type of growth : dwarf or climbing
- 3. Leaf : colour of the petiolule, in particular at the node
- 4. Inflorescence: 4.1 colour of the flower (unicoloured or bicoloured)
- 4.2 size of the floral bracts

- 5. Pod: 5.1 length
- 5.2 transversal cut
- 5.3 surface appearance
- 5.4 fibres : presence or absence
- 5.5 parchment : presence or absence
- 5.6 constriction : between the seeds and at the level of the seeds
- 5.7 basic colour and superimposed colour
- 5.8 length and shape of the style

5.9 number of ovules

- 6. Seed (ripe and dry): 6.1 size
- 6.2 shape of longitudinal cross-section
- 6.3 shape of transversal cross-section
- 6.4 colour (excluding hilum ring)
- 6.5 colour of the hilum ring
- 6.6 colour of the halo
- 6.7 nervation

7. Classification of early maturity

8. Resistance to *Colletotrichum Lindemuthianum*

30. PEA *Pisum sativum* L. (excl. *P. arvense* L.)

- 1. Plant 1.1 type of growth (dwarf or climbing)
- 1.2 number of the 1st floral node (excluding the cotyledon node)

2. Leaf: 2.1 colour

2.2 maculation of the stipules : presence or absence

3. Inflorescence: 3.1 number of flowers by inflorescence

3.2 shape of the base of the vexillum : in V shape or not

4. Pod: 4.1 length (in the dry state)

4.2 shape of the free end

4.3 dorsal profile (at the 2nd floral node)

4.4 colour of the green seed

4.5 parchment : presence or absence

4.6 number of ovules

5. Seed (ripe and dry): 5.1 size

5.2 shape (including appearance)

5.3 colour of the tegument

5.4 colour of the cotyledons

5.5 shape of the grains of starch (simple or compound)

31. RADISH *Raphanus sativus* L.

A. *Raphanus sativus* L. var. *niger* Pers. 1. Leaf : (observations from the 4th to the 7th leaf) 1.1 length

1.2 general shape

1.3 denticulation

1.4 colour of the petiole

1.5 size of the terminal foliole

1.6 colour of the terminal foliole

2. Root: 2.1 size

2.2 shape

2.3 shape of shoulders

2.4 colour of the shoulders

2.5 shape of the end

2.6 appearance of the epidermis

2.7 colour of the epidermis

3. Classification of early maturity

B. *Raphanus sativus* L. var. *radicula* Pers. 1. Leaf : (observations from the 3rd leaf) 1.1 length

1.2 general shape

1.3 denticulation

1.4 colour

2. Root: 2.1 shape

2.2 colour of the epidermis

3. Classification of early maturity

32. SCORZONERA OR BLACK SALSIFY *Scorzonera hispanica* L.

1. Root: 1.1 length

1.2 shape

1.3 appearance of epidermis

1.4 colour of epidermis

33. TOMATO *Solanum lycopersicum* L. (*Lycopersicon esculentum* Mill.)

1. Seedling : anthocyanin on the hypocotyl axis : presence or absence

2. Type of growth : determinate or indeterminate

3. Shape of the leaf : normal or whole folioles

4. Fruit: 4.1 size1

4.2 shape1

4.3 colour (before ripening)

4.4 colour (when ripe)

4.5 number of loculi1

5. Classification of early maturity: 5.1 period between germination and the blooming of the 3rd flower of the 1st bunch (field trial)

5.2 period between flowering and ripeness1

6. Resistance: 6.1 to *Verticillium albo-atrum*  
6.2 to *Fusarium oxysporum*

34. AUBERGINE or EGG PLANT *Solanum melongena* L.

1. Seedling: 1.1 anthocyanin on the hypocotyl axis : presence or absence  
1.2 habit of the cotyledons  
1.3 shape of the cotyledons

2. Plant: 2.1 length between the nodes  
2.2 shape of the mature leaf  
2.3 pilosity of the end of the stems  
2.4 anthocyanin on the ends of the stems : presence or absence  
2.5 spinosity (to be noted from the calyx)

3. Fruit: 3.1 size  
3.2 shape  
3.3 colour 1 3rd fruit of the 2nd and 3rd bunches, ripeness assessed at the beginning of colouring.  
3.4 shine  
3.5 distribution of pigments  
3.6 pigments under the calyx : presence or absence  
3.7 anthocyanin : presence or absence  
3.8 nature of the anthocyanin  
3.9 colour of the flesh

4. Classification of early maturity : period between germination and flowering

35. SPINACH *Spinacia oleracea* L.

1. Plant : rate of growth  
2. Leaf : (at the stage of maximum development of the first four leaves) 2.1 habit of the petiole  
2.2 length of the petiole  
2.3 colour

3. Leaves : (to be noted from the 7th leaf when the plants reach maximum development) 3.1 habit of the petiole  
3.2 length of the petiole  
3.3 colour  
3.4 shape of the lamina  
3.5 surface of the lamina

4. Seed (ripe and dry) : shape  
5. Classification of bolting  
6. Sexual distribution

7. Resistance to *Peronospora spinacial*

36. CORN-SALAD or LAMB'S LETTUCE *Valerianella locusta* (L.) Betsche (v. *olitoria* Polt.)

1. Size of plant
2. Leaf (at the harvesting stage):
  - 2.1 habit
  - 2.2 shape
  - 2.3 colour
  - 2.4 surface : smooth or veined
  - 2.5 pilosity : presence or absence
  - 2.6 shape of the edge of the leaf (to be noted from the tip)
  - 2.7 indentation : presence or absence

3. Seed (ripe and dry):

- 3.1 size

- 3.2 shape

4. Classification of early maturity

37. BROAD BEAN *Vicia faba major* L.

1. Stalk : length
2. Stipule : maculated or not
3. Flower : colour
4. Pod:
  - 4.1 habit
  - 4.2 length
  - 4.3 number of ovules

5. Seed : (ripe and dry)

- 5.1 size

- 5.2 general colour
- 5.3 tannin : presence or absence
- 5.4 colour of the hilum

38. POPCORN *Zea mays* convar. *Microsperma* Koern.

39. SWEET CORN *Zea mays* convar. *Saccharata* Koern.

1. Stalk:
  - 1.1 anthocyanin on the nodes : presence or absence
  - 1.2 level of insertion of the upper ear on the principal stem

2. Ear:

- 2.1 colour of the stigmas (two to three days after coming out)

- 2.2 length of the peduncle
- 2.3 length of the spathes
- 2.4 colour of the stalk (at the stage of full ripeness)

3. Seed:

- 3.1 type of seed harvested

- 3.2 shape
- 3.3 colour of the apex and of the sides

- 4. Period between germination and: 4.1 the male flowering
- 4.2 the female flowering

## ANNEX II

### A. MINIMUM GENERAL CONDITIONS

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### B. SPECIAL REMARKS

1. The person making the application shall make available to the competent authorities the quantities of seed that the latter consider necessary in order to carry out the trials and subsequent inspections.
2. The seed must satisfy the quality conditions for seed laid down in Annex II of the Council Directive<sup>1</sup> of 29 September 1970 on the marketing of vegetable seed.
3. In the case of perennial plants the trials must be continued until all the characteristics have been observed and noted at least once.
4. If it is not certain whether the method of inspection used in one Member State is also applied in the other Member States this method must be indicated.
5. If the number of trial grounds per year is not adhered to, the number of plots per year should be increased accordingly.
6. The minimum conditions laid down in part A may be reduced for checking genealogical factors. <sup>1</sup> OJ No L 225, 12.10.1970, p. 7.