



Technical questionnaire

cabbage (White, Red, Savoy)

Version 10

Mandatory fields or sections are marked with an asterisk (*)

01 . Botanical taxon: name of the genus, species or sub-species to which the variety belongs:

Brassica oleracea L. (White Cabbage Group) (syn. *Brassica oleracea* L. convar. *capitata* (L.) Alef. var. *alba* DC.)

Brassica oleracea L. (Red Cabbage Group) (syn. *Brassica oleracea* L. convar. *capitata* (L.) Alef. var. *rubra* (L.) Thell.

Brassica oleracea L. (Savoy Cabbage Group) (syn. *Brassica oleracea* L. convar. *capitata* (L.) Alef. var. *sabauda* L.

Brassica oleracea L. (Cabbage Group) (syn. *Brassica oleracea* L. convar. *capitata* (L.) Alef. var. *alba* DC. x *Brassica oleracea* L. convar. *capitata* (L.) Alef. var. *rubra* (L.) Thell.)

Other species (please specify)

02 . Application code:

For office use only

03 . Breeder's reference

Breeder's Ref.

04 . Information on the breeding scheme and propagation of the variety

04 . 01 . Type of material *

hybrid

cross-pollinated variety

self-pollinated variety

parental line

04 . 01.01 . Parental line use

(this question could be confidential)

In many cases there is a link in morphological expression of characteristics between the parental line and its hybrids. Therefore, it is recommended to provide information about the identity of hybrid varieties where the parental line is used. This makes the organisation of the technical examination more efficient and lowers the risk of an additional year at the costs of the applicant. This information will only be shared with the examination office in charge of the technical examination.
In accordance with Article 88(3) of Regulation 2100/1994 the Office will treat the information under this section as confidential on request of the applicant.

Please indicate for the production of which hybrid variety(ies) the parental line is used

04 . 02 . Method of propagation of the variety *

seed propagated

vegetatively propagated

Please specify

04 . 03. . Should the following question on genetic origin and breeding method be treated as confidential? *

Yes

No

04 . 04 . Confidentiality justification *

(this question could be confidential)

Please explain why the information is to be considered as confidential and how its disclosure would harm your commercial interests (included but not limited to business relations, manufacturing secrets, expertise, commercial strategies, intellectual property) under Article 4(2) of Regulation 1049/2001. Since the general rule is transparency, it is in your best interest to provide strong reasons to support your request for confidentiality. If a public access request is received, the Office will evaluate your justifications and decide whether to disclose or not the information.

Please provide detailed explanations *

04 . 05 . Information on the breeding method and the genetic origin of the application

(this question could be confidential)

breeding method

parentage with any other varieties

05 . Characteristics of the variety to be indicated

(the number in brackets refers to the corresponding characteristic in the CPVO Technical Protocol; please mark the state of expression which best corresponds)

The examination offices test the resistances based on the resistance test protocols listed in the CPVO-TP in force. In case the applicant does assess the resistance based on a different protocol than the one mentioned in the CPVO-TP, please be aware that this could lead to discrepancies between your declaration and the results obtained by the examination office. This may also have important consequences on the conduct of the DUS testing as well as trigger additional tests and fees. In addition, for some resistances an alternative DNA marker test exists. As the phenotype is always leading, the declaration in this Technical Questionnaire should not be based on such DNA marker test only.

05 . 00 . Type of cabbage *

1 - white cabbage

2 - red cabbage

3 - Savoy cabbage

05 . 01.01 . White cabbage varieties only: Plant: height (1.1) *

1 - very short

2 - very short to short

3 - short

Gouden Akker, Minicole

4 - short to medium

5 - medium

Marner Lagerweiss, Strukton

6 - medium to tall

7 - tall

Amager hochstrunkig, Thurner, Zerlina

8 - tall to very tall

9 - very tall

Filderkraut

05 . 01.02 . Red cabbage varieties only: Plant: height (1.2) *

1 - very short

Langedijker Allervroegste, Primero

2 - very short to short

3 - short

Marner Frührotkohl, Ruby Ball

4 - short to medium

5 - medium

Allrot, Roxy

6 - medium to tall

7 - tall

Langedijker Bewaar 3, Langedijker Herfst, Rovita

8 - tall to very tall

9 - very tall

05 . 01.03 . Savoy cabbage varieties only: Plant: height (1.3) *

1 - very short

2 - very short to short

3 - short

Fitis, Vorbote 2

4 - short to medium

5 - medium

Marner Grünkopf

6 - medium to tall

7 - tall

Hammer, Roi de l'hiver 2

8 - tall to very tall

9 - very tall

Bloemendaalse Gele

05 . 02 . Plant: length of outer stem (3) *

1 - very short

2 - very short to short

3 - short

Braunschweiger (W), Minicole (W), Vorox (R), Spivoy (S)

4 - short to medium

5 - medium

Bartolo (W), September (W), Langedijker Bewaar 2 (R), Belvoy (S)

6 - medium to long

7 - long

Amager hochstrunkig (W), Robuster (W), Pampa (S)

8 - long to very long

9 - very long

05 . 03.01 . White cabbage varieties only: Outer leaf: size (5.1) *

1 - very small

2 - very small to small

3 - small

Golden Cross

4 - small to medium

5 - medium

Atria, Braunschweiger, Marner Lagerweiss

6 - medium to large

7 - large

Robuster, Thurner

8 - large to very large

9 - very large

05 . 03.02 . Red cabbage varieties only: Outer leaf: size (5.2) *

1 - very small	
2 - very small to small	
3 - small	Langedijker Allervroegste, Primero
4 - small to medium	
5 - medium	Langedijker Vroege, Ruby Ball
6 - medium to large	
7 - large	Langedijker Herfst, Marner Lagerrot, Rovita
8 - large to very large	
9 - very large	

05 . 03.03 . Savoy cabbage varieties only: Outer leaf: size (5.3) *

1 - very small	
2 - very small to small	
3 - small	Promosa
4 - small to medium	
5 - medium	Belvoy
6 - medium to large	
7 - large	Vertus 3
8 - large to very large	
9 - very large	

05 . 04.01 . White and red cabbage varieties only: Outer leaf: degree of blistering (8.1) *

1 - absent or very weak	Slawdena (W), Rookie (R)
2 - moderate	Fieldrocket (W), Langedijker Herfst (R)
3 - strong	Roem van Enkhuizen 3 (W), Kissendrup (R)

05 . 04.02 . Savoy cabbage varieties only: Outer leaf: degree of blistering (8.2) *

1 - absent or very weak	De Pontoise 2
2 - very weak to weak	
3 - weak	Celsa
4 - weak to medium	
5 - medium	Savoy King
6 - medium to strong	
7 - strong	Hammer
8 - strong to very strong	
9 - very strong	Novusa, Roi de l'hiver 2

05 . 05 . Outer leaf: colour (with wax) (11) (G) *

1 - yellow green	April (W)
2 - green	Hammer (S)
3 - grey green	Bison (W), Gloria (W), Roi de l'hiver 2 (S)
4 - blue green	Market Pride (W)
5 - violet	Langedijker Bewaar 2 (R)

05 . 06 . Outer leaf: intensity of colour (12) *

1 - very light	
2 - very light to light	
3 - light	Gouden Akker (W), Rebus (R), Bloemendaalse Gele (S)
4 - light to medium	
5 - medium	Cabri (W), Redsky (R), Kilosa (S)
6 - medium to dark	
7 - dark	Excel (W), Integro (R), Norma (S)
8 - dark to very dark	
9 - very dark	

05 . 07 . Outer leaf: waxiness (14) *

1 - absent or very weak	First of June (W)
2 - very weak to weak	
3 - weak	Derby Day (W), Octoking (W)
4 - weak to medium	
5 - medium	Wiam (W), Celtic (S)
6 - medium to strong	
7 - strong	Bison (W), Thurner (W)
8 - strong to very strong	
9 - very strong	Rivera (W), Indaro (R)

05 . 08 . Head: shape of longitudinal section (17) (G) *

1 - transverse narrow elliptic	Braunschweiger (W)
2 - transverse elliptic	Centurion (W), Conquistador (W), De Pointoise 2 (S)
3 - circular	Octoking (W), Roem van Enkhuizen 2 (W)
4 - broad elliptic	Langedijker Herfst (R)
5 - broad obovate	Langedijker Bewaar (W)
6 - ovate	Cape Horn (W)
7 - angular ovate	Filderkraut (W), Hispi (W)

05 . 09 . Head: diameter (20) (G) *

1 - very small	
2 - very small to small	
3 - small	Marner Allfrüh (W), Vorbote 2 (S)
4 - small to medium	
5 - medium	Celsa (S), Pampa (S)
6 - medium to large	
7 - large	Braunschweiger (W), Quintal d'Alsace (W)
8 - large to very large	
9 - very large	

05 . 10 . Head: density (30) (G) *

1 - very loose	Mignon (W)
2 - very loose to loose	
3 - loose	Hornspi (W)
4 - loose to medium	
5 - medium	Dacato (S), Spivoy (S)
6 - medium to dense	
7 - dense	Pampa (S)
8 - dense to very dense	
9 - very dense	Slawdena (W)

05 . 11.01 . White cabbage varieties only: Time of harvest maturity (33.1) (G) *

1 - very early	Golden Cross
2 - very early to early	
3 - early	Green Express, Hijula
4 - early to medium	
5 - medium	Roem van Enkhuizen 2
6 - medium to late	
7 - late	Holsteiner Platter, Marner Lagerweiss, Strukton
8 - late to very late	
9 - very late	Bartolo

05 . 11.02 . Red cabbage varieties only: Time of harvest maturity (33.2) (G) *

1 - very early	
2 - very early to early	
3 - early	Langedijker Vroege, Normiro, Ruby Ball
4 - early to medium	
5 - medium	Autoro, Langedijker Herfst, Marner Septemberrot
6 - medium to late	
7 - late	Huzaro, Langedijker Bewaar 2, Marner Lagerrot
8 - late to very late	
9 - very late	

05 . 11.03 . Savoy cabbage varieties only: Time of harvest maturity (33.3) (G) *

1 - very early	Spivoy
2 - very early to early	
3 - early	Walasa
4 - early to medium	
5 - medium	Belvoy
6 - medium to late	
7 - late	Hammer
8 - late to very late	
9 - very late	Alexander's N°1

05 . 12 . Male sterility (35) (G) *

1 - absent	Winnigstadt (W), Pluton (R), Belvoy (S)
9 - present	Unifor (W), Roderick (R), Emerald (S)

05 . 13 . Resistance to *Fusarium oxysporum* f. sp. *conglutinans* (36) *

absent	
present	
not tested	

05 . 14 . Resistance to *Plasmodiophora brassicae* (Pb) - Race Pb: 0 (37) *

1 - absent	Passat
9 - present	Kilaton
not tested	

05 . 15 . Resistance to *Plasmodiophora brassicae* (Pb) - Race Pb: 1 (38) *

1 - absent	Passat
9 - present	Kilaton
not tested	

05 . 16 . Resistance to *Plasmodiophora brassicae* (Pb) - Race Pb: 2 (39) *

1 - absent	Kilaton, Passat
9 - present	
not tested	

05 . 17 . Resistance to *Plasmodiophora brassicae* (Pb) - Race Pb: 3 (40) *

1 - absent	Passat
9 - present	Kilaton
not tested	

06 . Similar varieties and differences from these varieties

Please note that information on similar varieties may help to identify comparable varieties and can avoid an additional period of testing.

06 . 01 . Are there any similar varieties known? *

Yes

No

06 . 02 . Similar varieties and differences from these varieties: *

Denomination(s) of variety(ies) similar to your candidate variety	Characteristic(s) in which your candidate variety differs from the similar variety(ies)	Describe the expression of the characteristic(s) for the similar variety(ies)	Describe the expression of the characteristic(s) for your candidate variety

07 . Additional information which may help to distinguish the variety *

07 . 01 . In addition to the information provided in sections 5 and 6, are there any additional characteristics which may help to distinguish the variety? *

Yes, specify

No

07 . 02 . Are there any special conditions for growing the variety or conducting the examination? *

Yes, specify

No

07 . 03 . Other information *

07 . 03.01 . Resistance to pests and diseases *

Yes, specify

No

07 . 03.02 . Other information *

Yes, specify

No

07 . 04 . Photo

It is highly recommended to provide pictures (up to five). Otherwise, the organisation of the technical examination will be rendered less efficient, with the risk of an additional year of technical examination at the costs of the applicant. Full guidance on the picture quality can be found here

07 . 04.01 . Details of the photo(s)

Place and conditions under which the material shown in the photo was grown (e.g. plants grown in the greenhouse vs. grown in the open field)

Date of the photo(s) (month and year)

07 . 04.02 . Attached photo(s)

08 . GMO-information *

08 . 01 . GMO-information required *

The variety represents a Genetically Modified Organism within the meaning of Article 2(2) of Council Directive EC/2001/18 of 12/03/2001.

Yes

If yes, please attach in point 08.02 a copy of the written attestation of the responsible authorities stating that a technical examination of the variety under Articles 55 and 56 of the Basic Regulation does not pose risks to the environment according to the norms of the above-mentioned Directive.

No

08 . 02 . In case of GMO, joint attestation of the responsible authorities stating that a technical examination of the variety under Articles 55 and 56 of the Basic Regulation does not pose risks to the environment according to the norms of the above-mentioned Directive.

09 . Information on plant material to be examined

The expression of a characteristic or several characteristics of a variety may be affected by factors, such as pests and disease, chemical treatment (e.g. growth retardants or pesticides), effects of tissue culture, different rootstocks, scions taken from different growth phases of a tree, etc. Consequently the plant material to be examined should not have undergone any treatment which would affect the expression of the characteristics of the variety, unless the competent authorities allow or request such treatment. If the plant material has undergone such treatment, full details of the treatment must be given. In this respect, please indicate below, to the best of your knowledge, if the plant material to be examined has been subjected to:

09 . 01 . Micro-organisms (e.g. virus, bacteria, phytoplasma) *

Yes, specify

No

09 . 02 . Chemical treatment (e.g. growth retardant or pesticide) *

Yes, specify

No

09 . 03 . Other factors *

Yes, specify

No

DECLARATIONS *

I/we hereby declare that to the best of my/our knowledge the information given in this form is complete and correct.

Place

Date

Name

Signature