

Official Use Only	
Ref. AFP	11 / <input type="text"/>
GM	Yes <input type="checkbox"/> No <input type="checkbox"/>
Other Restrictions	Yes <input type="checkbox"/> No <input type="checkbox"/>

Technical Questionnaire (VEGETABLE PEA)

Plant Varieties Act 1997 and
 The Seeds (National Lists of Varieties) Regulations 2001 (as amended)

Please note:

- The completed TQ and the application will form part of the public record for this variety
- The seed submitted for DUS in the first year will be regarded as the definitive stock
- All relative sections of this form **must** be completed. An incomplete form may result in a delay in processing the application
- Completed forms should be e-mailed to NLPBR-Applications@apha.gsi.gov.uk
- Alternatively forms may be sent to:

The Animal and Plant Health Agency, Eastbrook, Shaftesbury Road, Cambridge, CB2 8DR
 Telephone 0208 026 5993.

Section 1 - Application Details

(a) National Listing (NL) Plant Breeders' Rights (PBR) Parental Line (PL)

(b) Species: Latin name *Pisum sativum* L.

(c) Type: Wrinkled Round Sugar

(d) Please give details of applications already made or to be made in any other countries

Country	Date	Application No.	NL	PBR	Variety name or Breeders' reference

(e) Has an application for European Community Plant Breeders' Rights (ECPBR) been made? Yes No

If 'Yes', Please state date of application

Section 2 - Applicant details

(a) Name and address of applicant for

• National Listing:

• Plant Breeders' Rights (if different)

Name and address of breeder:

Name and address for correspondence:

Is the address for:

• service or

• agent

An agent is authorised to act for the applicant on all aspects of an application, including instructions to withdraw applications, delete from a National List or surrender Plant Breeders' Rights

Section 3 - Variety denomination

(a) Where appropriate proposal for a variety denomination

(b) Provisional designation (breeder's name/reference)

Section 4 - Information on origin, maintenance and reproduction of the variety

4.1 Do you wish the details and data relating to components of hybrid varieties including data related to their cultivation to be treated as confidential? Yes No

If 'yes', please give this information on the separate form for confidential information.

If 'no', please give information on data relating to the components of hybrid varieties including data related to their cultivation.

Breeding scheme (indicate female component first)

4.2 Origin

(a) Seedling (indicate parent varieties)

(b) Mutation (indicate parent variety)

(c) Discovery (indicate where, when and how the variety has been developed)

(d) Other (please specify)

4.3 Method of propagation

(a) Cuttings

(b) *In vitro* propagation

(c) Seed

(d) Other (please specify)

4.4 Other information

In the case of seed propagated varieties: method of production:

(a) Self-pollinated

(b) Cross-pollinated (please give details)

(c) Hybrid (please give details)

4.5 Geographical origin of the variety: the region and the country in which the variety was bred or discovered and developed

Section 5 – Characteristics of the variety to be indicated (the number in brackets refers to the corresponding characteristic in the CPVO Protocol; please mark the state of expression which best corresponds).

Characteristic	Example varieties	Note
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5.1 Plant: anthocyanin colouration

(1)

Absent Avola, Solara 1

Present Pidgin, Rosakrone 9

Characteristic	Example varieties	Note
5.2 Stem: length (4)		
Very short	Zephir	1 <input type="checkbox"/>
Short	Nobel, Mini	3 <input type="checkbox"/>
Medium	Calibra, Xantos	5 <input type="checkbox"/>
Long	Blauwschokker, Livia	7 <input type="checkbox"/>
Very long	Mammoth Melting Sugar	9 <input type="checkbox"/>
5.3 Stem: number of nodes up to and including first fertile node (5)		
Very few	Kelvil	1 <input type="checkbox"/>
Few	Smart, Zero4	3 <input type="checkbox"/>
Medium	Markana, Susan	5 <input type="checkbox"/>
Many	Cooper	7 <input type="checkbox"/>
Very many	Regina	9 <input type="checkbox"/>
5.4 Foliage: colour (6)		
Yellow green	Pilot	1 <input type="checkbox"/>
Green	Avola, Paris, Progreta, Waverex	2 <input type="checkbox"/>
Blue green	Polar	3 <input type="checkbox"/>
5.5 Leaf: leaflets (8)		
Absent	Hawk, Solara	1 <input type="checkbox"/>
Present	Avola, Rhea	9 <input type="checkbox"/>
5.6 Stipule: flecking (19)		
Absent	Lisa, Tafila	1 <input type="checkbox"/>
Present	Avola, Maro	9 <input type="checkbox"/>
5.7 Time of flowering (23)		
Very early	Tempo	1 <input type="checkbox"/>
Early	Smart, Zero4	3 <input type="checkbox"/>
Medium	Carlton, Waverex	5 <input type="checkbox"/>
Late	Cooper, Purser	7 <input type="checkbox"/>
Very late	Livioletta	9 <input type="checkbox"/>
5.8 <u>Only varieties with stem fasciation absent:</u> Plant: maximum number of flowers per node (24)		
One	Progress N° 9, Tyla	1 <input type="checkbox"/>
Two	Banff, Cooper	3 <input type="checkbox"/>
Three	Ultimo, Zodiac	5 <input type="checkbox"/>
Four or more	Arnesa, Calibra, Survivor	7 <input type="checkbox"/>

Characteristic	Example varieties	Note
5.9 Only varieties with plant anthocyanin colouration present: Flower: colour of wing (25)		
White with pink blush		1 <input type="checkbox"/>
Pink	Rosakrone	2 <input type="checkbox"/>
Reddish purple	Assas	3 <input type="checkbox"/>
5.10 Flower: shape of base of standard (28)		
Strongly raised		1 <input type="checkbox"/>
Moderately raised	Progreta	3 <input type="checkbox"/>
Level	Markado, Solara	5 <input type="checkbox"/>
Moderately arched	Avola, Cooper	7 <input type="checkbox"/>
Strongly arched	Bohatyr, Kennedy	9 <input type="checkbox"/>
5.11 Pod: length (35)		
Very short	Cepia, Vermio	1 <input type="checkbox"/>
Short	Progreta, Solara	3 <input type="checkbox"/>
Medium	Cooper, Jof	5 <input type="checkbox"/>
Long	Hurst Green Shaft, Protor	7 <input type="checkbox"/>
Very long	Tirabeque	9 <input type="checkbox"/>
5.12 Pod: width (36)		
Very narrow	Claire	1 <input type="checkbox"/>
Narrow	Picar, Ultimo	3 <input type="checkbox"/>
Medium	Progreta, Solara	5 <input type="checkbox"/>
Broad	Finale, Kahuna	7 <input type="checkbox"/>
Very broad	Kennedy	9 <input type="checkbox"/>
5.13 Pod: parchment (37)		
Absent or partial	Sugar Ann	1 <input type="checkbox"/>
Entire	Avola, Solara	2 <input type="checkbox"/>
5.14 Excluding varieties with pod parchment: entire: Pod: thickened wall (38)		
Absent	Nofila, Reuzensuiker	1 <input type="checkbox"/>
Present	Cygnnet, Sugar Ann	9 <input type="checkbox"/>
5.15 Only varieties with pod: thickened wall: absent: Pod: shape of distal part (39)		
Pointed	Jof, Oskar	1 <input type="checkbox"/>
Blunt	Avola, Solara	2 <input type="checkbox"/>

Characteristic	Example varieties	Note
5.16 Pod: colour (41)		
Yellow		1 <input type="checkbox"/>
Green	Avola, Solara	2 <input type="checkbox"/>
Blue green	Show Perfection	3 <input type="checkbox"/>
Purple	Blauwschokker	4 <input type="checkbox"/>
5.17 <u>Excluding varieties with pod parchment: entire:</u> Pod: suture strings (43)		
Absent	Nofia, Sugar Lace	1 <input type="checkbox"/>
Present	Crispi, Reuzensuiker	9 <input type="checkbox"/>
5.18 Pod: number of ovules (44)		
Few	De Grace, Phoenix	3 <input type="checkbox"/>
Medium	Backgammon, Hawk	5 <input type="checkbox"/>
Many	Karisma	7 <input type="checkbox"/>
5.19 Immature seed: intensity of green colour (45)		
Light	Arabelle, Solara, Ultimo	3 <input type="checkbox"/>
Medium		5 <input type="checkbox"/>
Dark	Dark Skin Perfection, Hawaii	7 <input type="checkbox"/>
5.20 Seed: type of starch grains (47)		
Simple	Adagio, Maro, Solara	1 <input type="checkbox"/>
Compound	Avola, Polar	2 <input type="checkbox"/>
5.21 Seed: colour of cotyledon (50)		
Green	Avola, Solara	1 <input type="checkbox"/>
Yellow	Caractacus, Hardy	2 <input type="checkbox"/>
Orange		3 <input type="checkbox"/>
5.22 <u>Only varieties with plant anthocyanin colouration present:</u> Seed: marbling of testa (51)		
Absent	Rhea, Rif	1 <input type="checkbox"/>
Present	Assas, Pidgin	9 <input type="checkbox"/>
5.23 <u>Only varieties with plant anthocyanin colouration present:</u> Seed: violet or pink spots on testa (52)		
Absent	Pidgin, Rif	1 <input type="checkbox"/>
Faint	Assas, Susan	2 <input type="checkbox"/>
Intense	Arvika, Rhea	3 <input type="checkbox"/>

Characteristic	Example varieties	Note
5.24 Seed: hilum colour (53)		
Same colour as testa	Avola, Solara	1 <input type="checkbox"/>
Darker than testa	Nofila, Rif	2 <input type="checkbox"/>

5.25 Seed: weight (55)

Very low	Ultimo	1 <input type="checkbox"/>
Low	Hawk, Iceberg	3 <input type="checkbox"/>
Medium	Mammoth Melting Sugar, Phoenix	5 <input type="checkbox"/>
High	Kennedy, Maro	7 <input type="checkbox"/>
Very high	Bamby, Kabuki	9 <input type="checkbox"/>

Section 6 – Similar varieties and differences from these varieties:

Denomination of similar variety	Characteristic in which the similar variety is different ¹	State of expression of similar variety	State of expression of candidate variety

¹ In the case of identical states of expression of both varieties, please indicate the size of the difference.

Section 7 – Additional information which may help to distinguish the variety

7.1 Resistance to pests and diseases

	Resistant	Susceptible	Not tested
Fusarium Wilt (Race 1) (Common Wilt)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fusarium Wilt (Race 5) (Common Wilt)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fusarium Wilt (Race 6) (Common Wilt)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Erysiphe pisi</i> Syd. – Powdery mildew	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Ascochyta pisi</i> Race C ((leaf and pod spot)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Resistances (please specify)			

7.2 Growth type

Dwarf

Non-dwarf

7.3 Special conditions for the examination of the variety

Yes, please specify

No

If it is agreed to carry out a special DUS test an appropriate charge will be levied

7.4 UseFresh market Canning Freezing Dry seed for human consumption Dry protein Forage

Other (please specify)

7.5 Other information Yes, please specify No

Section 8 - GMO and other Novel types

Does this application relate to a Genetically Modified Organism as defined in Section 106 of the Environmental Protection Act 1990?

Yes No

If "Yes" you must complete form PVS9/B Genetically Modified and other Novel Candidates.

Section 9 - Information on plant material to be examined

9.1 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).

9.2 The plant material 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:

(a) Micro-organisms (eg virus, bacteria, phytoplasma)

Yes No

(b) Chemical treatment (eg growth retardant or pesticide)

Yes No

(c) Tissue culture

Yes No

(d) Other factors

Yes No

Please provide details of where you have indicated "Yes"

Declaration

I/We declare that to the best of my/our knowledge and belief the statements made in this Technical Questionnaire are correct

Signature of Applicant

Date

(original signature unless emailed)

Name in BLOCK letters

For and on behalf of