



Assured Produce

Crop Specific Protocol

Peppers (Sweet) - Protected

(CROP ID: 70)



February 2009

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Acknowledgements

Assured Produce gratefully acknowledges the contribution of all those consulted in the preparation of this protocol, particularly Gerry Hayman.

Preface

This crop specific protocol has been written to complement and avoid duplicating the generic principles of the scheme and appendices.

It is advisable to read the Assured Produce Generic Crop Protocol Standards and the Assured Produce Generic Protocol Guidance Notes (referred to in this document as the Generic Standards and Generic Guidance Notes) first before reading this crop specific protocol.

This crop specific protocol contains crop specific parameters and guidance, where applicable, for the requirements stated in the Generic Standards.

All statements in this protocol containing the words "**must**" (in bold type) will be verified during the Assured Produce assessment and their compliance will form a part of the certification/approval decision. The score required for these "**must**" control points can be found on the final page of this document and in the checklists produced by Assured Produce licensed certification bodies.

Disclaimer and trade mark acknowledgement

Although every effort has been made to ensure accuracy, Assured Produce Ltd. does not accept any responsibility for errors and omissions.

Trade names are only used in this protocol where use of that specific product is essential. All such products are annotated[®] and all trademark rights are hereby acknowledged.

Notes:

Pesticides with 'Essential Use' derogations that expired 31 December 2007 can no longer be used or stored.

There may be other withdrawals or revocations. Products containing substances which have been revoked are shown on the PSD website (<http://www.pesticides.gov.uk>). Growers should check with their advisers, manufacturers, the Assured Produce website 'Newsflashes', the PSD website (www.pesticides.gov.uk)

Growers should comply with the 'Use up by' dates for all pesticide products. Growers should also be aware of and comply with changes on new product labels.

There may be changes for the following reasons:

- At re-registration stage after Annex 1 listing there may be: reductions of dose rates; changes in timings and/or number of applications for some products.

In the following Appendices products and use by dates are only listed for SOLAs, and in some cases new product MAPP numbers may not be available yet.

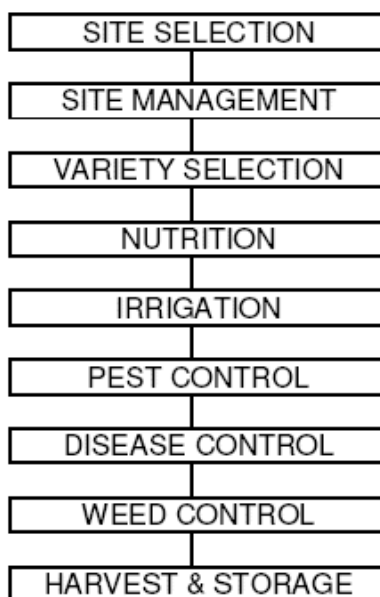
For pesticides on-label, only active substances are shown.

Any new standards have been prefixed in the text with **(NEW)**

1 General introduction

Following a systematic approach will help growers to identify and manage the risks involved in crop production. This protocol is based on a typical crop production process. Using a flowchart approach, food safety, Health & Safety, environmental and quality hazards are identified. Appropriate controls may then be established to minimise risk. Food safety and Health & Safety issues always take precedence over quality and environmental controls.

The flow chart is structured as shown below. Note that the sectional layout of both this protocol and the crop specific protocols follow the same structure.



The contents of each crop specific protocol are reviewed annually by informed farmers and growers, food technologists, scientists, the relevant fresh produce association, processors and agronomic consultants. Updated editions are issued prior to the cropping season.

The review process considers both new developments and all relevant technology which has emerged throughout the course of the previous year and which have been found to be both workable by the grower and beneficial to the environment. As one aim of the Scheme is to transfer such information and technologies to growers, attention is drawn to those features of specific relevance to ICM by using *italic* script. In order that growers may be confident that they are working to a current document, each protocol is dated and numbered. Any changes to the text have been highlighted by marking the document with a line in the margin.

2 Planning and records

See Generic Standards and/or Generic Guidance Notes.

3 Site selection

See Generic Standards and/or Generic Guidance Notes.

4 Site management

See Generic Standards and/or Generic Guidance Notes.

5 Variety selection

See Generic Standards and/or Generic Guidance Notes.

Growers **must** visit their propagators to inspect their plants.

6 Nutrition

See Generic Standards and/or Generic Guidance Notes.

Growers **should** consider the recirculation of water and nutrients. If not, they **should** take steps to minimise nutrient run-off into soil and water courses.

Growers **should** measure the volume of run-off and have samples analysed.

7 Irrigation

See Generic Standards and/or Generic Guidance Notes.

8 Crop protection

8.1 The basic approach to crop protection

Key principles of ICM for protected salad crops

- a. Biological, environmental and cultural methods of pest and disease control are to be used as the first line of defence.
- b. Chemical pesticides are only to be used when biological controls are not available or shown not to be working.
- c. The crops should be monitored at least weekly and records made of pest, disease and biological control organism levels.
- d. Records should be kept of the introduction of biological control agents.
- e. Climate control computers should be used to ensure a suitable environment is maintained at all times.
- f. Records **must** be kept of all pesticide applications.

Adaptation for new pests and diseases

The occurrence of a new disease or pest problem is largely unpredictable. It may arise, for example, when a previously non-indigenous disease or pest becomes established in the UK (e.g. WFT), with a change in variety or cropping practice (e.g. switch from soil to substrate cropping) or when a pathogen/pest previously controlled by a particular pesticide develops resistance. In all these situations it may be necessary to implement additional pesticide treatments.

A proposed schedule for controlling 'new' pest or disease problems, in order of priority, is described below.

- a. Identification of the causal agent of the problem is critical to achieve control and new pests and diseases could be the subject of statutory action if they are classed as quarantine organisms. In case of doubt it is essential to seek advice from Defra's Plant Health & Seeds Inspectorate.
- b. The key objective is that the organism is controlled by means of a change in glasshouse environment, crop culture, biological or other non-chemical method. In some situations however, it is possible that additional use of pesticides may be necessary, at least in the short term or until a suitable alternate variety with genetic resistance is available. Such new varieties should be incorporated into the cropping programme, as they become available, providing they meet the end-market specifications.

- c. The 'new' pest or disease may be controlled by selecting products already known to be compatible with the biological control measures.
- d. If none of these pesticides provide effective control, advice should be sought on a suitable alternative product, currently approved for use on the appropriate protected crop under Control of Pesticides Regulations (1986).

Training requirements

Pest and disease identification

Staff working regularly on protected sweet pepper crops should be able to recognise the following pests and diseases:

- *Botrytis* (grey mould) on leaves, stems and fruit
- *Pythium* and *Phytophthora* root and stem base rots
- Various relevant virus diseases
- Aphids
- Glasshouse whitefly
- Spider mites and other mites
- Caterpillar damage
- Leaf miner damage
- Thrips

Staff should also be able to recognise biological control organisms being used.

Staff should know to whom to report when the above pests and diseases, or other problems regularly found on a particular nursery, are first detected during the season. Managers and supervisors should appreciate the relative risk to their crops from the relevant pests and diseases and be alert to the risk of new pests and diseases, such as powdery mildew or *Phytophthora capsaci* in peppers.

In-service training

Training in identification of pests and diseases, their damage and their biological controls and an appreciation of the objectives of this protocol **should** be given to each new member of staff.

All staff working on the nursery, both regular and casual, **should** be instructed to satisfy COSHH requirements with respect to pesticide treatments, and to satisfy the requirements of the General Food Hygiene Regulations.

Monitoring

Regular monitoring of biological control agents and pests and diseases is of vital importance so that quick corrective action can be taken if required. Quick diagnosis and action are fundamental to effective control. It is essential that all crops are walked at least once a week and records kept of each inspection. **All** nursery staff should be alert to fresh pest or disease symptoms or signs of imbalance with biological control mechanisms.

General requirements

It is recommended that the following standards are adhered to when growing sweet peppers:

- when buying in plants, specifications for propagation, including pest and disease control measures, should be given to the propagator who, in turn, should provide the grower with documentation confirming pesticide applications, that these meet legal requirements and that application records are held by the propagator (See Generic Protocol 5.4.3).
- vehicles used to transport plants should be clean and adequately heated. Caution should be exercised where vehicles have previously been used to transport fruit and vegetables, especially tomatoes and

peppers, or chemicals.

- steps should be taken to minimise nutrient run off into soil and water courses.
- steps should be taken to minimise nitrate levels in applied nutrient solutions.
- the introduction and monitoring of biological control agents should be recorded.
- written procedures for the management and recording of incidents involving oil spillage **must** be in place, where oil is used as a heating fuel.
- written procedures for the management and recording of incidents involving breakage of glass in the glasshouse **must** be in place.
- all glasshouses should have appropriate "No Smoking/No Food" signs and staff **must** be provided with a clearly defined area in which to eat and drink.

It is also recommended that:

- if the crop is grown in an isolated substrate, the substrate should be, where possible, reused for more than one crop, except where there is a significant risk of disease carry-over. .
- where isolated substrates are reused, they should be sterilised between crops.
- volume of run-off should be measured and samples analysed.

8.2 Plant protection product choice

See Generic Standards and/or Generic Guidance Notes.

Approved uses not included on the product label

In some circumstances product labels do not include all of the approved uses and growers and advisers wishing to check the approval notice of a particular product should note that this information is available from www.pesticides.gov.uk/psd_databases.asp

A search on the database for a product name should yield a results page. A click on the product name should link to a summary of the approval information. At the bottom of the summary are links to available notices which will give the statutory conditions of use.

In the case of products with older approval an electronic approval may not be available. In these cases growers should contact the PSD Information Services Branch for details of the approved conditions of use.

Contact details are: p.s.d.information@psd.defra.gsi.gov.uk tel. 01904 455775

8.3 Advice on the use of pesticides

See Generic Standards and/or Generic Guidance Notes.

8.4 Application of pesticides

See Generic Standards and/or Generic Guidance Notes.

8.5 Records of application

See Generic Standards and/or Generic Guidance Notes.

8.6 Protective clothing/equipment

See Generic Standards and/or Generic Guidance Notes.

8.7 Pesticide storage

See Generic Standards and/or Generic Guidance Notes.

8.8 Empty pesticide containers

See Generic Standards and/or Generic Guidance Notes.

8.9 Pesticide residues in fresh produce

See Generic Standards and/or Generic Guidance Notes.

See Generic Protocol Guidance Notes 8.9 for further background and generic advice.

Assured produce is aware that a key area in the production of fresh produce which requires continued attention by growers and their advisers is that of keeping pesticide residues to a minimum. This issue is not just one of meeting the MRL trading standard but ensuring that any individual or multi residues are kept as low as possible below this level.

The key targets are -

- **optimising the use of post harvest treatments, though none are likely to be used for sweet peppers.**
- **ensuring minimum harvest intervals are followed.**
- **ensuring that application equipment is applying products correctly and that any staff applying pesticides are adequately qualified.**

Currently there are no residue issues associated with this crop grown in the UK but awareness needs to be maintained for any future issues.

8.10 Sweet Pepper production

8.10.1 Specific hygiene measures

Previous cropping

Every effort should be made to reduce pest numbers on previous crops before pests such as spider mites go into diapause in the autumn. High volume sprays using a short persistence insecticide may be used where there is still a pest problem after termination of cropping and prior to plant removal.

At the end of cropping, fog or fumigate the crop with a suitable disinfectant. Remove the crop, weeds and all debris within 2 days of treatment, and dispose of them by removing off site (ensure the load is covered). The plastic sheeting should be recycled where possible, but the risk of carry-over of disease organisms should be carefully considered in relation to its re-use on site.

Wash down the glass and the structure inside the glasshouse and then treat with a suitable disinfectant (e.g. Horticide®, or Jet 5®).

- a. In the cases of previous leaf miner or leafhopper problems, a high volume spray of a synthetic pyrethroid insecticide should be applied to bare ground, walls and structure when all equipment has been removed. Persistent pyrethroid insecticides should not be used because of their possible effects on biological

- control agents.
- b. In the case of previous whitefly problems, fumigate the empty glasshouse with nicotine. Warm climatic conditions are necessary for successful fumigation.

Equipment

Thoroughly clean picking boxes, trolleys, tractor tyres, footwear and any associated tools and equipment. Treat them with a disinfectant as listed above. Store cleaned boxes and equipment carefully to avoid re-contamination.

After using disinfectants in the glasshouse thoroughly ventilate the house to remove all traces of vapour. Rinse picking trays with water after treating with disinfectant.

Exterior

Destroy all weeds around the glasshouse before the new crop arrives and at regular intervals during the season using non-hormone weed killers of short persistence or mowing. Several common weeds (eg. chickweed, sowthistle, and dandelion) are known hosts of tomato spotted wilt virus (TSWV) and could act as a source of this virus for the pepper crop. Weeds may also be a means of carry-over of other virus disease (e.g. ToMV, CMV), of powdery mildew and of various pests.

New crop establishment

For soil-grown crops, the soil should be sterilised with steam, or other suitable sterilant, as and when necessary for control of weeds and root diseases. Annual treatment will generally be necessary to reduce the risk of root diseases.

Rockwool slabs should be re-used where possible, but only after sterilisation with steam.

As soon as the new crop arrives, old sticky traps should be removed and examined. Further traps should be hung in each glasshouse and these should be assessed regularly to monitor the pest situation.

Trays containing the new season's plants must be placed only on a clean surface (e.g. new polythene, disinfected and rinsed concrete).

Propagation

Growers must formalise the supply contract with their propagators, stipulating pesticides that can be used. Growers should ensure the supplier adheres to the contractual requirements by requesting crop treatment records and making inspection visits. Plants should be carefully inspected on delivery and any concerns/complaints notified immediately to the propagator.

8.10.2 Pest control

Biological control

The table below lists available biological control measures. The introduction and monitoring of biological control agents **should** be recorded.

The rates of introduction of biological agents should be based on the supplier's recommendations.

Pest	Control	Notes
Western flower thrips or onion thrips	a) <i>Amblyseius cucumeris</i> b) <i>Amblyseius degenerans</i> c) <i>Amblyseius swirskii</i> d) <i>Orius</i> spp. e) <i>Verticillium lecanii</i>	c) promising results especially in warm climates d) only the indigenous species e) for corrective action
Aphids - Peach-potato - Melon-cotton	a) <i>Aphidius colemani</i> b) <i>Aphidius ervi</i> c) <i>Aphidoletes aphidimyza</i> d) <i>Verticillium lecanii</i> (Vertalec®)	d) for corrective action
Two-spotted spider mite	a) <i>Phytoseiulus persimilis</i> b) <i>Feltiella acarigusa</i> c) <i>Amblyseius californicus</i>	
Whitefly	a) <i>Encarsia formosa</i> b) <i>Amblyseius swirskii</i> c) <i>Verticillium lecanii</i> (Mycotal®)	Not normally a problem in peppers b) promising results especially in warm climates c) for corrective action
Caterpillar	a) <i>Bacillus thuringiensis</i> b) <i>Trichogramma</i> spp	a) Best results are obtained on young caterpillars, so monitoring and early application essential. b) Use not permitted in Guernsey. An egg parasite so effective monitoring of adult moths is vital.
Broad mite	<i>Amblyseius cucumeris</i>	Remove affected plants. Do not introduce biocontrol agents on leaf material.

Chemical control

In some instances biological controls are not available and suitable pesticides may be necessary.

Pest	Active ingredient	Notes
Onion thrips	a) fatty acids b) spinosad	
Western flower thrips (WFT)	a) thiacloprid b) abamectin	a) Harmful to beneficial insects. b) harmful to beneficials but potentially useful as end of season clean up spray
Aphids	a) pirimicarb b) pymetrozine c) nicotine	a) May have adverse effects on <i>Amblyseius</i> . c) Use for melon-cotton aphid, which is resistant to pirimicarb.
Whitefly	a) fatty acids b) buprofezin c) nicotine	b) Also active against leafhopper but approval being revoked in 2009
Two spotted spider mite	fenbutatin oxide a) spiromesifen b) abamectin	a) also active against whitefly but more information needed on crop safety and effect on beneficials b) harmful to beneficials but potentially useful as end of season clean up spray

Notes: Spot sprays of glucose polymer (Eradicoat® or Majestik®) may be used against whitefly, thrips, aphids and spider mites. Polysaccharide (Agri-50E®) is also available for use against aphids and whitefly in particular. These materials act in a physical way and therefore fall outside the scope of the Control of Pesticide Regulations (1986). No harvest interval requirements therefore apply. Thorough spraying is essential to hit the pest target and achieve control.

8.10.3 Disease control

Certain diseases are relatively common and occur on many holdings each year. The procedure for the control

of the common disease problems is given in detail. The procedure for other diseases is given in outline and further technical advice should be sought as necessary.

It cannot be emphasised too strongly that regular crop monitoring with rapid and accurate disease identification and an appropriate rapid response, involving cultural changes, a glasshouse environmental change, roguing of the affected plant or a fungicide treatment, is essential to fulfil the objective of minimising fungicide use.

All crops should be walked and inspected for disease at least once every seven days. If disease is overlooked, or seen but no action taken, then several fungicide applications may be required to bring the problem under control, compared with fewer applications if prompt action is taken.

Botrytis

Preventative action decision	Fungicides
General	
Control humidity (<85% RH) Keep foliage and floor dry Avoid plant damage	
Remove debris after trimming	
On young plants	
Avoid damage at planting Treat if damaged	Azoxystrobin, fenhexamid
On flowers, leaves, branches and fruit	
Check humidity control and plant handling	Azoxystrobin, fenhexamid

Notes:

Azoxystrobin (Amistar), which currently has a SOLA for use against powdery mildew, may have some activity against Botrytis but resistance to this fungicides is likely if used alone.

Other diseases

Disease	Comment	Action
<i>Pythium</i> root rot	Young plants are more susceptible	Use clean water source. Sterilise soil and re-used slabs. Drench with propamocarb hydrochloride.
<i>Phytophthora</i> root rot	Uncommon but easily introduced by contamination of water supplies from ground water. <i>Phytophthora capsaci</i> , a potentially serious disease, reported in UK in 2007 but not in 2008.	Use clean water source. Sterilise soil and re-used slabs. Avoid water logging. Seek advice if <i>Phytophthora capsaci</i> suspected.
<i>Rhizoctonia</i> stem base rot	Uncommon. Soil crops.	Sterilise soil.
White rot (<i>Sclerotinia</i>)	Mainly in soil-grown crops	Remove affected parts. Sterilise soil.
Powdery mildew	Serious problem in Holland; not recently recorded in UK.	Fenarimol ⁽¹⁾ , sulphur ⁽¹⁾ , azoxystrobin ⁽¹⁾ .
<i>Fusarium</i> fruit and stem rot	Caused by <i>Fusarium oxysporum</i> and recently identified in the UK	Ongoing HDC project. Incidence encouraged by high humidity. Aborted fruit a potential source of infection so hygiene important. Fruit rot may develop in storage so check before dispatch.
<i>Verticillium</i> wilt	Rare. Mainly soil crops	Sterilise soil.
Tomato mosaic virus (ToMV)	Common in Holland; less so in UK to date. Wide range of symptoms e.g. blotchy ripening, 'bumpy' fruit, leaf mosaic	Choose resistant variety. Dip hands in skimmed milk solution when working in susceptible crop in the early stages. Remove affected plants.
Cucumber mosaic virus (CMV)	Uncommon. Easily confused with TMV	Control aphid vectors.
Tomato spotted wilt virus (TSWV)	Increasing risk and cases reported in 2008. Symptoms can be similar to CMV	Control WFT vector. Remove affected plants. Control weeds.
Pepper yellow veins virus	Mostly in soil grown crops. <i>Olpidium</i> vector. No fruit symptoms described. Could potentially be a problem in recirculated systems.	Sterilise soil. Use clean water source.

Notes:

⁽¹⁾ SOLA - see Appendix 4 for the specific product and expiry date

9 Harvesting and storage

See Generic Standards and/or Generic Guidance Notes.

Glasshouses **must** have appropriate 'No Smoking/No Food' signs and that staff are provided with a clearly defined area to eat/drink.

10 Pollution control and waste management

See Generic Standards and/or Generic Guidance Notes.

There **must** be written procedures for the management and recording of incidents involving oil spillages in place.

11 Energy efficiency

See Generic Standards and/or Generic Guidance Notes.

12 Health and Safety

See Generic Standards and/or Generic Guidance Notes.

13 Conservation

See Generic Standards and/or Generic Guidance Notes.

Appendix 1 Products currently approved for use on protected Sweet Peppers

Active Ingredient	Target Organism	MRL (mg/kg)	Harvest Interval ⁽¹⁾
<i>acetamiprid</i>	aphids, whitefly	0.3	3 days
<i>Bacillus thuringiensis</i>	caterpillars	none set	none stated
buprofezin ⁽²⁾	whitefly	1.0	3 days
deltamethrin	aphids, caterpillars, whitefly	0.2	none stated
fatty acids (soft soap)	whitefly, aphids, thrips, spider mites	none set	none stated
nicotine (shreds)	aphids, leaf hoppers, leaf miners, thrips, whitefly	none set	1 day
nicotine (liquid)	aphids, leaf hoppers, leaf miners, thrips, whitefly	none set	2 days
pirimicarb	aphids	1.0	2 days
pirimiphos-methyl ⁽³⁾	ants, aphids, capsids, leaf miners, thrips, whitefly	1.0	none stated
propamocarb hydrochloride	damping off, root rot	10.0	14 days (soil crops)
rotenone	aphids	0.01*	1 day
<i>Verticillium lecanii</i>	aphids, whitefly	none set	none stated

Notes:

- (1) or latest time of application
- (2) approval revoked from 31 March 2009, final use date 31 March 2010
- (3) final use date 30 September 2009
- * level at or about the limit of determination (LOD)

Appendix 2 Insecticide compatibility with Biological Control Organisms

Product	<i>Phytoseiulus</i>		<i>Encarsia</i>		<i>Aphidius</i>		<i>Amblyseius</i>	<i>BumbleBees</i>
	Egg	Adult	Pupae	Adult	Mummy	Adult		
buprofezin	S	S	I (3)	S	S	S	S	S
fatty acids	I	H/I?	S	H/I?	-	H (I?)	H/I?	H
nicotine (smoke)	S	S?	S	H	-	H	I	H
nicotine (spray)	-	H (<7)	S	H (<4)	-	H	H	H
pirimicarb	I	I	S	H (7)	-	S	H (3)	H
pymetrozine	-	S	S	S	S	I(3)	S	S

Notes:

Key:

S : Safe, but as a precaution bee hives should be covered before applications

() : Number of days

I : Intermediate

H : Harmful. Beehives should be removed pre-application

- : Not tested; assume harmful unless evidence to the contrary

? : Not tested but suspected from practical experience

This table is based on the current information available. With certain formulations and under certain circumstances the information may not be true. Check with the supplier of the biological agents.

Appendix 3 Fungicide compatibility with Biological Control Organisms

Product	<i>Phytoseiulus</i>		<i>Encarsia</i>		<i>Aphidius</i>		<i>Amblyseius</i>
	Egg	Adult	Pupae	Adult	Mummy	Adult	
azoxystrobin	-	S	S	S	S	S	S
fenarimol	S	I	S	S	-	S	S
propamocarb hydrochloride	S	S	S	S	S	S	S
sulphur	S	S	S	H (?)	I (?)	I (?)	I (?)

Notes:**Key:**

S : Safe

I : Intermediate

H : Harmful

- : No information; assume harmful unless evidence to the contrary

? : Not tested but suspected from practical experience

This is a guide based on the latest information available. Under certain circumstances or with certain formulations the above may not be true. Check with the supplier of the biological control organisms.

Appendix 4 Specific off-label approvals (SOLAs) for protected Sweet Peppers

No	Product	Active Ingredient	MRL (mg/kg)	Harvest Interval ⁽¹⁾	Expiry
0422/07	Dynamec [®]	abamectin	0.05	3 days	31/12/13
1295/02	Amistar [®]	azoxystrobin	2.0	3 days	31/12/11
1650/07	Decis Protech [®]	deltamethrin	0.2	none stated	31/12/13
1693/07	Decis [®]	deltamethrin	0.2	none stated	31/12/13
1650/07	Cleancrop Decathlon [®]	deltamethrin	0.2	none stated	31/12/13
1611/07	Bandu [®]	deltamethrin	0.2	none stated	31/12/13
2433/99	Dimilin Flo [®]	diflubenzuron	1.0	1 day	31/12/13
3126/07	Rubigan [®]	fenarimol	0.5	2 days	30/06/09
2379/06	Elvaron Multi [®]	tolyfluand	None set	3 days	All uses suspended
2086/04	Teldor [®]	fenhexamid	2.0	1 day	30/11/10
0481/08	Agrovista Fenamid [®]	fenhexamid	2.0	1 day	31/05/11
0020/93	Vydate 10G [®]	oxamyl	0.02	14 days	31/12/13
2032/99	Filex [®]	propamocarb hydrochloride	10.0	2 days (substrate crops)	31/12/13
3424/07	Proplant [®]	propamocarb hydrochloride	10.0	2 days (substrate crops)	30/09/09
2945/07	Proplant [®]	propamocarb hydrochloride	10.0	2 days (substrate crops)	31/12/13
0845/03	Chess WG [®]	pymetrozine	1.0	3 days	31/10/11
0501/07	Chess WG [®]	pymetrozine	1.0	3 days	31/10/11
3728/06	Calypso [®]	thiacloprid	0.5	3 days	31/12/14
0474/08	Agrovista Reggae [®]	thiacloprid	0.5	3 days	31/12/14
2149/06	Oberon [®]	spiromesifen	0.5	3 days	30/04/13
3652/02	Thiovit Jet [®]	sulphur	50.0 ⁽²⁾	None stated	31/12/13
2024/07	Microthiol Special [®]	sulphur	50.0 ⁽²⁾	None stated	31/12/13
2239/07	Solfa WG [®]	sulphur	50.0 ⁽²⁾	None stated	31/12/13
2119/07	Nemolt [®]	teflubenzuron	0.5	3 days	31/12/13
0238/07	Switch	cyprodonil + fludioxonil	1.0 / 2.0	7 days	31/12/13
2652/08	Previcur Energy	Fosetyl-aluminium/propamocarb hydrochloride	130 / 10.0	3 days	3/12/13

⁽¹⁾ or latest time of application

⁽²⁾ currently under review as unlikely to be achievable even where sulphur has not been applied

Appendix 5 Control Points: Peppers (Sweet)

CS.70 PEPPERS (SWEET)

- CS.70.2 Water and nutrients should be recirculated -
Protocol reference: Section 6
- CS.70.3 If not, steps should be taken to minimise nutrient run-off into soil and water courses -
Protocol reference: Section 6
- CS.70.4 The volume of run-off should be measured and samples analysed -
Protocol reference: Section 6
- CS.70.6 You should visit the propagator to inspect your plants -
Protocol reference: Section 5
- CS.70.7 You must have written procedures for the management and recording of incidents involving oil spillages - where fuel oil is used on site
Protocol reference: Section 10
- CS.70.8 Your glasshouses must have appropriate "No Smoking/No Food" signs and your staff provided with a clearly defined area to eat / drink -
Protocol reference: Section 9
- CS.70.9 The introduction and monitoring of biological control agents should be recorded -
Protocol reference: Section 8.10.2