



Environment and Rural Affairs Department
Plants, Horticulture and Potatoes

To: Organisations on the attached list

1-B
Pentland House
47 Robb's Loan
Edinburgh EH14 1TY

Telephone: 0131-244 6343
Fax: 0131-244 6509
charlie.greenslade@scotland.gsi.gov.uk
<http://www.scotland.gov.uk>

Your ref:
Our ref: SPP 1/1/23

24 September 2004

Dear Sir/Madam

Amendments proposed to the Seed Potatoes (Scotland) Regulations 2000

I am writing to consult you about proposals to amend the Seed Potatoes (Scotland) Regulations 2000.

Last November the Department consulted the industry about proposals for the voluntary downgrading of seed potatoes. Of those who responded the preferred option was to adopt an approach which would involve the issue of a crop inspection report rather than a certificate of classification. Further information about this amendment is detailed in paragraph 2 of the consultation paper. We hope to make the amendment required to the 2000 Regulations in January and to have the amending Regulations in force for the next growing season.

We also intend to take this opportunity to make some further amendments to the Regulations. I attach a consultation paper which sets out the details of the amendments we propose to make. I should be grateful if you could let us have comments on the proposed amendments by close on 17 December 2004. Comments should be sent to Caroline Boyd at the above address (telephone 0131 244 6339; fax 0131 244 6509 or e-mail caroline.boyd@scotland.gsi.gov.uk).

I would be grateful if you could clearly indicate in your response which parts of the consultation paper you are responding to as this will aid analysis of the responses received. I would also appreciate if you could complete the enclosed responsee information form and return this with your comments.

We will make all responses available to the public in the Scottish Executive Library. All responses not marked confidential will be checked for any potentially defamatory material before being placed in the library. We have placed a copy of this consultation on our website at www.scotland.gov.uk. This consultation, and all other SE consultation exercises, can be viewed online at <http://www.scotland.gov.uk/consultations>. You can telephone Freephone 0800 77 1234 to find out where your nearest public internet access point is.

consult letter marketing regs 2004

The Scottish Executive now has an e-mail alert system for SE consultations (SEconsult). This system allows stakeholder individuals and organisations to register and receive a weekly e-mail containing details of all new SE consultations (including web links). SEconsult complements, but in no way replaces SE distribution lists, and is designed to allow stakeholders to keep up to date with all SE consultations activity, and therefore be alerted at the earliest opportunity to those of most interest.

Yours faithfully

Charles W Greenslade

Head of Plants, Horticulture and Potatoes

Respondee Information Form

Please complete the details below and attach it with your response. This will help ensure we handle your response appropriately:

Name:

Postal Address:

Consultation title:

1. Are you responding as: (please tick one box)

- (a) an individual (go to 2a/b)
(b) **on behalf of** a group or organisation (go to 2c)

2a. Individuals:

Do you agree to your response being made available to the public (in SE library and/or on SE website)?

- Yes (go to 2b below)
No, not at all

2b. Where **confidentiality is not requested**, we will make your response available to the public on the following basis (**please tick one** of the following boxes)

- Yes, make my response, name and address all available
Yes, make my response available, but not my name or address
Yes, make my response and name available, but not my address

2c On Behalf of Groups or Organisations:

Your name and address as respondees **will be** made available to the public (in the SE library and/or on SE website). Are you content for your response to be made available also?

- Yes
No

Sharing Responses

3. We will share your response internally with other SE policy teams who may be addressing the issues you discuss. They may wish to contact you again in the future, but we require your permission to do so. Are you content for the Scottish Executive to contact you again in the future in relation to this consultation response? Yes/No

Organisations Consulted

Mr John Kinnaird
National Farmers Union Scotland
The Rural Centre, West Mains
Ingliston
NEWBRIDGE
Midlothian
EH28 8LT

Copy to: Peter Loggie

Mr Hugh Edmond MBE
Secretary and Treasurer
The Scottish Potato Trade Association
Dunkessen
Fintry
Glasgow
G63 0XG

Mr Hugh Edmond MBE
Secretary
VTSC Growers' Association
Dunkessen
Fintry
GLASGOW
G63 0XG

Mrs Helen Priestley
Chief Executive
British Potato Council
4300 Nash Court, John Smith Drive
Oxford Business Park South
OXFORD
OX4 2RT

Mr C David Fradd
Secretary
National Association of Seed Potato Merchants
Unicorn House
3 Foundation Street
IPSWICH, 1P4 1BG

Ms Christine Robb
Scottish Organic Producer's Association
Scottish Organic Centre
10th Avenue/Royal Highland Centre
INGLISTON
Edinburgh, EH28 8NF

CONSULTATION PAPER ON THE AMENDMENTS PROPOSED TO THE SEED POTATOES (SCOTLAND) REGULATIONS 2000

1. Scotland is acknowledged as a producer of seed potatoes of high health, particularly for virus, and this is supported by evidence of a range of improvements in quality over the past 20-30 years.

Voluntary downgrading

2. In November 2003 the Scottish Executive Environment and Rural Affairs Department consulted the industry about finding an alternative to the practice of voluntary downgrading of seed potatoes which had received a certificate of classification after growing crop inspection. The preferred option of those who responded to that consultation was to adopt an approach which would involve the issue of a crop inspection report rather than a certificate of classification. This change will mean that when a grower applies to have a crop inspected, the inspector inspects the crop not only for the category and class of seed in respect of which the application has been made, but also for all the lower categories and classes. The grower then receives a crop inspection report which shows whether the crop meets the standards for the class at which it was entered, as well as the standards of any lower classes or whether it fails outright to meet the standards for any class. When a crop is being marketed, consignments can then be labelled at the highest achieved class or any lower class at the request of the seller.

3. SEERAD proposes to amend the Seed Potato (Scotland) Regulations 2000 to introduce crop inspection reports in time for the next growing season (i.e. 2005). In addition SEERAD proposes to make a number of other amendments to the 2000 Regulations at the same time. It is our view that these amendments will help the Scottish seed potato trade meet a number of challenges in the current changing and increasingly competitive market. Comments are sought on the Department's proposals by 17 December 2004.

Proposed amendments

Pre-basic and VTSC classes

4. The present class VTSC (virus tested stem cutting) would be designated as pre-basic category rather than basic category seed potatoes. The name VTSC would be replaced by Pre-basic. VTSC 1 would become Pre-basic 3 and VTSC 2 would be Pre-basic 4. This would remove the VTSC name which is no longer relevant to the technology by which the initial stocks are being produced and would be more consistent with the nomenclature adopted in other international certification schemes, e.g. United Nations Economic Commission for Europe (UNECE), European Plant Protection Organisation (EPPO). In addition, the deletion of a class name which refers to virus-tested might help to remove a buyer's perception that such stocks will be virus-free.

5. The current VTSC tolerances for growing crop inspection would apply to Pre-basic 3 and 4. However, the tuber tolerances for pre-basic and VTSC differ and we are proposing that a common set of tolerances is applied to all pre-basic generations using the minimum standards of UNECE Seed Potato Standard as the basis for these tolerances. This means that

some Pre-basic 1 and 2 tolerances will be relaxed and some VTSC tolerances will be tightened.

The proposals are set out in the Table at Annex A and the principal highlights are as follows:

- **Individual tolerance for blight, gangrene etc, and frost damage to be 0.2% with blackleg being zero; the aggregate allowance for rots to be 0.2%.**
- **Tolerance for skin spot to be 0.2% as per current Pre-basic 1 and 2.**
- **Tolerance for common scab unchanged.**
- **Tolerance for black scurf and powdery scab to be 1.0% with an allowable surface area cover of 12.5%.**
- **Tolerances for Groups in columns 3, 4 and 5 to be as per Pre-basic 1 and 2.**
- **Introduce a nil tolerance for superficial necrosis caused by PVY strains (see paragraph 10).**

Tuber tolerances for Basic seed potatoes (now excluding VTSC)

6. In comparison with the Dutch tolerances for black scurf and scab, which includes both common and powdery scab, our tolerances are much more relaxed and this may be part of the reason why Dutch seed has a better reputation for tuber quality than Scottish seed. However discussions with inspectors and some of the trade suggest that seed lots are rarely rejected for skin spot or black scurf and that these diseases are very uncommon at the level of our tolerances. Unfortunately historical data from the labelling inspections are not available in a form which enables it to be analysed to confirm these observations. Nevertheless, we are confident that there is merit in proposing a tightening of the tolerance for these 2 diseases, particularly as the UK, including Scotland, wishes to move towards compliance with recognised international standards.

7. **Allowable surface areas:** Our current tolerances for common scab are in compliance with those of the UNECE Standard. For powdery scab, the allowable percentage surface area cover for basic seed potatoes is slightly greater at 12.5% than the 10% specified in the UNECE Standard but, for black scurf, the allowable percentage surface area cover in the Scottish scheme is much greater for basic category seed potatoes (25% v 10%) than the UNECE Standard. **We are, therefore proposing that the allowable surface area cover is tightened for basic seed potatoes to 12.5% for black scurf with the tolerance remaining unchanged at 3.0%.**

8. **Surface diseases:** Skin spot is a disease which has become relatively uncommon on Scottish seed potatoes but still raises concern in discussions with the industry in England who consider that our current tolerance for basic seed potatoes means that sufficient infection may be present to cause unacceptable amounts of skin blemish on the daughter tubers. Our judgement is that the tolerance could be tightened without affecting the marketing of the Scottish crop and this would send a signal to buyers that improvements in tuber health of

Scottish seed potatoes are being reflected in our classification tolerances. **We therefore propose that the tolerance be tightened to 0.2%.**

9. Potato Tuber Necrotic Ring Disease (PTNRD): This tuber disease is caused by strains of potato virus Y which are recombinants of PVY^O and PVY^N. Recombinant strains may produce mosaic symptoms on infected growing plants and can produce superficial necrosis on the tubers of susceptible varieties. These symptoms can render tubers unmarketable. However, not all recombinant strains can cause tuber symptoms. PTNRD has not been recorded in Scotland but has been reported in Europe, particularly southern EU Member States.

10. The introduction of a tolerance in the classification scheme would reduce the risk of aggressive strains capable of causing tuber symptoms being distributed in marketed seed produced in Scotland or elsewhere in EU. Given that an infected tuber will produce an infected plant, we propose that a tolerance of 0.1% for PTNRD is included in the tuber tolerances for basic category seed potatoes in the amended Regulations. There would be a nil tolerance for pre-basic category seed potatoes (see paragraph 5 above).

Proposals for tuber disease tolerances:-

- **Tighten the allowable area tolerance for black scurf for basic seed potatoes from 25% to 12.5% - see Annex B.**
- **Tighten skin spot tolerance for basic seed potatoes from 2% to 0.5% - see Annex B.**
- **Introduce a tolerance for superficial necrosis caused by PVY strains of 0.1% for basic seed potatoes.**

AA class - Retain as a class of Basic category seed potatoes and rename as Class A

11. SEERAD proposes, in line with previously expressed Scottish seed potato industry wishes, that Class AA will be retained as basic category seed potatoes. However if this is accepted then the current virus tolerance for Class AA needs to be tightened in order to minimise the risk of crops derived from such seed failing to meet the EU direct progeny tolerance for virus and to comply with current international standards. The main consequence of this would be to introduce a stricter tolerance for severe virus (0.4% compared with the present tolerance of 1% for all virus) while tightening, only slightly, the tolerance for mild/total virus from 1.0% to 0.8%. The current tolerance for blackleg would be unchanged. This option would allow class AA to continue to act as a Basic category fall grade for stocks of lower quality with respect to mild viruses and blackleg and allow them to be marketed as Basic category seed potatoes.

12. It is however proposed that an amendment be made to the existing Scheme nomenclature with Class AA being renamed as Class A, as is the case in Northern Ireland. One of the main points of consideration is in relation to the Dutch classification scheme. The Dutch are major exporters of seed potatoes and many of the importing countries have developed their import regulations on the basis of the nomenclature used by The Netherlands for seed potato classes. For some time, the Scottish seed potato industry's view has been that a change of name to Class A would be more helpful for trading purposes and acceptable to

potential importing countries who often specify that they want Class A. Although Class A in The Netherlands scheme is a class of certified category seed potatoes, our proposal is that Class A would remain within the basic category in Scotland and that standards and tolerances would be those indicated in the table at Annex B.

Introduction of discretionary field generation markers onto the seed potato label

13. In general, the risk of a seed stock acquiring disease would appear to increase with field generation age (number of years that a stock has been grown in the field), particularly in the early years of multiplication, but this pattern varies with disease and variety. Currently generation age in the SPCS refers only to the number of generations for which a stock has been grown at a specific class, e.g. SE2 means 2 generations at SE but it does not tell the buyer how many generations a stock has been grown as pre-basic seed potatoes, for example.

14. For some years, a number of Scottish producers and seed buyers have expressed a desire to have information on the field generation of a stock stated on the official label. The SPCS database can now deliver this data. SEERAD considers that there is sound technical justification for the introduction of generation markers in the SPCS in Scotland and that it is a natural evolution within the existing system i.e. from having generation control within each class to generation control within the overall multiplication chain. Generation markers would be attached to stocks as an FG number, independent of, but in addition to, the class as they progress through the classification system. This information would be provided on a discretionary basis only, at the request of the seller. Such requests would be made when applying for labels - the applicant would simply have to tick a box on the application form.

Non-EU marketing provisions

Proposed disapplication of certain provisions of the Seed Potatoes (Scotland) Regulations for seed potatoes being marketed outwith the EU

15. Article 1 of Council Directive 2002/56/EC disappplies the Directive to seed potatoes shown to be intended for export to third countries. However the Seed Potatoes (Scotland) Regulations 2000 currently makes no distinction regarding the destination of seed potatoes produced in Scotland. In particular, the requirement in our regulations (Schedule 1, paragraph 3(b)) that varieties entered for seed potato classification must be on the UK National List or Common Catalogue has been considered to be a barrier to breeders and growers marketing varieties suitable for warm or hot climates. Breeders have encountered difficulties in getting such varieties accepted onto the UK National List because the National List regulations require that new varieties must demonstrate improved characteristics (e.g. yield, disease-resistance, etc.) in a UK context compared with current listed varieties. This can be difficult with such varieties. Breeders have argued that this discourages breeding new British varieties suitable only for export markets.

16. Disapplying Schedule 1, paragraph 3(b) for varieties destined for non-EU countries would allow such varieties to be classified. The disapplication would also give Scottish producers the opportunity to produce seed of unlisted varieties not bred in the UK but being grown by importing countries. It would still be the intention that all other marketing requirements, with one other exception, would apply to seed potatoes produced for marketing to non-EU markets. The other exception would be to disapply Schedule 4, paragraph 4 (2)(c) which restricts the maximum variation in size between tubers in a lot to 25mm. It is proposed

that the maximum variation in size between tubers in a lot would be left to commercial agreement rather than applying the EU tolerance.

Standards for export of seed potatoes to non-EU markets

17. Rots: The tolerance for wet rots applied by NAK in The Netherlands is much stricter (*1tuber/5 bags, approximately 0.03%*) than the Scottish tolerance of 0.5% for all rots and, in addition, when Dutch seed is exported outside the EU, the Dutch Plant Protection Service apply a nil tolerance for wet rots. Given industry experience with some exports, it is clear that our current tolerance can give the opportunity for significant development of progressive diseases such as rots after inspection, particularly where the journey time is a few weeks and when the potatoes are subject to fluctuating environmental conditions. **We propose that the current tolerance of 0.5% for rots is amended to 0.2%. To aid transparency for foreign customers, we also propose to include in the Regulations a table showing the general tuber tolerances for basic seed potatoes produced in Scotland and intended for non-EU markets. The table is attached at Annex C. Exporters are already aware that some countries require tighter tolerances for certain pests and diseases. If pre-basic seed potatoes were intended for marketing to a non-EU country, the standards for EU trade would apply.**

Proposed amendments to the provisions for non EU trade

- **Disapply requirement for varieties to be National Listed in order to be marketed.**
- **Disapply 25mm maximum variation in size band requirement.**
- **Replace 0.5% tolerance for rots by 0.2%.**
- **Introduce a table of tuber tolerances for non EU-trade.**

Approved stocks

18. Approved stocks are seed potatoes of varieties which are in the process of being listed in the UK National List or EU Common Catalogue. SEERAD operates an Approved Stock scheme whereby such seed potatoes are inspected both as growing crop and as tubers. The minimum conditions and standards applied at inspection are those for Elite class seed potatoes. This scheme allows seed multiplication to a specific quality to be undertaken before National Listing in order to have sufficient seed stocks available for customers as soon as a variety is accepted on to the National List. In addition, such seed potatoes may also be marketed for large scale trial/selection purposes to determine end use suitability. They are marketed to growers to produce sufficient material to assess their usefulness under end user conditions, e.g. crisping in a factory.

19. The current basis for the Approved Stock scheme lies in Regulation 3(5) of the Seed Potatoes (Scotland) Regulations 2000 and Article 6 of Council Directive 2002/56/EC on the marketing of seed potatoes. We do not now consider that this provision provides transparency for the marketing of these seed potatoes and want to amend the regulations to make the position clear. However the Commission has also been considering the introduction of a system to allow the marketing of unlisted varieties of seed potatoes for end use tests only

throughout the community. We expect that an EU Decision will be introduced later this year. We will therefore be consulting interested bodies on the provisions contained in the Decision later in the year. **We hope to be able to introduce these amendments at the same time as the other amendments come into effect. If this is does not prove possible further amendment regulations will be made.**

Plants, Horticulture and Potatoes

SEERAD

24 September 2004

TABLE

PRE-BASIC 1 TO PRE-BASIC 4 CLASS AND EQUIVALENT IN OTHER PARTS OF THE UK

<i>Column 1</i> <i>Diseases, pests, damage and defects</i>	<i>Column 2</i> <i>Individual</i> <i>Tolerances</i>	<i>Column 3</i> <i>Group</i> <i>Tolerances</i>	<i>Column 4</i> <i>Collective</i> <i>group</i> <i>tolerances</i>	<i>Column 5</i> <i>Allowable</i> <i>% surface</i> <i>area</i> <i>cover</i>
GROUP I				
Wart Disease (<i>Synchytrium endobioticum</i> Schilb.)	NIL	-	-	
Potato Tuber Eelworm (<i>Ditylenchus destructor</i> Thorne)	NIL	-	-	
Potato Cyst Nematode (<i>Globodera</i> species infesting potatoes)	NIL	-	-	
Ring Rot (<i>Clavibacter michiganensis</i> (Smith) Davis <i>et al</i> ssp. <i>Sepedonicus</i> (Spieck Koth) Davis <i>et al</i>)	NIL	-	-	
Brown Rot (<i>Ralstonia solanacearum</i> (Smith) Yabuuchi <i>et al</i>)	NIL	-	-	
Potato Tuber Moth (<i>Phthorimaea operculella</i> (Zell))	NIL	-	-	
Potato Spindle Tuber Viroid	NIL	-	-	
Colorado Beetle (<i>Leptinotarsa decemlineata</i> (Say))	NIL	-	-	
GROUP II				
Blight (<i>Phytophthora infestans</i> (Mont) de Bary)	0.2%	}	}	
Blackleg (<i>Erwinia carotovora</i> (Jones) Bergey <i>et al</i> ssp. <i>atroseptica</i> (Hellmers & Dowson) Dye) or <i>Erwinia chrysanthemi</i> Burkholder <i>et al.</i> or both	Nil	}	}	
		}0.2%	}	
Gangrene/Dry Rot/Wet Rot	0.2%	}	}	
Frost damaged tubers	0.2%	}	}	
GROUP III				
Skin spot (<i>Polyscytalum pustulans</i> (Owen & Wakefield) M. b. Ellis)	0.2%	}	}	4.0%
Black scurf (<i>Rhizoctonia solani</i> Kuhn)	1.0%	}	}	12.5%
Powdery scab (<i>Spongospora subterranea</i> (Wallr) Lagerh)	1.0%	}	}	12.5%
Common scab (<i>Streptomyces</i> species)	3.0%	}	}	25.0%
GROUP IV				
External blemishes or tubers other than diseased tubers whose shape is atypical for the variety	1.0%		}	
Superficial necrosis caused by strains of potato virus Y	Nil		}	
GROUP V				
Dirt or other extraneous matter	1.0%			

TABLE

BASIC SEED POTATOES AND EQUIVALENT IN OTHER PARTS OF THE UK

Column 1 Diseases, pests, damage and defects	Column 2 Individual Tolerances	Column 3 Group Tolerances	Column 4 Collective group tolerances	Column 5 Allowable % surface area cover
GROUP I				
Wart Disease (<i>Synchyrium endobioticum</i> (Schilb) Perc.)	NIL	-	-	
Potato Tuber Eelworm (<i>Ditylenchus destructor</i> Thorne)	NIL	-	-	
Potato Cyst Nematode (<i>Globodera</i> species infesting potatoes)	NIL	-	-	
Ring Rot (<i>Clavibacter michiganensis</i> (Smith) Davis <i>et al</i> ssp <i>sepedonicus</i> (Spieck.& Koth) Davis <i>et al</i>)	NIL	-	-	
Brown Rot (<i>Ralstonia solanacearum</i> (Smith) Yabuuchi <i>et al.</i>)	NIL	-	-	
Potato Tuber Moth (<i>Phthorimaea operculella</i> (Zell))	NIL	-	-	
Potato Spindle Tuber Viroid	NIL	-	-	
Colorado Beetle (<i>Leptinotarsa decemlineata</i> (Say))	NIL	-	-	
GROUP II				
Blight (<i>Phytophthora infestans</i> (Mont) de Bary)	0.5%	}	}	
Blackleg (<i>Erwinia carotovora</i> (Jones) Bergey <i>et al</i> ssp <i>atroseptica</i> (Hellmers & Dowson) Dye) or <i>Erwinia chrysanthemi</i> Burkholder <i>et al.</i> or both	0.5%	}0.5%	}	
Gangrene/Dry Rot/Wet Rot	0.5%	}	}	
Frost damaged tubers	0.5%	}	}	
			}	
				}4.0%
GROUP III				
Skin spot (<i>Polyscytalum pustulans</i> (Owen & Wakefield) M. B. Ellis)	0.5%	}	}	12.5%
Powdery Scab (<i>Spongospora subterranea</i> (Wallr) Lagerh)	3.0%	}	}	12.5%
Black scurf (<i>Rhizoctonia solani</i> Kuhn)	3.0%	}	}	12.5%
Common scab (<i>Streptomyces</i> species)	4.0%	}	}	25.0%
GROUP IV				
External blemishes or tubers other than diseased tubers whose shape is atypical for the variety	1.0%	}1.0%	}	
Superficial necrosis caused by strains of potato virus Y	0.1%	}	}	
GROUP V				
Dirt or other extraneous matter	1.0%			

TABLE

BASIC SEED POTATOES INTENDED FOR NON-EU MARKETS

Column 1 Diseases, pests, damage and defects	Column 2 Individual Tolerances	Column 3 Group Tolerances	Column 4 Collective group tolerances	Column 5 Allowable % surface area cover
GROUP I				
Wart Disease (<i>Synchyrium endobioticum</i> (Schilb) Perc.)	NIL	-	-	
Potato Tuber Eelworm (<i>Ditylenchus destructor</i> Thorne)	NIL	-	-	
Potato Cyst Nematode (<i>Globodera</i> species infesting potatoes)	NIL	-	-	
Ring Rot (<i>Clavibacter michiganensis</i> (Smith) Davis <i>et al</i> ssp <i>sepedonicus</i> (Spieck & Koth) Davis <i>et al</i>)	NIL	-	-	
Brown Rot (<i>Ralstonia solanacearum</i> (Smith) Yabuuchi <i>et al.</i>)	NIL	-	-	
Potato Tuber Moth (<i>Phthorimaea operculella</i> (Zell))	NIL	-	-	
Potato Spindle Tuber Viroid	NIL	-	-	
Colorado Beetle (<i>Leptinotarsa decemlineata</i> (Say))	NIL	-	-	
GROUP II				
Rots including: Blight (<i>Phytophthora infestans</i> (Mont) de Bart)	0.2%	}	}	
Blackleg (<i>Erwinia carotovora</i> (Jones) Bergey <i>et al.</i> ssp <i>atroseptica</i> (Hellmers & Dowson) Dye) or <i>Erwinia chrysanthemi</i> Burkholder <i>et al.</i> or both, Gangrene/Dry Rot/Wet Rot	0.2%	}	}0.2%	
	0.2%	}	}	
GROUP III				
Skin spot (<i>Polyscytalum pustulans</i> (Owen & Wakefield) M. B. Ellis)	0.5%	}	}	12.5%
Powdery Scab (<i>Spongospora subterranea</i> (Wallr) Lagerh)	1.5%	}	}4.7%	12.5%
Black scurf (<i>Rhizoctonia solani</i> Kuhn)	1.5%	}	}	12.5%
Common scab (<i>Streptomyces</i> species)	1.5%	}	}	12.5%
GROUP IV				
External blemishes or tubers other than diseased tubers whose shape is atypical for the variety	1.0%	}	}	
Superficial necrosis caused by strains of potato virus Y	0.1%	}	}	
External necrosis caused by other viruses	2.0%	}	}	
GROUP V				
Dirt or other extraneous matter	0.5%			