

SASA



Seed Potato Classification Scheme in Scotland

Implementing the UNECE Standard in practice

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STANDARD S-1
concerning the marketing and
commercial quality control of
SEED POTATOES



2008 EDITION
UNITED NATIONS
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How the Scottish SPCS relates to the UNECE standard:



UNECE Standard: Practical Implementation

How the Scottish SPCS relates to the UNECE standard:

- **Legislation: Scotland, UK and EU**
- **Organisational Structure**
- **Certification and Quality Control**
- **Procedures and Methods**



Legislation

Seed Potato Marketing Directive (2002/56/EC) **European**

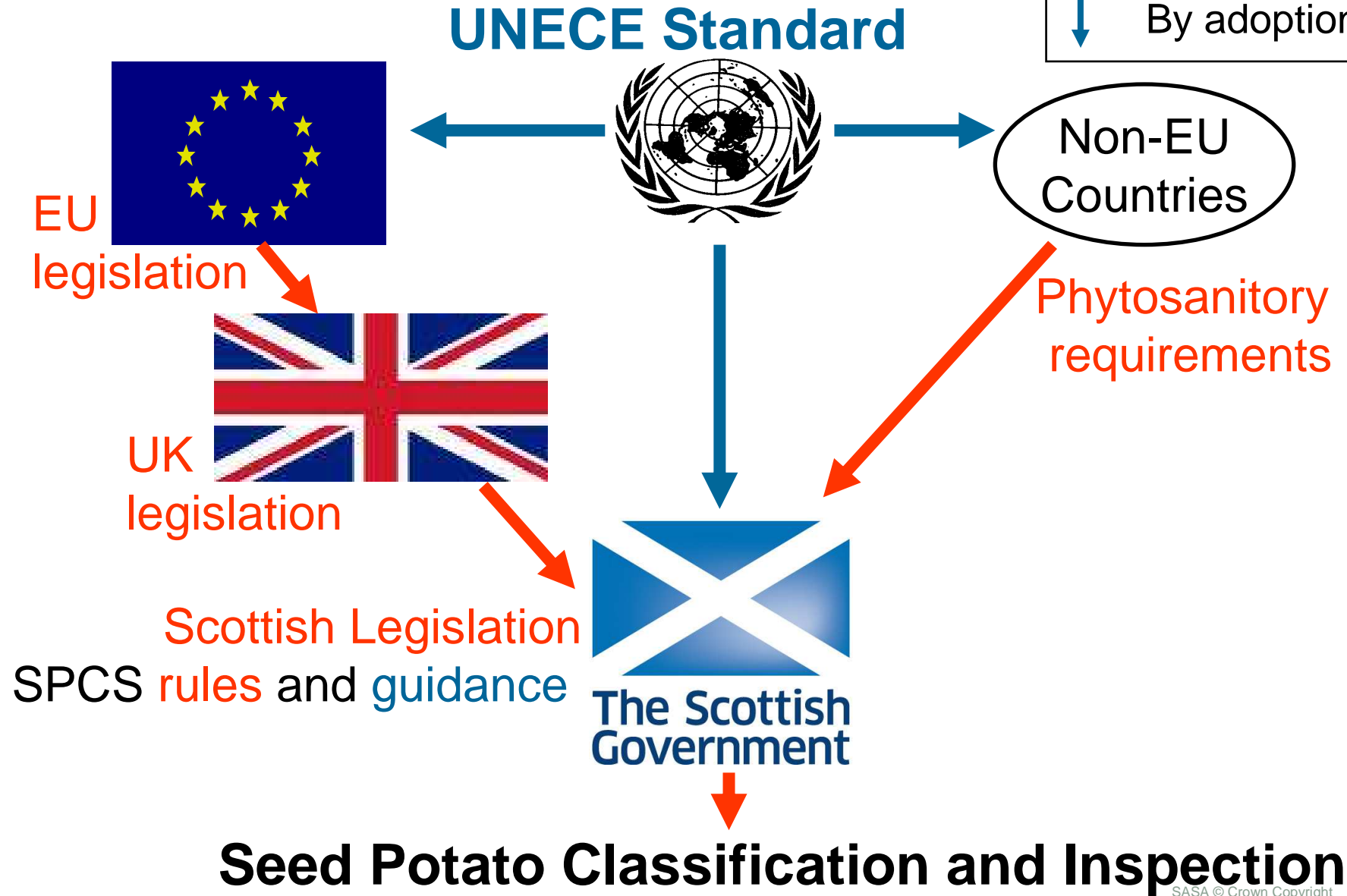
Common Catalogue Directive (2002/53/EC) **European**

The Seeds (National Lists of Varieties) Regulations 2001 **UK**

Seed Potato Regulations (SSI 2000/201) **Scottish**



Structure for SPCS requirements



Variety and Variety Testing

UNECE

The UNECE standard requires varieties to be Distinct Uniform and Stable (DUS) by UPOV methodology and be named.

EU

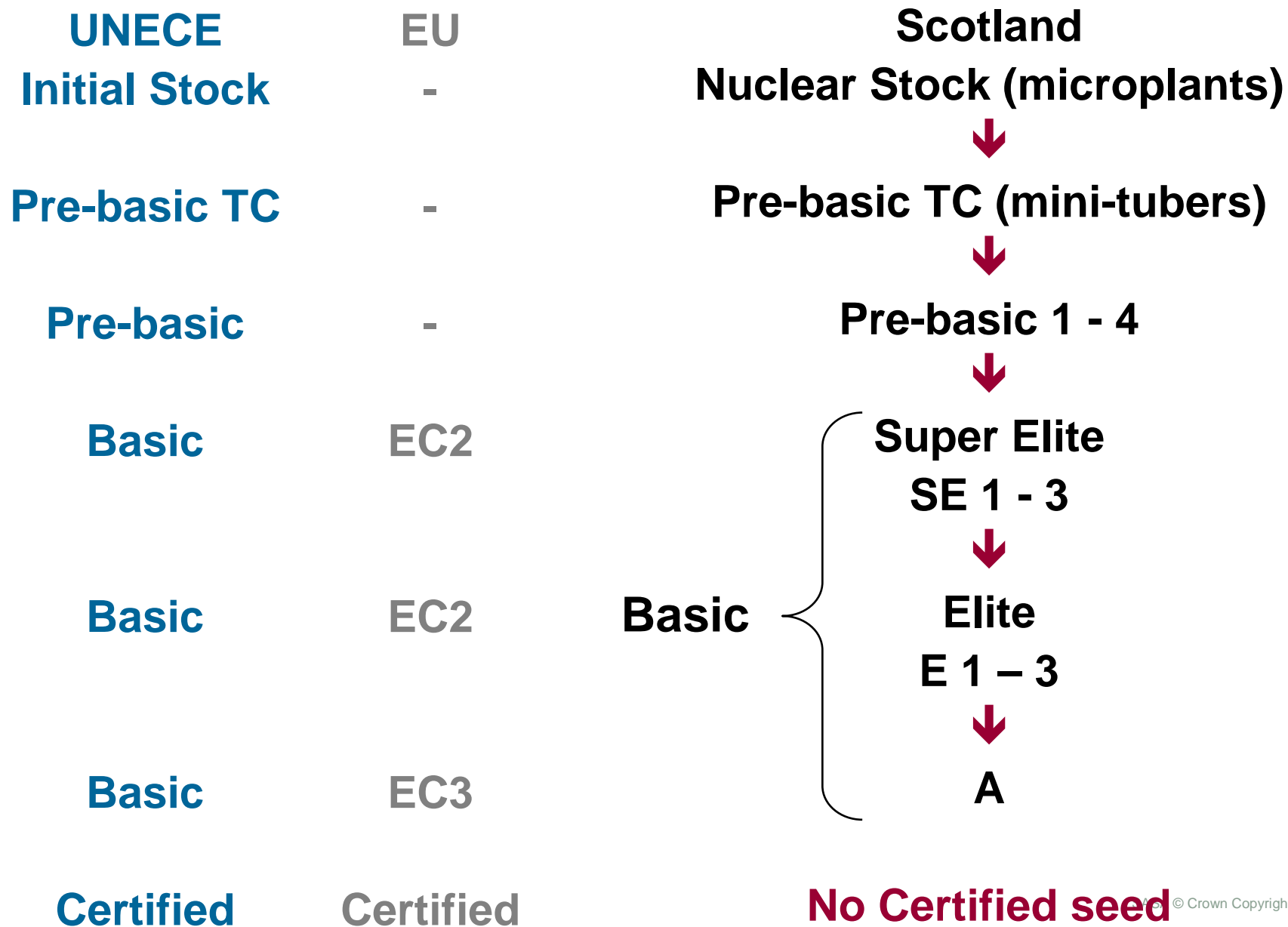
- EU Directive requires varieties to be on a member state National List (all listed on EU Common Catalogue)
- Varieties must be DUS & show Value for Cultivation & Use (VCU)
- Each EU Member State can determine VCU criteria.

Variety and Variety Testing Practice in Scotland

National Listing on a UK basis

- Variety trials conducted by officials
- Scottish regulations allow a derogation for non-EU varieties
(e.g. Egyptian NL varieties)
- UK VCU includes disease resistance testing: e.g. tuber blight

Official Seed Classification



Official Seed Classification Controls

Official pathogen tested collection

Approved Commercial Labs

Crops/lots Officially inspected

Approved PB growers

Crops/lots Officially inspected

Commercial growers

Crops/lots Officially inspected

Strict flush-through chain

Nuclear Stock (microplants)



Pre-basic TC (mini-tubers)



Pre-basic 1 - 4



Basic Super Elite

SE 1 - 3

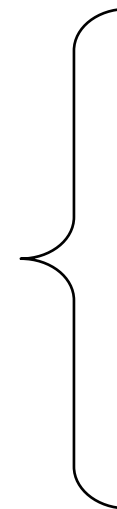


Basic Elite

E 1 - 3



Basic A



Controls



Seed Origin and Identity

Approval of Production site (PBTC)

Competence of Grower (PBTC and PB)

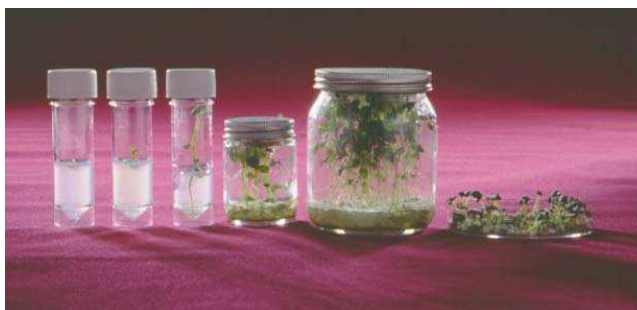
Eligibility of Land

Crop health, purity and separation

Lot health, identity and labelling

Control of Ware planting and health

Pathogen Free Initial Propagation Material **Nuclear/Initial Stock**



Pathogen tested microplants produced
officially at SASA either through

Nuclear Stock Initiation Unit (EU material),
or
Potato Quarantine Unit (non-EU material)



More than 500 potato varieties in
SASA collection

Further multiplication in commercial
laboratories approved by SASA

Controlled Propagation of Pathogen Free Microplants and minitubers **PBTC**



Minitubers (Pre-basic TC)

Microplants are grown on in peat or hydroponics (pest free media) to produce minitubers

Protected, pest and disease free Environment
(Glasshouse/poly tunnel)

All PBTC officially approved by the Scottish Government

All crops and lots inspected

Trained Official Inspection Staff

We train and oversee the official inspection staff who monitor the purity and health of seed potato crops.

The health status of ware crops is also checked.



Seed Potato Land Controls



Potato wart disease never found

Found, by testing, to be free from PCN
before planting

Rotation interval:

7 years for Pre-basic crops

5 years for Basic crops

Growing Crop Inspections



At least two official inspections during the growing season;

Strict tolerances for varietal purity, aphids, virus diseases and blackleg;

Inspections supported by lab staff.



Labeling



All seed in final containers needs to be sealed with an official label

The label shows all relevant details of the seed, including the crop number, which ensures full traceability

EC – Plant Passport **Scotland (UK)**
***Solanum tuberosum* L.** **Basic Seed Potatoes**
Crop Identification Number 12 3456 78 90
Variety DESIREE
Grade EC2 Class SE FG4
Registration No. UK/S 3456
Size 35 x 55 mm
Date of Closing **Declared Net Weight**
 12/12/06 50 kg
EC rules and Standards
ZP-a6, ZP-d1 **0803182627140706**

Labels can show Field Generation

Official Seed Potato Lot Inspections



All lots are inspected

The inspector must ensure all
tolerances appropriate for the
class are met

Scotland applies stricter tolerances
for Export lots (non-EU)

Country specific tolerances for export
markets must also be met

Official Seed Potato Lot Inspections



Tuber inspections are carried out on
the basis of sampling

The sampling rate is above set
above the EU minimum

Export lots are sampled more
intensively

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Variety Testing Results posted online via SASA hosted databases

<http://varieties.potato.org.uk/menu.php?>

Home Search Indexes Help



The British Potato Variety Database

Maris Piper

 Scottish Seed Stocks
 English Seed Register

Parentage
Breeder

(CPC 1673 x Ulster Knight) x (Arran Cairn x Herald)
Plant Breeding Institute

Maincrop maturity with high yields and many tubers per plant. Resistant to potato cyst nematode Ro1, good resistance to gangrene, damage and bruising. Suitable for storage. Moderately susceptible to common scab, powdery scab, potato virus Y and slugs. Medium dry matter with good cooking and frying qualities.



Tuber characteristics

Smoothness of skin Medium
Shape of tuber Oval
Depth of eyes Very shallow - shallow
Colour of skin Cream
Colour of flesh Cream

Botanical description

Maturity Maincrop
Height of plants Tall
Frequency of berries Many
Colour of flower Red violet
Colour of base of lightsprout Pink

Variety Testing Work: National List Testing, Independent Variety Testing

Tuber characteristics		Botanical description	
Smoothness of skin	Medium	Maturity	Maincrop
Shape of tuber	Oval	Height of plants	Tall
Depth of eyes	Very shallow - shallow	Frequency of berries	Many
Colour of skin	Cream	Colour of flower	Red violet
Colour of flesh	Cream	Colour of base of lightsprout	Pink

Maris piper

Resistance to Damage, Pests and Diseases	Low	.	.	.	.	.	.	.	High
Black dot (<i>Colletotrichum coccodes</i>)	.	.	.	4	.	.	.	.
Black scurf (<i>Rhizoctonia solani</i>)	6	.	.	
Dry rot (<i>Fusarium coeruleum</i>)	.	.	3	.	.	.	.	.
Dry rot (<i>Fusarium sulphureum</i>)	.	2	.	.	.	.	.	.
Late blight on foliage (<i>Phytophthora infestans</i>)	.	.	.	4	.	.	.	.
Late blight on tubers (<i>Phytophthora infestans</i>)	5	.	.	.	
Powdery scab (<i>Spongospora subterranea</i>)	.	.	3	.	.	.	.	.
Silver scurf (<i>Helminthosporium solani</i>)	.	.	.	4	.	.	.	.
Skin spot (<i>Polyscytalum pustulans</i>)	.	.	.	4	.	.	.	.
Blackleg (<i>Pectobacterium atrosepticum</i>)	5	.	.	.	
Common scab (<i>Streptomyces scabiei</i>)	1	.	.	.	.	.	.	.
Potato Cyst Nematode (<i>Globodera pallida</i> Pa 2/3, 1)	.	2	.	.	.	.	.	.
Potato Cyst Nematode (<i>Globodera rostochiensis</i> Ro1)	9
Potato Leafroll Virus	.	.	.	4	.	.	.	.
Potato Virus Yo	.	2	.	.	.	.	.	.
Bruising	6	.	.	
Splitting	7	.	

High Seed Health and Quarantine Organisms

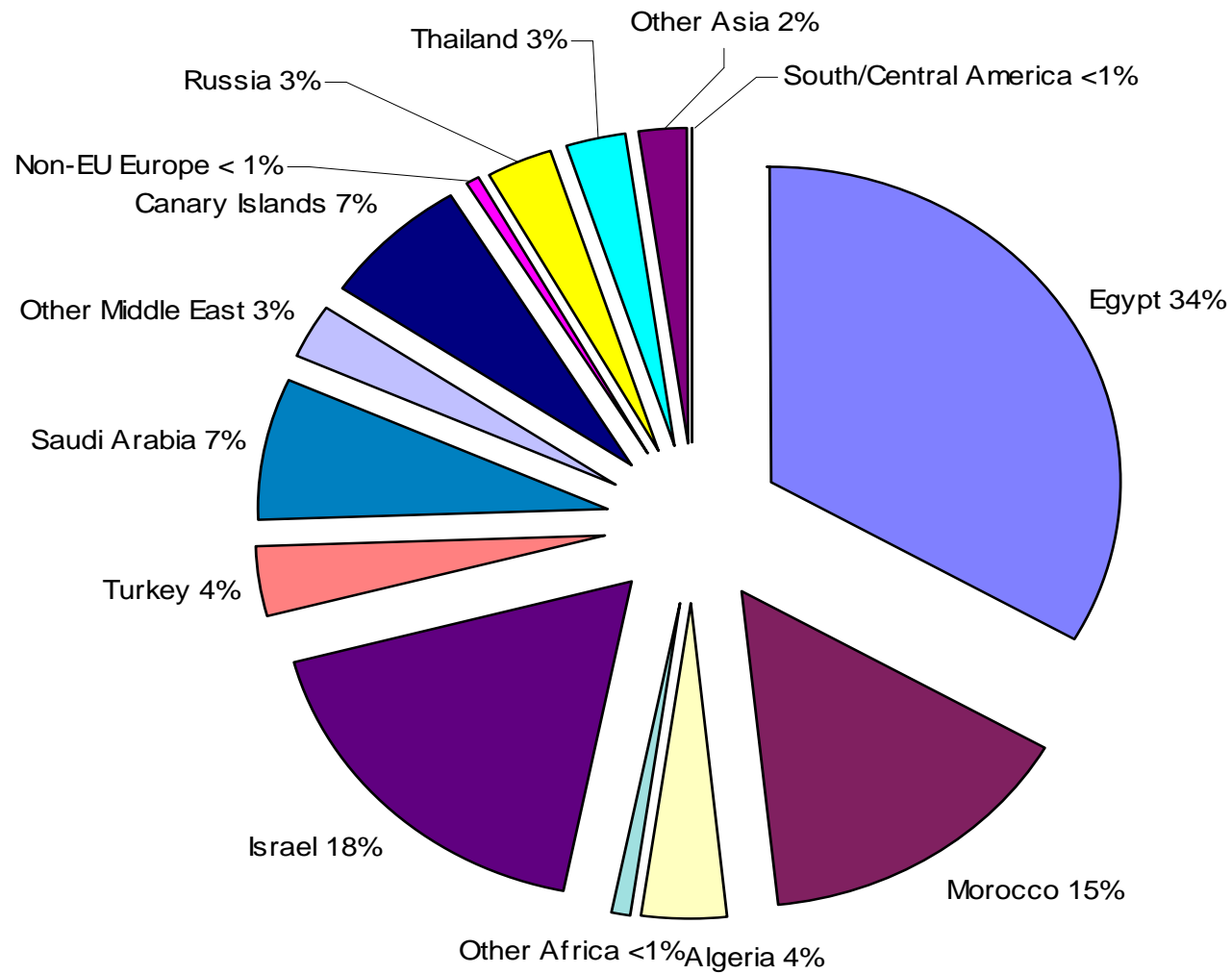


Scotland's Potatoes are free from the following important potato pests and diseases:

- Brown rot
- Ring rot
- *Dickeya* spp. (*Erwinia chrysanthemi*)
- Colorado beetle
- Tuber moth
- Gall nematodes (*Meloidogyne*)
- *Potato spindle tuber viroid*

SASA works to maintain absence of these pests and diseases

Scottish Seed Potato Export



Season 2007/08
 Markets outside
 the European
 Union



- Agriculture
- Plant Health, Seeds and Potatoes
- Potatoes
- Potato Export Conditions
- Introduction**
- Import countries A - Z
- Wart disease
- Potato cyst nematodes
- Growing crop
- Minimum tuber tolerances
- Wood packaging
- Link to Disease Control

Introduction

POTATO EXPORT CONDITIONS

Scotland exports seed and ware potatoes to more than 40 different countries around the world. The following pages provide information on the conditions and phytosanitary requirements for the importation of Scottish potatoes into individual countries **outside** the EU.

Please click **Import Countries A - Z** on the left hand menu to navigate to the pages on the country of your choice.

Please note that the conditions on this website are set by the importing countries and not by the Scottish Government.

Compliance with the phytosanitary requirements is checked during official growing crop and tuber inspections. Occasionally some additional testing may be required to assure compliance with a specific requirement, e.g. absence of viruses. A Phytosanitary Certificate will only be issued after satisfactory completion of all pre-export inspections and tests. Where it is known that an importing country has no specific phytosanitary requirement or condition for a specific disease, pest, type of damage or defect that is listed in Scottish regulations, the [Scottish minimum export tolerances for seed and ware potatoes](#) will be applied.

For certain countries, information on import requirements can only be obtained from the import permit. Any information related to existing arrangements with importing countries must be confirmed to the Scottish Government in writing by the plant health authority of the importing country before they can be applied.

Any queries regarding the phytosanitary requirements for potato export to both non-EU and EU countries should be directed to the Potato Export Liaison Officer for Scotland at SASA Division, via email at potatoexports@sasa.qsi.gov.uk or phone 0131 2446354.

The contents of this site are provided on the understanding that the information was, to the Scottish Government's knowledge, correct at the time of posting. Exporters should note that conditions may be stated for the importing country without the Scottish Government receiving notification.



Website of Country conditions maintained for use by inspectors and industry