

# Control of Potato Cyst Nematodes

**Consultation on the Implementation  
in Scotland  
of Directive 2007/33/EC**

**Jon Pickup & Jean Waddie**

# Important Recommendation

This PowerPoint presentation is based on the information available at

<http://www.scotland.gov.uk/Publications/2009/07/AnalysisofResponses>

The authors recommend reading this analysis to gain a thorough summary of the consultation. The following presentation was written to accompany a verbal delivery and therefore lacks the explanation provided on the above website

# Outline

- ❖ Key elements of the new PCN Directive
- ❖ Scottish Government consultation  
(6 March – 29 May)
  - Soil sampling rates
  - Farm saved/unclassified seed
  - Management of infested land
- ❖ Next Steps

# New PCN Directive

- ❖ European Council Directive 2007/33/EC of 11 June 2007 on the control of PCN
- ❖ Repeals current Directive 69/465/EEC
- ❖ Changeover date of 1 July 2010

# New Directive: Key features

1. Harmonised sampling rate for official pre-planting PCN testing across the EU
  - Reduction for large fields; freedom to define “field”
2. Pre-planting test required for all potatoes for planting, i.e. farm saved seed
  - Exemption if planted at same place of production
3. Pre-planting testing extended to planting material of all PCN hosts and plants grown in rotation with potatoes, unless marketed free of soil, e.g. bulbs.

# New Directive: Key features

4. Treatment of infested fields:
  - No potatoes for planting may be grown
  - Ware potatoes under official control programme
  - Control of contaminated potatoes and waste
5. Annual survey of ware potato land (at least 0.5%)
6. Definition of varietal resistance and methods for resistance testing – recognises importance of resistance in control programmes.

# Scottish Government Consultation

- ❖ Consultation on implementation of Directive
- ❖ Areas of flexibility for member states:
  - “Field” (for soil sampling)
  - “Place of production” (for farm saved seed)
  - Controls on infested land
- ❖ Related SPCS rules and procedures
- ❖ Costs and charging



# Soil sampling



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# Soil sampling

- ❖ Current rates vary across EU from 150ml/ha (UK) to 1200ml/ha
- ❖ New standard rate: **1500ml/ha** – greater chance of detection
- ❖ May be reduced to **400ml/ha** where:
  - No potatoes grown for 6 years before test
  - No PCN found in previous 2 official tests
  - No PCN and no dead cysts found in most recent official test
- ❖ Most Scottish fields will qualify for the reduced rate

# Soil sampling

- ❖ Evidence that no potatoes grown for 6 years
  - RPID will use SG records, e.g. SPCS, PP1 and IACS - may also use growers records.
- ❖ Banking of test results
  - Formerly 4 years
  - 90% of crops grown within 2 years of test
  - Recently reduced to manage changeover
  - Should we have 4 years, 2 years, or no banking?

# Soil sampling – “fields”

- ❖ Standard or reduced sampling rate may be reduced for larger “fields”
  - Standard rate – first 8ha at 1500ml/ha, additional hectares at 400ml/ha
  - Reduced rate – first 4ha sampled at 400ml/ha, additional hectares at 200ml/ha

# Large field sampling: example

11ha at standard rate	11ha at reduced rate
8ha @ 1500ml = 12000ml	4ha @ 400ml = 1600ml
3ha @ 400ml = 1200ml	7ha @ 200ml = 1400ml
Total soil required = 13,200ml	Total soil required = 3000ml
<b>Average rate = 1200 ml/ha</b>	<b>Average rate = 273 ml/ha</b>

# Soil sampling – “fields”

- ❖ A ‘field’ is the area from which a soil sample will be taken
- ❖ If PCN are found, restrictions will apply to the ‘field’
- ❖ Simplest definition of a field: the area surrounded by recognisable boundaries
- ❖ Current equivalent to the ‘field’ is the 4ha unit – large fields are split into 4ha units for soil sampling
- ❖ Larger “fields” permit a lower sampling rate but larger areas taken out of production if PCN are found

# Field definition - options

- ❖ No part fields allowed. Parts of the area within recognisable boundaries may be excluded from sampling, but the sampled area may not be subdivided
- ❖ Units of 10ha. Large fields must be divided into sections as near 10ha as possible, fields smaller than 10ha may not be divided
- ❖ Part-fields to be determined by the applicant: no maximum size, minimum of 4ha

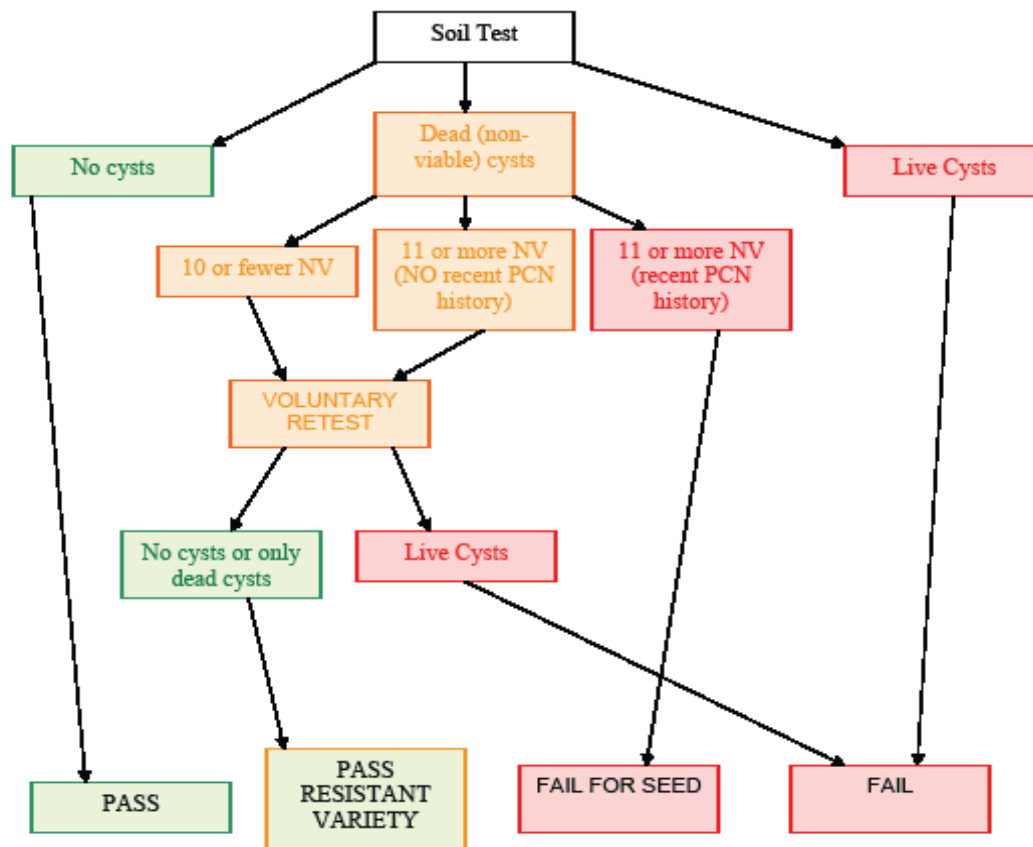
# Simplified SPCS proposals

In recognition of the more intensive sampling required under the 2007 Directive, it is proposed that:

- ❖ Where live cysts are found, the “field” will be recorded as infested
- ❖ No restrictions on adjacent areas (no buffer zones)
- ❖ No restrictions where only dead cysts are found and no ‘voluntary retests’



# Current SPCS procedure



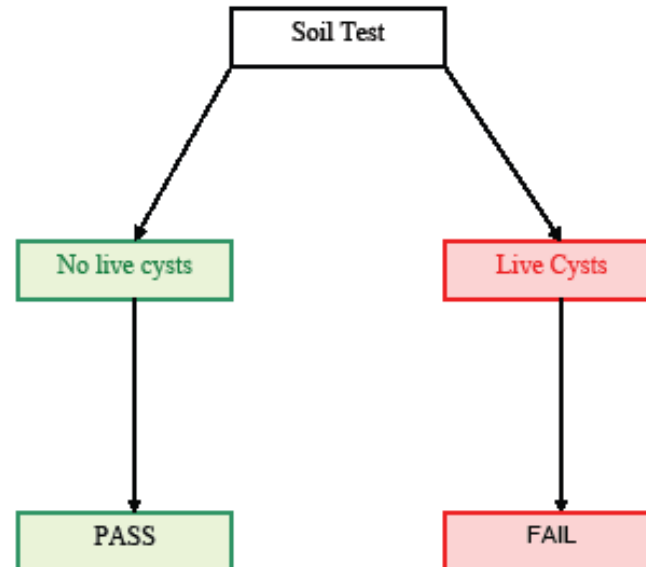
## ADJOINING UNITS

Units adjoining those failed or awaiting a retest are usually treated as “PASS RESISTANT VARIETY” (PRV). If *G. pallida* is present in the field, or was present when the field was last sampled, the adjoining units are usually treated as PRV.

**Flow chart for Pre-crop soil testing under current procedures – June 2009**

# Simplified SPCS proposals

Flow chart for pre-crop soil testing under new  
EU Control Directive– July 2010



**NO MEASURES ON ADJOINING UNITS**  
**NO RETESTS**  
**NO "PASS RESISTANT VARIETY"**

# Farm saved seed

- ❖ 1969 Directive only requires soil testing for PCN where classified seed potatoes are to be grown
- ❖ 2007 Directive recognizes the plant health risks associated with all potatoes for planting
- ❖ Unclassified seed potatoes are only exempt if to be planted at “the same place of production”, i.e. truly farm saved seed

# Place of production

- ❖ Most restrictive definition: limited to a single holding
- ❖ Widest option: permit farm saved seed to be moved to any holding in the same ownership or management, anywhere in Scotland
- ❖ Conclusion: limited to a single holding or holdings consolidated under a single holding number (must be in same parish or, if spreading into two or more parishes, must be contiguous).

# Land recorded as infested

2007 Directive requirements:

- ❖ No seed potatoes may be grown in the field
- ❖ Ware potatoes may be grown under an **officially approved control programme**
- ❖ Contaminated potatoes must be graded and processed at a plant with **appropriate waste disposal facilities**
- ❖ Contaminated potatoes must not be planted

# Register of infested land

- ❖ Government policy is to publish information proactively wherever possible.
- ❖ Proposal: to make available a public register of recorded fields
- ❖ Reaction: may give negative impression of PCN status to export markets
- ❖ Scottish Government reaction: No published register of infected land
- ❖ Growers have responsibility to check status of land with RPID before they rent

# Official Control Programmes

- ❖ Fields officially recorded as infested shall be subject to an official control programme aiming at least at the suppression of potato cyst nematode
- ❖ Applies only to land officially tested, i.e. as required by the EU PCN Directives, and found positive for PCN
- ❖ Programmes are likely to include use of resistant varieties, nematicides or other control measures, and rotation



# Official Control Programmes

## ❖ Proposal:

- Scottish Government endorses models submitted by advisory organisations, e.g. PCL
- Individual growers submit detailed programmes for approval, based on endorsed models
- RPID monitor compliance through record checks etc.

## ❖ Industry responses :

- Existing SCRI/PCL model requires further development
- Control programmes should not be overly-strict

## ❖ Scottish Government reaction: further consultation with the industry on control programmes

# Disposal of contaminated waste and soil

- ❖ Ware potatoes grown on recorded land must be graded and processed at a plant with suitable facilities to ensure no risk of spreading PCN with waste or soil.
- ❖ Proposal: official control programme must include details of the grading / processing plant to be used, so the facilities can be approved.
- ❖ Scottish Government reaction: further consultation with the industry on waste disposal requirements

# De-recording tests

## ❖ 2007 Directive requirements:

- 6 years since positive test or last potato crop
- or 3 years if control measures have been used
- 1500ml/ha
- or 400ml/ha if 7 years since last crop

## ❖ Scottish Government reaction:

- 6 years since positive test or last potato crop
- remove existing requirement for 11-year rotation
- 1500ml/ha

# Soil sampling: who pays?

- ❖ The costs of PCN soil testing will increase substantially – probably 2- to 3-fold
- ❖ Industry responses:
  - Costs to be kept to a minimum
- ❖ Scottish Government reaction :
  - Charging will cover additional costs of new regime
  - RPID looking at maximising efficiency savings

# Next Steps

- ❖ From September 2009: Further discussion with industry (setting up of an advisory group) to consider:
  - Control programmes
  - Waste disposal
- ❖ End of 2009: Publication of further consultation paper - operation of new regime and proposed fees
- ❖ Spring 2010: Legislation to implement new regime laid before the Scottish Parliament



Thank you for your  
attention

**SASA**

Roddinglaw Road  
Edinburgh  
EH12 9FJ