



Revision of the EU PCN Directive: implications for potato growers

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Outline of talk

- ❖ European Council Directive 2007/33/EC of 11 June 2007 on the control of PCN and repealing Directive 69/465/EEC <http://eur-lex.europa.eu>
- ❖ Background - Why revise the 1969 PCN Directive?
- ❖ Key Elements of the new PCN Directive
- ❖ Harmonized Sampling
- ❖ Directive Summary
- ❖ Policy Issues

1969 EU PCN Directive: Key Points

- ❖ Agreed by 6 Member States
- ❖ measures to be taken to control Potato Cyst Eelworm (*Heterodera rostochiensis* Woll.)
- ❖ official investigation only required for **seed potatoes intended for marketing**
- ❖ on contaminated plots: no potatoes or plants intended for transplanting may be grown
- ❖ derogation where resistant varieties are grown, land is disinfected and if crops are harvested before the cysts mature

Nil tolerance for PCN on seed potatoes – Quarantine Pest



1969 EU PCN Directive

PCN - EU Plant Health Directive (77/93/EEC) – Quarantine Pests (Annex IAll)

- (1) knowledge of distribution of pest
- (2) control where present (i.e. to limit population increase)
- (3) prevention of spread

	Marketed Seed	Ware
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(1) knowledge	Yes	No
(2) control	Yes	No
(3) prevention of spread	Yes	No

PCN incidence in Europe

- ❖ *G. rostochiensis* identified in all EU Member States which officially test to species level
- ❖ *G. pallida* identified in most Member States which officially test to species level
- ❖ Incidence of PCN varies considerably across the EU
- ❖ Soil sampling rates across the EU vary from 600ml from a 4ha unit to 400ml from a 0.33ha unit (i.e. from 150ml/ha to 1200ml/ha)

New PCN Directive - Background

- ❖ EU consensus –1969 Directive has failed to achieve the desired level of PCN control
- ❖ Revision - bring into line with legislation covering other quarantine organisms
- ❖ Drawn up by the European Commission, taking advice from a working group of experts on the regulation of PCN
- ❖ 2004 - Specialist sub-group meetings on sampling and resistance testing (Münster, Germany)
- ❖ 18 April 2007 - Directive finalized by EU Council Working Group

New PCN Directive - Key elements

1. comes into force on 1 July 2010
2. recognizes advances in taxonomy, i.e.
Globodera pallida and *G. rostochiensis*
3. sets out a harmonized sampling rate for official pre-crop PCN testing across the EU
4. permits countries freedom to define a 'field'
5. prohibits production of any potatoes for planting on 'fields' officially recorded as infested

New PCN Directive - Key elements

6. extends testing to land intended for the production of planting material of all PCN hosts and plants likely to be grown in rotation with potatoes (leeks, brassicas, strawberries, bulbs, etc.)
7. testing exemption for farm-saved seed potatoes and plants but only if they are to be planted at the same place of production
8. testing exemption for material marketed free from soil (includes bulbs but not potatoes)
9. requires an annual survey of ware potato land

New PCN Directive - Key elements

10. ware potatoes may be grown on contaminated land, providing the land is subject to an official control programme aimed at the suppression of PCN
11. measures to minimise the risk of spread of PCN with potatoes and waste known to be contaminated
12. resistant varieties are recognized as integral to PCN control and a protocol for resistance testing is set out
13. provision of a definition of varietal resistance to PCN

2007 EU PCN Directive

PCN - EU Plant Health Directive (77/93/EEC) – Quarantine Pests (Annex IAll)

- (1) knowledge of distribution of pest
- (2) control where present (i.e. to limit population increase)
- (3) prevention of spread

	All Seed	Ware (all hosts)
(1) knowledge	Yes	Yes
(2) control	Yes	Yes
(3) prevention of spread	Yes	Yes

Harmonized Soil sampling



Soil sampling procedure

- ❖ With reference to the sampling and testing for the official investigation... :

sampling shall involve a soil sample with the **standard rate** of at least **1500 ml soil/ha** collected from at least **100 cores/ha** preferably in a rectangular grid of not less than 5 metres in width and not more than 20 metres in length between sampling points covering the entire field.

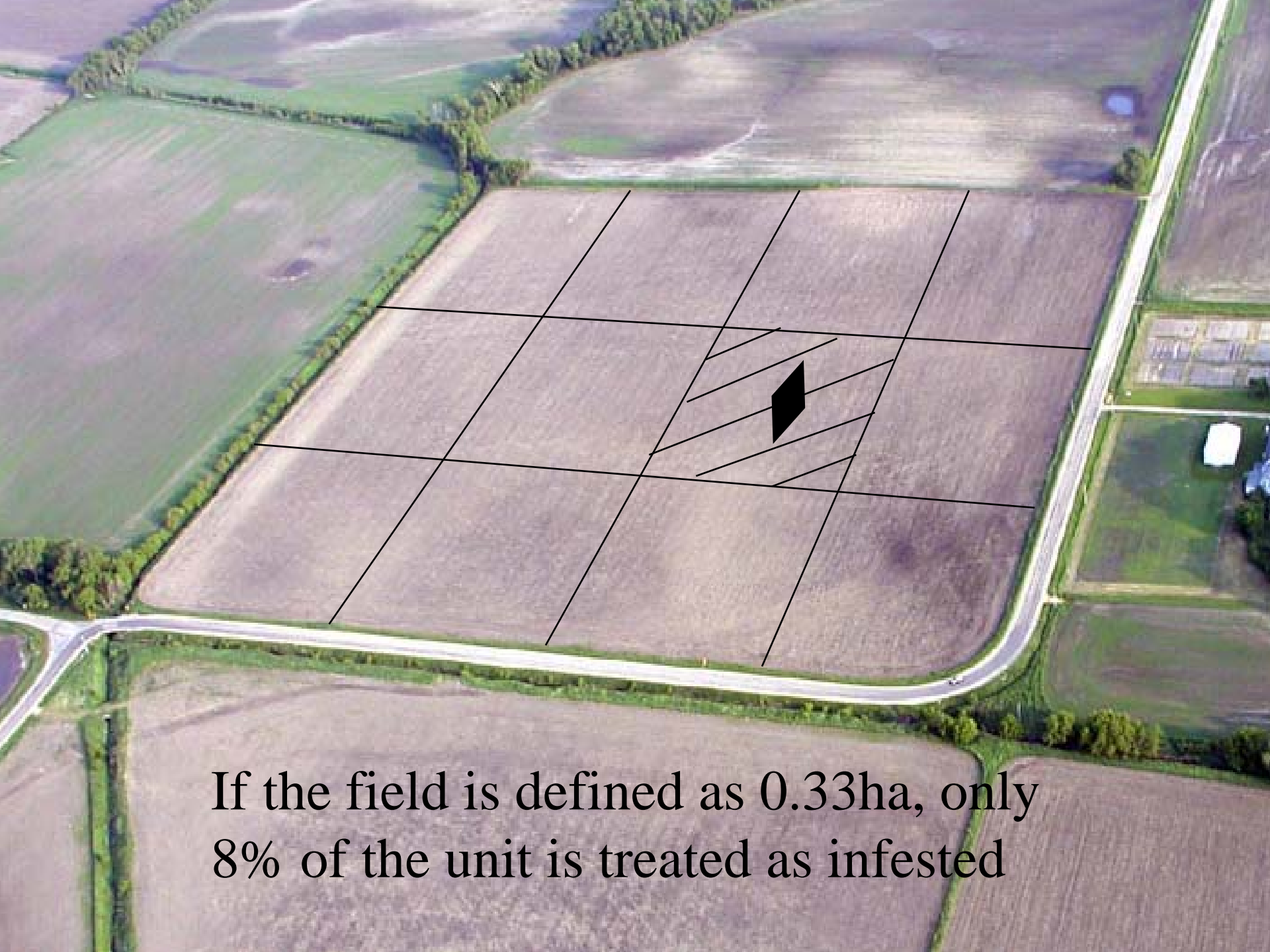
The whole sample shall be used for further examination.

Reduced Soil Sampling Rate

- ❖ By way of derogation, the 1500ml sample size may be reduced to a minimum of **400 ml of soil/ha** provided that:
 - there is documentary evidence that **no potatoes**, or other host plants have been grown or were present in the field in the **six years** prior to the official investigation,
 - ...or if previous tests show a history of freedom from PCN*

Further reduction of sampling rate for larger fields

- ❖ By way of derogation the sampling rate... may be reduced for fields larger than 8 ha and 4 ha respectively:
 - (a) in the case of the standard (**1500ml**) rate... the first **8 ha** shall be sampled at the rate specified, but may be reduced for each additional hectare to a minimum of **400 ml of soil/ha**;
 - (b) in the case of the reduced (**400ml**) rate... the first **4 ha** shall be sampled at the rate specified, but may be further reduced for each additional hectare to a minimum of **200 ml of soil/ha**.



If the field is defined as 0.33ha, only
8% of the unit is treated as infested

Reduced sampling rate for pest free areas

- ❖ By way of derogation the standard size of the soil sample... may be reduced to a minimum of **200 ml of soil/ha** provided that the field is situated in **an area declared free from PCN**, and designated, maintained and surveyed in accordance with the relevant International Standards for Phytosanitary Measures.

Soil Sampling - Summary

- ❖ 100 cores per ha - preferably in a rectangular grid
- ❖ **Standard Rate - 1500ml of soil per ha**
- ❖ **Reduced Rate - 400ml of soil per ha, if**
either potato rotation is 1 in 7 years or longer, or
testing history provides evidence of freedom from
PCN
- ❖ **Further reductions for:**
 large fields
 pest free areas

Summary - 2007 EU PCN Directive

- ❖ The 2007 EU PCN Directive lays out a legislative framework appropriate for the control of a quarantine pest
- ❖ The new Directive addresses the spread of PCN with all potatoes for planting
- ❖ Pre-crop soil testing for PCN is an essential and costly component of the new EU PCN Directive
- ❖ A harmonized methodology for soil sampling is set out, incorporating flexibility to accommodate the variation in the incidence of PCN and field sizes that occur across the EU
- ❖ Many additional risks and control issues are also addressed, e.g. plants for transplanting, contaminated waste, survey of ware production, harmonized resistance testing

Policy Issues:

- ❖ How should we define a field?
- ❖ Farm saved/unclassified seed
- ❖ Should we retain the 'additional measures' currently taken in Scotland following findings of dead cysts?
- ❖ Resources
- ❖ Enforcement

SASA



**Thank you for your
attention**

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