



THE CURRENT INCIDENCE OF TOMATO BORER, *TUTA ABSOLUTA*, IN THE UK

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PLAN OF TALK

- UK tomato industry
 - Threat posed by *T. absoluta*
 - *T. absoluta* and UK quarantine
 - Interceptions and outbreaks
 - Looking forward
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UK TOMATO INDUSTRY

- 3rd most commonly eaten fruit in UK
- Retail value of £175 million

Market statistics for UK tomato industry

Measure	Value
Production area	200 ha
Tomato production	75,000 tonnes
Tomato consumption	400,000 tonnes
Tomato imports	330,000 tonnes
Tomato exports	4,500 tonnes

Data from 2007

UK TOMATO INDUSTRY

Top 10 exporters of tomatoes to UK

	Country	Tonnes
1	Spain	159,842
2	The Netherlands	174,763
3	Poland	26,793
4	Germany	16,186
5	Italy	14,430
6	France	8,622
7	Morocco	7,168
8	Belgium	6,245
9	Israel	1,906
10	Portugal	1,343

Data from 2007

THREAT POSED BY *T. ABSOLUTA*

- Studies suggest that *T. absoluta* is unlikely to survive prolonged periods $< 0^{\circ}\text{C}$
- Climate and pest distribution data demonstrate uncertainties of predicting establishment e.g. high altitude (3500 metres) populations in Peru
- Transient outdoor populations are considered possible in UK (May – August)

Primary four threats posed to UK tomato industry by *T. absoluta*

Threat	Pathway	Risk
Tomato fruits from infested areas	Vine tomatoes, Adjacent packing and production facilities	High
Infected packaging equipment	Crates, containers and vehicles	Medium
Tomato plants for planting	Trade of tomato mother stock for propagation	Low
Solanaceae for planting	Ornamental plant trade	Low

THREAT POSED BY *T. ABSOLUTA*

- Economic damage to tomato crop
 - Economic damage due to additional control measures
 - Economic damage due to additional labour requirements
 - Disruption of IPM programmes
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T. ABSOLUTA AND UK QUARANTINE

- **National response through tomato industry**

Article 16 (2) of the Plant Health Directive 2000/29/EC against findings at import and at growers' premises, aiming at eradication

- **Protected Zone (full quarantine status)**

Imposes plant passporting, as well as standards on place of production. It is unclear whether eradication within a two year period (as required under the Plant Health Directive) is realistic

- **2010 decision to retain national response status**

Conditions imposed, retains flexibility, mitigates negative impacts upon industry

- **Situation will remain under review**

2 yearly review to ensure conditions are being met and gather new information

INTERCEPTIONS AND OUTBREAKS

- **Interception is a single consignment without establishment**

Contaminated consignments are destroyed or returned (optional), the latter opens up the possibility of re-entry

- **Outbreak is a detection of a population established on UK plants.**

All outbreaks are countered using appropriate treatments (chemical)

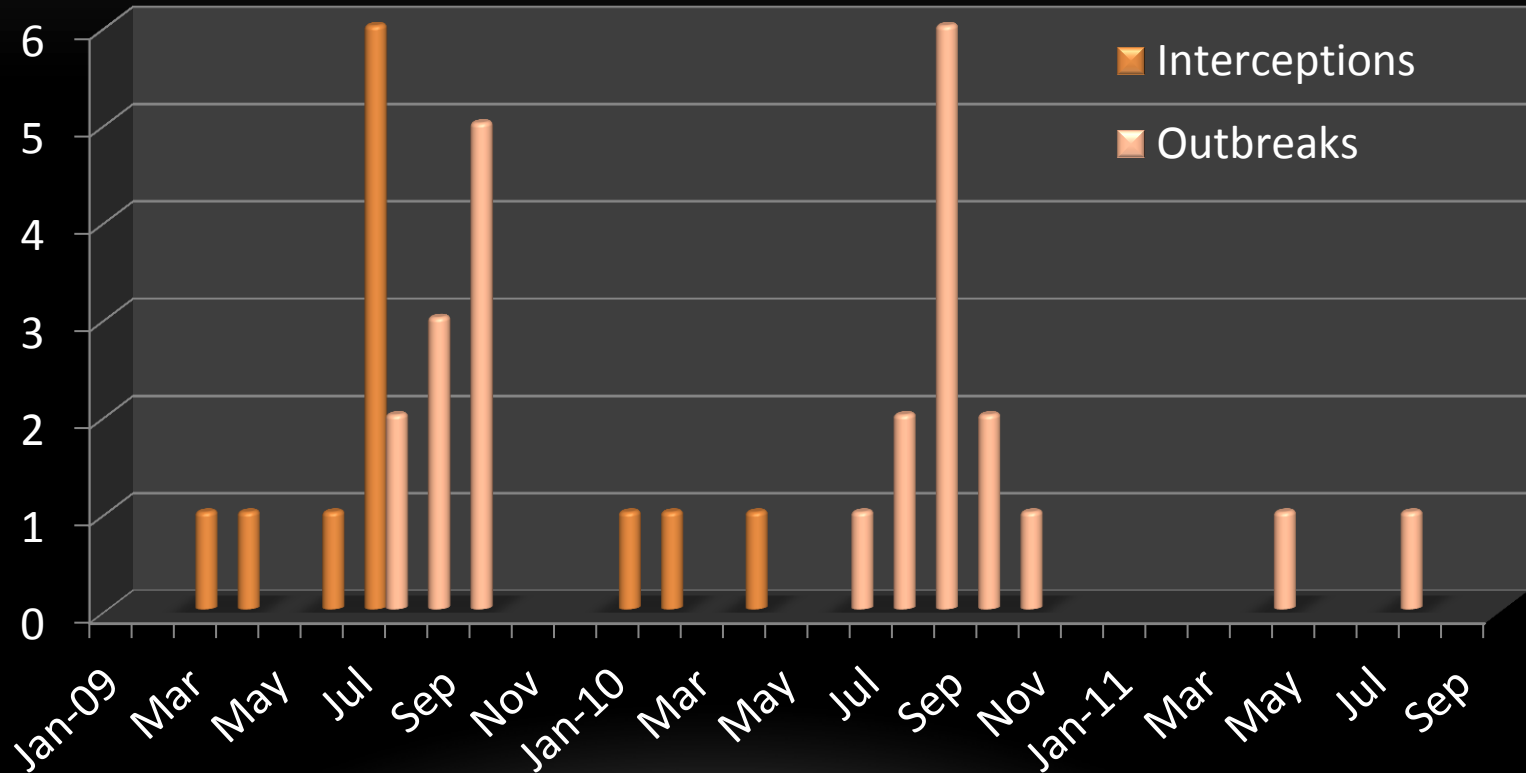
INTERCEPTIONS AND OUTBREAKS

- 12 interceptions between 2009 and 2011, origins include Spain, Italy, Canary Islands
- 24 outbreaks across seven counties (Cambridgeshire, Essex, Isle of Wight, Lancashire, Suffolk, Worcestershire, Yorkshire)

Data from UK Food and Environment Research Agency

INTERCEPTIONS AND OUTBREAKS

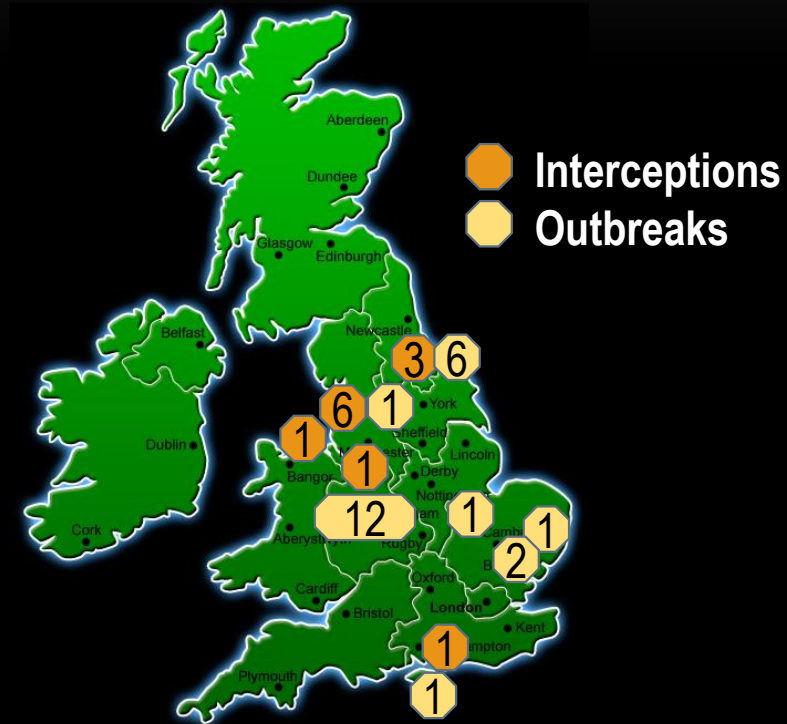
Temporal distribution of UK *T. absoluta* interceptions and outbreaks



Data from UK Food and Environment Research Agency

INTERCEPTIONS AND OUTBREAKS

Geographical distribution of UK *T. absoluta* interceptions and outbreaks



Data from UK Food and Environment Research Agency

LOOKING FORWARD

- **Monitoring and data collection will continue**
- **Protected Zone status will be reviewed**
- **Knowledge gaps to be filled by targeted research projects**

e.g. biology and life cycle of the pest in the UK, pesticide and biological controls, alternative hosts (potatoes, beans, aubergine), and impact/control within the organic sector

- **Novel control strategies need to be embraced**
 - **Collaborations/networks should be fostered**
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