Exploring the potential for action on biocontrol throughout the arable supply chain, with an emphasis on the role of food companies in shaping demand.

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What is the challenge?

Biocontrol is well established in horticulture – but what are the barriers in arable and where are there opportunities for change across the food and farming sector?

Key questions:

What do stakeholders across the food and ag sector think about the use of biocontrol currently?

What is preventing adoption in arable supply chains?

What opportunities are there to focus attention and action on biocontrol?

What are the implications for the biocontrol sector?

Desk research and Forum industry insights

Interviews with practitioners across the food industry

Synthesis of levers and opportunities for action

Our research methodology

Stakeholder perspectives: Challenges

What do stakeholders think about biocontrol in arable – from a grower, supplier and food company perspective?

- Supply chain structure
- Understanding business value of biocontrol
- Perceived operational challenges

Stakeholder perspectives: Challenges

What do stakeholders think about biocontrol in arable – from a grower, supplier and food company perspective?

Supply chain structure

- Distance between grower and consumer and lack of differentiation in the supply chain
- Transparency and traceability farm to fork
- Shifting supply base – short-term relationships
- Too far from consumer demand

Stakeholder perspectives: Challenges

What do stakeholders think about biocontrol in arable – from a grower, supplier and food company perspective?

Understanding business value of biocontrol

- Lack of basic knowledge of biocontrol
- Lack of proven business and operational cases
- Mismatch with current priorities (e.g. energy crisis) and little bandwidth or budget

Stakeholder perspectives: Challenges

What do stakeholders think about biocontrol in arable – from a grower, supplier and food company perspective?

Perceived operational challenges

- Labour costs and operational adaptation e.g. means of application

- Who shares risk, or does the farmer bear it?

- Advisory services don’t target biocontrol

- Wider regulatory environment means progress for new

Stakeholder perspectives: Challenges

What do stakeholders think about biocontrol in arable – from a grower, supplier and food company perspective?

“They just don’t know where to start and that is why it feels like there is inertia.

But that means change can be unlocked and it’s in your hands.”

Project interviewee

Stakeholder perspectives: Opportunities

Where are the opportunities to engage across the supply chain and with food businesses?

- Food corporates
- Suppliers / growers
- Consumers

Stakeholder perspectives: Opportunities

Where are the opportunities to engage across the supply chain and with food businesses?

Food corporates

- Pesticide and nature restoration strategies of food retailers / manufacturers
- Rethinking of value chains in response to climate and scope 3 – and new collaborations and relationships
- Increased attention to traceability and transparency

Stakeholder perspectives: Opportunities

Where are the opportunities to engage across the supply chain and with food businesses?

Supplier / grower

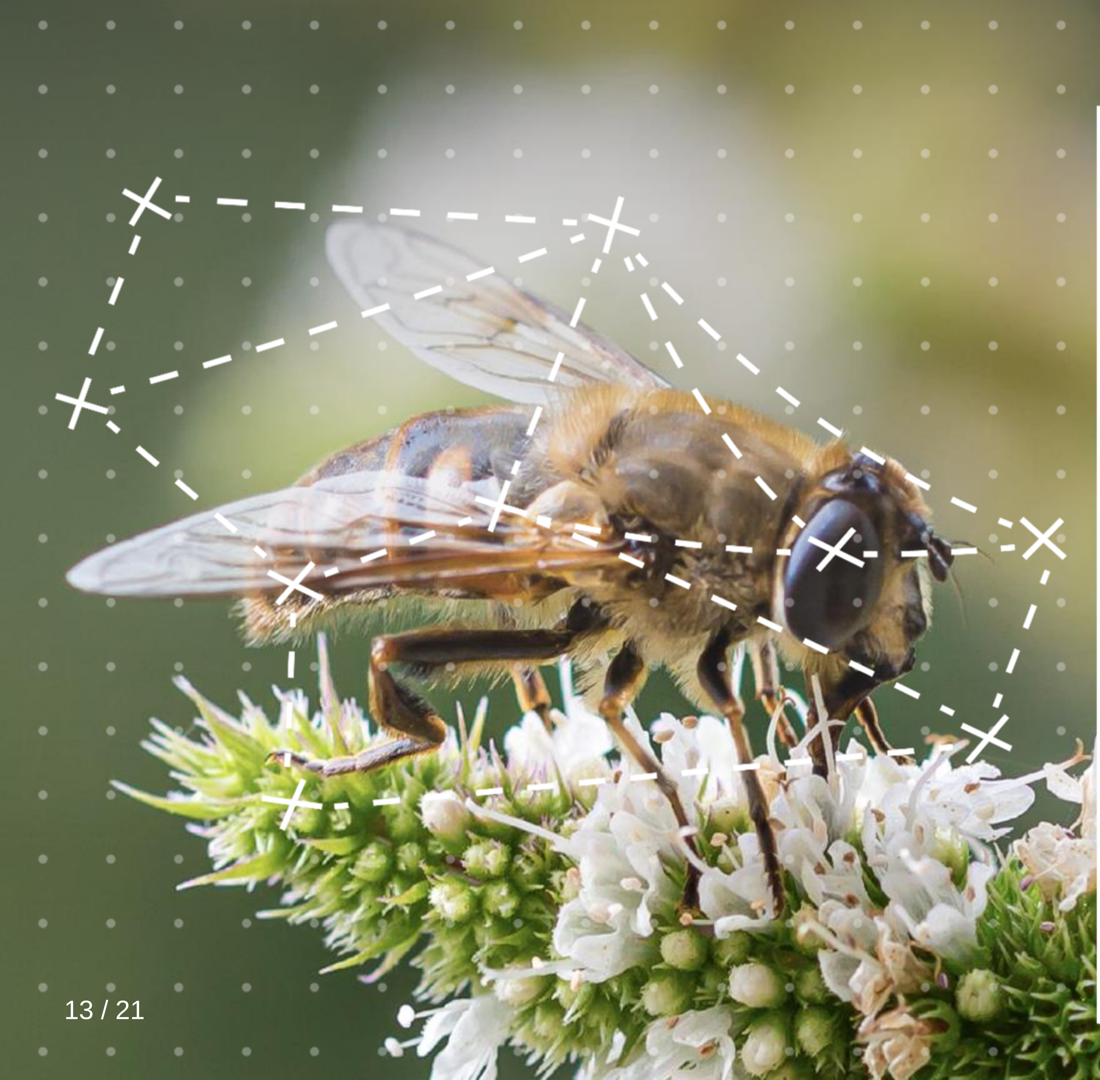
- Looking for cost reductions on inputs
- Potential for falling efficacy of current chemicals and lower yields driving search for new solutions and mindsets on biocontrol
- Link to soil healthy, biodiversity and ecosystem services attributes

Stakeholder perspectives: Opportunities

Where are the opportunities to engage across the supply chain and with food businesses?

Consumers

- Concern for food provenance and pesticides
- Consumer interest in nature – marketing food company action



How can we join the dots to shift the food system?

Priority areas for action

SHIFTING THE BIOCONTROL NARRATIVE

FOOD COMPANY FOCUS

FARMER / GROWER FOCUS

COLLABORATIVE FOCUS

POLICY FOCUS

SHIFTING THE BIOCONTROL NARRATIVE

Chart a narrative that connects with concerns such as:

resilience in the face of risk

robustness in the face of volatility

restoration of land and yields in the face of environmental degradation

FOOD COMPANY FOCUS

Food company **awareness / working knowledge** campaign

Proof points – harness R&D programmes

Target those with aligned strategic priority – pesticide reduction, nature restoration, consumer concerns

Target those with operational capability – e.g. segregated supply chains, consumer resonance and proximity

COLLABORATIVE INNOVATION FOCUS

Food retailers and manufacturers will be working with suppliers to reshape value chains and rethink farming practice – where can you align?

Action on Scope 3 emissions are driving closer supply chain relationships, more collaboration, supplier traceability and transparency.

COLLABORATIVE INNOVATION FOCUS

- Practices that align with Scope 3 supply chain interventions
- Demonstrable reductions in pesticide use
- Cost reductions in business model / inputs
- Landscape level hotspots for water, biodiversity action
- Increased resilience e.g. to weather extremes
- Alignment with regenerative agriculture pilots of major food companies (above and below soil interventions)

GROWER / SUPPLIER FOCUS

Farmer / supplier networks, peer to peer engagement campaign

Demonstrable business case, cost reductions in business model / inputs, resilience

Landscape level hotspots for water, biodiversity action

Alignment with regenerative agriculture pilots of major food companies (above and below soil interventions)

Shape the priorities of advisory services

Influence the training agenda (course content, field visits, internments, scholarships)

POLICY FOCUS

Can biocontrol link to the policy guidance on agriculture and environment?

Where can policy support other actors efforts on biocontrol – e.g. R&D

Regulatory environment for biocontrol – how can this enable access to biocontrol solutions?

Where next?

Biocontrol has huge potential, but actions will be needed to challenge inertia in the current food and ag system.

This decade presents a unique time as the environmental and agriculture regulatory environment shifts, and businesses will need to live up to what their new operating environment requires.

Where can you take biocontrol next?

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Get in touch:

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