



BRITISH APPLES AND PEARS
GROWERS TECHNICAL CONFERENCE

WELCOME AND INTRODUCTION

Rachel McGauley

BAPL

R&D Programme Manager

BAPL

Technical Committee
Manager

AHDB

Eight years as the Fruit Research
Manager at AHDB





WELCOME FROM ROB SAUNDERS

Technical Committee Chairperson



Programme Item	Time	Who
Registration	09h00	ALL
Welcome and introduction to the BAPL R&D programme	09h15	Rachel McGauley
• <i>PaPPl</i> e	09h30	NIAB EMR
• New and Invasives		Francis Wamonje
• Soil and Canker		Matevz Papp-Rupar
• Non-chemical control of WAA		Sarah Arnold
• Hard bodied pests		Michelle Fountain
• Codling moth		Charles Whitfield
• Scab efficacy trial	10h45	Tom Passey NIAB EMR
• Woodlice	11h05	Rory Jones ADAS
• Storage	11h35	Richard Colgan NRI and Rachel McGauley
• Climate change survey	11h40	Graham Dow
Networking lunch 12h15 – 13h45		
• Biochar and LCAs	13h45	Russell Graydon
• Future projects	14h15	Rachel McGauley
• HCP Update	14h45	Simon Conway
• EAMU/EA and Risk Register for 2024/25 onwards	15h15	Carlos Duarte
• R&D Grower Subscription Update	16h00	Ali Capper
• Q&A	16h05	ALL



**BAPL GROWERS
TECHNICAL CONFERENCE**

A close-up photograph of a hand holding a ripe red apple. The background is a soft-focus green orchard with other apples hanging from the trees. A bright green rectangular border is overlaid on the image, framing the text.

RESEARCH UPDATES

NIAB EMR



Opportunities for Integrated **P**est and Disease
Management in **A**pples and **P**ears: Tackling British
Apple and **P**ears Ltd. Priorities: PAPPLe



NIAB EMR

Scab Efficacy Trial



ADAS

Improving integrated pest and disease
management in commercial
apples and pears: Woodlice

**NRI
PRODUCE QUALITY CENTER**



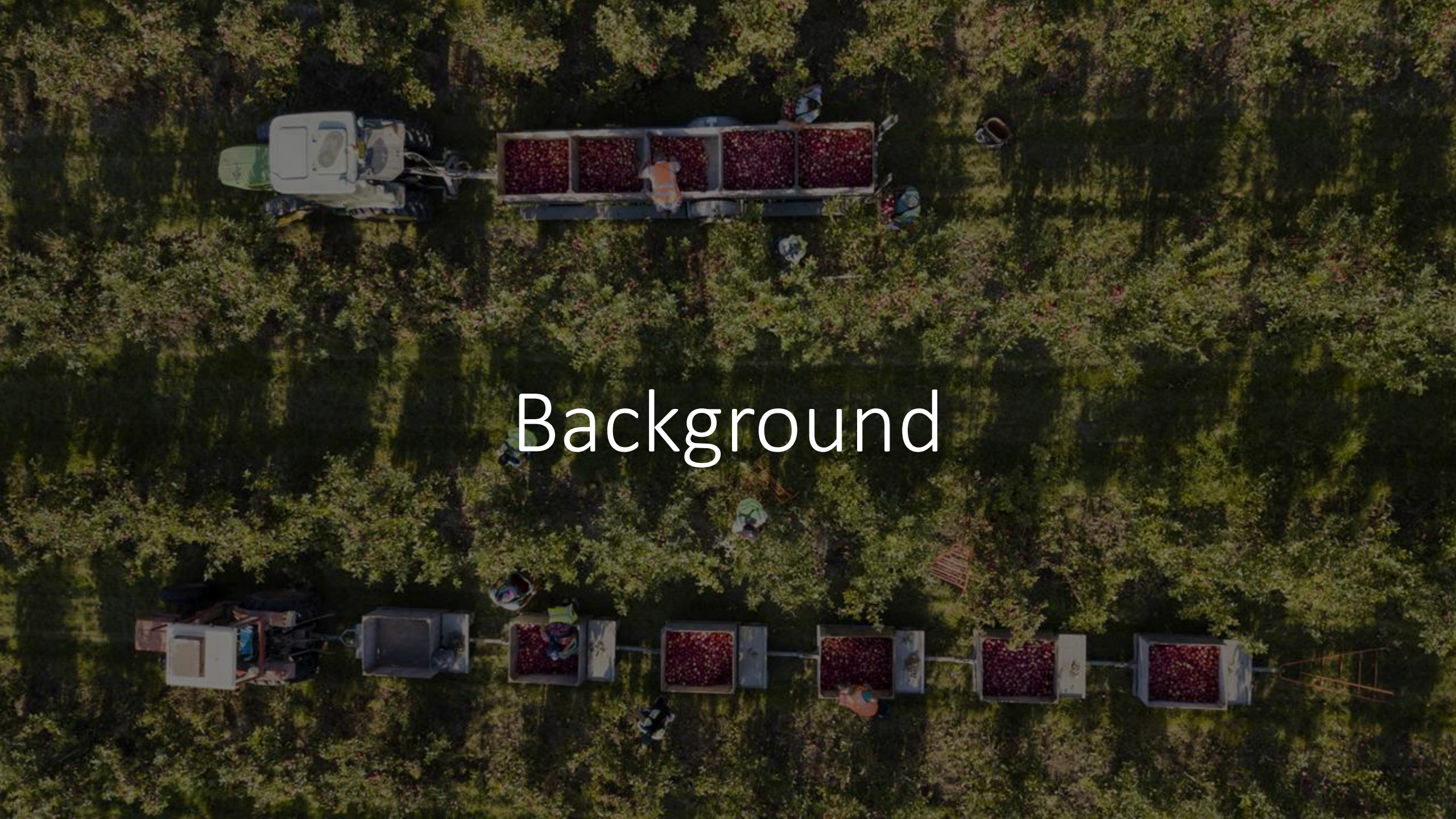
Managing Energy Usage in Apple Stores

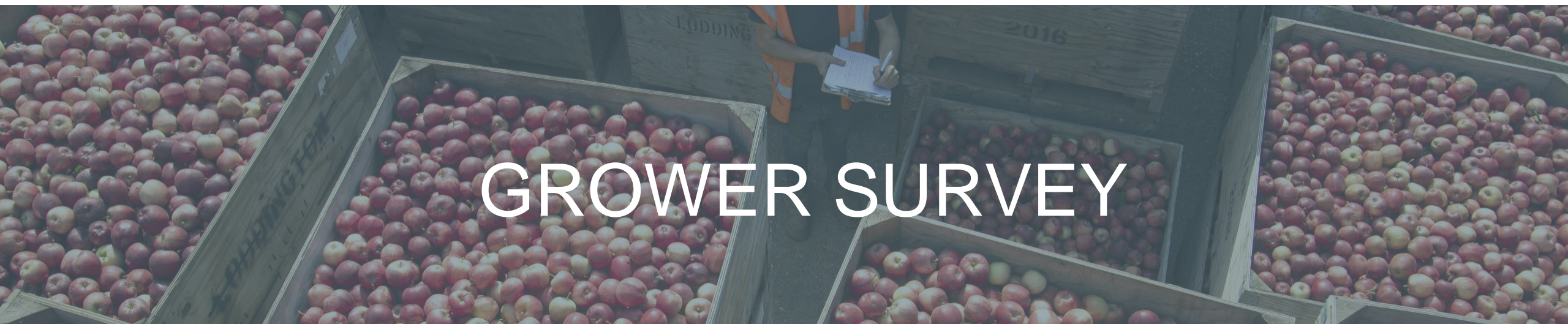
Project funded by Growing Kent and Medway

Consortium between:

- AC Hulme and Sons (project lead)
- NRI PQC (project management)
- Stemy Energy
- GridDuck
- Avalon Fresh
- JD Cooling
- British Apples and Pears Ltd

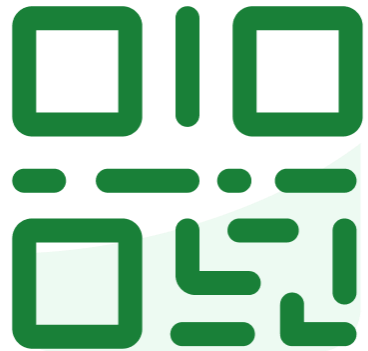
Background





GROWER SURVEY

slido



Join at slido.com
#1278481

ⓘ Start presenting to display the joining instructions on this slide.

slido



Are you interested in understanding more about your energy use?

ⓘ Start presenting to display the poll results on this slide.

slido



Do you have systems in place to help monitor the energy use of your store?

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Do you use these systems?

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Are you interested in a more nuanced system

ⓘ Start presenting to display the poll results on this slide.

slido



What would the barriers to this be

ⓘ Start presenting to display the poll results on this slide.

slido



Would you be interested in a 'Store Save' project

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NIAB EMR

Climate Change Survey



Meeting Rooms, Conference Space,
 Exhibition Halls, Outside Events
 Corporate Days, Seminars, Weddings and
 Parties, Bespoke Packages and Excellent
 Customer Service



Kent Event Centre



NETWORKING LUNCH
12:15 – 13:45



BRITISH APPLES AND PEARS
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**BAPL GROWERS
TECHNICAL CONFERENCE**



BAPL

Biochar and LCAs

Project funded by Innovate UK

WHY IS FUTURE RESEARCH NEEDED?

New problems

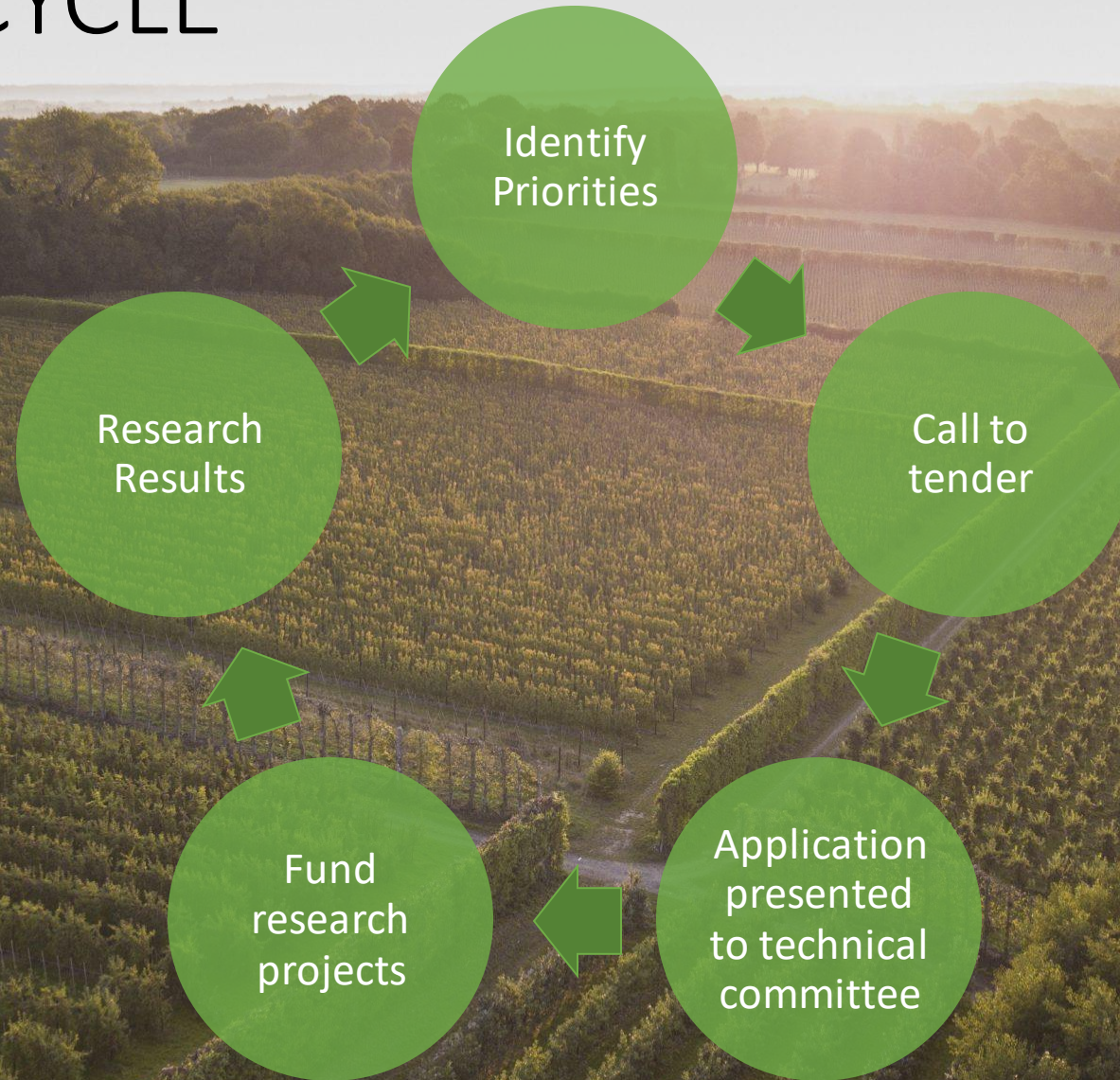
Lack of crop protection products – current ones being lost faster than they're being replaced

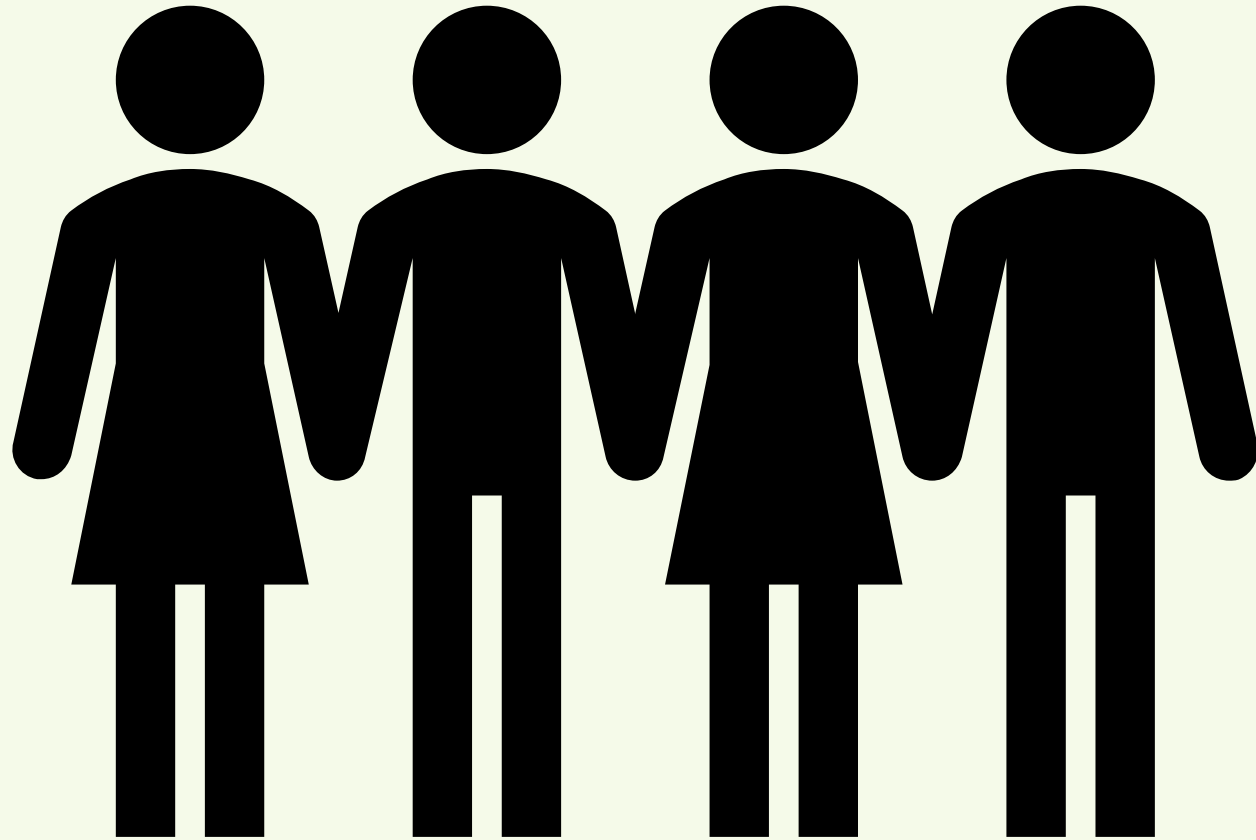
Changing climate

Sustainable British Apple and Pear industry



RESEARCH CYCLE





TECHNICAL COMMITTEE

MEMBERSHIP

Currently 14 members

Chaired by Rob Saunders

MEETINGS

March and October

Review risk register, priorities and discuss EAMU and EA, approve new research

ONLINE

[britishapplesandpears.co.uk/
research-development](http://britishapplesandpears.co.uk/research-development)

PRIORITIES

- Risk register updated by technical committee.
- Fruit agronomist meeting to update risk register, review season, and plan future.
- Keep HCP updated with priorities.

		Crop loss (Percentage of yield decrease)				
		Insignificant	Minor	Moderate	Major	Catastrophic
		(0-5%)	(5-10%)	(10-20%)	(20-50%)	(50-100%)
Likelihood of pest or disease	Score	1	2	3	4	5
Almost Certain	5	5	10	15	20	25
Likely	4	4	8	12	16	20
Possible	3	3	6	9	12	15
Unlikely	2	2	4	6	8	10
Rare	1	1	2	3	4	5
Risk Outcome						
Low	1-2	No action needed/Long term priorities				
Moderate	3-6	Monitor/Long term priorities				
Significant	8-12	Action/ Medium term priorities				
High	15-16	Action / Short term priorities				
Urgent	20-25	Urgent Action				

CURRENT RISK REGISTER: SHORT VERSION / HIGHEST PRIORITIES

Target	Latin name	Apple	Organic Apple	Pear
Pests				
Woolly apple aphid (WAA)	<i>Eriosoma lanigerum</i>	5 x 3 = 15	5 x 3 = 15	
Apple blossom weevil	<i>Anthonomus pomorum</i>	5 x 3 = 15	5 x 4 = 15	1 x 1 = 1
Pear sucker	<i>Cacopsylla pyri/pyricola</i>			5 x 4 = 20
Pear bud weevil	<i>Anthonomus piri</i>			5 x 3 = 15
Rhynchites weevil	<i>Rhynchites aequatus</i>	5 x 3 = 15		2 x 1 = 2
Apple sawfly	<i>Hoplocampa testudinea</i>	3 x 1 = 3	5 x 3 = 15	
Codling moth	<i>Cydia pomonella</i>	5 x 3 = 15		
Diseases				
European apple canker	<i>Neonectria ditissima</i>	5 x 4 = 20	5 x 5 = 25	3 x 2 = 6
Scab	<i>Venturia inaequalis</i>	5 x 2 = 15	5 x 5 = 25	4 x 1 = 4
Weeds				
Broad leaved weeds (annual)		4 x 2 = 8		4 x 2 = 8
Grass weeds		5 x 1 = 5		4 x 2 = 8

DISEASE CONCERNS



- Scab
- Canker (and eye rot)

PEST CONCERNS



- Hard bodied insects following loss of Gazelle
- WAA, Rosy apple aphid and pear sucker after loss of Batavia
- Codling & tortrix control already difficult and expected to become harder after loss of indoxacarb
- Woodlice

WEED CONCERNS



- Over reliance on glyphosate



CALL TO TENDER

PRIORITIES

- Surveillance for new and invasive pests and diseases
- European apple canker (*Neonectria ditissima*)
- Woolly apple aphid (*Eriosoma lanigerum*)
- Hard bodied insects including woodlice
- Codling moth (*Cydia pomonella*)
- Scab (*Venturia inaequalis*)

RESEARCH PLAN 2023-24



IPM

Directly fund research on IPM



SCAB EFFICACY

Directly fund a scab efficacy trial then pass this over to HCP



CARBON AUDITS

Apply for Innovative Farmers to fund validation of models and communicate best practice for carbon auditing



STORAGE

Apply for GK&M funding for research on storage



RESEARCH PLAN 2024-25



IPM

Directly fund
research on IPM



SCAB

Apply for GK&M
funding to match
BAPL funding for
research into a scab
programme



WILDFLOWERS

Apply for IUK funding
with other sectors



STORAGE

Apply for IUK funding
for research on
storage to follow on
from current project



WILDFLOWER RESEARCH

Which wildflower species will not only attract pollinators but also other beneficial insects without introducing pests and diseases?

Which wildflower species are most compatible with a commercial growing system?

Best way to plant and manage wildflowers for the most benefit.



SCAB RESEARCH

Create a 'scab programme'

Take the most promising products from the scab efficacy trial

Combine with scab risk prediction such as RIMpro to develop a 'programme' based on risk.



STORAGE

Given the sharp increases in the cost of energy and fuel recently, the use of these needs to be optimised and reduced where possible. A key area for potential improvements is with storage.

There is now an opportunity for a larger storage project looking at ways to optimise and reduce energy usage in stores.

RESEARCH 2024-25

Proposed Timeline

**FEB
2024**

- Launch call for IPM research project
- Apply for GK&M funding for scab programme

**MAR
2024**

At next BAPL TC meeting, review proposals and launch project(s)

**JUN
2024**

Apply for IUK funding for storage and wildflower work



A close-up photograph of a hand holding a ripe red apple. The apple is the central focus, with its stem and a small leaf visible. The hand is positioned from the right side of the frame, supporting the apple. The background is filled with lush green leaves, some in sharp focus and others blurred, creating a sense of depth. A semi-transparent green rectangular box is overlaid on the image, containing the text 'HCP UPDATE' in a bold, white, sans-serif font.

HCP UPDATE

A close-up photograph of a hand holding a ripe, red apple. The apple is the central focus, with its stem and a small leaf visible. The hand is positioned from the right side of the frame, holding the apple gently. The background is a soft-focus green, suggesting an orchard or garden setting. A semi-transparent green rectangular box is overlaid on the center of the image, containing the text 'Q & A' in a bold, white, sans-serif font.

Q & A



Thank You

Safe Journey Home