A growers perspective of on-farm trials

Iain Tolhurst Organic Research Centre conference 2014

The trial

- Comparison of different substrates
- Klassman
- Klassman + Biochar
- Woodchip
- Woodchip + biochar





Farmer led trials/research

- Strawberry varieties 1976-1986
- Strawberry mulch materials 1976-1980
- Utilising waste heat from green waste compost 1987
- Compost/substrate mixes 1988-present day
- Green manure mixes for under-sowing 1988-present day
- Onion sets from seed 2009-2011
- Dried berlotti beans in hortic rotations 2011 ongoing
- Coppice woodfuel production 2007-ongoing
- Winter salads production on woodchip heat 2013
- Bio-fumigation of Verticillium Dahlae for strawberry production 2013 (Tozers seeds)



Official trials and research



Green manures overwinter HDRA 1992-4

Over-winter leafy veg-N contents EFRC 1991

Green manures intercropping Univ. of Reading 1991-92

Trials of potato resistant varieties EFRC 1994

Pollinating insects in species rich green manures LegumLINK ORC 2010-13

Farm business survey Univ of Reading 2012-ongoing

Variety trials Soil Assoc/DOFF 2013

Plant substrate trials Soil Asso. ORC. DOFF (Fieldlab) 2014

Agro-forestry establishment ORC/Woodland Trust 2014 onwards

The crops

LeekSummer cabbage



What are we looking at?

Plant growth-germination, size, p+d problems, final yield

Watering regime Handling characteristics Costs



Trial Design

- Fit available space
- Equipment needs
- Labour input
- Watering
- Ventilation



Setting up the trial

- Trial design
- Plan
- Preparation
- Sowing
- Lables



Trial modifications





Measure and monitor

Germination

- Plant survival
- Growth rates
- Yield qualityP+D





Challenges

Timeliness
Monitoring
Labour
Recording



Field labs

- Involve growers
- Information exchange
- Networking

