

Organic Producers Conference 22-23 January 2014

Sustainable intensification or intensive sustainability?

A growers perspective

Iain Tolhurst

www.tolhurstorganic.co.uk

Sustainable
optimisation?



The 10 major challenges for a sustainable future

- Fertility
- Energy
- Labour
- Markets
- Economic sustainability
- Reduction of bio-diversity
- Climate
- Carbon capture
- Seed stocks
- Material Inputs



Fertility

- Peak P+K
- Sourcing organic inputs
- Return of waste materials.
- Ban on peat use
- Declining soil quality and mineral losses
- Effects of extreme weather on fertility



Energy

- Increasing expense
- Dwindling supply
- Oil guzzling systems
- Big carbon debit



Labour

- Lack of skilled entrants
- Lack of training facilities
- Lack of affordable housing
- Image problem
- Affordability of labour
- Expectations of entrants.



Marketing

- Stagnation of markets
- Access to markets
- Inadequate local support



Economic sustainability

- Getting it to pay
- Poor margins
- Need for high yields
- Low labour inputs



Loss of bio-diversity

- Increased pest and disease
- Soil problems



Climate

- Unpredictable
- Extreme
- Damaging of soil/crops



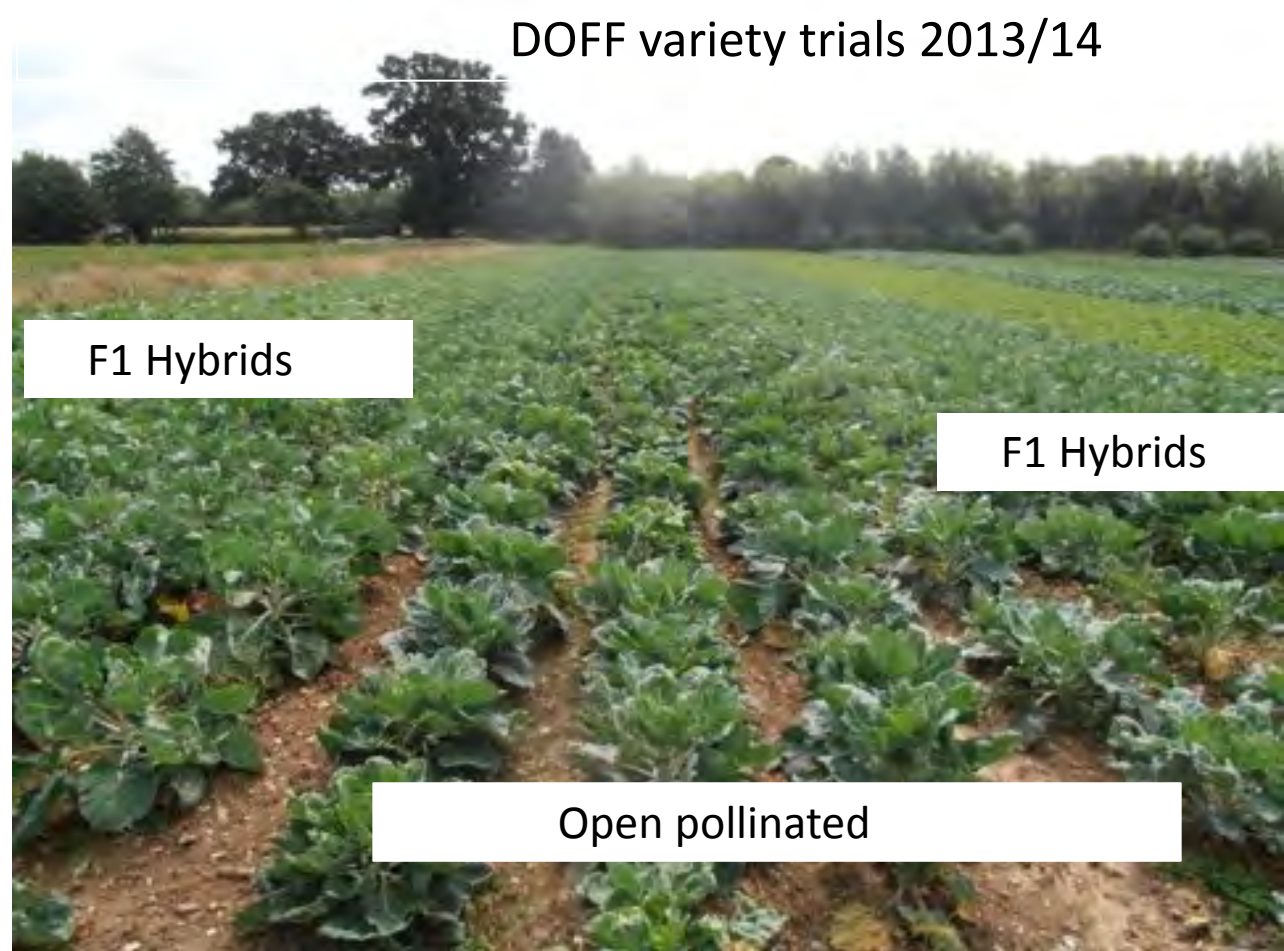
Carbon Capture

- Design of rotation
- Measure carbon
- Reduce inputs



Seed stocks

- Poor choice of varieties
- Badly maintained
- Too much reliance on F1 hybrids
- Variable quality
- Disease risks
- Expensive



Material inputs

- Polythene
- Packaging
- Equipment



Solutions?

- Make optimum use of farm's own fertility, plugging the leaks
- Reduce/eliminate imported fertility-grow your own + Rule of Return
- Produce and store carbon as part of the growing system-get planting
- Nurture your soil
- Reduce energy usage
- Grow some energy
- Training + housing facilities-entrants
- Localise marketing-engage customers
- Product diversification
- Prepare for climate shocks
- Improve resilience to systems.
- Repair not replace equipment.
- Monitor the farm's carbon footprint



