Sustainability of no-till and related global knowledge transfer experiences

BCPC 56th Annual Weed Review
Sophi Taylor Building, NIAB, Cambridge
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Thank God I brought my umbrella

Wouldn't want my hair to get wet
317.5mm Rainfall

23rd September – 11th November (7 weeks)
Background

• 560Ha – All Arable, family farm with Dad & Uncle
• 2 Distinct Soil Types:
  Blacktoft Series Silty Loam & Foggathorpe Series (Mg) Clay
We are only 2 meters above sea level!
• Cropping: Winter Wheat, Oilseed Rape, Winter Beans, Spring Barley, Linseed
• Do own agronomy, on BASIS & FACTS Professional Register
• Annual Rainfall 625mm
• 100% No-till, apart from subsoil & mole drain as required
• 2016 Nuffield Scholar
#Nuffield16
Why no-till?

• Improve crop production economics: reduce labour, fuel, machinery costs = increased profit

• Increase available soil water (particularly in dry climates such as Australia)

• Increase soil organic matter – Carbon

• Reduce soil erosion

• Improve nutrient cycles
The soil
John Deere invented this in 1837...
No-till it’s simple . . . Stupid!
Knowledge Exchange

Iowa State University
Field Extension Education Laboratory
Est. 1987
Take Action
Argentine bottom-up approach

No Secrets
“More crop, less weeds – sustainably”

The example we should be following?
AHRI communication

‘we aim to give the audience what they need, not just what we have’
Recommendations (1)

- Herbicide boxes and labels should have the Herbicide Resistance Committee (HRAC) classification group shown on them to aid herbicide rotation.

- The agrochemical industry should help to educate farmers and agronomists about the HRAC classification system.
Recommendations (2)

• Industry recommendations for herbicide resistance needs to come from ‘one voice’ similar to the Weedsmart initiative in Australia, with funding from growers’ AHDB Cereals & Oilseeds levy and the agrochemical industry.
Thank you for listening