MONITOR FARM PROGRAMME



Pembrokeshire Monitor Farm meeting report

Meeting: Soil health

Speakers: Philip Wright (Wright Resolutions Ltd)

Date: 7 November 2018

Location: Camrose Community Hall, Pembrokeshire

For more information, visit: cereals.ahdb.org.uk/pembrokeshire



Why is soil structure important?

- Soil compaction costs us in yield of all crops
- Restricted drainage and waterlogging also has a penalty on crop yield, and can encourage certain weeds
- Poor aggregation reduces infiltration and passage of water through soil. This causes:
 - Risk of run-off, pollution and higher environmental costs;
 - Poor aeration at depth, suffocating roots, reducing their natural respiration, and anaerobic activity harms soil biology. This reduces the ability to degrade residual chemicals and increases denitrification risk.

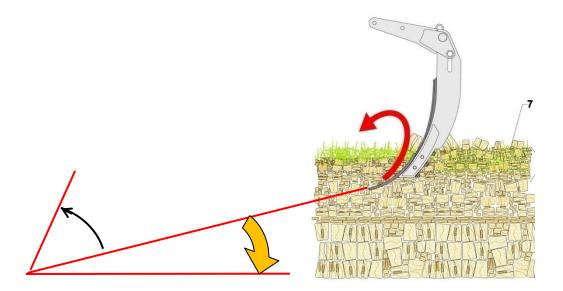


MONITOR FARM PROGRAMME



Why is good soil biology important in Pembrokeshire?

- 1. Nutrient and water storage
- 2. Essential for coarser soils
- 3. Maintains healthy balance of micro-organisms and provides N through mineralisation
- 4. Provides resilience and stability
- 5. Relationship with roots (Mycorrhiza) to assimilate water and nutrients
- 6. Earthworms: improvers of porosity + stability + fertility



Tines – lifting and loosening:

- Mixing and structuring
- Coarser surface where needed
- · Levelling after often required
- Cannot cut trash
- Beneficial in wetter conditions

Rake angle effects:

- · Increasing angle reduces loosening
- Increasing angle increases compressive loads.

MONITOR FARM PROGRAMME



Find out more

GREATsoils
Introduction to soil biology
Biological tests for soil health
Developing a soil health testing plan at Strategic Farm West
Field drainage guide



For more information contact: Richard Meredith

To find out more about Farmbench, AHDB's benchmarking tool, contact: Meg Spendlove



E: Meg.Spendlove@ahdb.org.uk M: 07815 600240

While the Agriculture and Horticulture Development Board seeks to ensure that the information contained within this document is accurate at the time of printing, no warranty is given in respect thereof and, to the maximum extent permitted by law, the Agriculture and Horticulture Development Board accepts no liability for loss, damage or injury howsoever caused (including that caused by negligence) or suffered directly or indirectly in relation to information and opinions contained in or omitted from this document. Reference herein to trade names and proprietary products without stating that they are protected does not imply that they may be regarded as unprotected and thus free for general use. No endorsement of named products is intended, nor is any criticism implied of other alternative, but unnamed products.

AHDB Cereals & Oilseeds is part of the Agriculture and Horticulture Development Board (AHDB)

© Agriculture and Horticulture Development Board 2019