



Focus Group 'Production of protein crops under climate change'

Berlin, Germany
20-21 November 2024



Experience from Ireland, farming and advisory

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EU Cap Network Focus Group Protein Crops

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Also Tillage/Organic Tillage Farmer

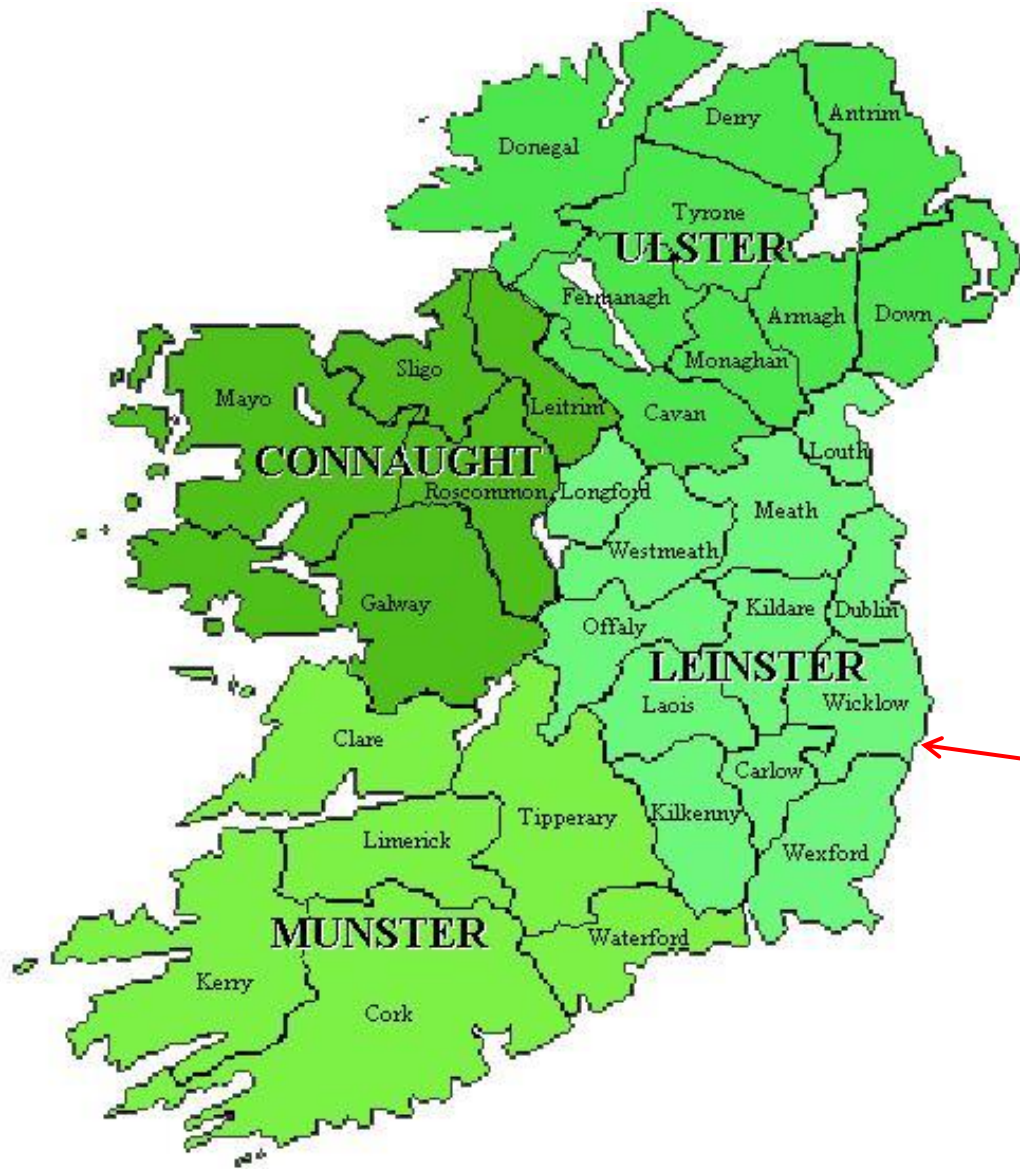


AGRICULTURE AND FOOD DEVELOPMENT AUTHORITY

Information to share with you

- My farm experience of protein crops
- My experience as an organic tillage specialist and the role of protein crops in the organic farming sector
- My involvement with the VALPRO path project
- What challenges have we faced growing protein crops
- Future on-farm plans relating to protein crops

My farm experience of protein crops



180 ha farm
Winter & Spring Cereals
Beans, WOSR and Maize
as break crops

Farm Location
(Arklow)

January 1st 2023



Partial organic conversion
30 ha

On-Farm Experience

- Growing spring beans since 1985

Why?

- Useful break crop for take-all disease reduction in winter wheat
- Opportunity to control certain grass weeds with alternative herbicides
- Pigeon feed customers
- A profitable crop (more recently due to Protein Aid Scheme = €500/ha)
- Great crop for soil structure (always produce a nice seedbed after beans)
- Always a wonderful buzz in the crop!

Lessons learned about growing beans

- Very sensitive crop to stress, particularly drought and high temperatures
- Should stress occur between flowering and pod set, we have seen large yield losses
- Unfortunately with climate change, we have seen much more variable yields of beans on our farm in the last 6 years compared with 1980s

Why?

- Late spring/early summer droughts (becoming more common in my area)
- Wetter springs delaying planting of spring beans

What can we do?

- If late autumn weather favourable, sow more winter beans
- Start growing more intercrops of beans or peas with cereals
- Intercropping may allow us to grow more peas, especially on lighter soils

Simple On-Farm Trials...what did we find?

- Seeding rate very important

Low Seed Rate (18 seeds/m²)



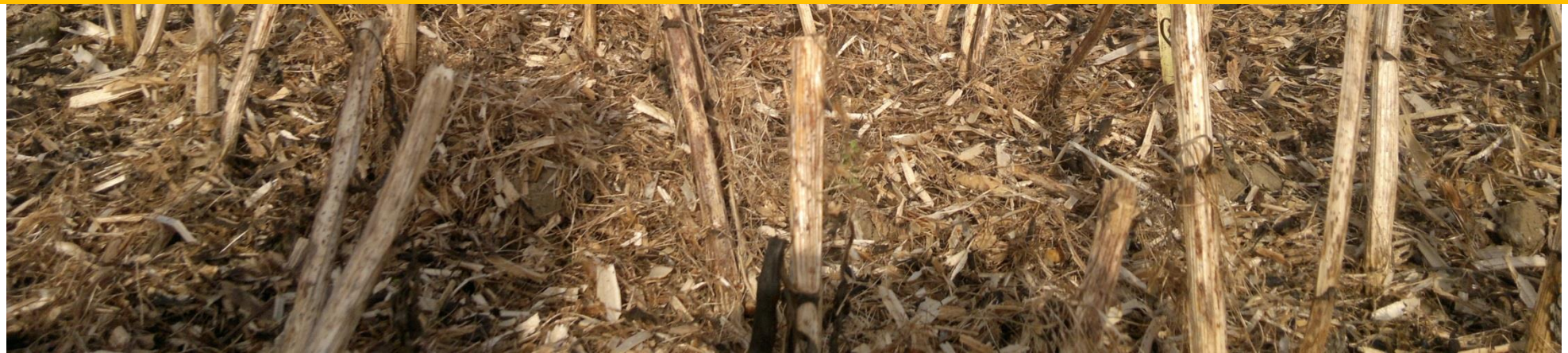
High Seed Rate (40 seeds/m²)



High Seed Rate (40 seeds/m²)



Yielded 1.5t/ha higher than low seed rate



Higher seed rate significantly more
competitive against weeds





My experience with protein crops as an organic tillage specialist

- Intercropping of legumes with cereals very popular on Irish organic farms
- 50,000t organic animal feed demand, but only 5,500ha of organic tillage crops
- When allowing for good crop rotations, this reduces tillage area for protein crops even further
- Organic soya bean imports highly expensive
- Need to encourage more home grown protein for expanding animal feed demand
- Challenging to grow proteins in an organic system

Growing Organics Monitor Farm Programme

- 12 organic monitor farms (beef, sheep, tillage, dairy and horticulture)
- 5 tillage organic monitor farms (2 stockless)
- Platform to carry out on-farm trials (living lab concept)
- Protein crop trials a major focus
- Collaboration with other research projects



Also involved in VALPRO Path Research Project

- What is VALPRO Path?



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All information on the Focus Group is available on the webpage:

<https://eu-cap-network.ec.europa.eu/focus-group-production-protein-crops-under-climate-change>

