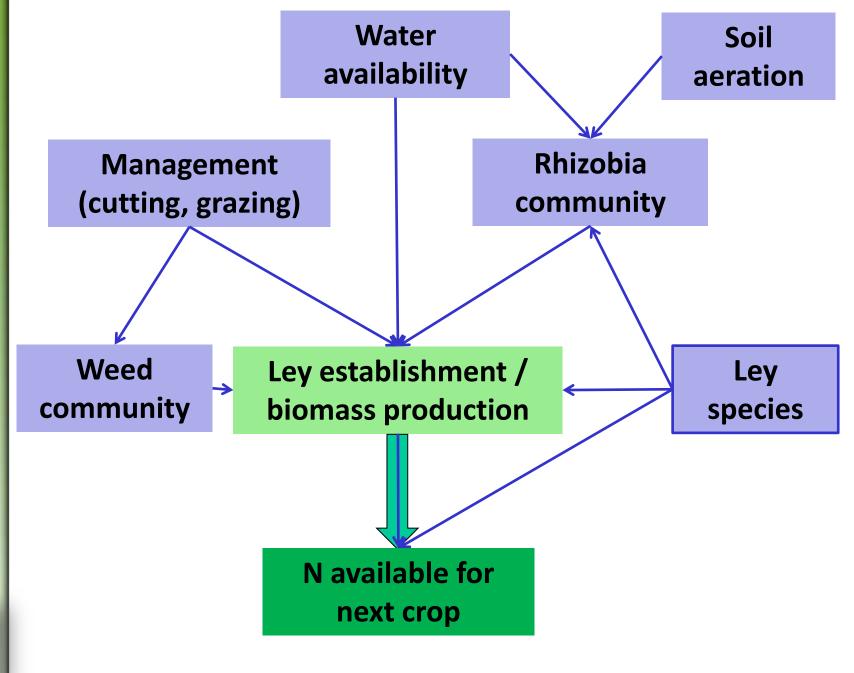
Nitrogen supply characteristics of ley and green manure species

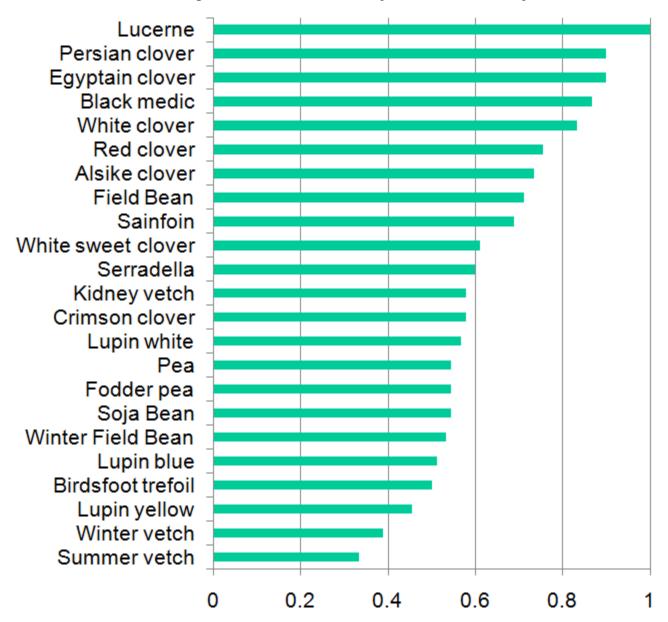
Thomas Döring,
Organic Research Centre
Producer Conference 2011





ELM FARM

N in plant residues (normalized)

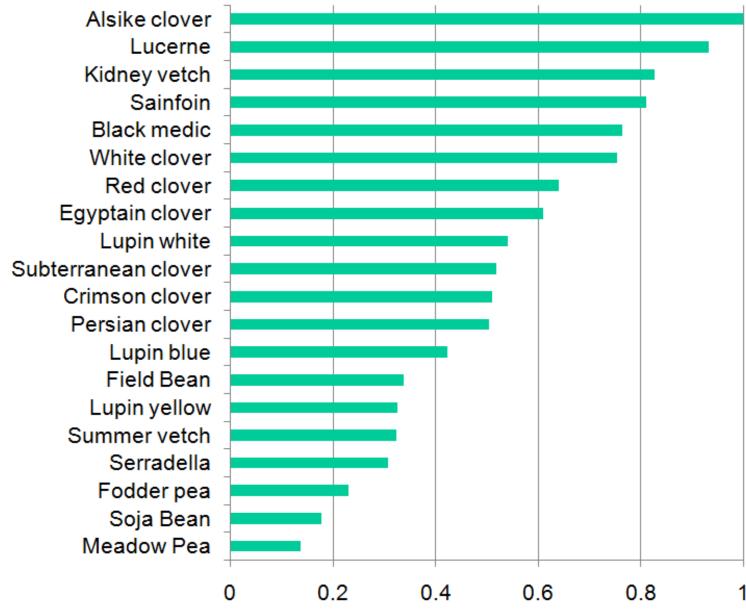


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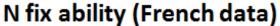
Source: Kahnt 2008

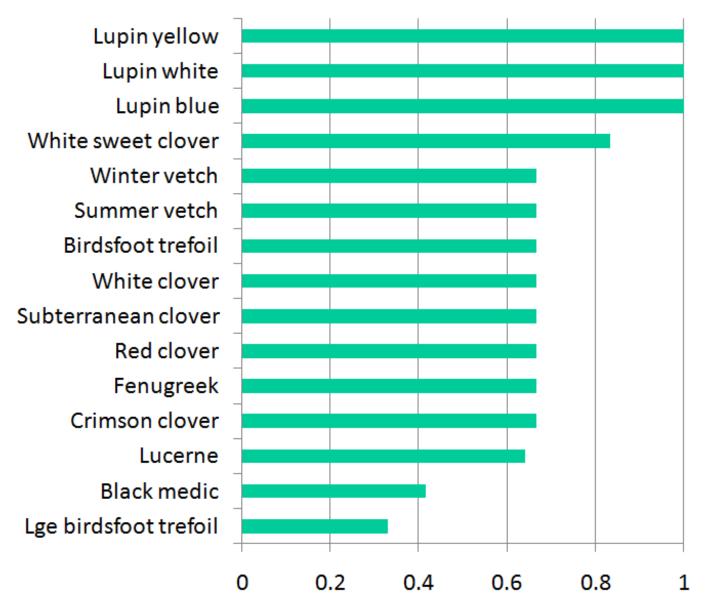
ORGANIC RESEARCH CENTRE CENTRE ELM FARM

N effect to next crop

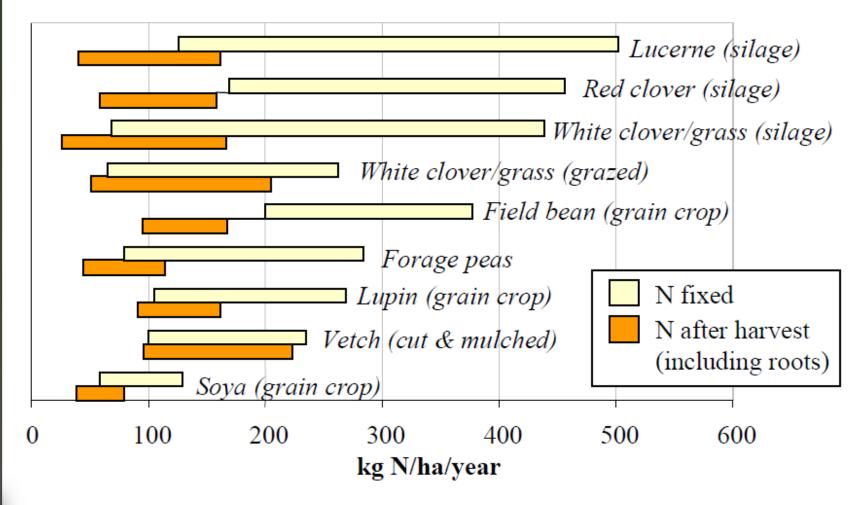


Source: Kahnt 2008





N fixed and N after harvest





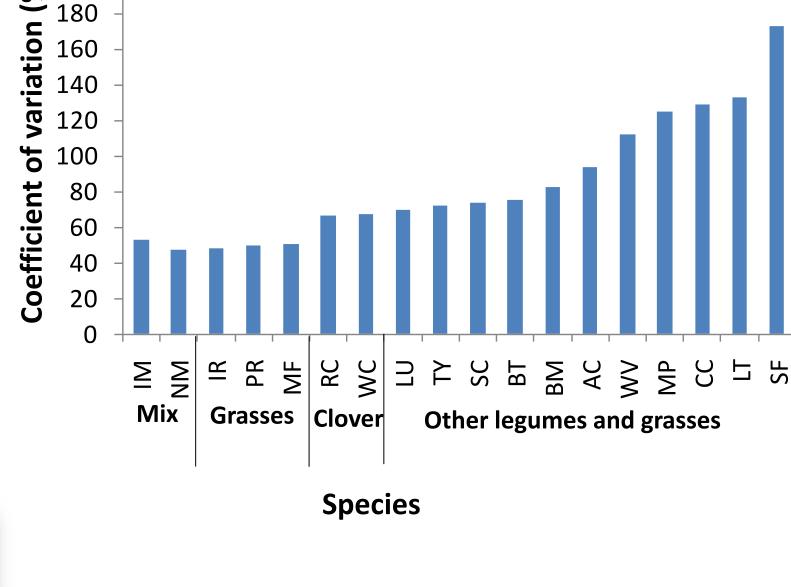
Source: Briggs et al. 2005

Legume LINK: Six research hubs

- 4 grass species as monocultures
- 12 legume species as monocultures
- ASM (All Species Mixture) inoculated
- ASM (All Species Mixture) non-inoculated







Variability of biomass production (summer 2009)



200

Conclusions

- Choose ley species carefully.
- Do not rely on a single species.
- Species choice is not everything.







Department for Environment Food and Rural Affairs



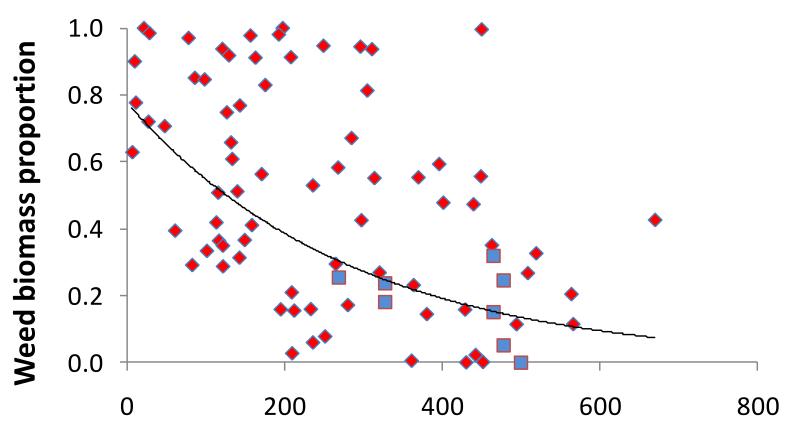
Thank you for your attention!

Any questions?



Re-growth league table

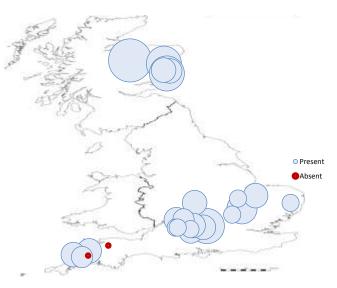
Species	Elm Farm	Rothamsted	Wakelyns	SAC
Alsike clover	++	++	+	++
Lucerne	++	++	++	+
Red clover	++	+	++	+
White clover	+	++	+	++
B'foot trefoil	++	++	+	-
Black medic	-	+	++	++
Timothy	-		++	+
Winter vetch	+	-	-	+
Crimson clover		-	-	+
Large B'foot trefoil		-		++
Perennial ryegrass	-	-	+	
Sainfoin	+	+		
Sweet white clover	-		-	-
Italian ryegrass			-	-
Meadow fescue		+		
Meadow pea	-			



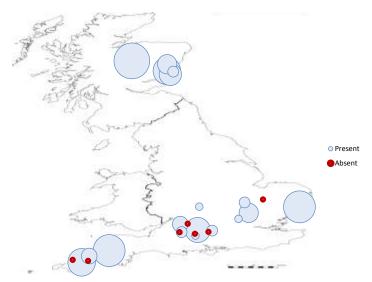
Plant density (indiv./m2): Final est. count

ELM FARM

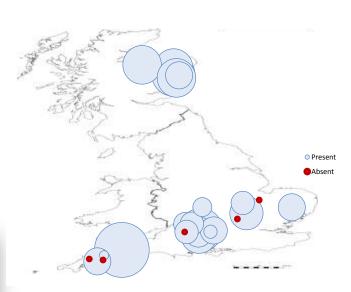
Crimson Clover



Alsike Clover



White Clover

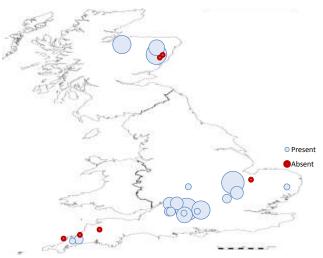


Red Clover

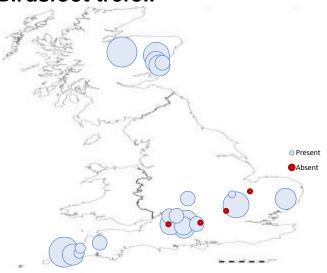


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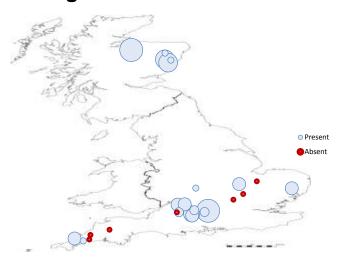
Sainfoin



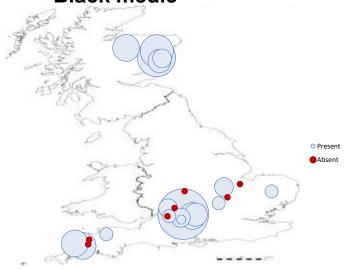
Birdsfoot trefoil

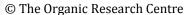


Large birdsfoot trefoil

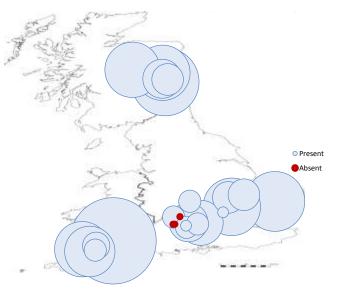


Black medic

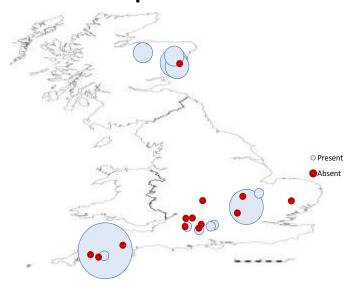




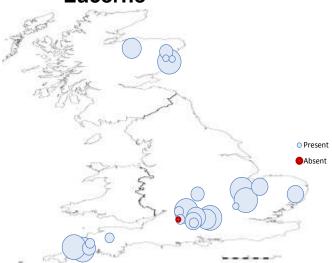
Grasses



Meadow pea



Lucerne



Lucerne with sowing dates

