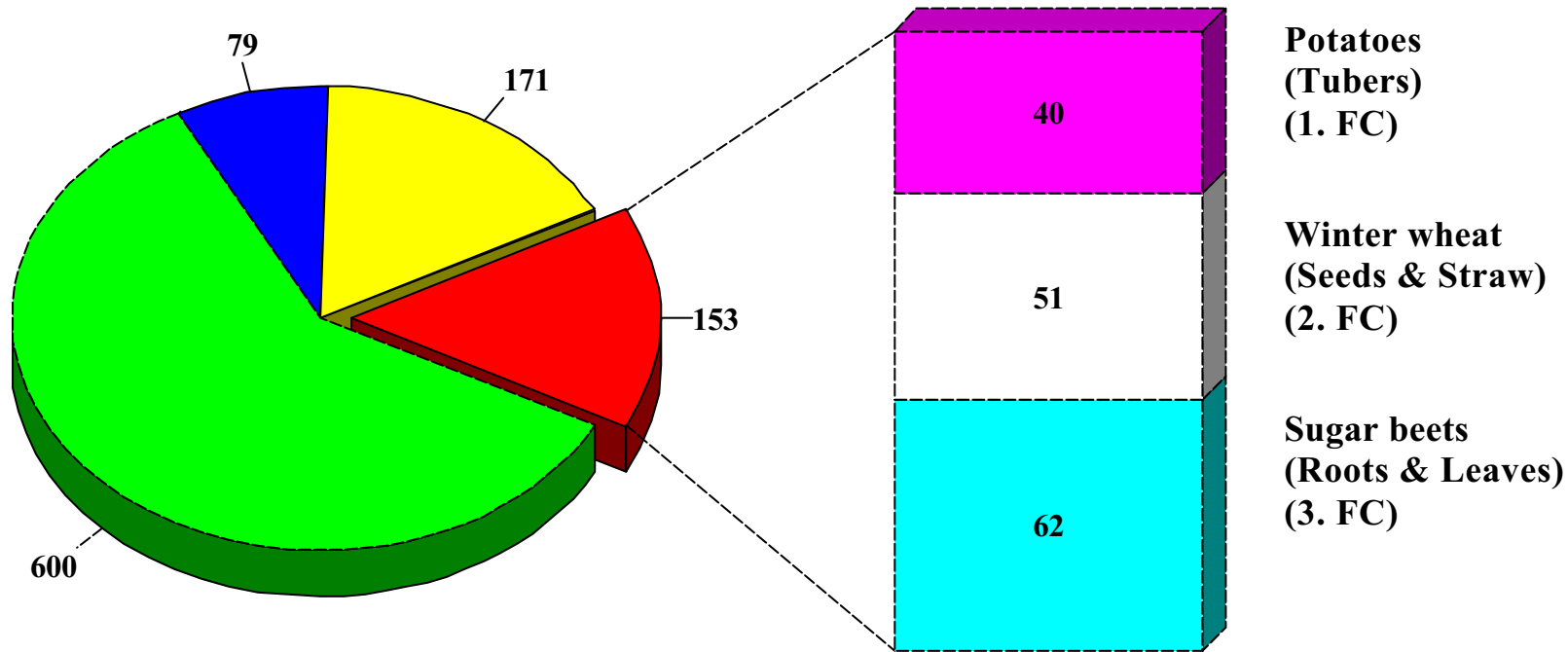


# N-accumulation of alfalfa growing (calculated at the end of the fifth course of the rotations CR3 and CR5) (according to LEITHOLD & PFORDTE 1989)

20 % Loss \*

Nt-accumulation \*

\* Root capacity

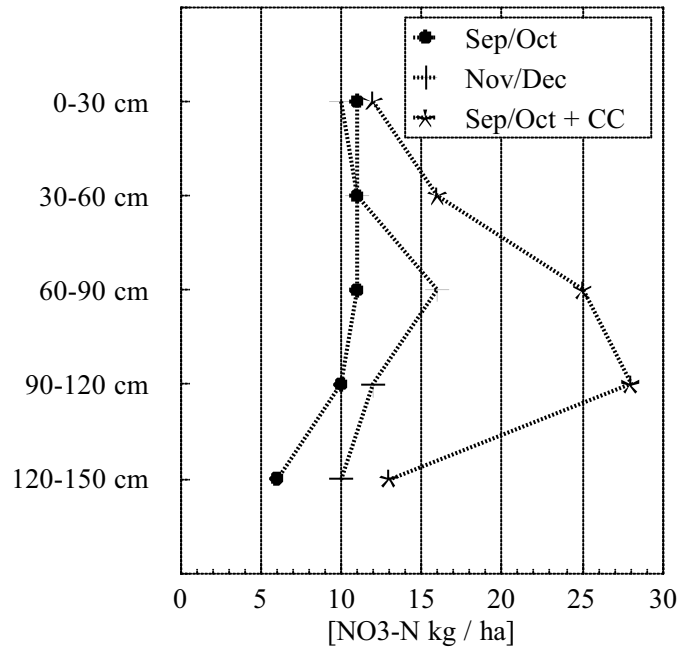


Biomass (2y)

Additional uptake of N by following crops (FC) \*

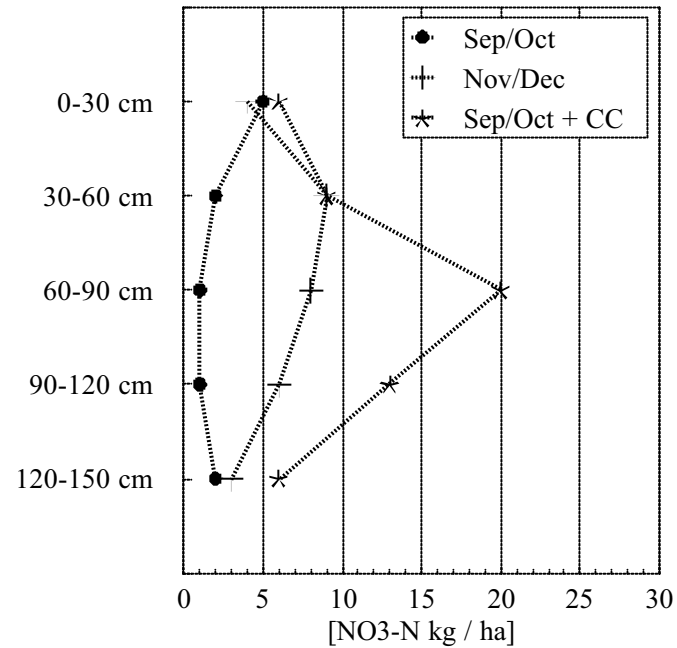
## Effect of tillage date and catch crop upon the content of soil nitrate under winter wheat after clover grass (according to Heß 1990)

**Boschheide Hof**



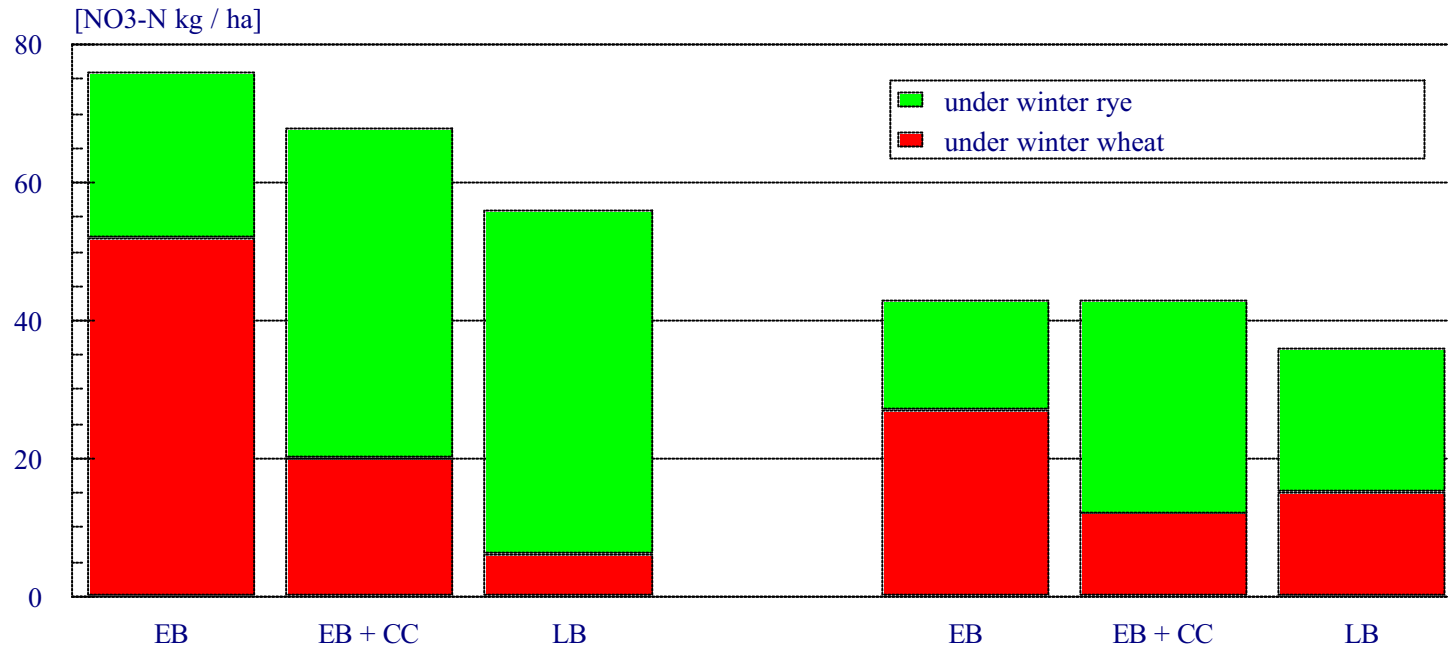
ulS 30.01.1986

**Wiesengut**



ulS 24.01.1986

## Accumulative balance of nitrate losses over two periods of percolation water in response to tillage system and site (according to Heß 1990)



Boschheide Hof

(ulS) 1985-1987

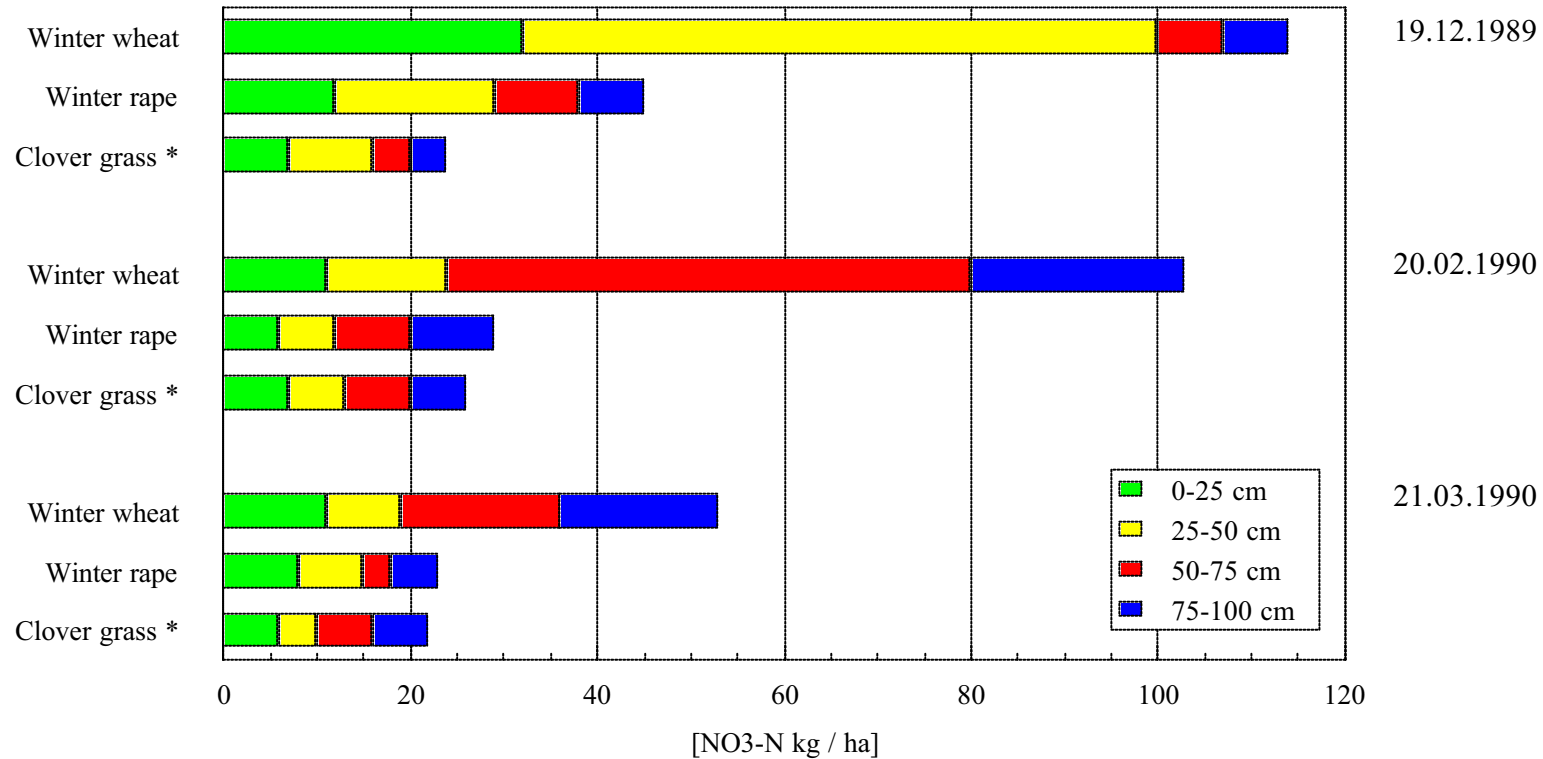
Wiesengut

(ulS) 1986-1988

EB early breakdown  
LB late breakdown  
CC catch crop

+

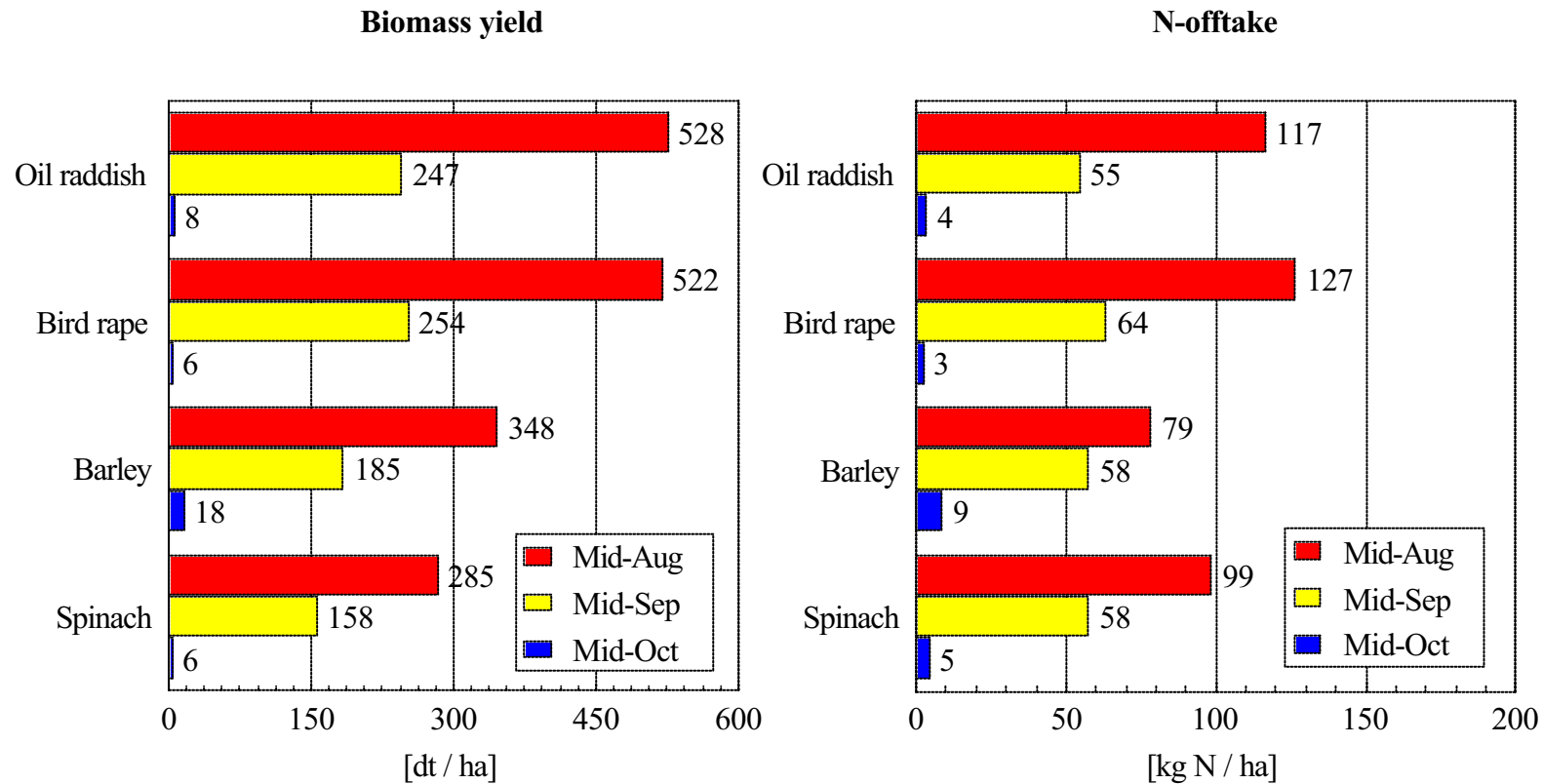
## Nitrate-N in the soil profile under different succeeding crops of clover grass (according to Heß 1990)



\* Tillage in spring and succeeding cultivation of hoeing crops or spring cereals



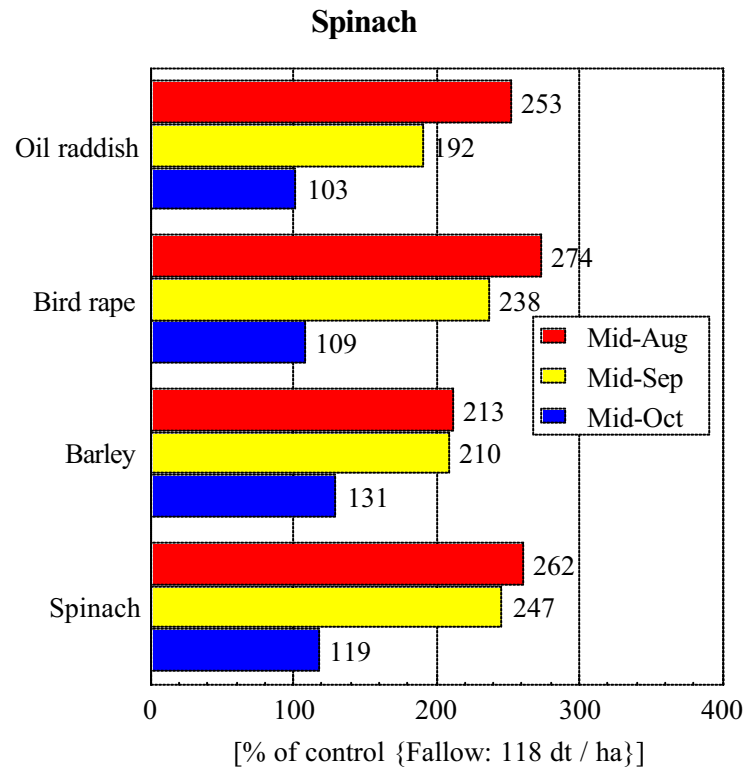
# Biomass yield and N-offtake of different green manuring crops in response to the sowing date (according to Elers & Hartmann 1987)



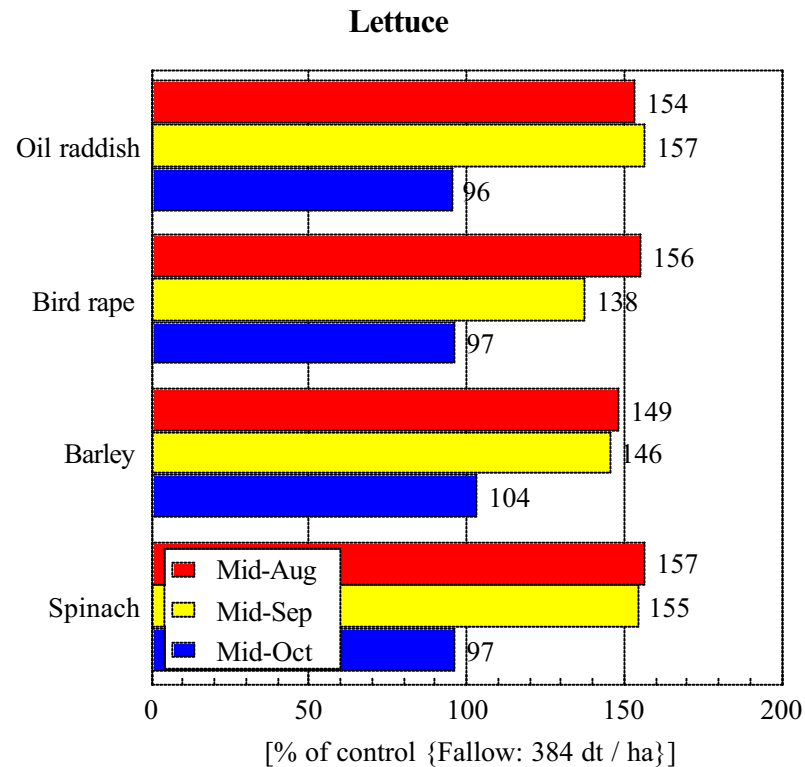
Mean of growing years 1984 and 1985



# Fresh matter yield of succeeding crops spinach and lettuce in response to sowing date and species of green manure (according to Elers & Hartmann 1987)



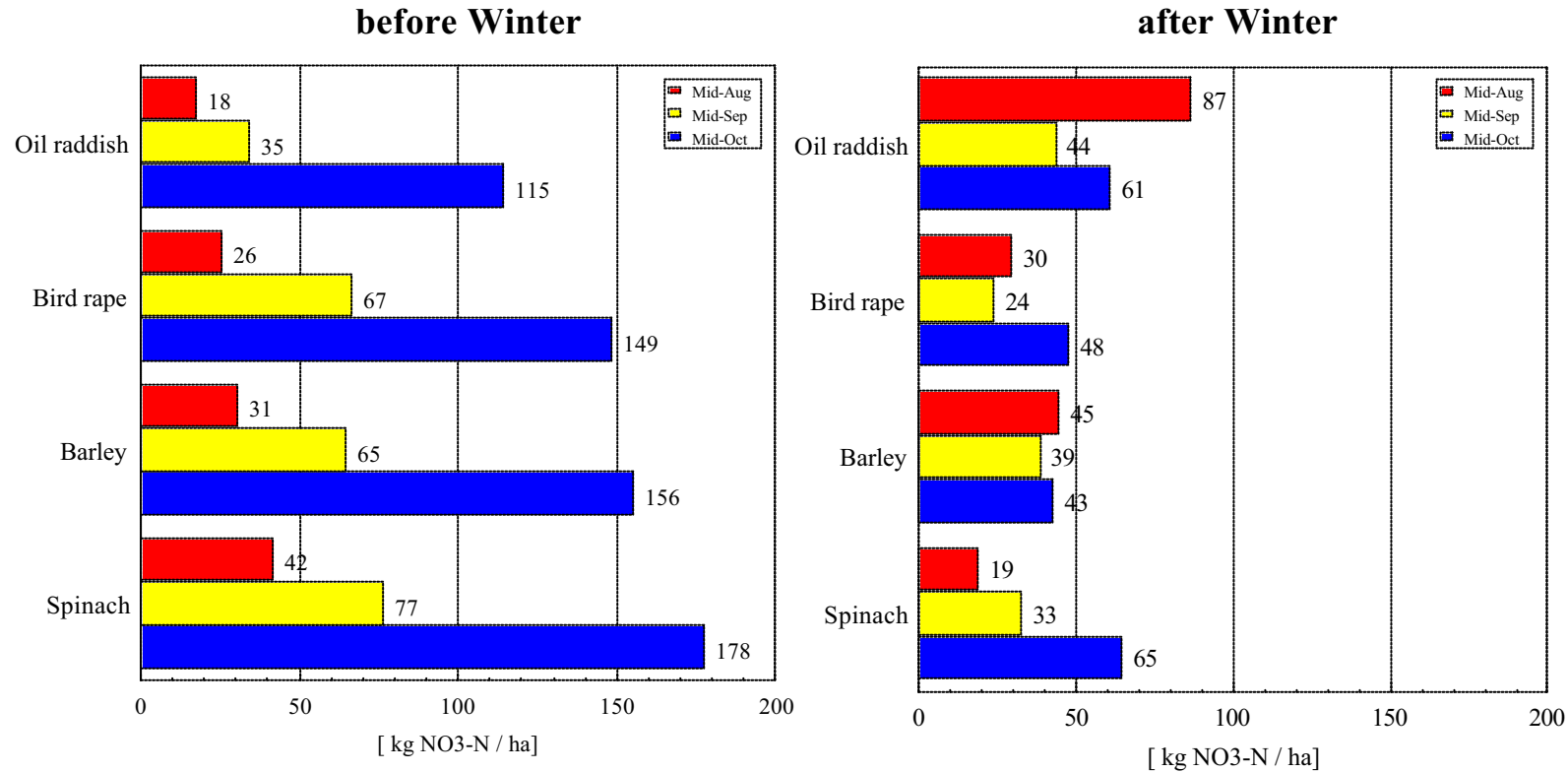
Mean of growing years  
1984 and 1985



Growing year  
1986



# Nitrate content in the soil profile (0-60 cm) in response to the species and sowing date of green manure (according to Elers & Hartmann 1987)



Mean of growing year  
1984 and 1985



## Offtake of nitrogen in sprout and root by various legumes (according to Heinzmann 1981)

Crops	Sprout	Root	Total	Relation of Root to Total
	-----	[ kg N / ha ]	-----	[ % ]
<b>Pulses</b>				
<i>Average (9 species)</i>	284	56	340	16
<b>Forage legumes</b>				
<i>Average (12 species)</i>	319	128	447	29