



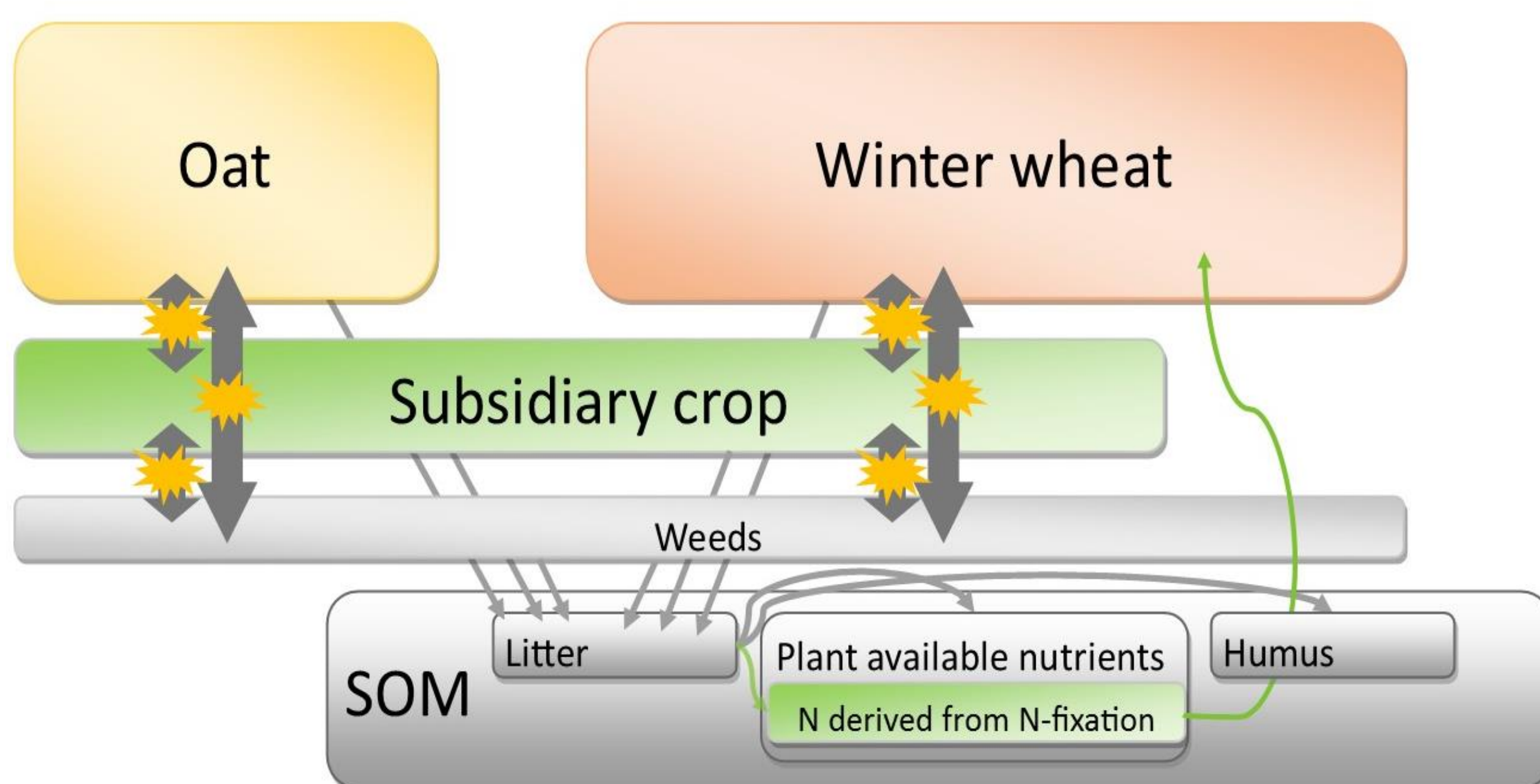
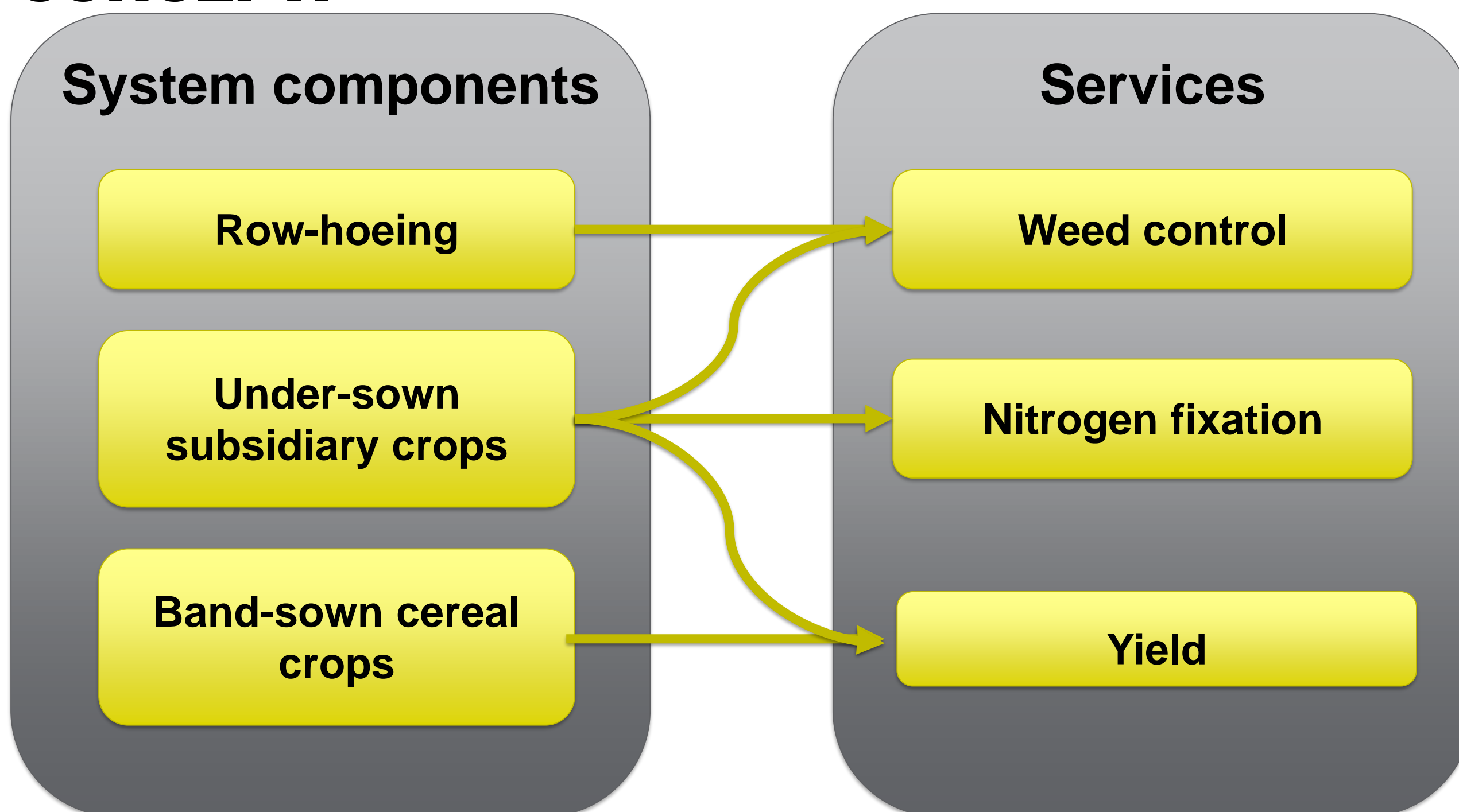
Half the surface tilled

Reduced tillage in organic farming

AIM:

To optimize the crop sequence spring cereal – winter cereal, with regards to yield, nitrogen use efficiency and weed control.

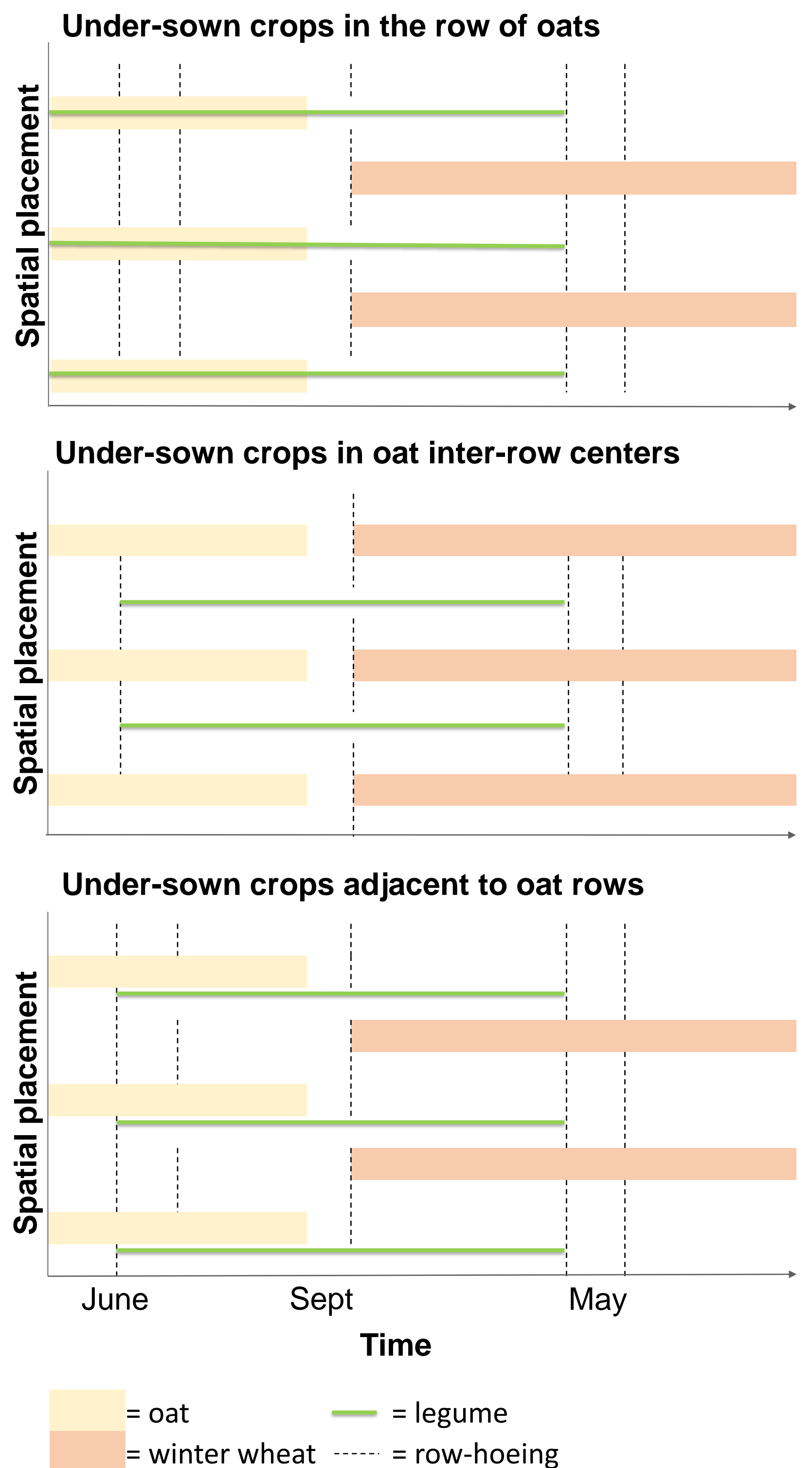
CONCEPT:



 = competition for nutrients, water and solar radiation

Schematic drawing of processes and flows within the cropping system that will be studied. These are competition between the vegetation layers, organic matter amendment from plant residues and cycling of nitrogen fixed by the subsidiary crops.

SYSTEM DESIGN:



Schematic drawing of the system design. The drawing shows satial placement of cereal crops and under-sown crops, when the under-sown crops were sown and occations of row-hoeing.



Pictures of under-sown subsidiary crops. To the left: *Trifolium incarnatum* and *Vicia villosa* in the row of oats, middle: *T. pratense*, *T. repens* and *Medicago lupulina* in oat inter-row centers, to the right : *T. squarrosum* and *T. resupinatum* adjacent to oat rows.