Field pea and nitrogen in crop rotation

Objectives
Nitrogen fixed by grain legumes corresponds to a quantity of fertiliser to be managed. Trials were carried out to:
- quantify nitrogen availability to crops following pea
- quantify nitrogen balance at crop and rotation level
- quantify energy value of fixed nitrogen

Fertilising value
- 0 to 20 kg N/ha for maize preceded by a cover crop
- 30 to 40 kg N/ha for winter rye
- 40 to 60 kg N/ha for winter rape

Conclusions
- Field pea in crop rotation allows effectively to reduce mineral fertiliser applications up to 175 kg N/ha and non-renewable energy use up to 20%