

Changes in the weed seedbank through conversion

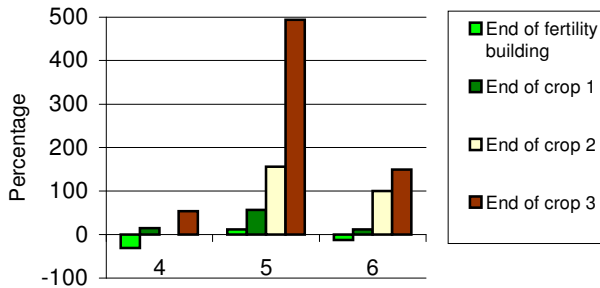
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The aim of this study was to establish if any of the practices or rotations used in conversion affect the composition of the weed seedbank

Abundance

Percentage increase/decrease of viable weed seeds from the start of fertility building



Conclusions

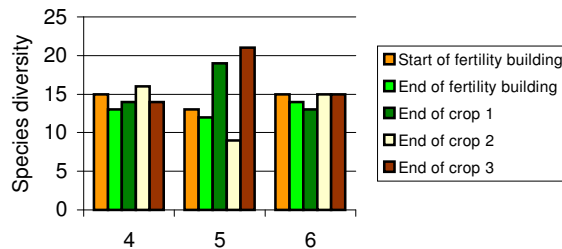
- Following fertility building viable weed seed numbers fell in two areas and rose slightly in one
- After one rotation viable weed seed numbers rose in all areas between 54-495%
- The area with the greatest proportion of undersown cereal crops had the highest rise in weed seed numbers

Diversity

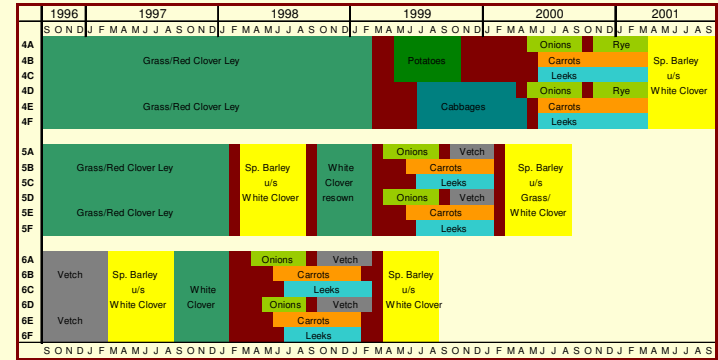
Conclusions

- Diversity was similar throughout the rotation in area 4 and 6 around 14 (+/- 2 species)
- Area 5 showed an increase in diversity of 6 species after the first cereal, a subsequent drop during vegetable cropping and then an 8 species rise after the second cereal

Total weed species diversity over the course of the rotation

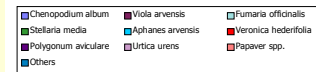


Crop rotation in areas 4, 5 and 6 - 1996-2001

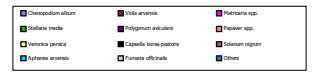


Composition

Start of the fertility building - Area 6



End of crop 3 - Area 6



Conclusions

- An example of species composition for area 6 is shown above
- Fat hen and pansy comprised 85% of the seedbank at the start of conversion
- A more equitable distribution is seen at the end of one rotation