

# ARABLE PLANT CONSERVATION IN WALLONIA (SOUTHERN BELGIUM)



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# ARABLE FLORA IN WALLONIA

- Ca. 250 possible species in Walloon fields

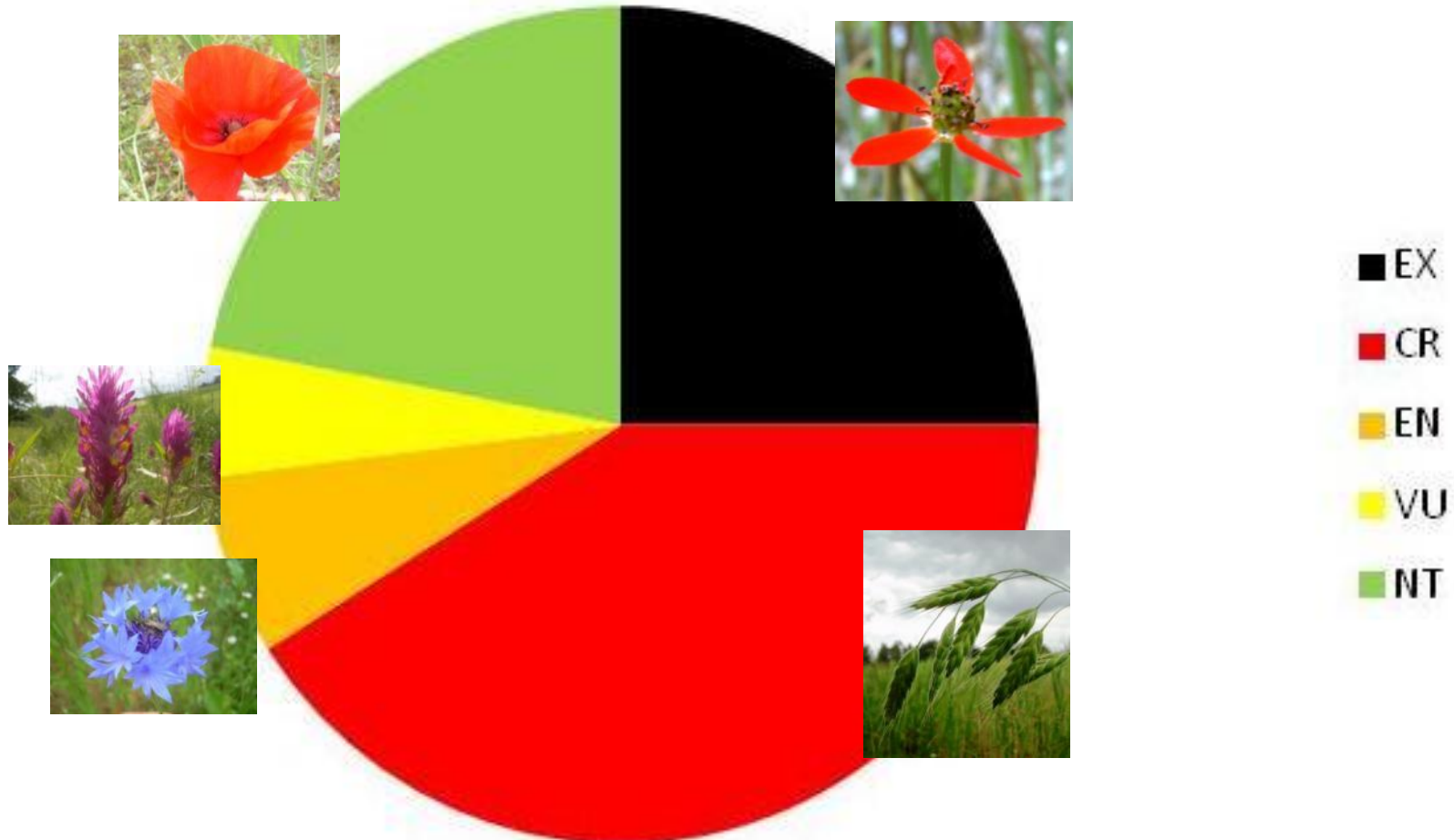
- 107 specialist species (= arable plants s.s.)



- Ca. 150 other species: ruderal generalists, dry grasslands annuals, manure stockpiles and farm pavements species...



# ARABLE PLANT STATUS (N=107)





## DESPITE THEIR UNFAVOURABLE STATUS

- Only 5 arable plants have a legal protection status (*Ajuga chamaeptytis*, *Iberis amara*, *Torilis arvensis*, *Lathyrus nissolia* and *Bromus grossus*)
- Only two dedicated nature reserves (<10ha), sheltering only few threaten species
- Much of arable plant conservation in Wallonia depends on the agrienviromental scheme through the « Arable plant conservation stripes »



# WHAT'S AES?

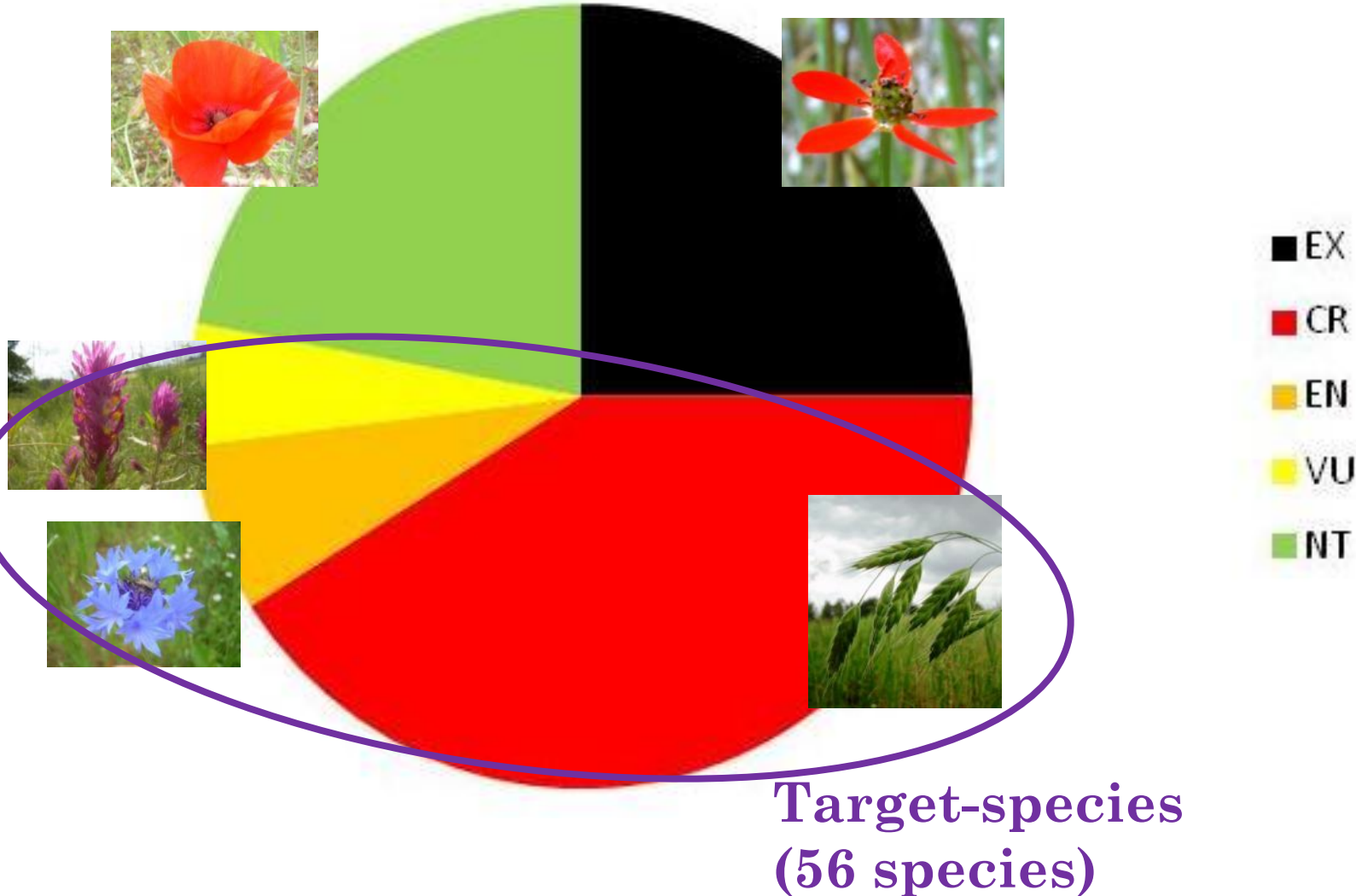
- Existing in all UE countries (obligatory measure of the CAP's 2<sup>nd</sup> pillar). In charge of regions in many countries including Belgium.
- Financial compensations for farmers adopting actions for environment, including biodiversity (ca. 10 possible actions in Wallonia).
- 5-year contracts, on a voluntary basis. Compensation is a function of the expected constraints (work surplus) and yield losses.
- Financial compensation for arable plant conservation stripes : 1250€/ha



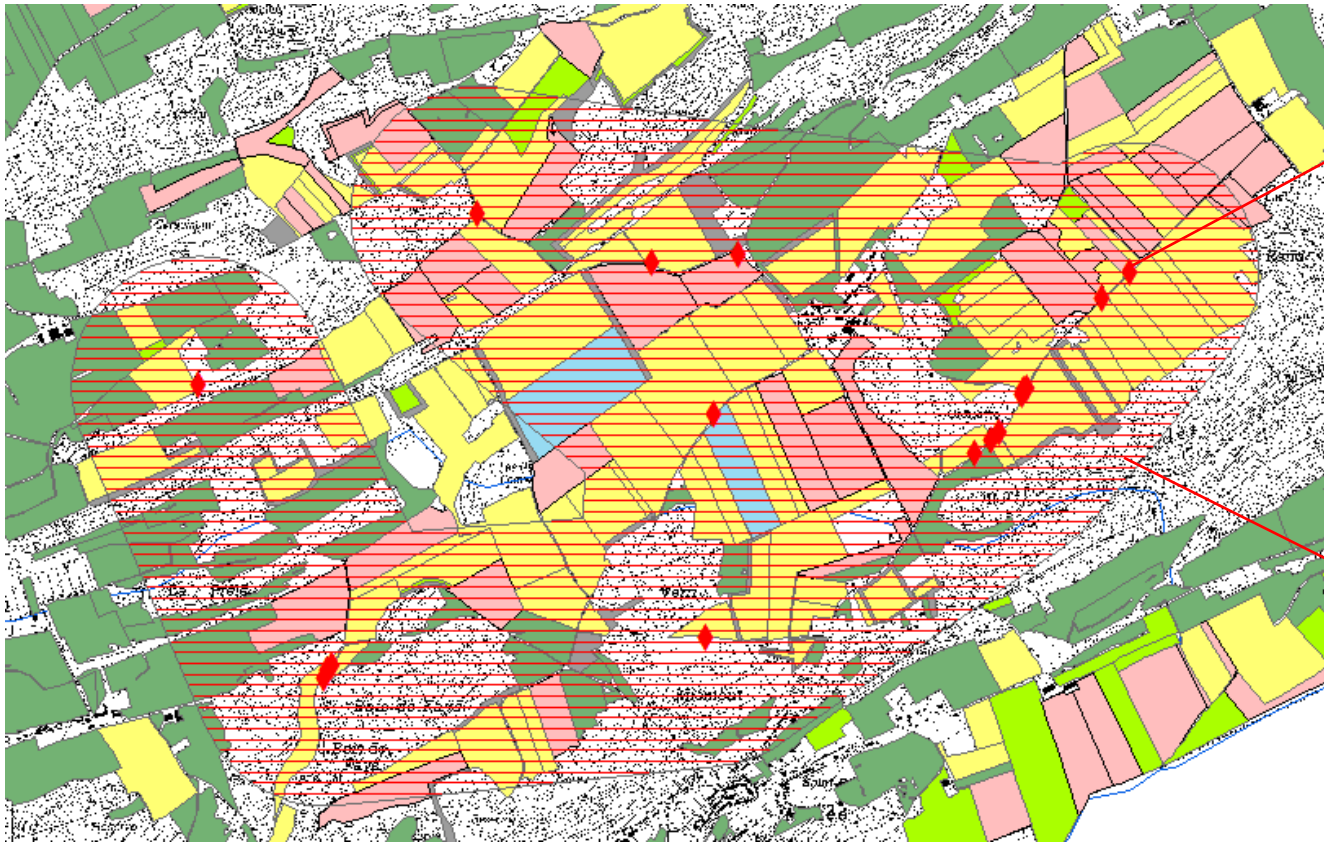
# THE ARABLE PLANT CONSERVATION STRIPES...



# ARABLE PLANT CONSERVATION STRIPES, A TARGETED MEASURE : SPECIES

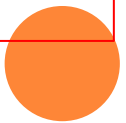


# ARABLE PLANT CONSERVATION STRIPES, A TARGETED MEASURE : SITES



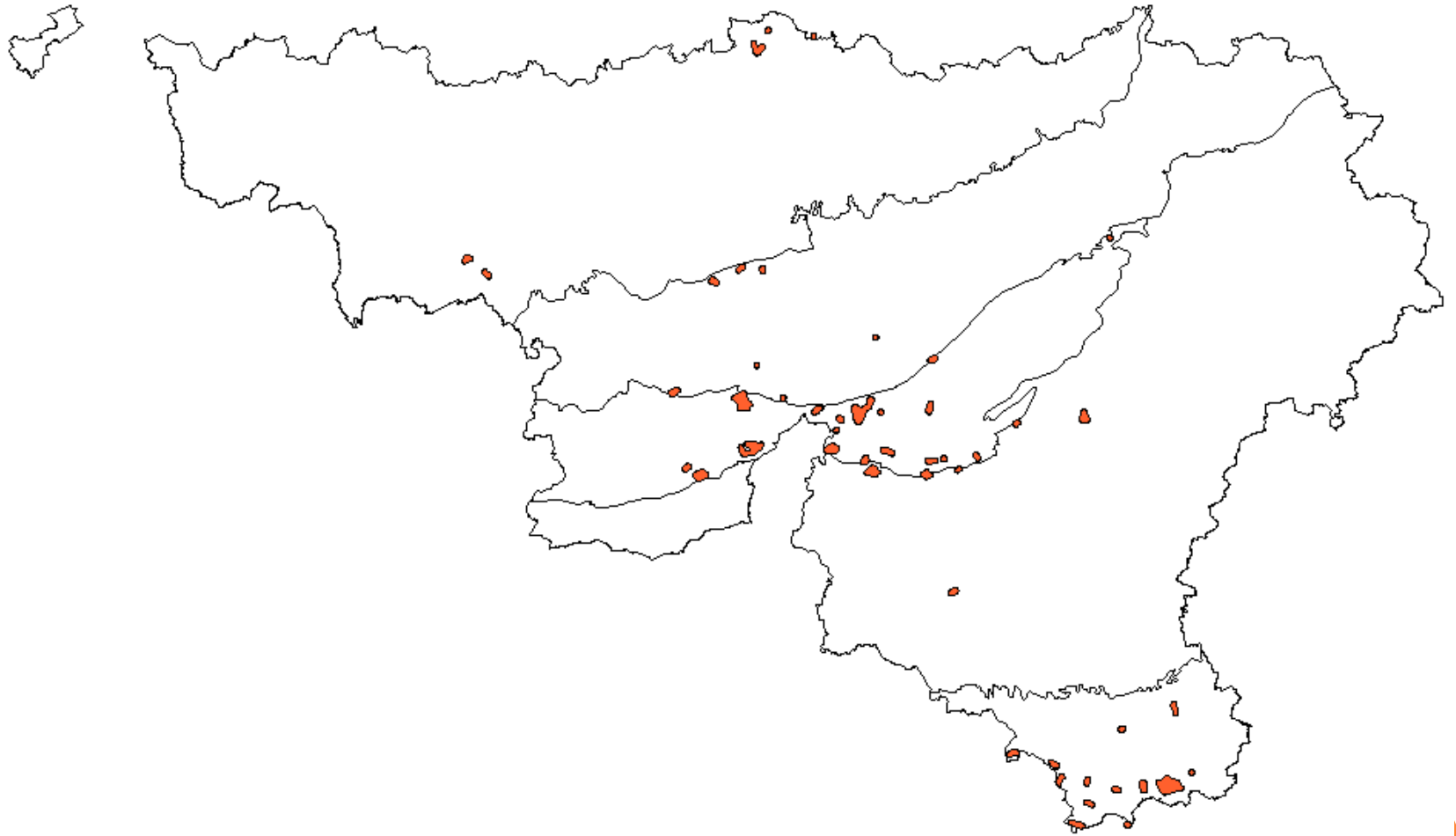
Observation  
data: direct  
contact with  
farmer to  
propose the  
implantation  
of a stripe

Buffer zones  
around  
observation  
data: Arable  
conservation  
stripe is  
available for  
farmer





# ARABLE PLANT CONSERVATION STRIPES, A TARGETED MEASURE : SITES



# AES/N2000 FARM ADVISORS




# ARABLE PLANT CONSERVATION STRIPES : THE MANAGEMENT

- A « package » of legal constraints:
  - At arable field border (no permanent grassland)
  - 3-30 meters width
  - No pesticides
  - No fertilizers (with possible derogations).
  - Max. 9% of total arable field area of the farm
- Other obligations defined by the AES farm advisor depending on the species:



# ARABLE PLANT CONSERVATION STRIPS : THE MANAGEMENT

- A « package » of legal constraints
  - Other obligations defined by the AES farm advisor depending on the species:
    - The target-species has no particular ecological traits (e.g. *Centaurea cyanus*) => Basis constraints : at least 3 years cereals or rapeseed over the 5 years (normal cultivation).
    - The target species have a strong affinity for winter cereals (e.g. *Bromus secalinus*) => at least 3 years winter cereals
    - The target species have a strong affinity for spring cereals (e.g. *Misopates orontium*) => Basis constraints + at least 2 years spring cereals
    - Occurrence of geophytes (e.g. *Bunium bulbocastanum*) => Basis constraints + no deep ploughing
    - Occurrence of stubble species (e.g. *Stachys annua*) => Basis constraints + keep stubble > 1 month
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# ARABLE PLANT CONSERVATION STRIPS : THE MANAGEMENT

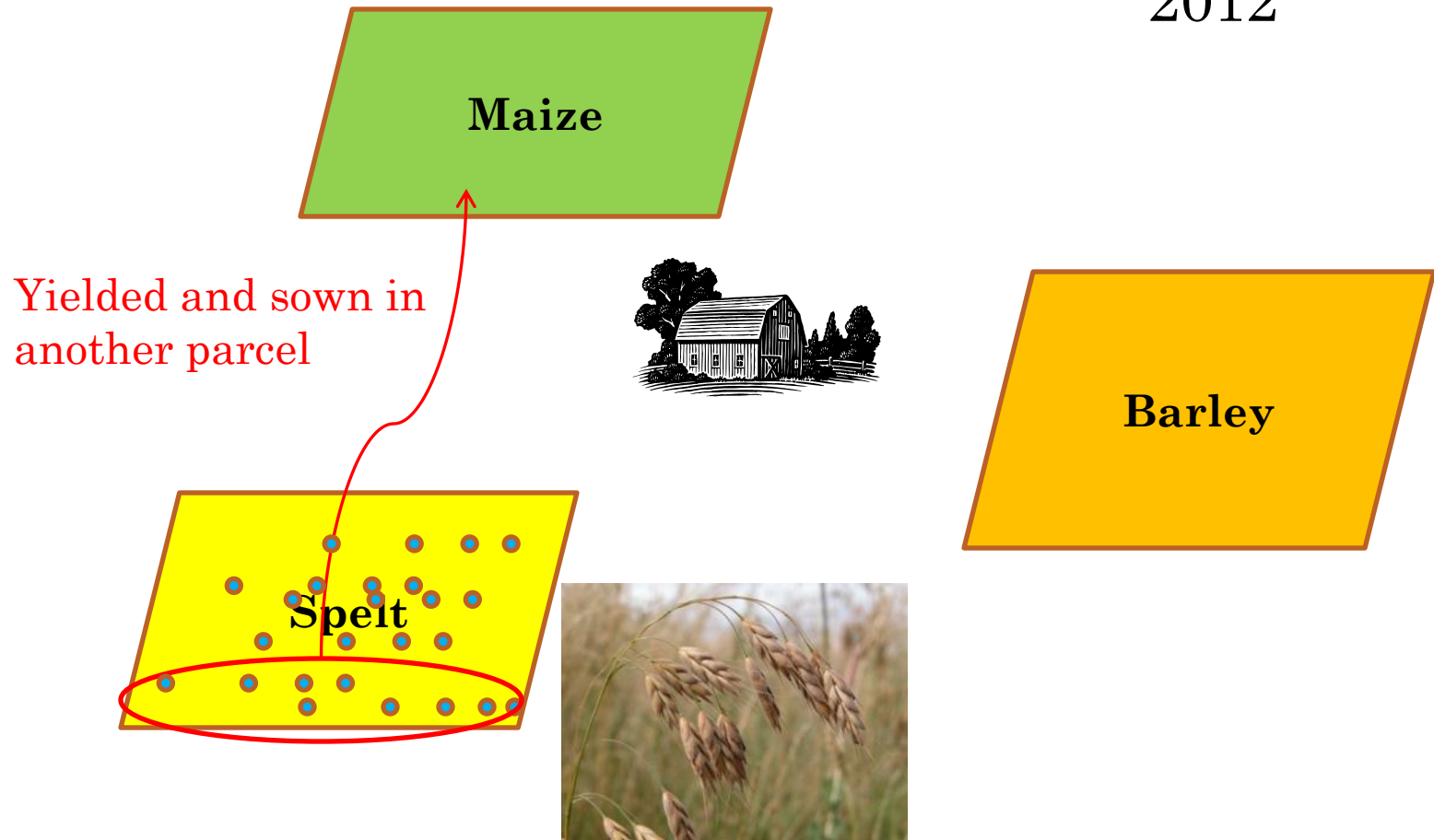
- A particular case : *Bromus grossus*, a contaminant of spelt seeds.



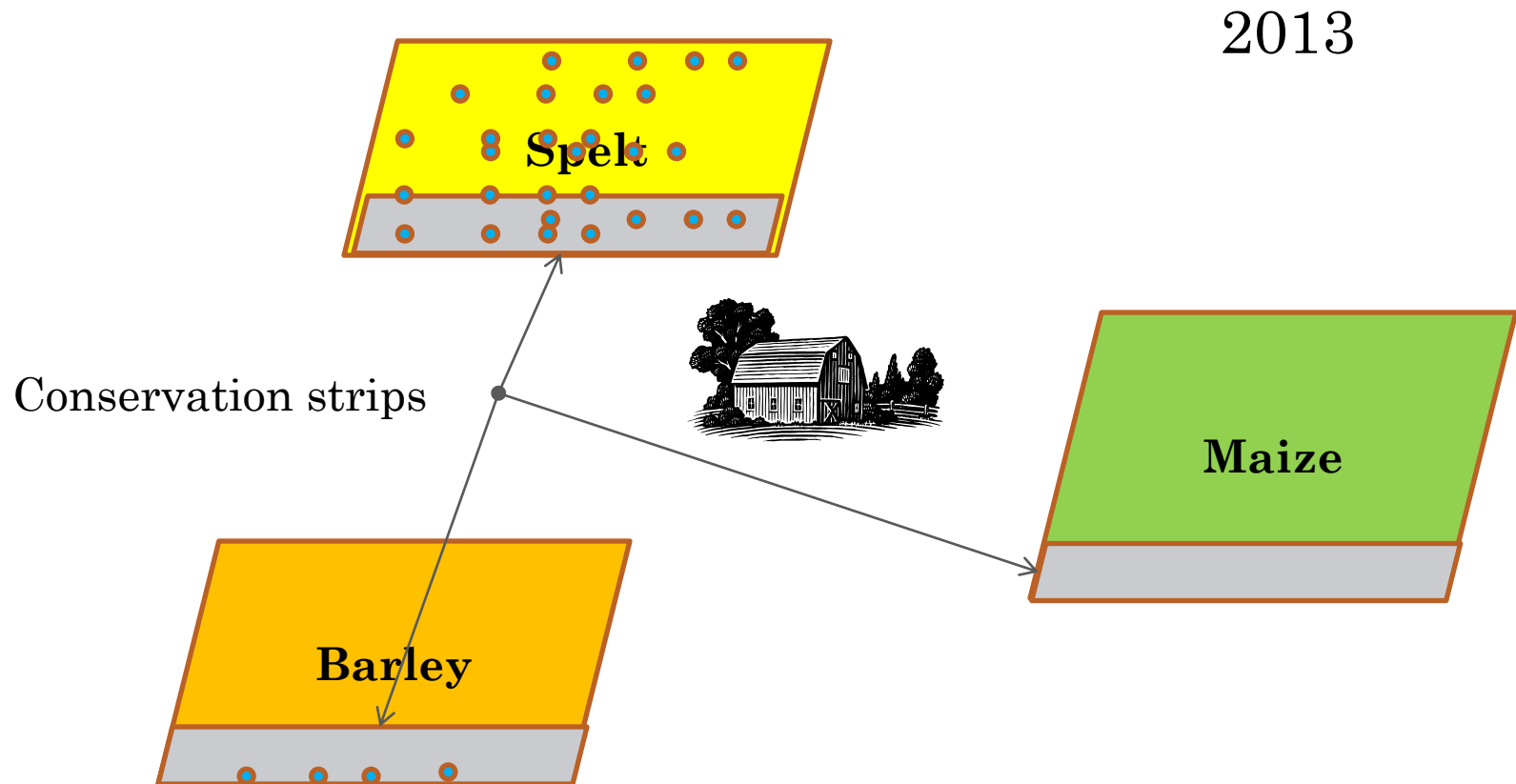


# ACTIONS POUR LIMITER LES CAUSES DE RÉGRESSION DES MESSICOLES

2012

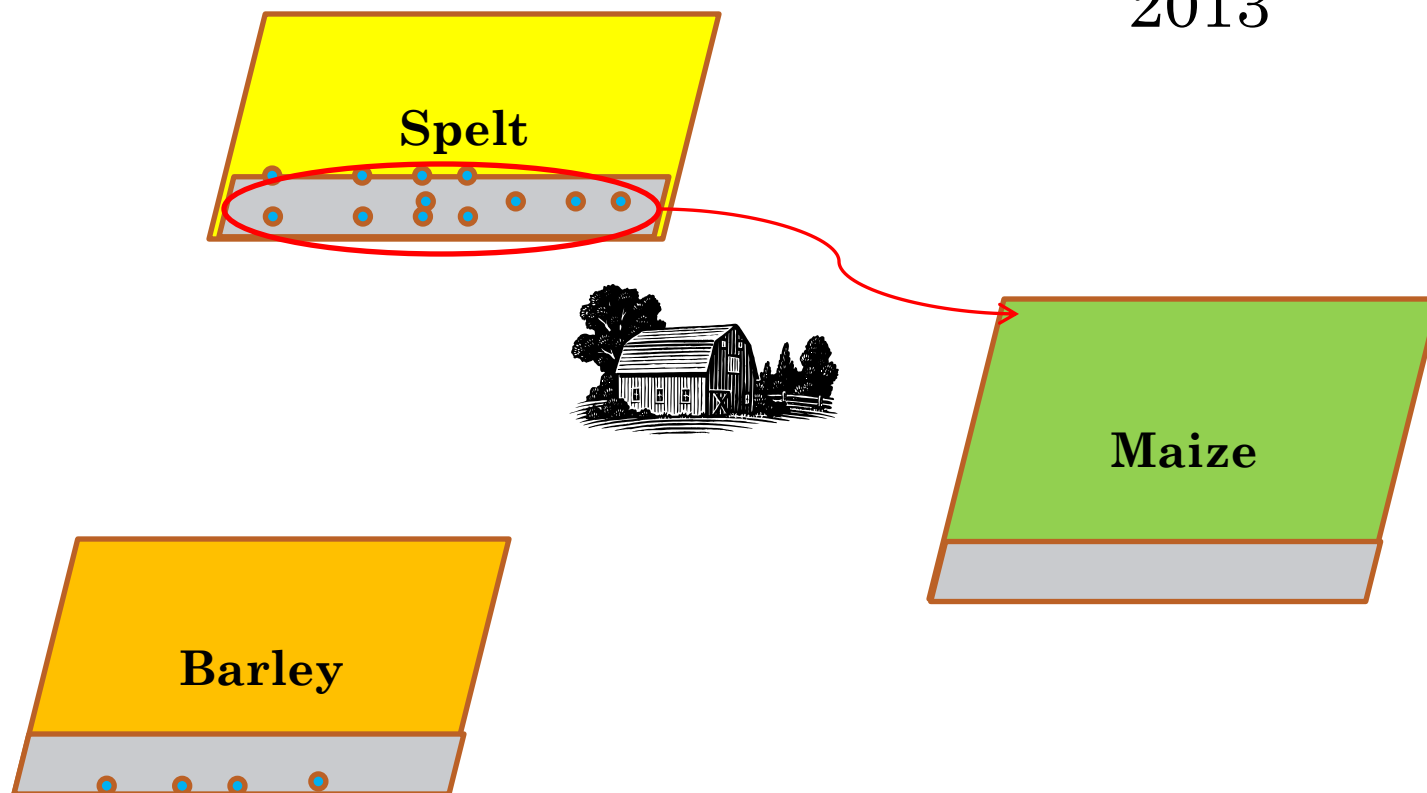


# ACTIONS POUR LIMITER LES CAUSES DE RÉGRESSION DES MESSICOLES



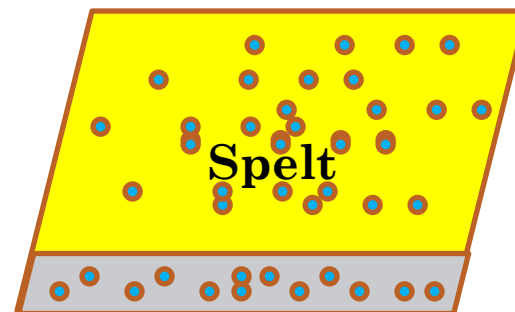
# ACTIONS POUR LIMITER LES CAUSES DE RÉGRESSION DES MESSICOLES

2013



# ACTIONS POUR LIMITER LES CAUSES DE RÉGRESSION DES MESSICOLES

2014



A SMALL INTERLUDE...















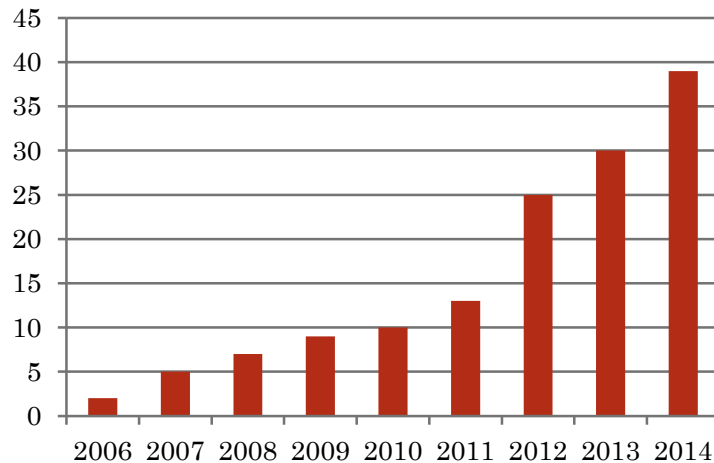




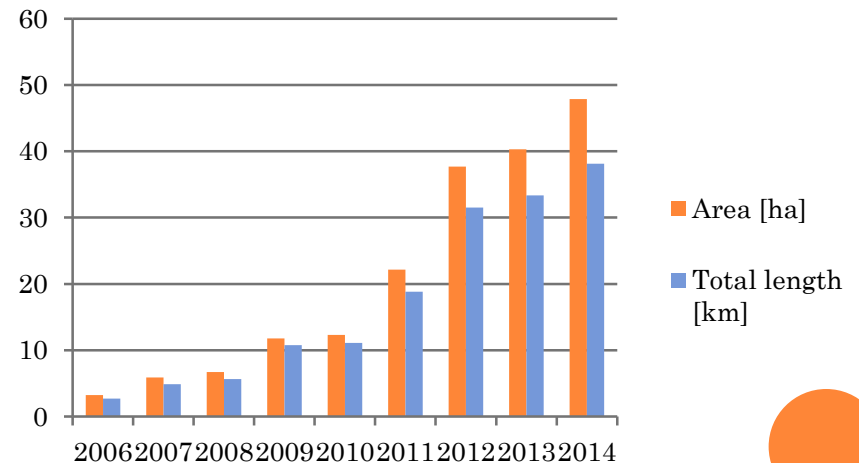
# THE RESULTS

- Increasing areas since 2006, but total area still rather low.
- Not all contracts are reconducted after 5 years:
  - Retired farmers
  - Management problems during the previous contract (spraying, no cultivation, ...) => the farm advisor did not allow the reconduction

## Number of farmers



## Areas & Lengths



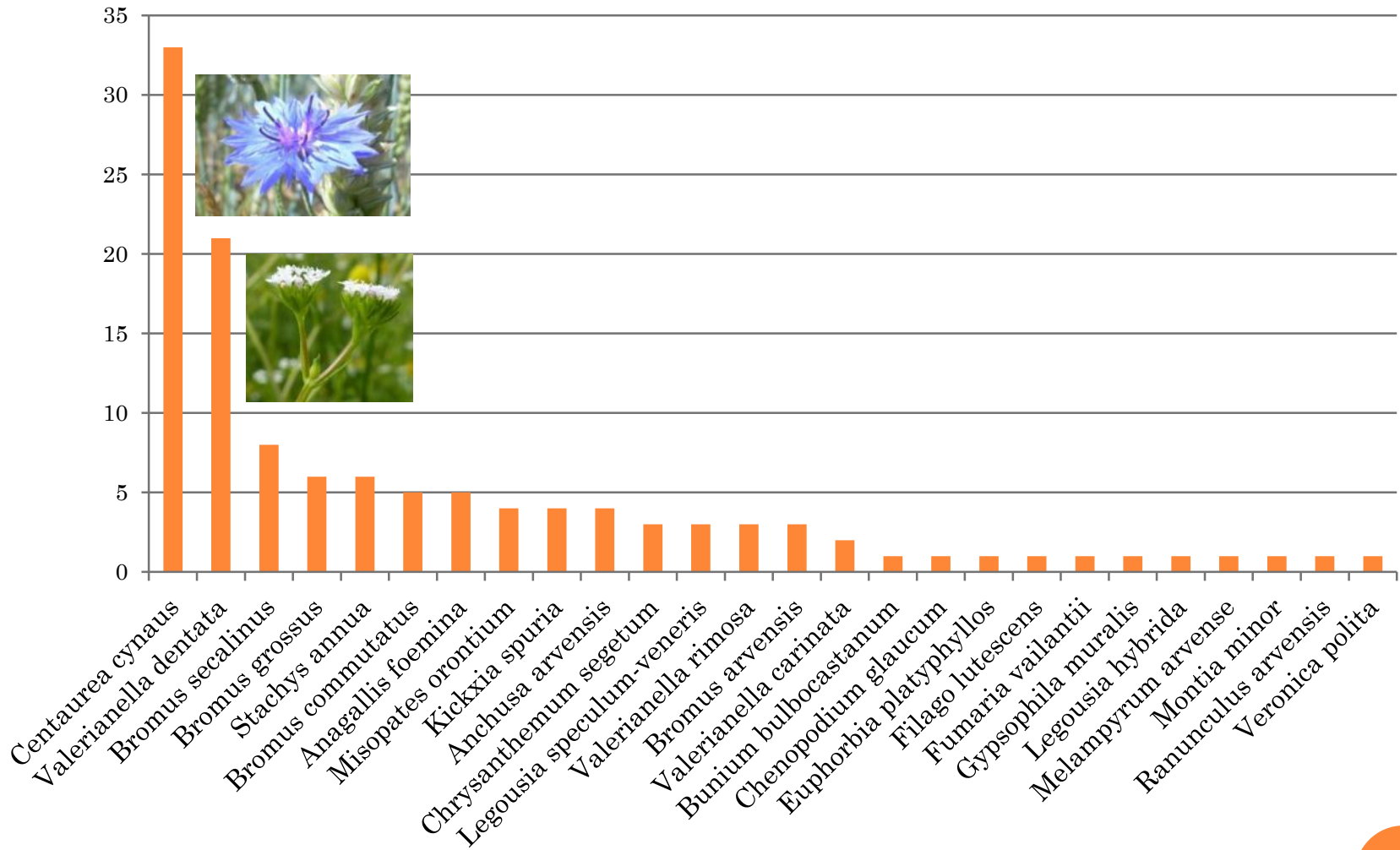


# EFFICIENCY OF THE ACTION

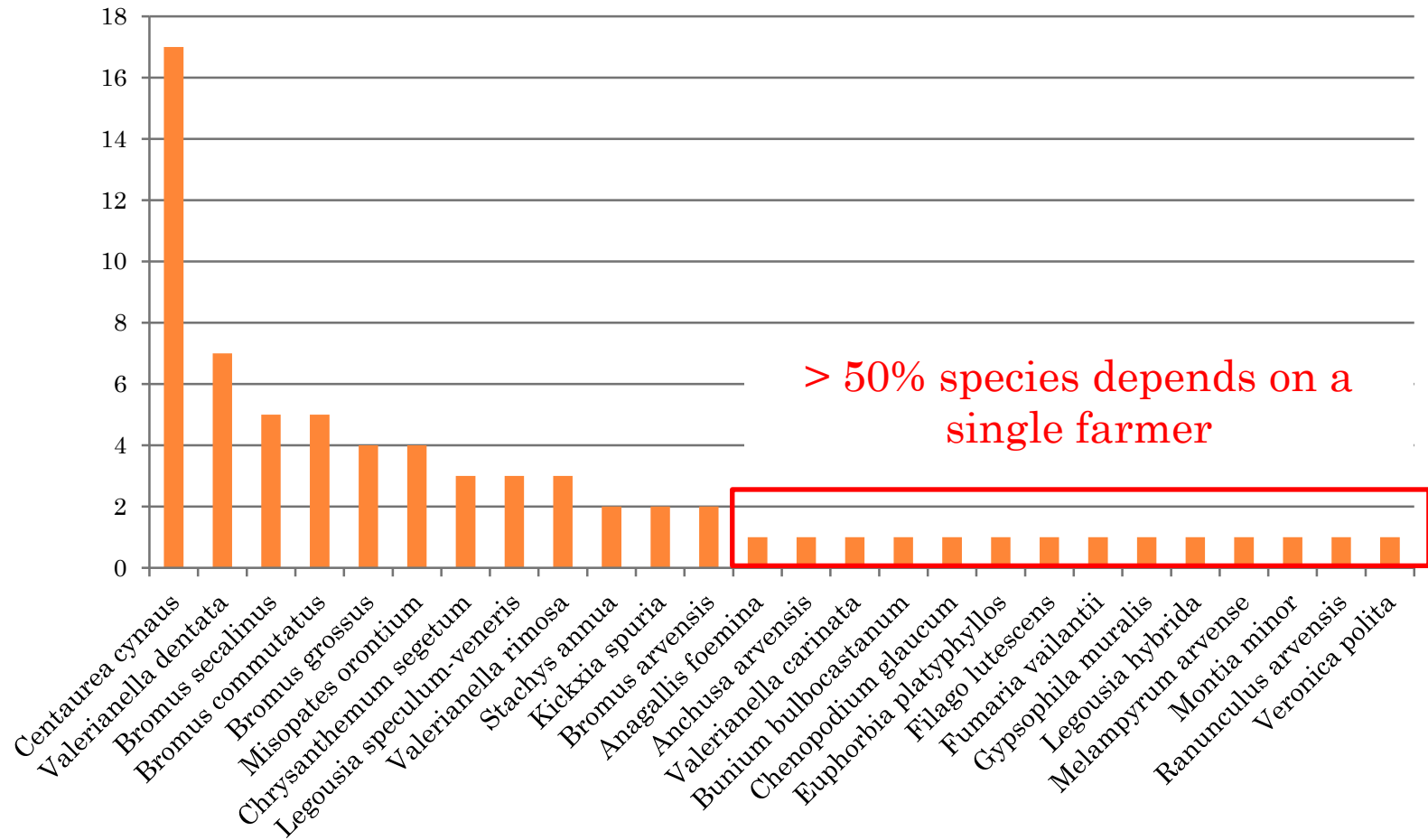
- Encouraging results for arable plant conservation (due to targeting). Monitoring 2011-2013:
  - 162 vascular plant species
  - Incl. 26 target species (at least 3 more sp in 2014, monitoring in progress)
  - All species found in the 2008 monitoring were found back in 2011-2013
- The “safety” level is low (many species occurs in a low number of stripes)



## Number of stripes



## Number of farmers



# CONCLUSIONS

- Targeting makes the conservation efficient (lots of species on a small area)
- AES should not be the main arable plant conservation (especially for long-term cons.), but can efficiently complement other actions.
- Limiting factors:
  - Find arable plant populations to conserve
  - Convince farmers (even with 1250€/ha)



# POST-CONCLUSION

- Targeting makes the conservation efficient... but chance can also be an ally
- Ex.: the landscape stripes : sown with cereals + *Papaver rhoeas* + *Centurea cyanus* (wild and local origin) for landscaping purpose. Thereafter managed like a conservation stripes





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- Since 2011, monitoring revealed:
  - *Anthemis cotula* (1 stripe)
  - *Bromus commutatus* (6 stripes)
  - *Bromus secalinus* (3 stripes)
  - *Euphorbia platyphyllos* (1 stripe)
  - *Valerianella dentata* (2 stripes)
  - *Valerianella ramosa* (1 stripe)
  - *Anchusa arvensis* (2 stripes)



THANK YOU FOR YOUR ATTENTION...

