

Battle of the brambles

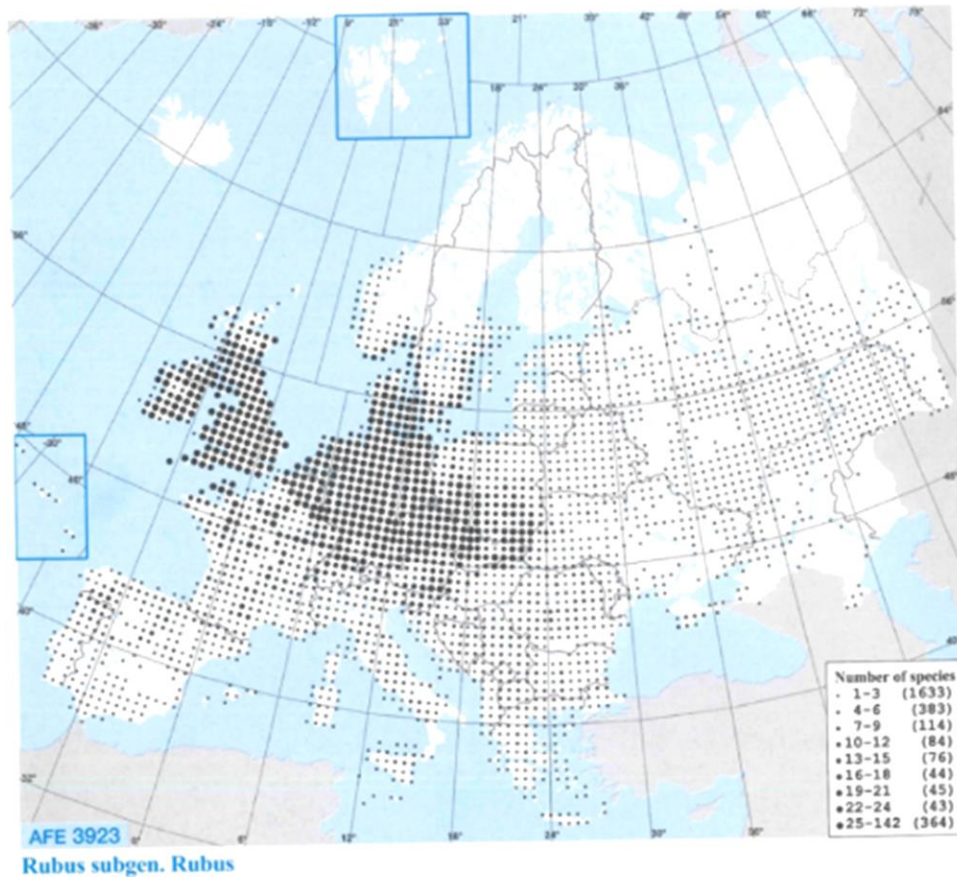
small scale dynamics between a disjunct native species and an invasive alien



Iris de Ronde

Europe

- 763-(1000?) *Rubus*-species
- most of them apomicts (-17)





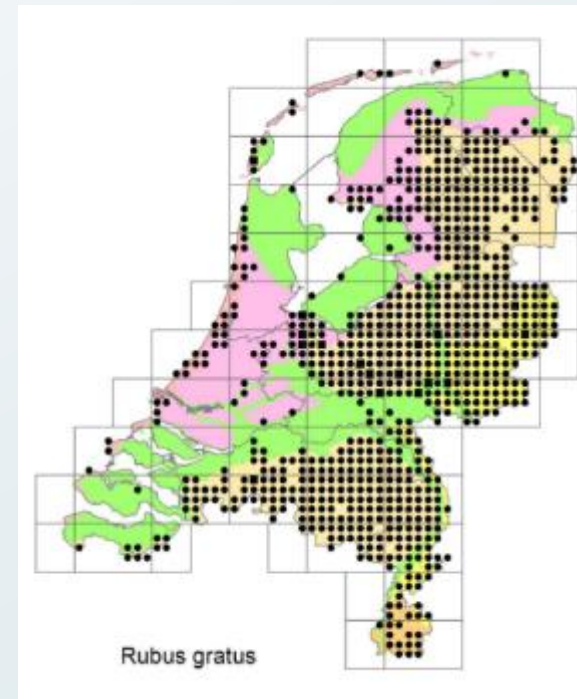
The Netherlands

- \pm 200 *Rubus*-species

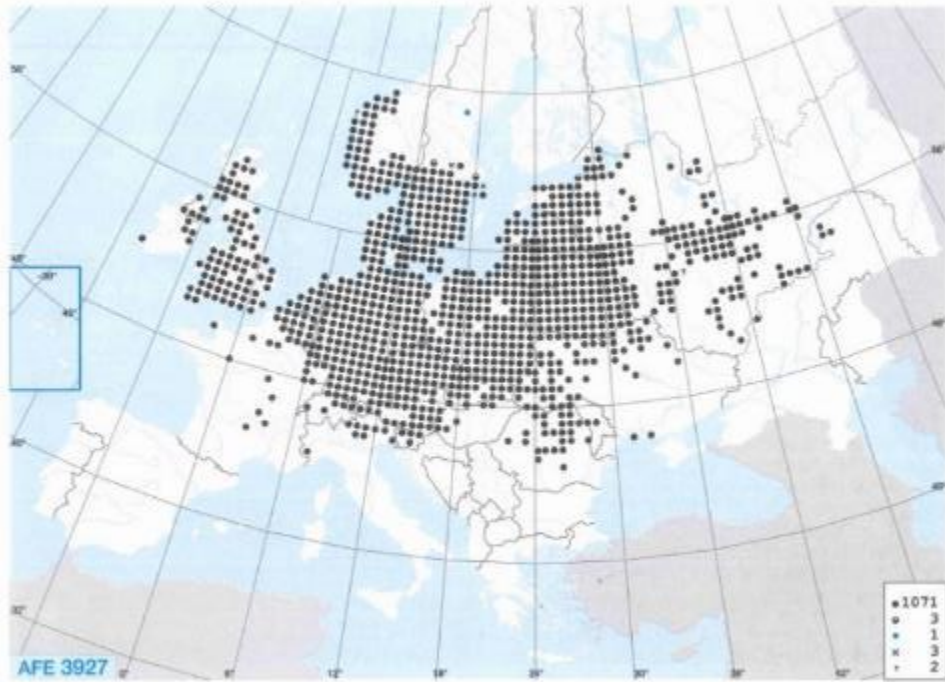


The Netherlands

- ± 200 *Rubus*-species
- Natural distribution area of the apomictic species

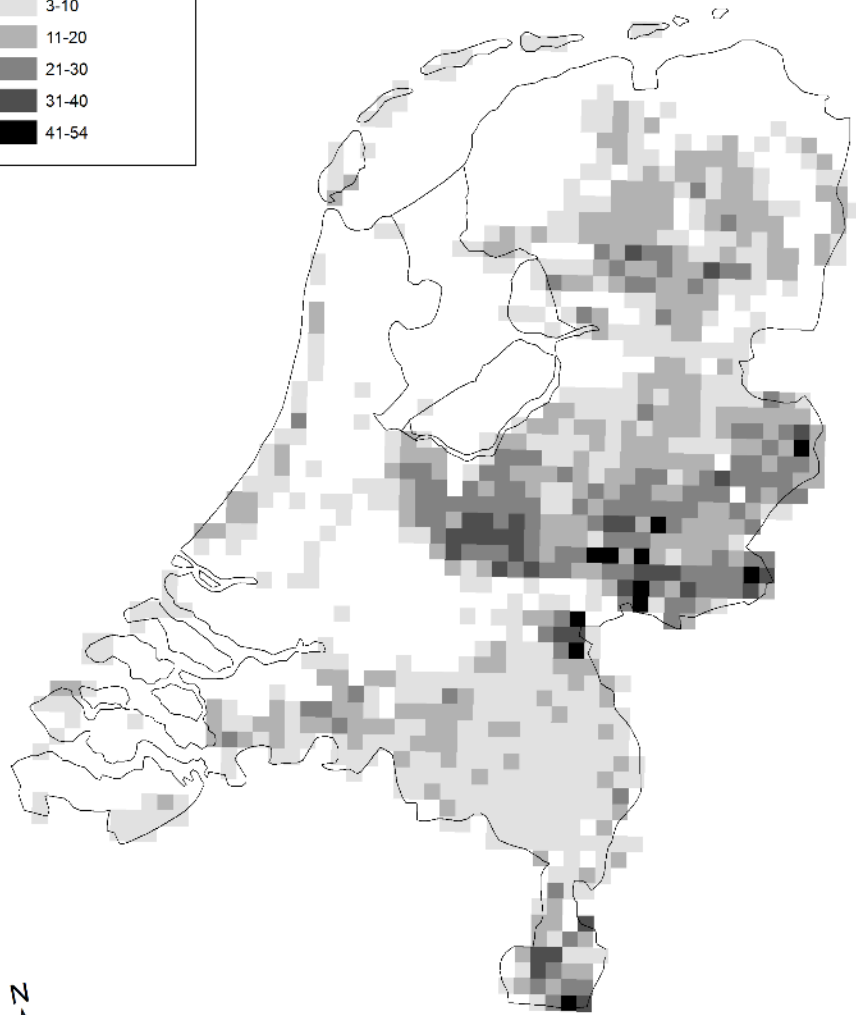
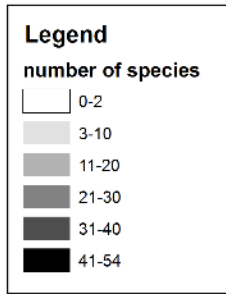


Large distribution area



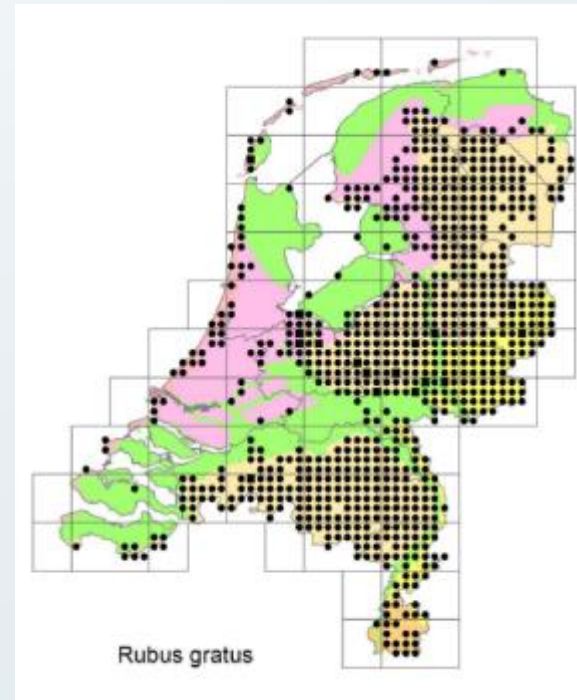
Small distribution area





The Netherlands

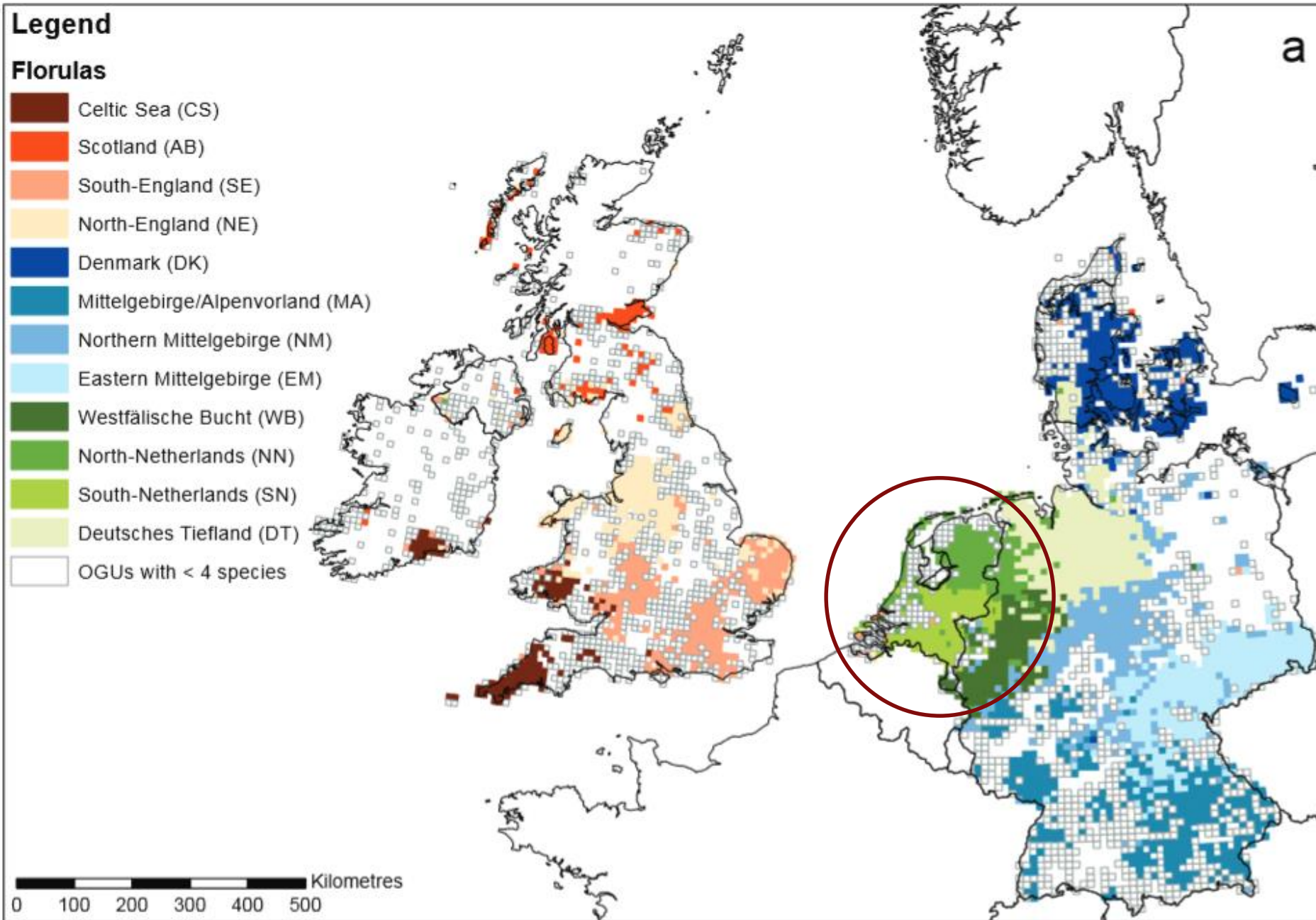
- number of species (5x5 km)



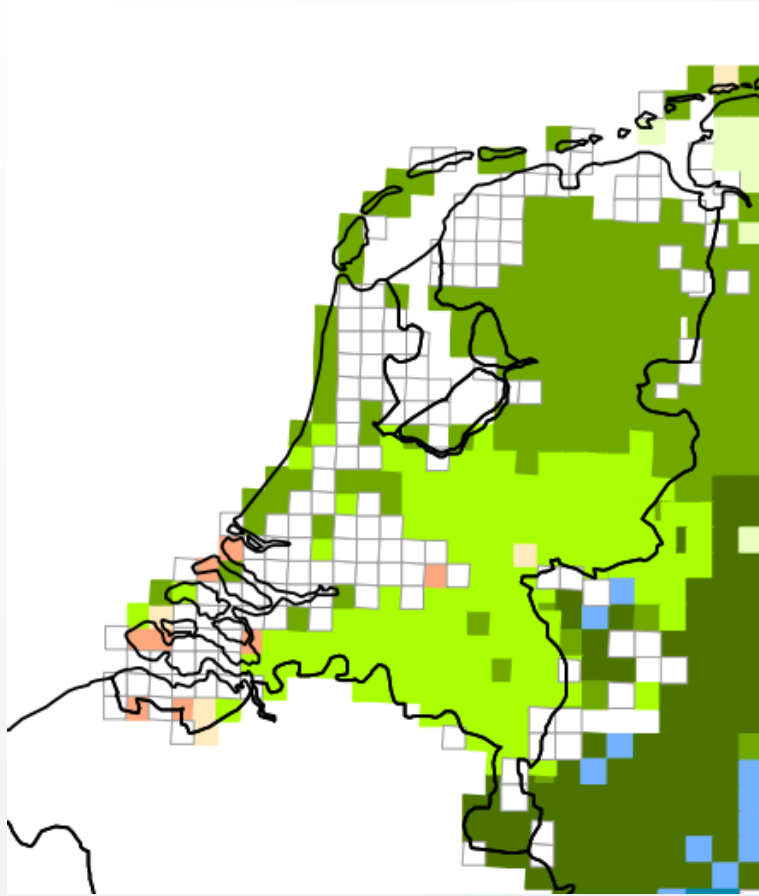
Legend

Florulas

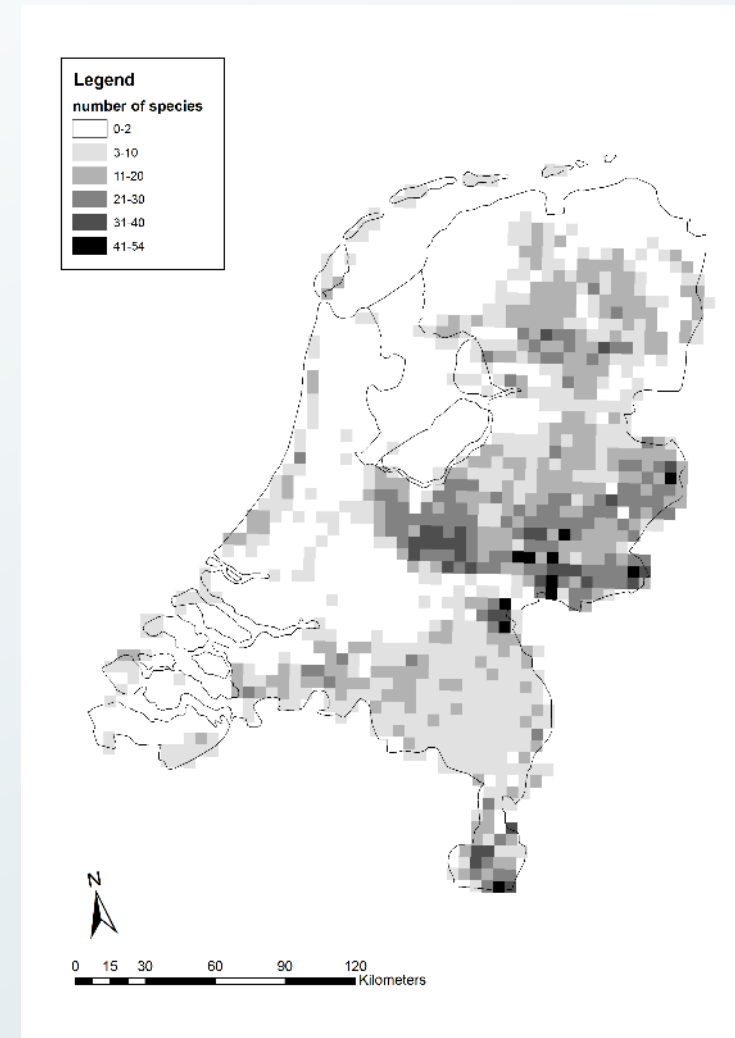
- Celtic Sea (CS)
- Scotland (AB)
- South-England (SE)
- North-England (NE)
- Denmark (DK)
- Mittelgebirge/Alpenvorland (MA)
- Northern Mittelgebirge (NM)
- Eastern Mittelgebirge (EM)
- Westfälische Bucht (WB)
- North-Netherlands (NN)
- South-Netherlands (SN)
- Deutsches Tiefland (DT)
- OGUs with < 4 species



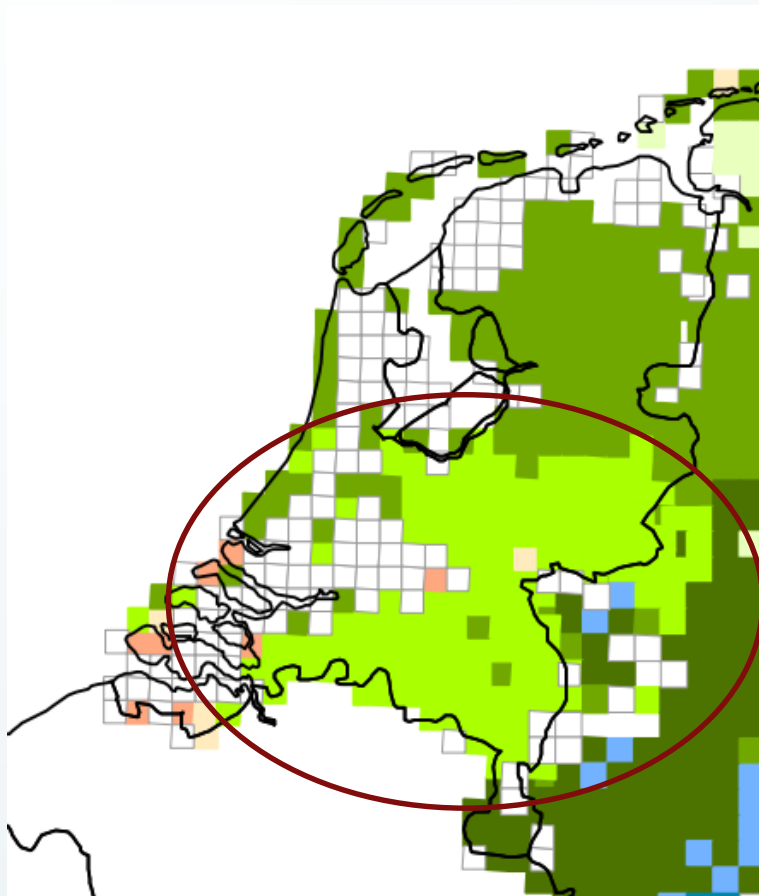
North- and South-Netherlands



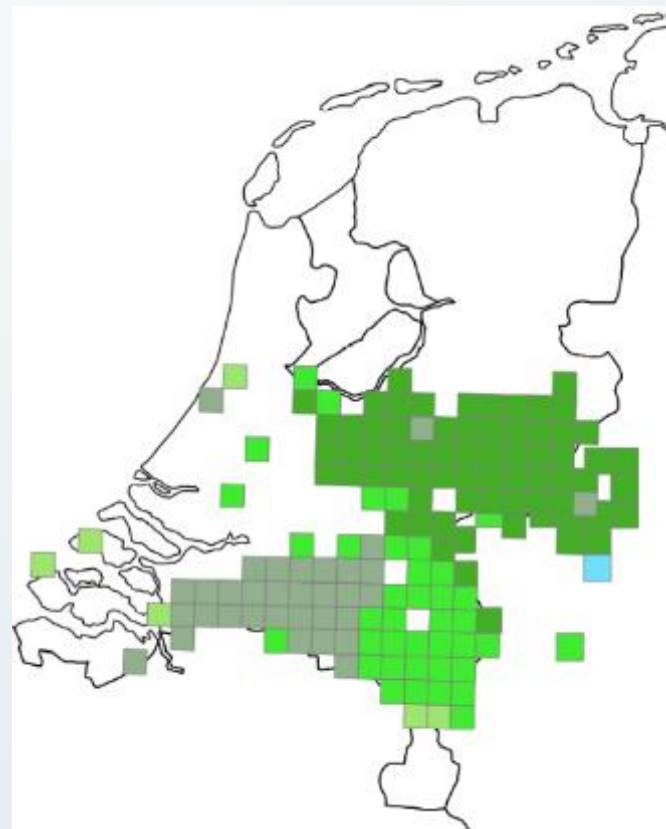
Number of species



South-Netherlands



National clustering South-Netherlands



Rubus armeniacus

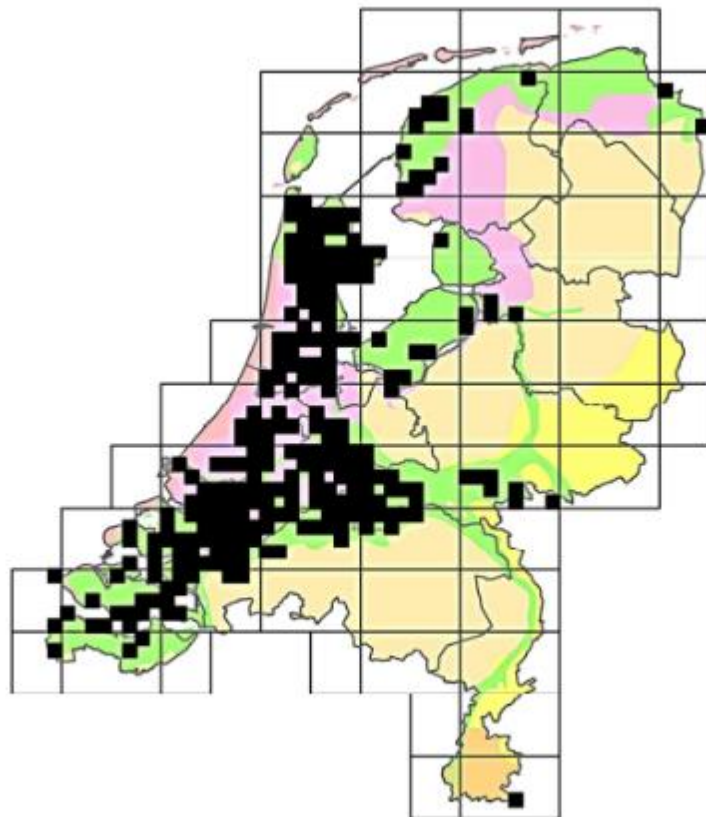
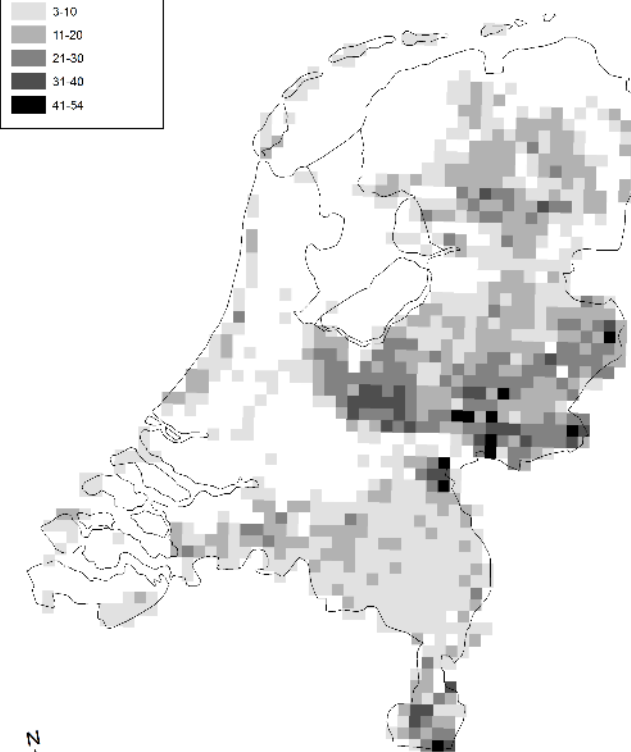
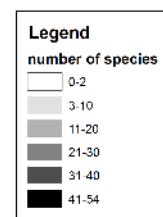
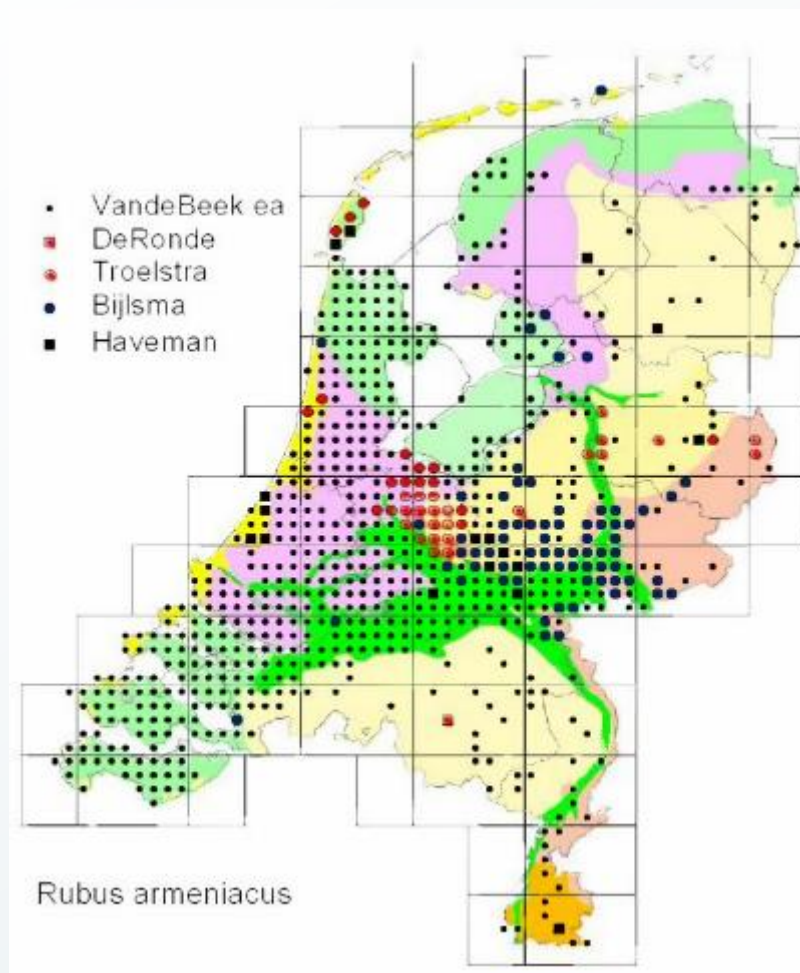


Figure 8.3. Distribution map of *Rubus armeniacus* in the Netherlands in grid cells (5 x 5 km) where other *Rubus* species (except *Rubus caesius* and/or *Rubus idaeus*) are lacking.

Number of species



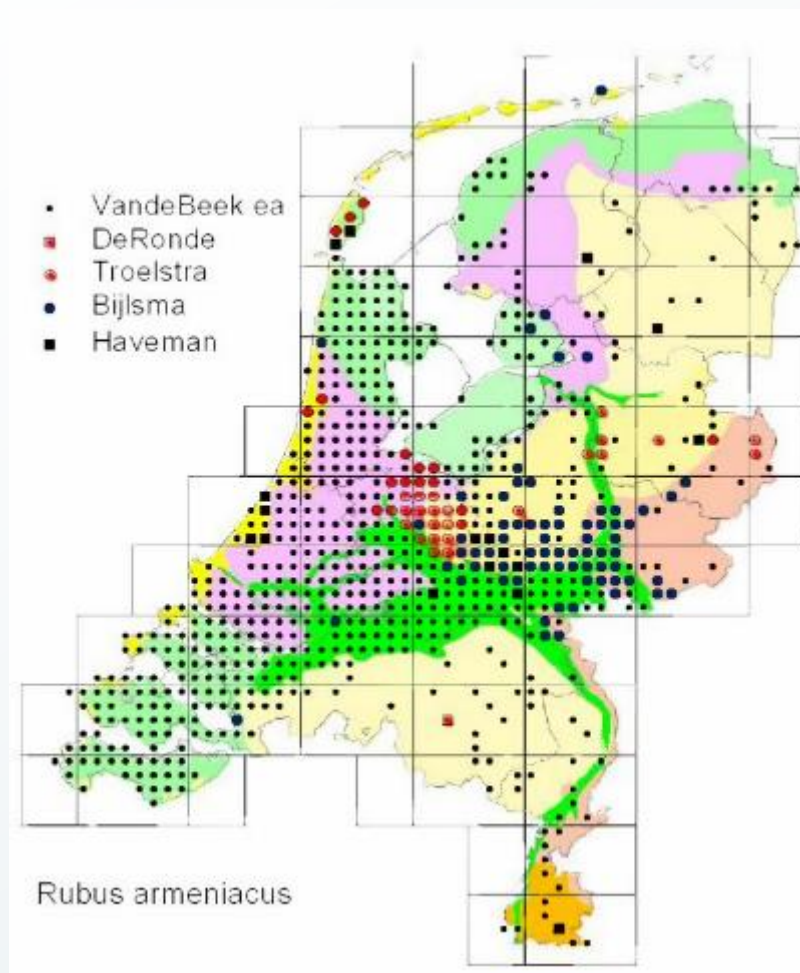
Rubus armeniacus 2011



Batologist Rubus-Konzil 2022



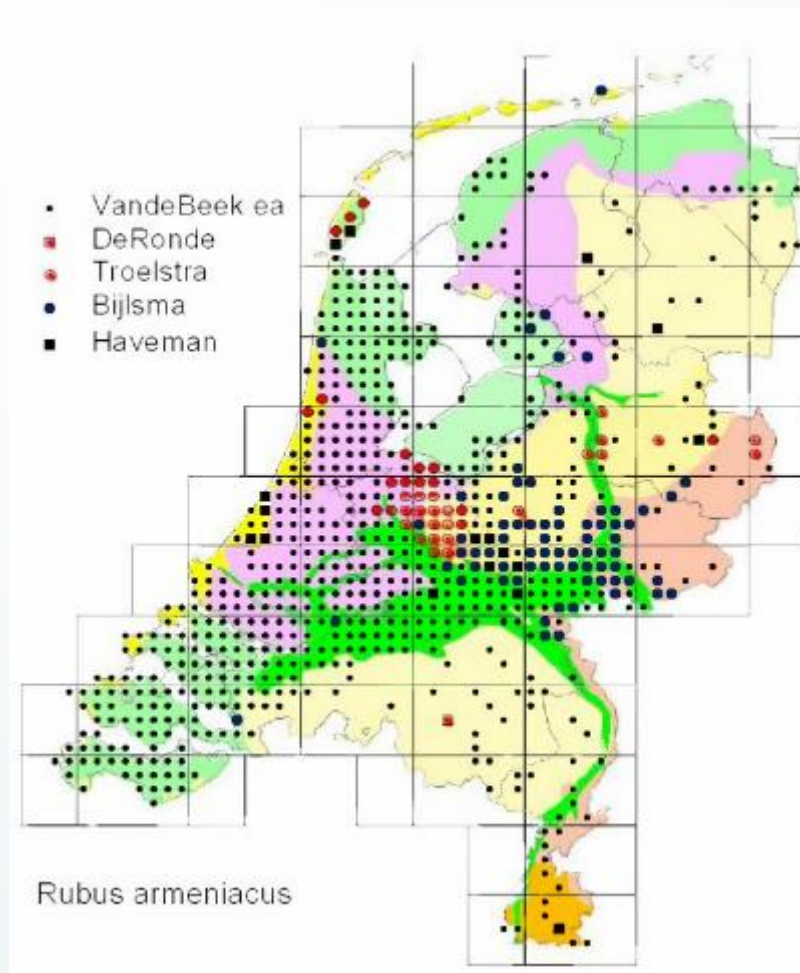
Rubus armeniacus 2011



Rubus armeniacus



Rubus armeniacus 2011

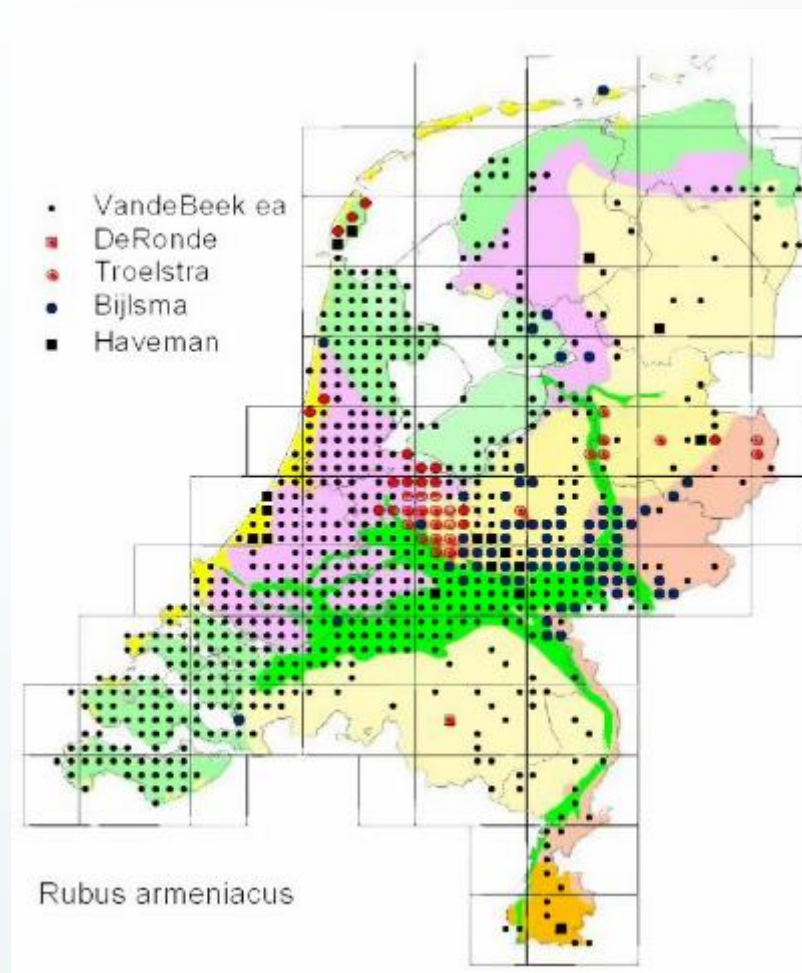


Rubus armeniacus

- 1 invasive alien
- still expanding

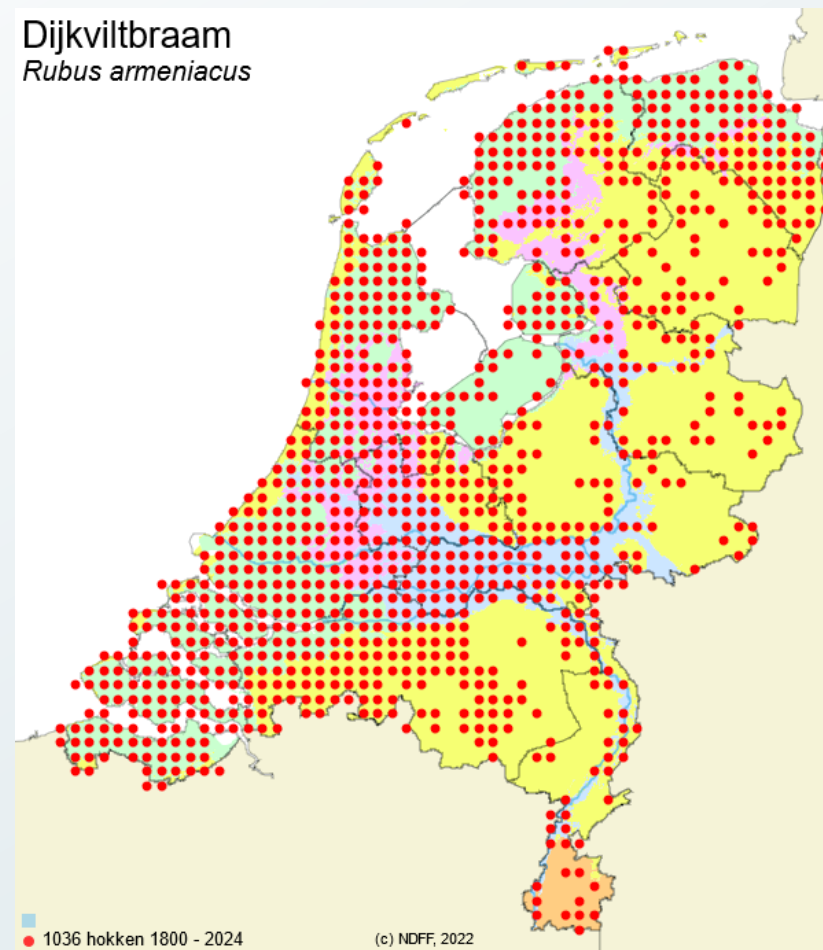


Rubus armeniacus 2011



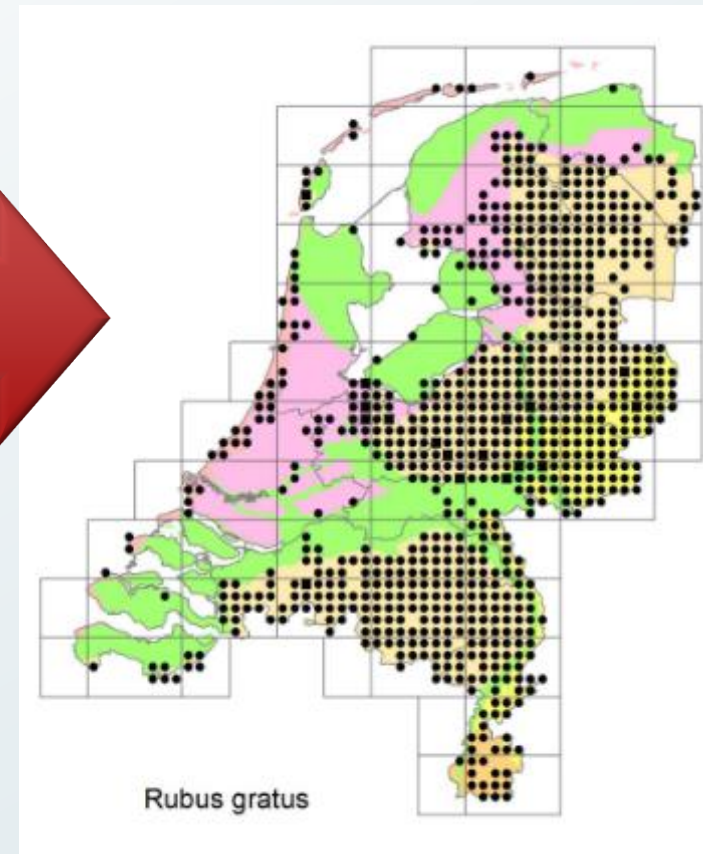
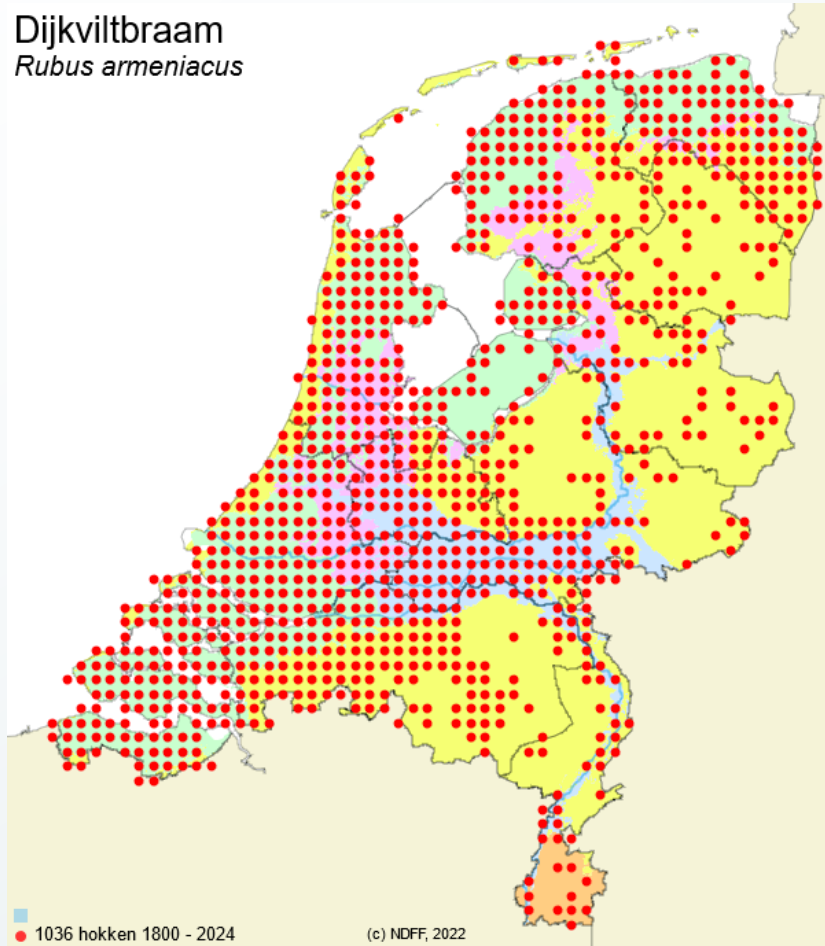
Rubus armeniacus 2022

Dijkviltbraam
Rubus armeniacus



Is *Rubus armeniacus* a threat for native *Rubus* species?

Dijkviltbraam
Rubus armeniacus





Transect Texel

- *Rubus armeniacus* /disjunct native species
- Natural habitat →
Roso rubiginosae-Rubetum affinis
- Followed the woody-species for 13 years





Roso rubiginosae-Rubetum affinis

- Coastal *Rhamno-Prunetea* scrubtype
- *Rubus vadalis*, *Rubus ceratifolius*,
Rubus guestphalicoides
- *Sambucus nigra*, *Crataegus monogyna*, *Rosa rubiginosa*,
Lonicera periclymenum, *Urtica dioica*
and *Solanum dulcamara*



AFE 4199
Rubus guestphalicoides



AFE 4200
Rubus thalassarctos



AFE 4148
Rubus vadalis



Rubus guestphalicoides





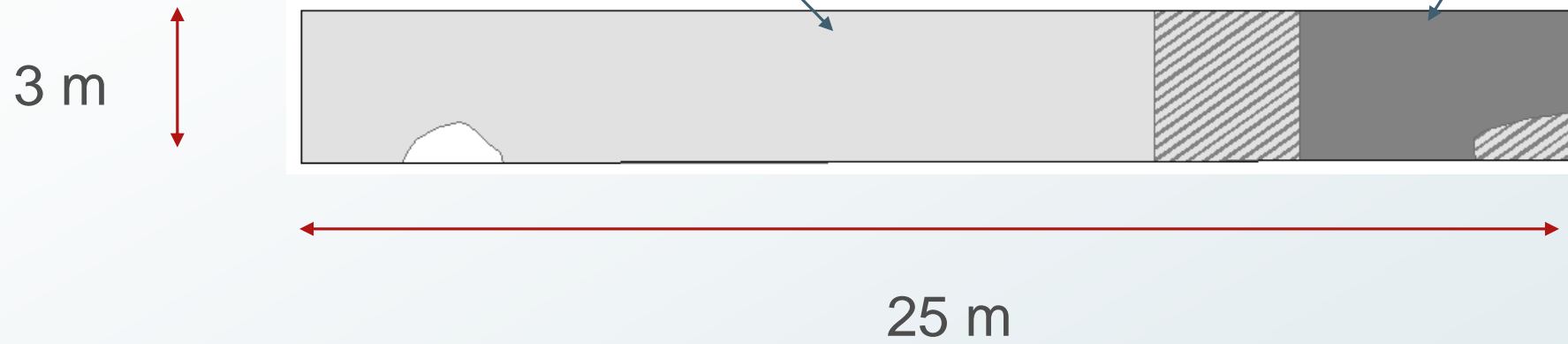
1.5 m

Rubus guestphalicoides



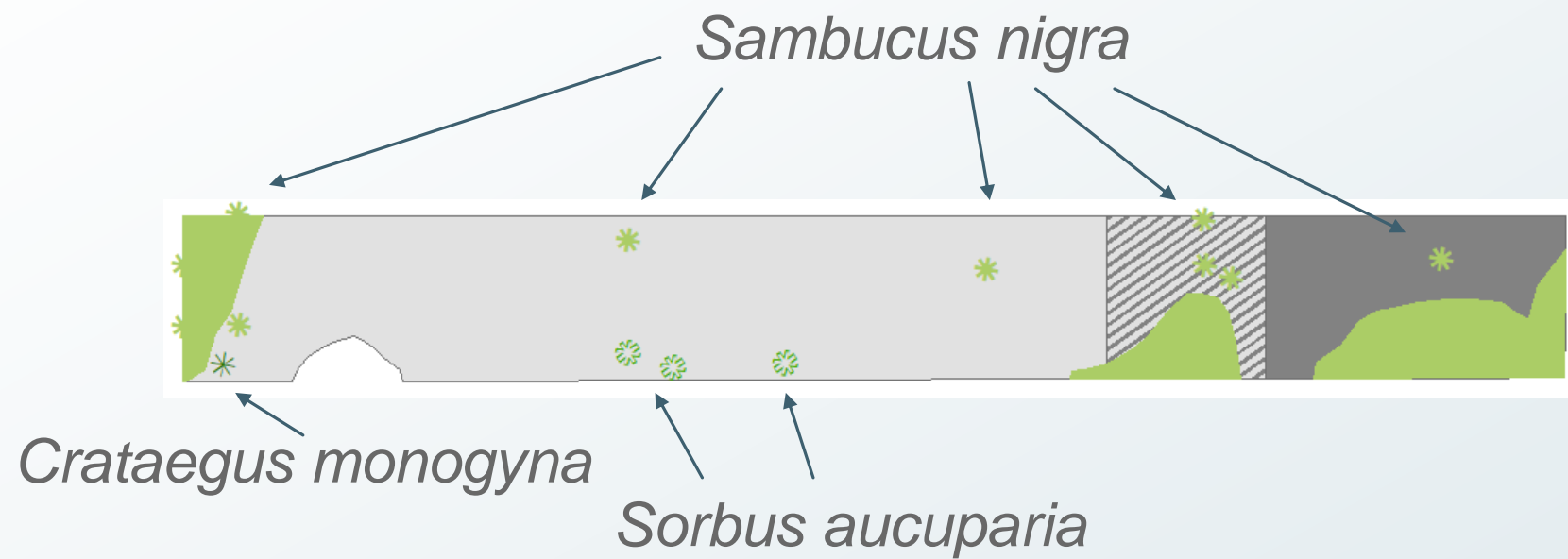
2.5 m

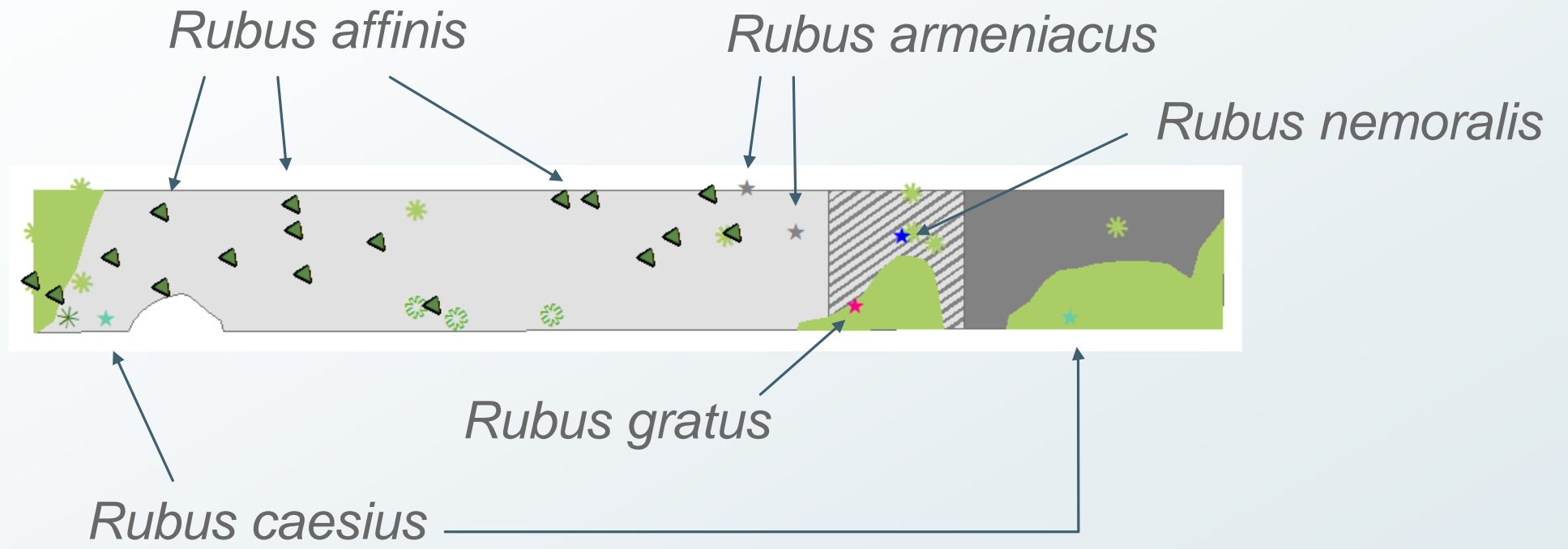
Rubus armeniacus





Sambucus nigra



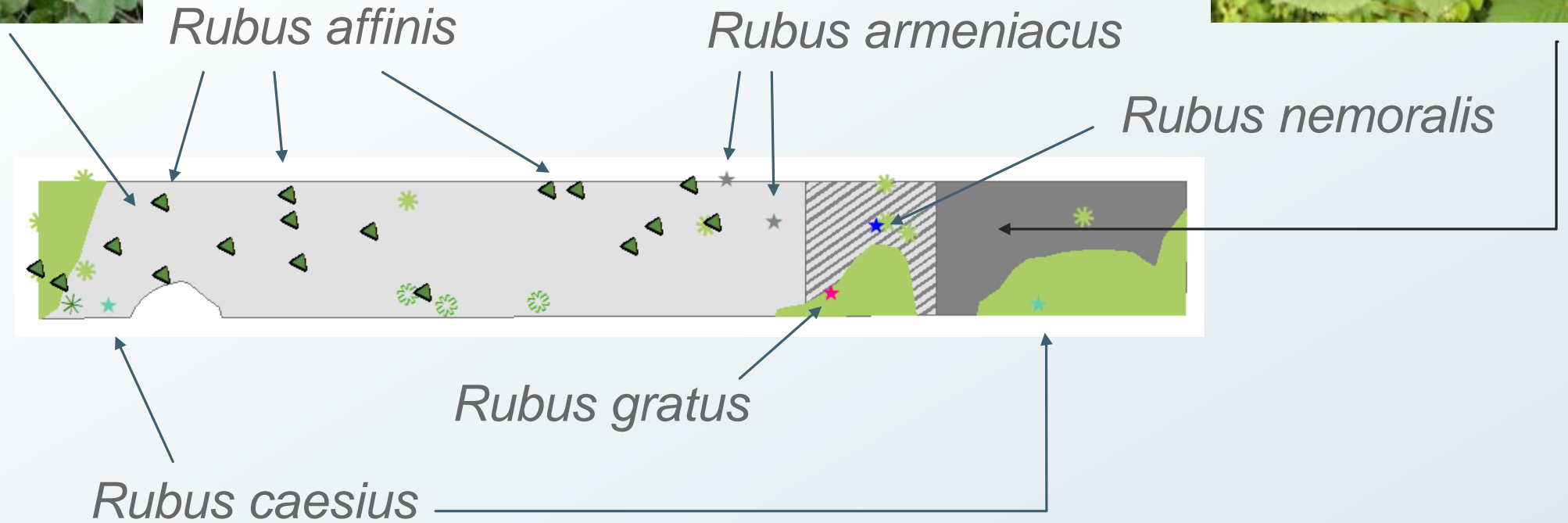




Rubus guestphalicoides



Rubus armeniacus

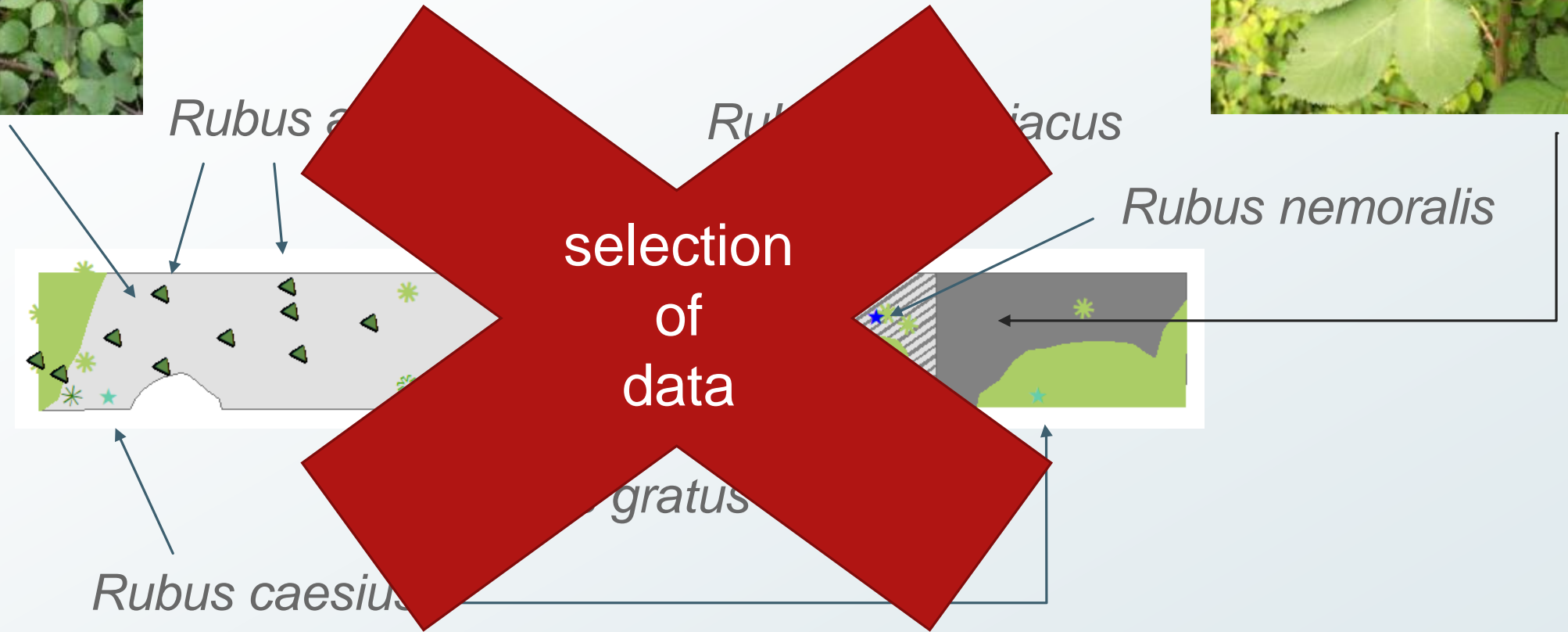




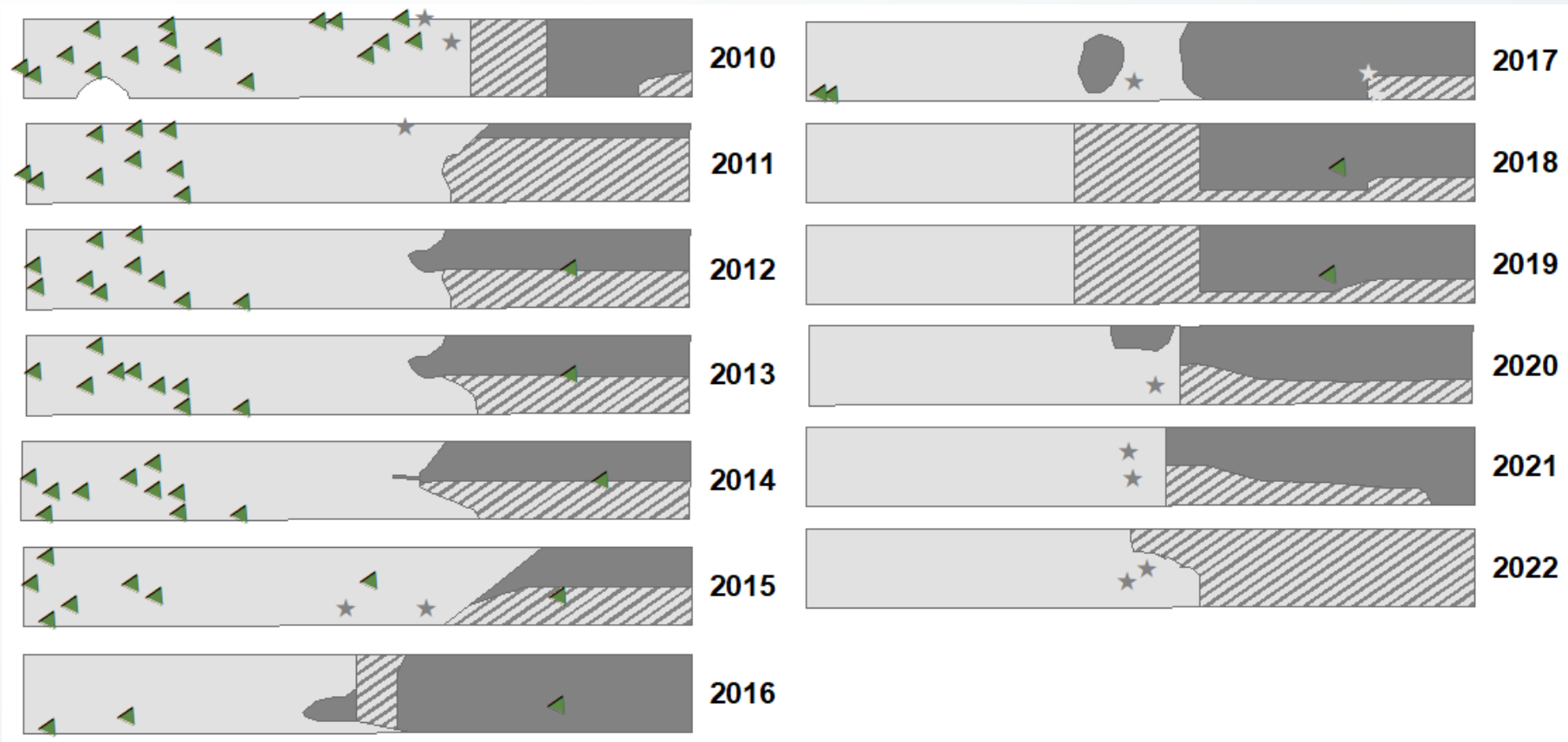
Rubus guestphalicoides



Rubus armeniacus



Decline of *Rubus affinis*

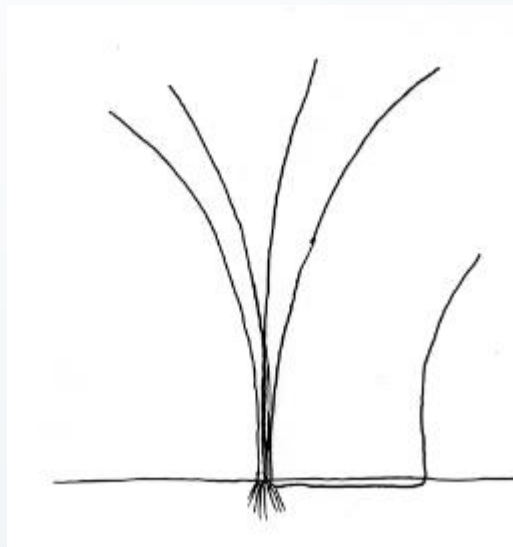


Decline of *Rubus affinis*

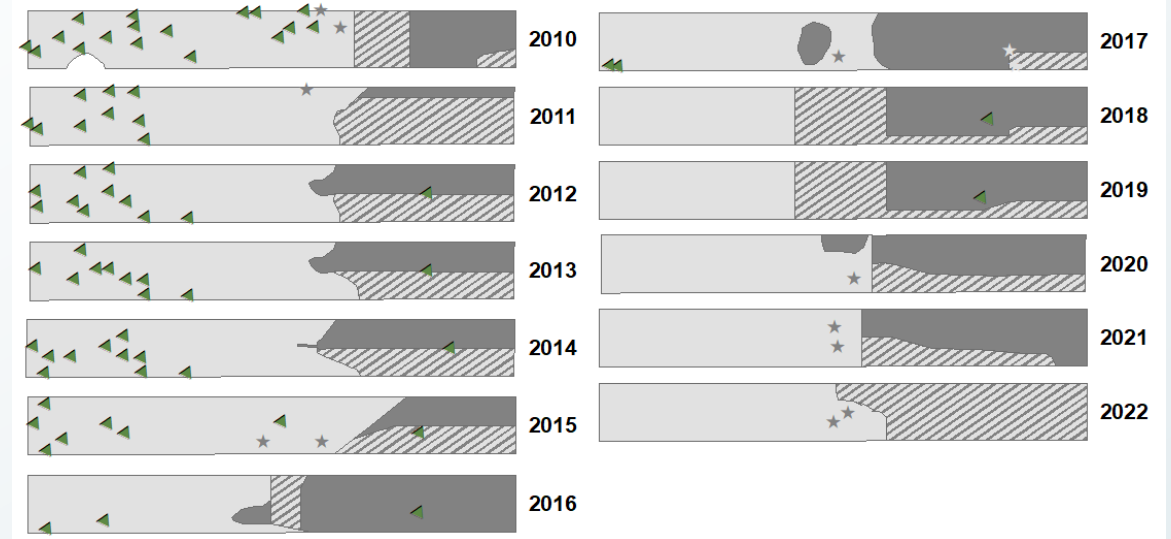
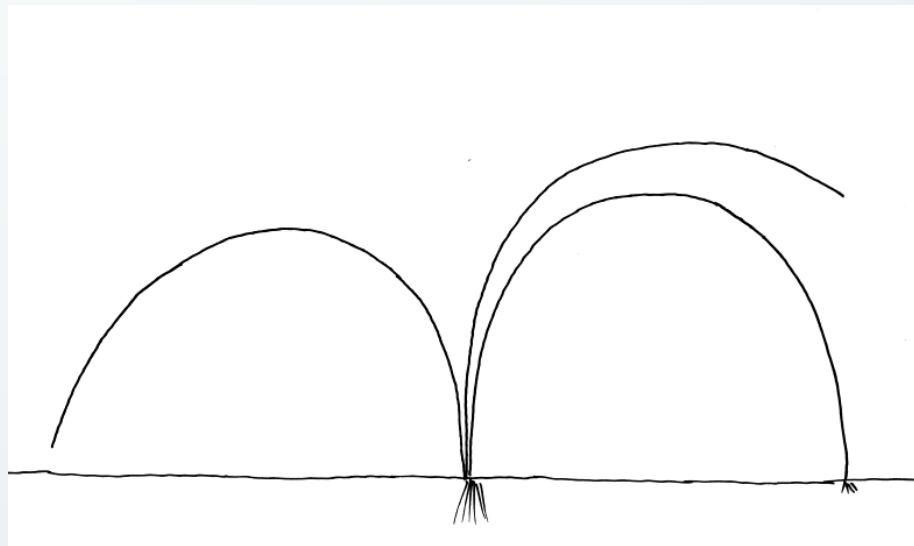


Decline of *Rubus affinis*

Rubus affinis

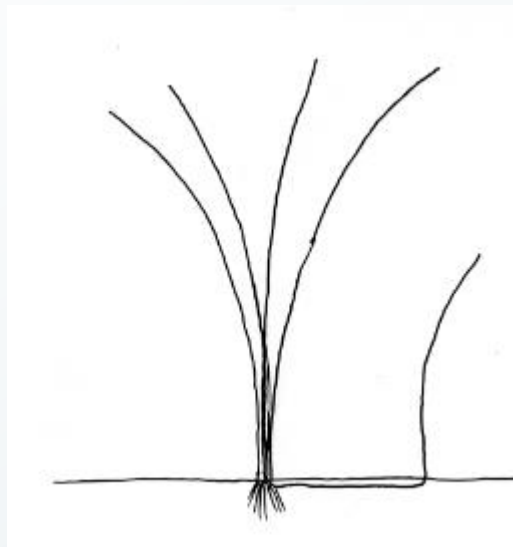


Rubus guestphalicoides
& *armeniacus*

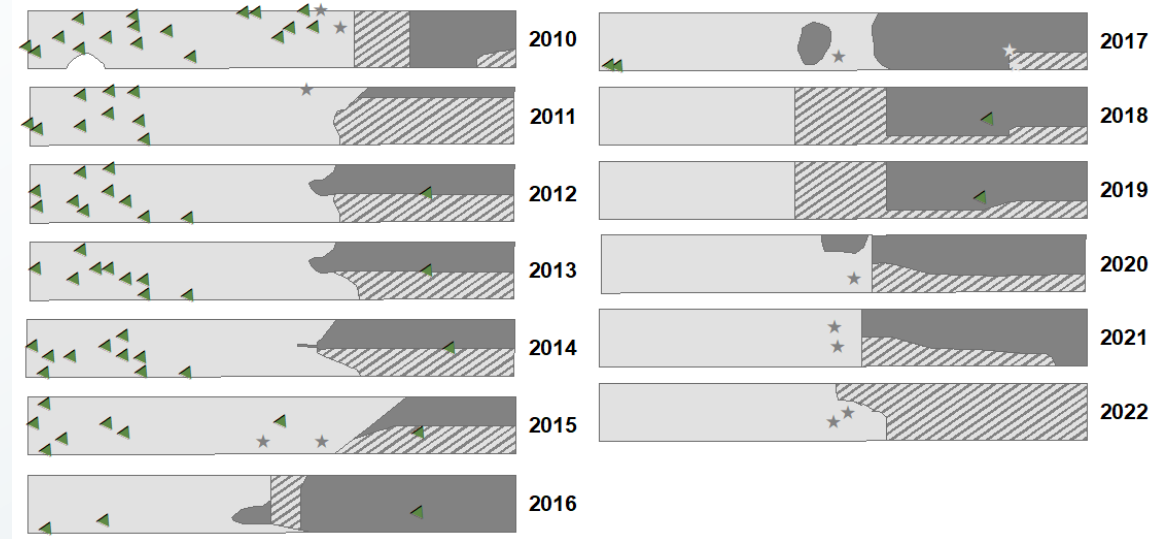
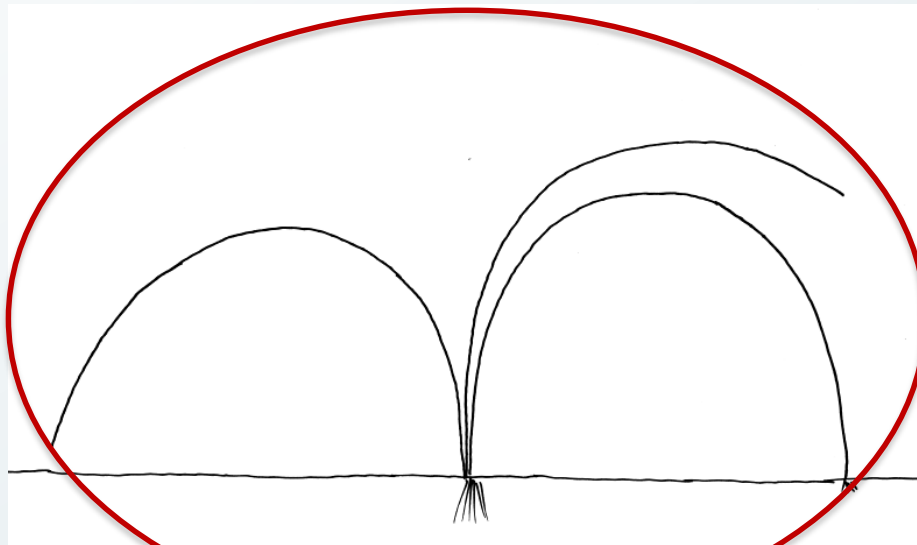


Decline of *Rubus affinis*

Rubus affinis



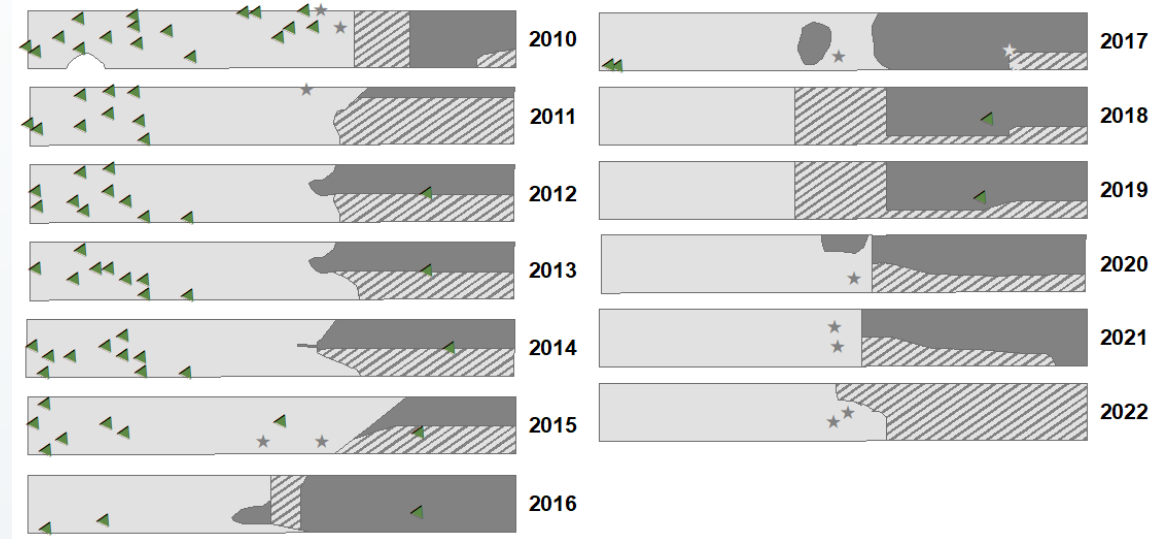
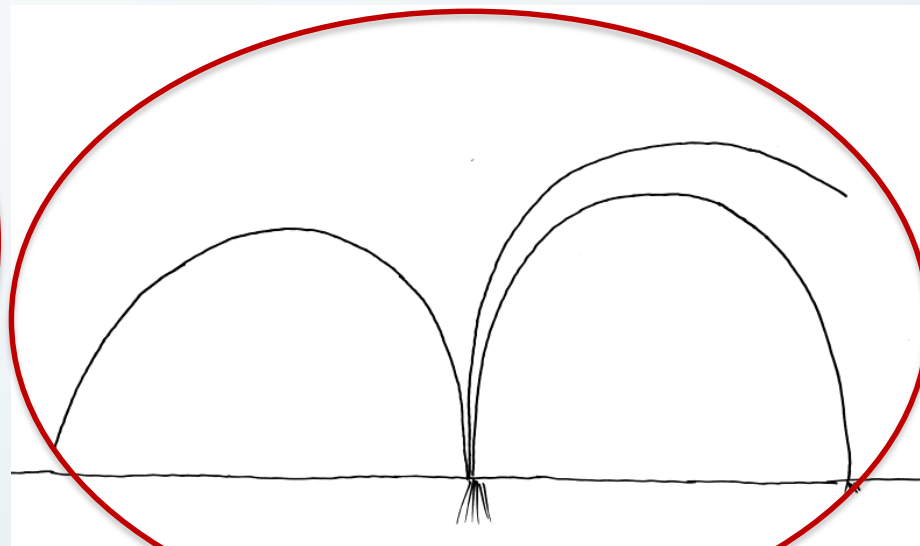
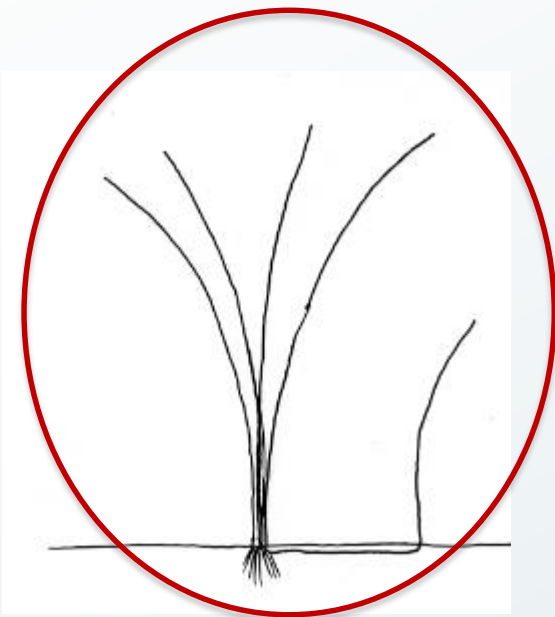
Rubus guestphalicoides
& *armeniacus*



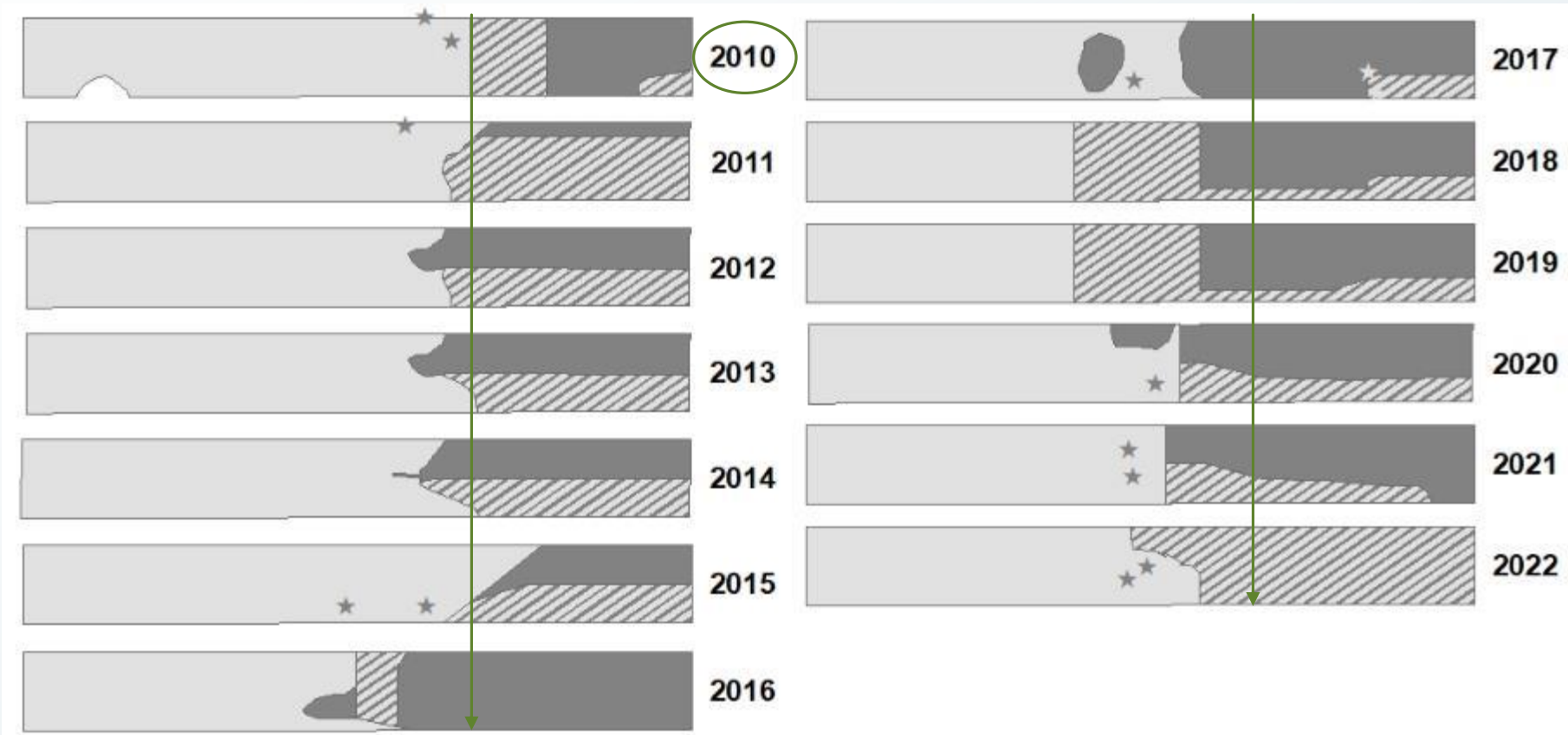
Decline of *Rubus affinis*

Rubus affinis

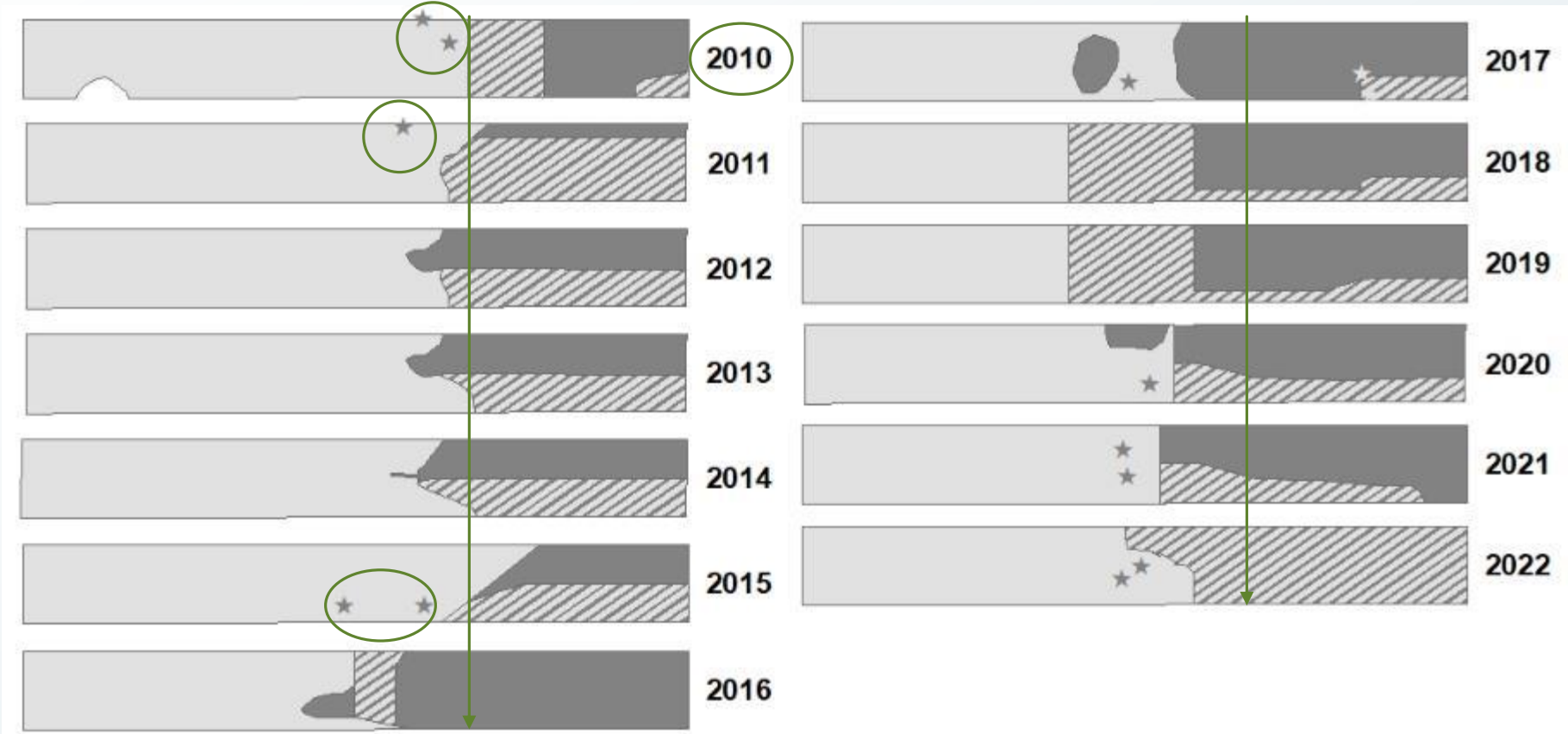
Rubus guestphalicoides
& *armeniacus*

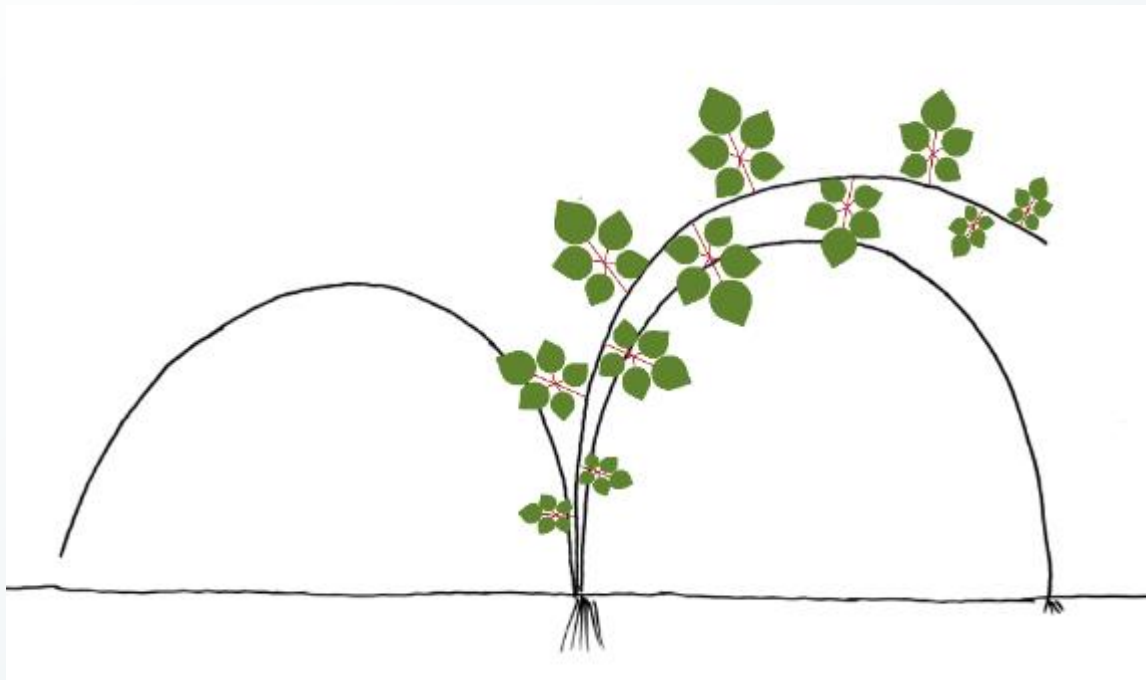


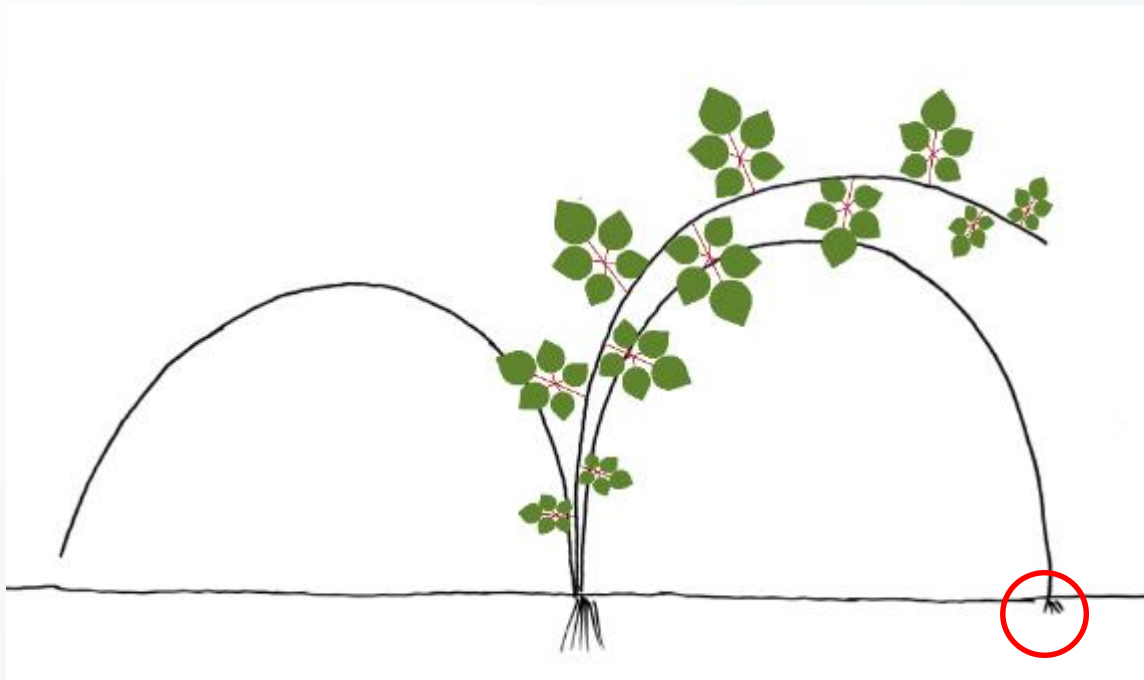
Expansion *Rubus armeniacus*



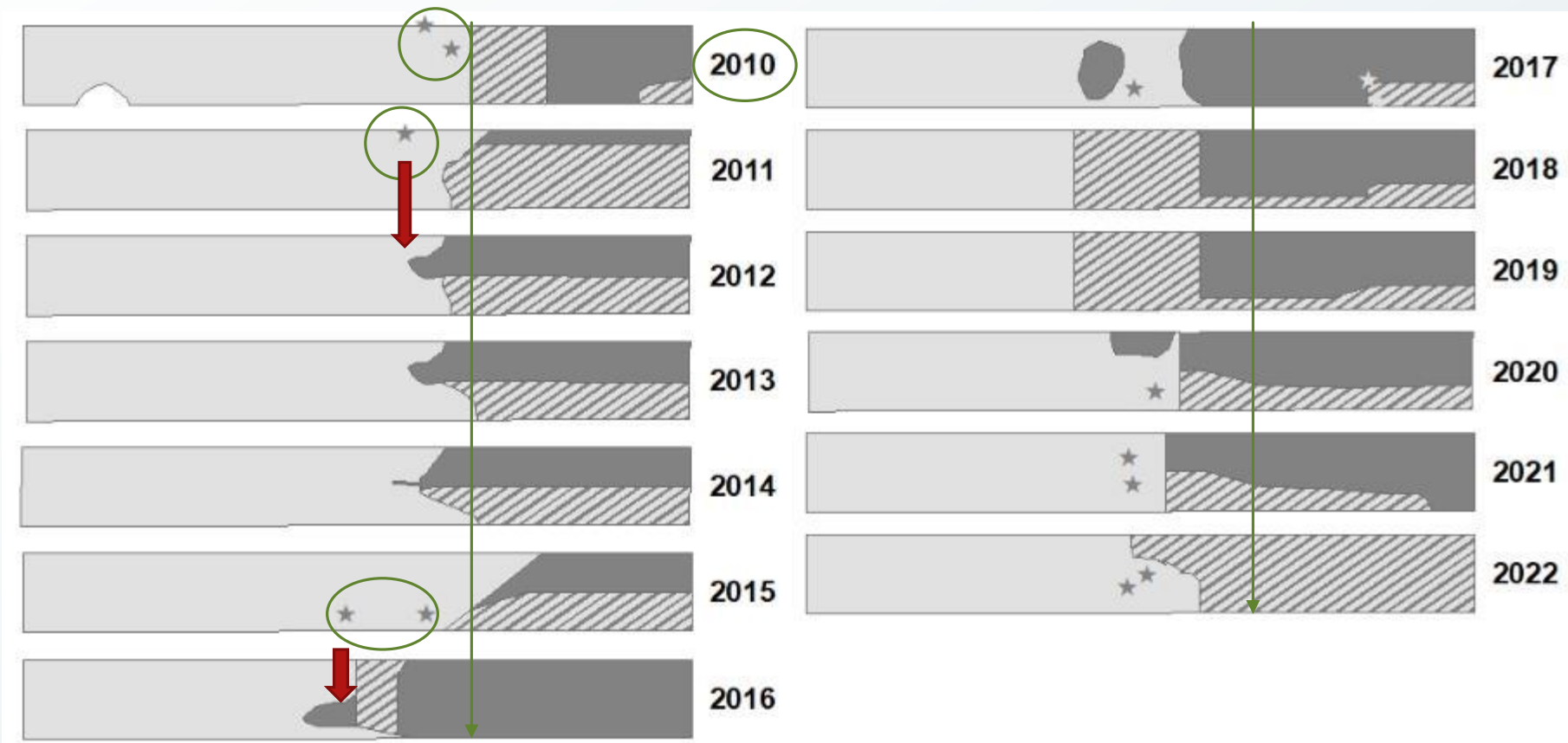
Expansion *Rubus armeniacus*



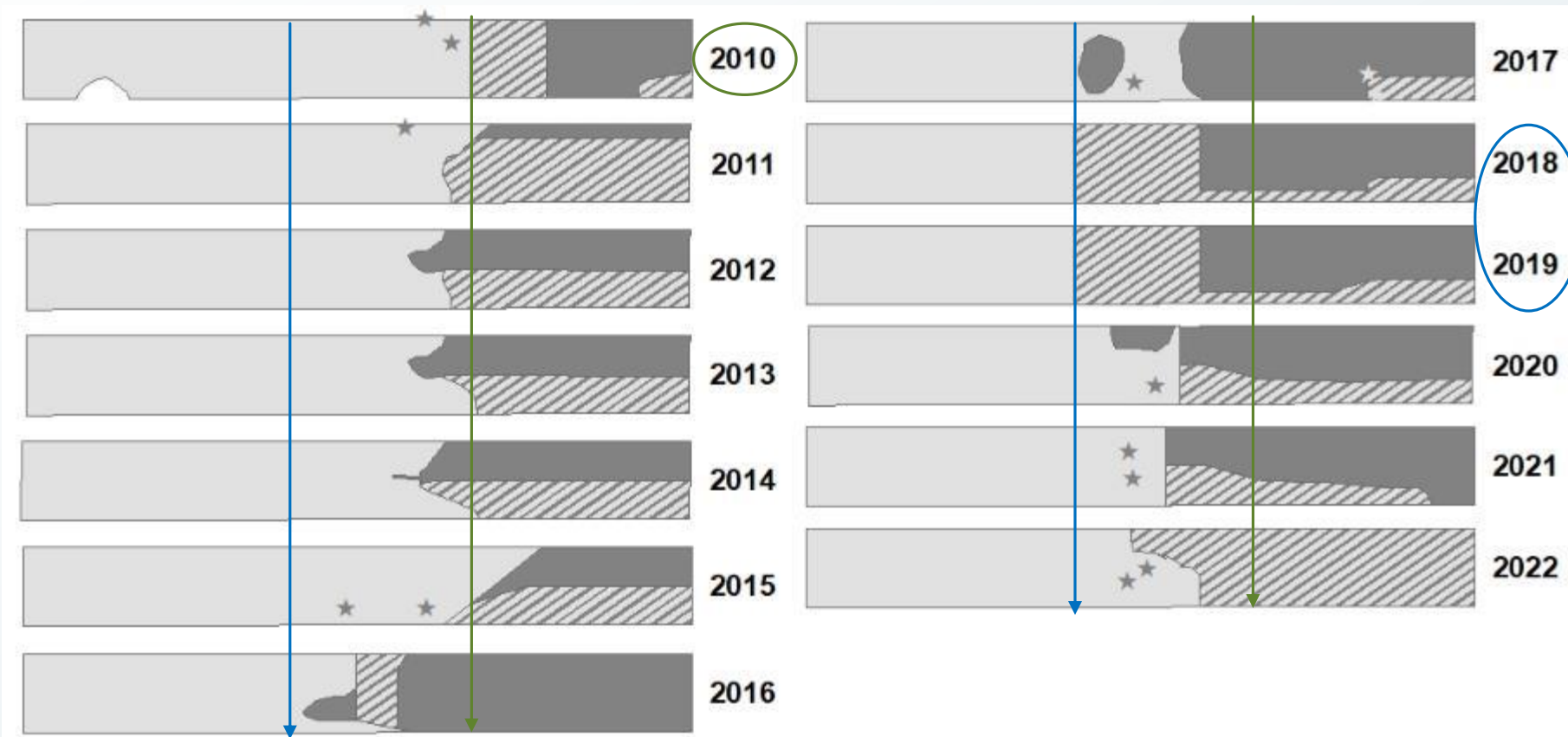




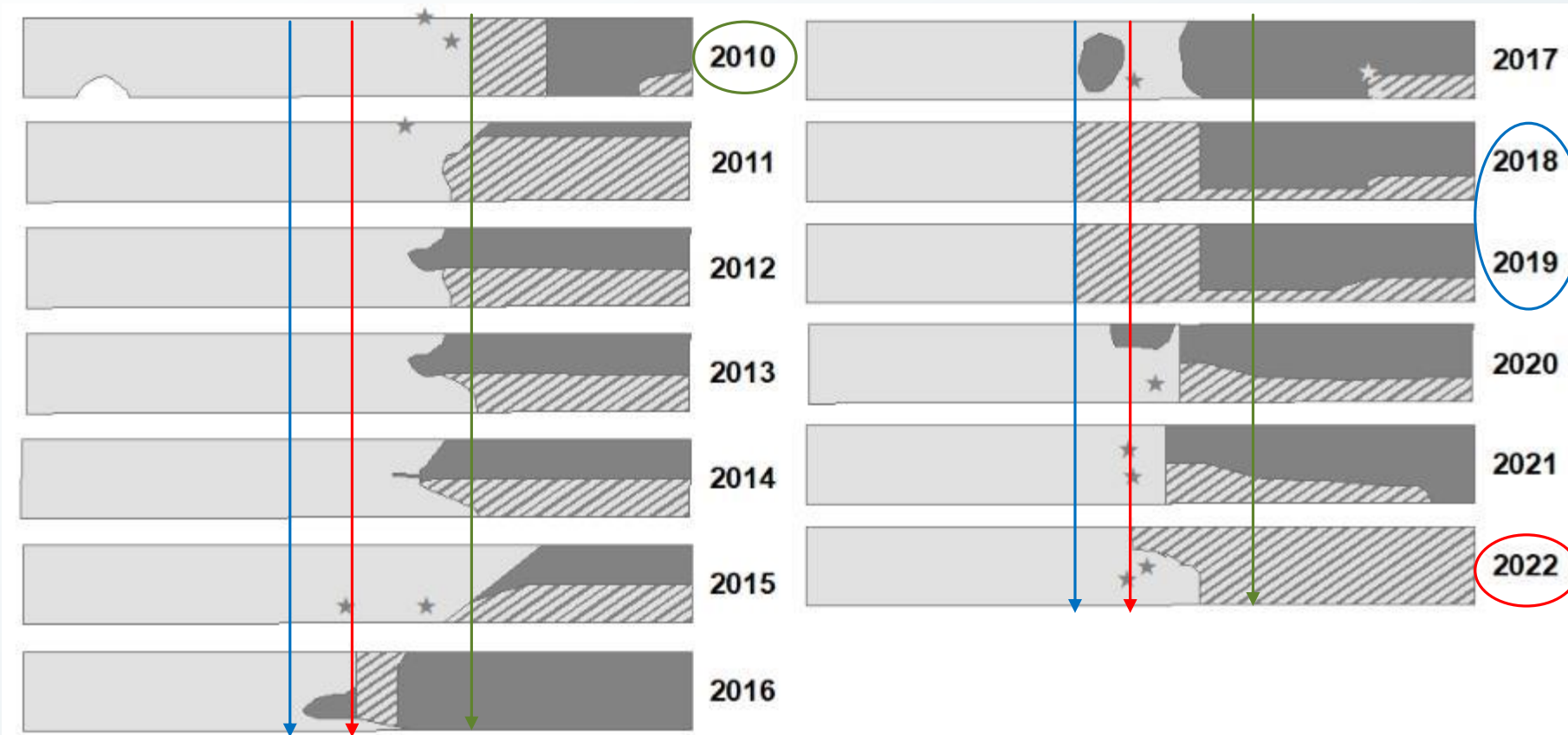
Expansion *Rubus armeniacus*



Expansion *Rubus armeniacus*



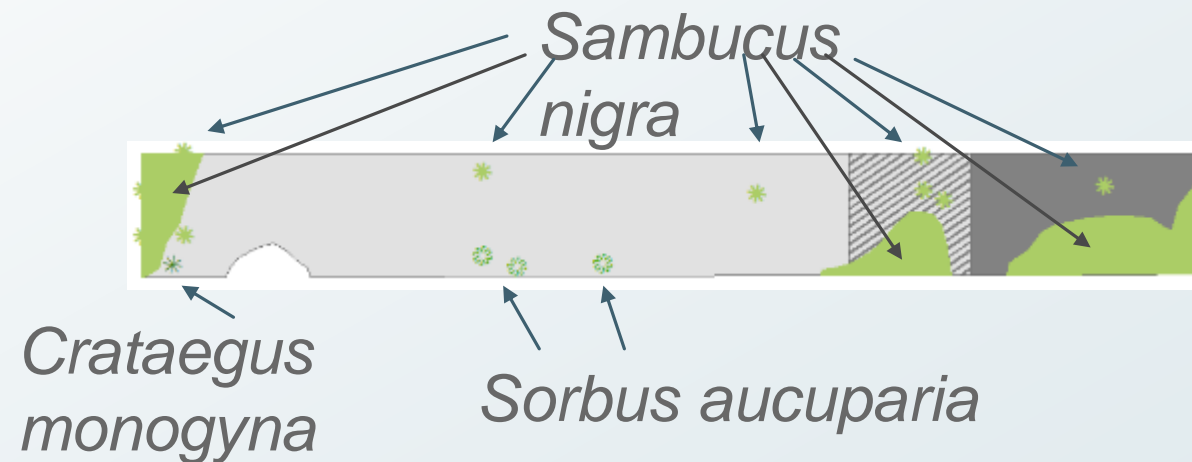
Expansion *Rubus armeniacus*



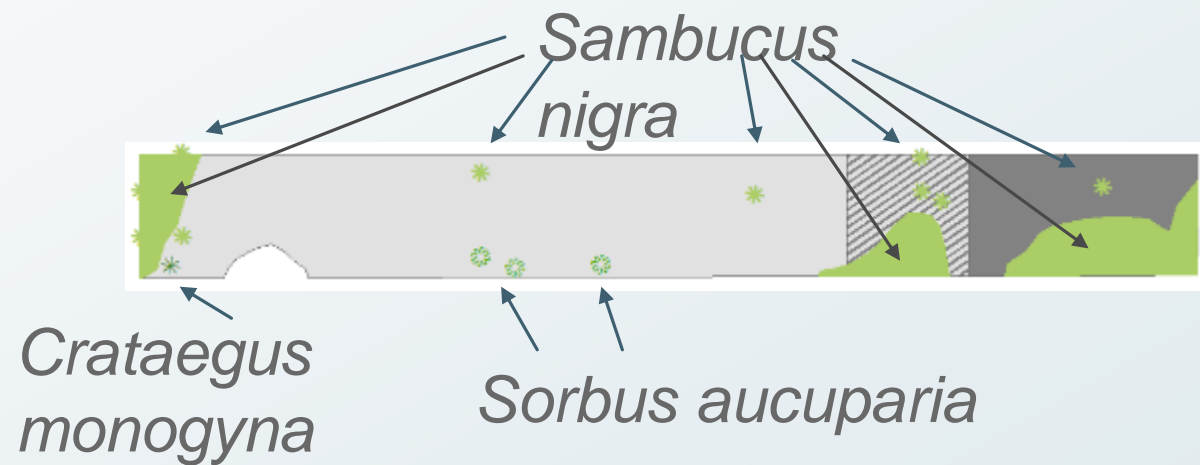
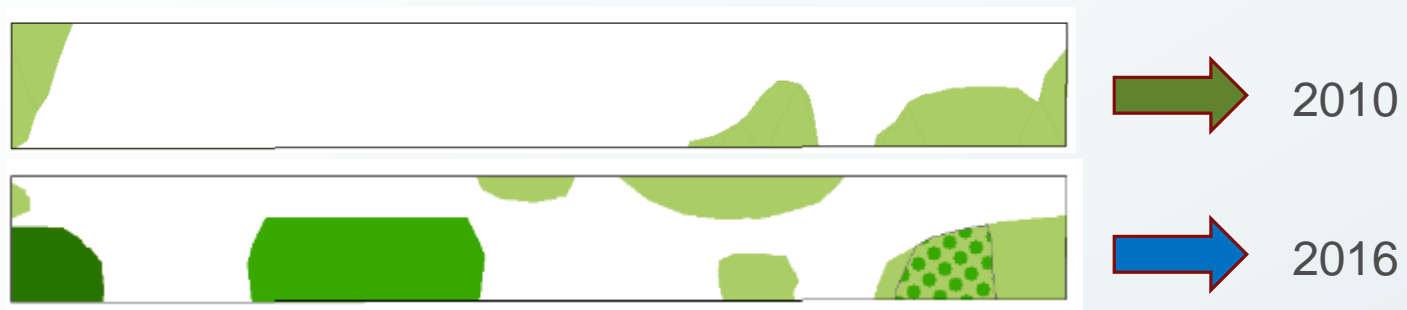
Increase of the woody species



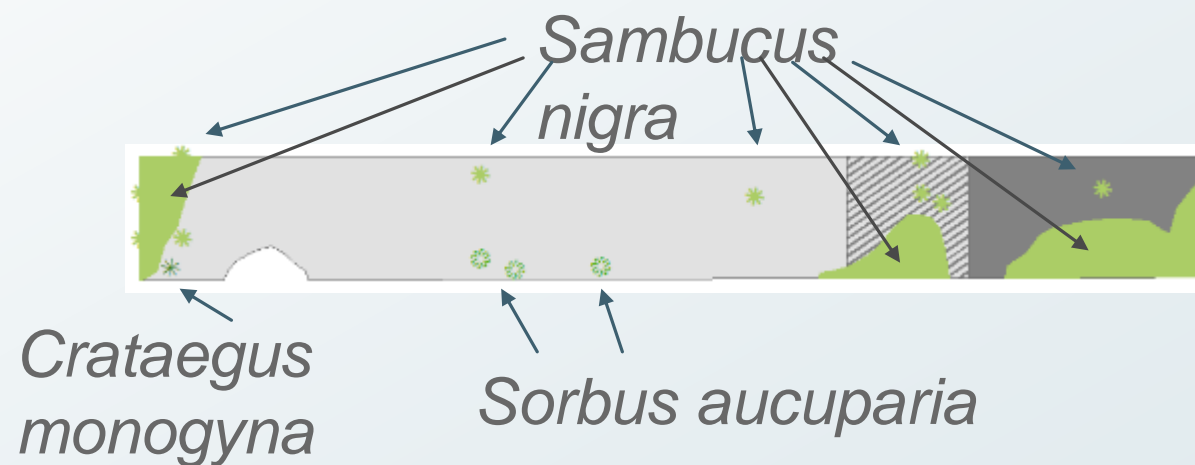
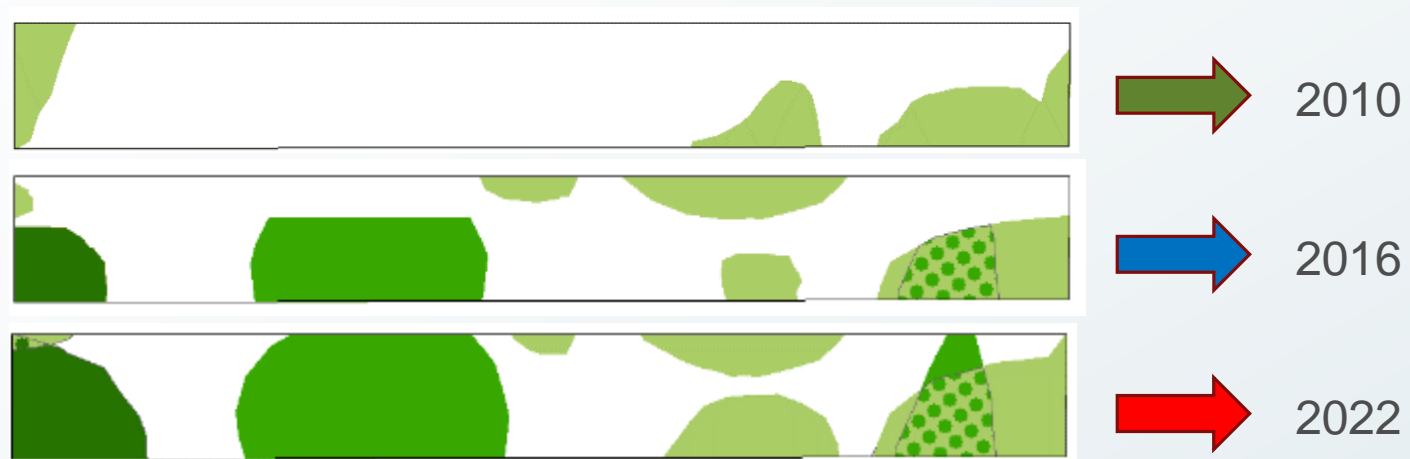
2010



Increase of the woody species



Increase of the woody species



Conclusions

- *Roso-Rubetum affinis* scrubs look stable, but there is a lot of change
- *Rubus* species act differently
 - *Rubus affinis* → pioneerspecies, upright growth form, dislikes shade
 - *Rubus armaniacus* → big species, quick expansion, dislikes shade
 - *Rubus questphalicoides* → smaller species, more tolerant to shade
- Probably *Rubus armaniacus* can form (at least locally) a threat for native *Rubus* species even in natural habitats, but its all depending on the local conditions

**Thank you very much
for your attention!**

