



Two new clones of *P. infestans* fight against a sexual recombining population in Denmark

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Year
2020

Continent
Europe

Country
All countries selected

Host
☒ All
☒ Potato

Genotypes ?
☒ All
☒ EU_41_A2 ☒ EU_43
☒ Other

Map names
☒ No ☐ Yes

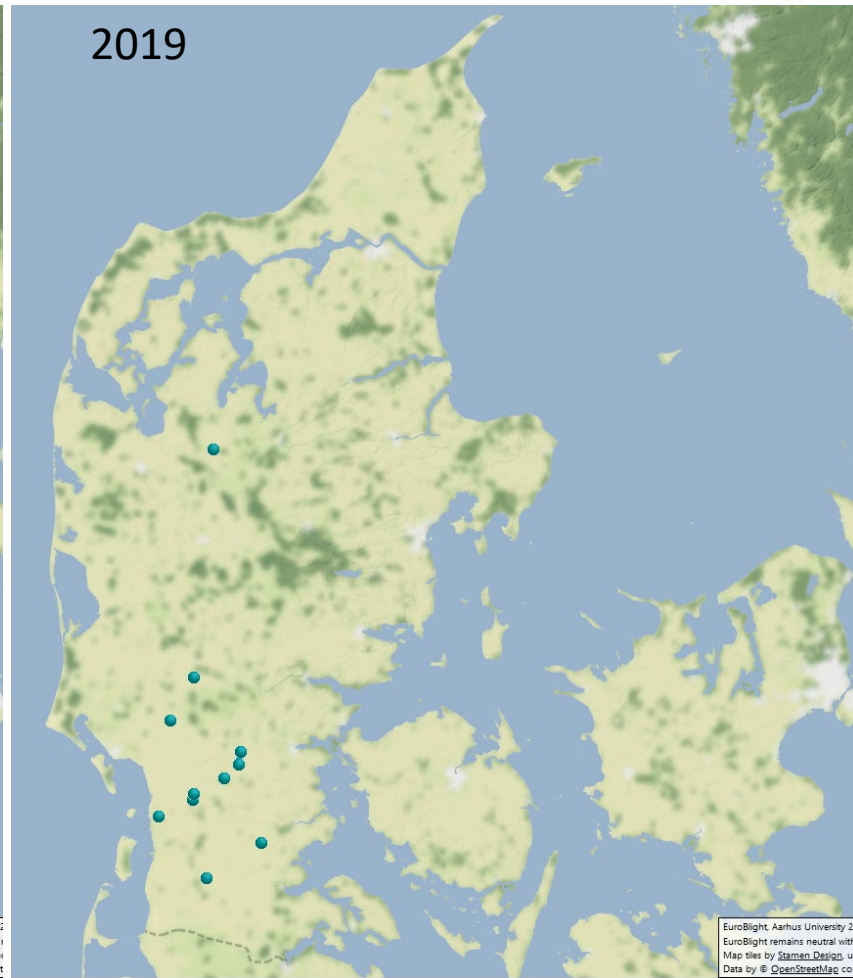
Show



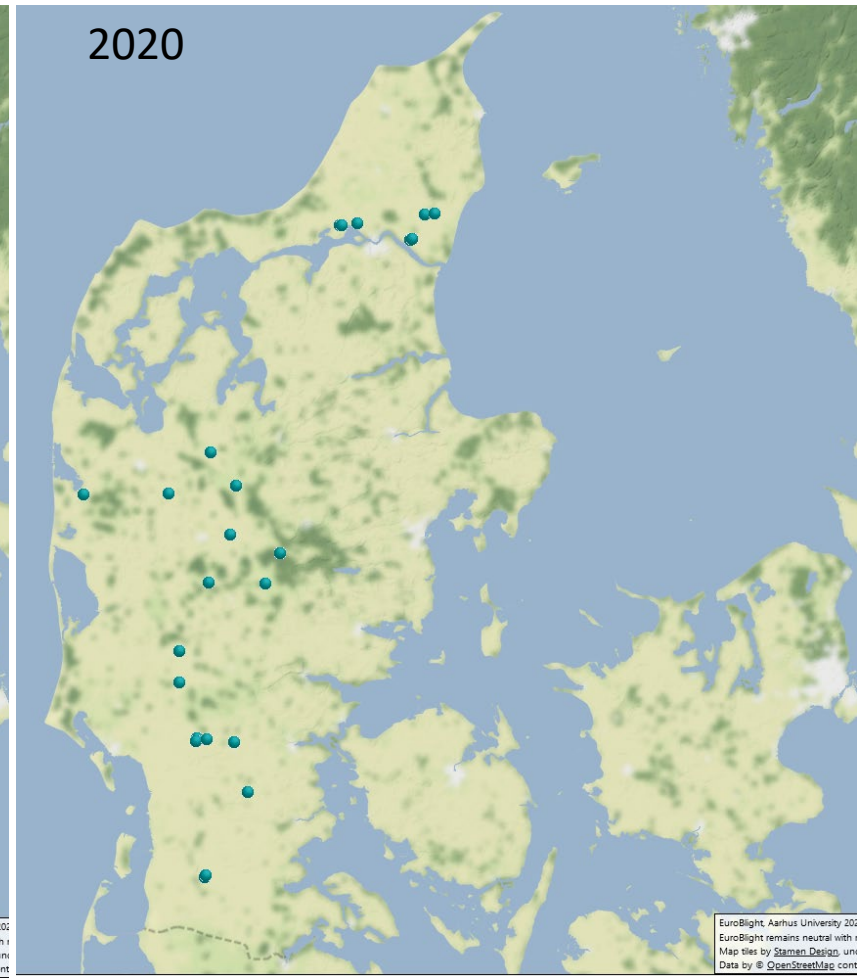
EU43 – a new genotype only found in Denmark. Named in 2020 and recognised via SSR *poppr* analysis in 2018 and 2019 (not earlier)



Mid-West Jutland

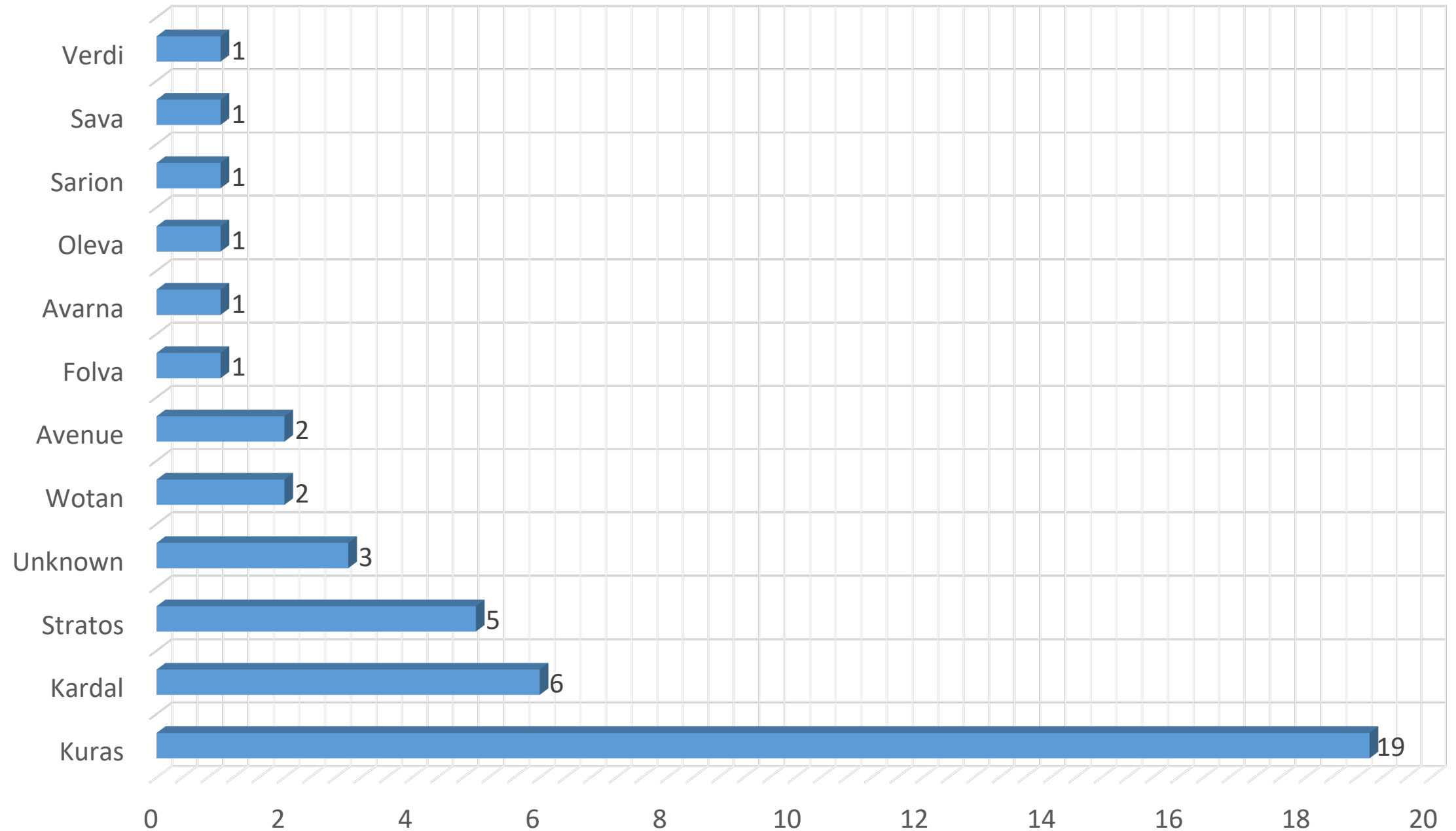


Expand south



More widespread – also in the north

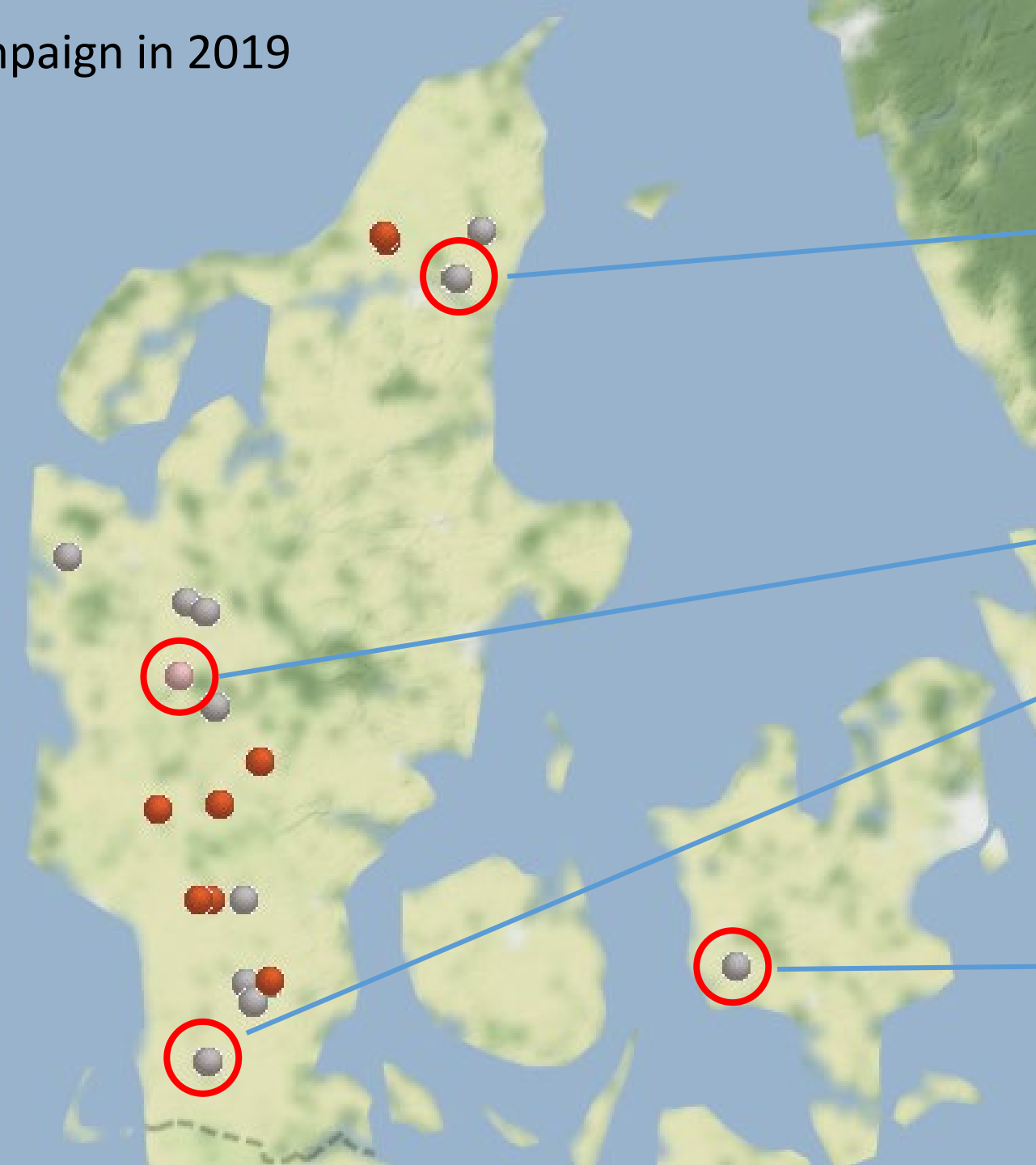
EU43 – On what varieties, 2018-2020?





Oospores in
Denmark.
Documented
since 1997

Early sampling campaign in 2019



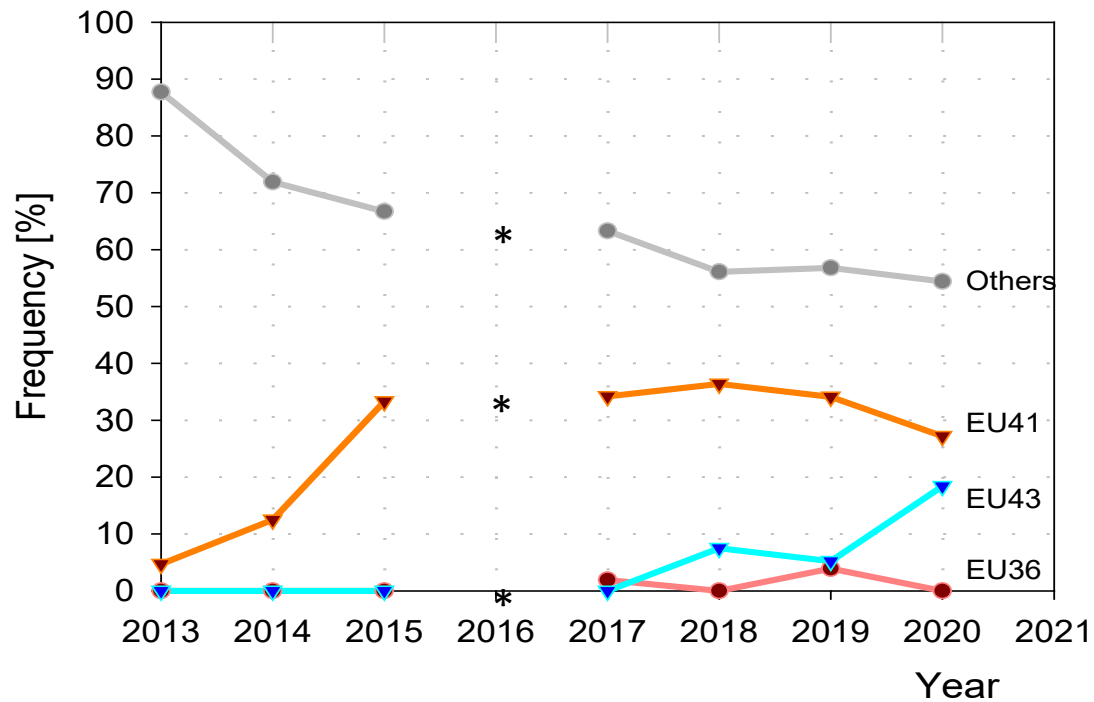
Suspected Oospore fields
Sampled 8 isolates per Field
SSR genotyped at JHI

- ● ● ● ● ● ● ●
- Other (3 different)

- ○ ○ ○ ○ ○ ○ ○ ○ ○
- EU_36_A2

- ● ● ● ● ● ● ● ●
- Other (5 different)

- ● ● ● ● ● ● ● ● ●
- ● ● ● ● ● ● ● ● ●
- ● ● ● ● ● ● ● ● ●
- Other (8 different)



* No data in 2016

Some conclusions

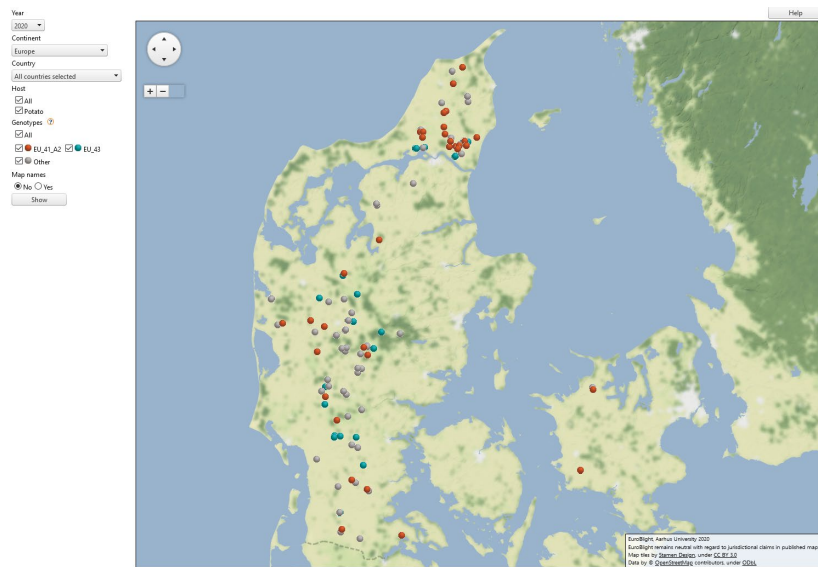
Aggressive clones survives in infected tubers,
The group of “Others” most of these probably survive as oospores.

Due to climate change, we have milder winters. More (infected) plants survive as dumps and as volunteer plants and this might explain the expansion of the clonal population.

Volunteer plants as “false crop rotations”

Increased pathogen diversity from oospore driven epidemics is a threat to a sustainable potato production in Europe

- Host specificity
- Erosion of host resistance
- Risk of fungicide resistance





Thank you for your attention