

# The Swiss pear breeding program at Agroscope

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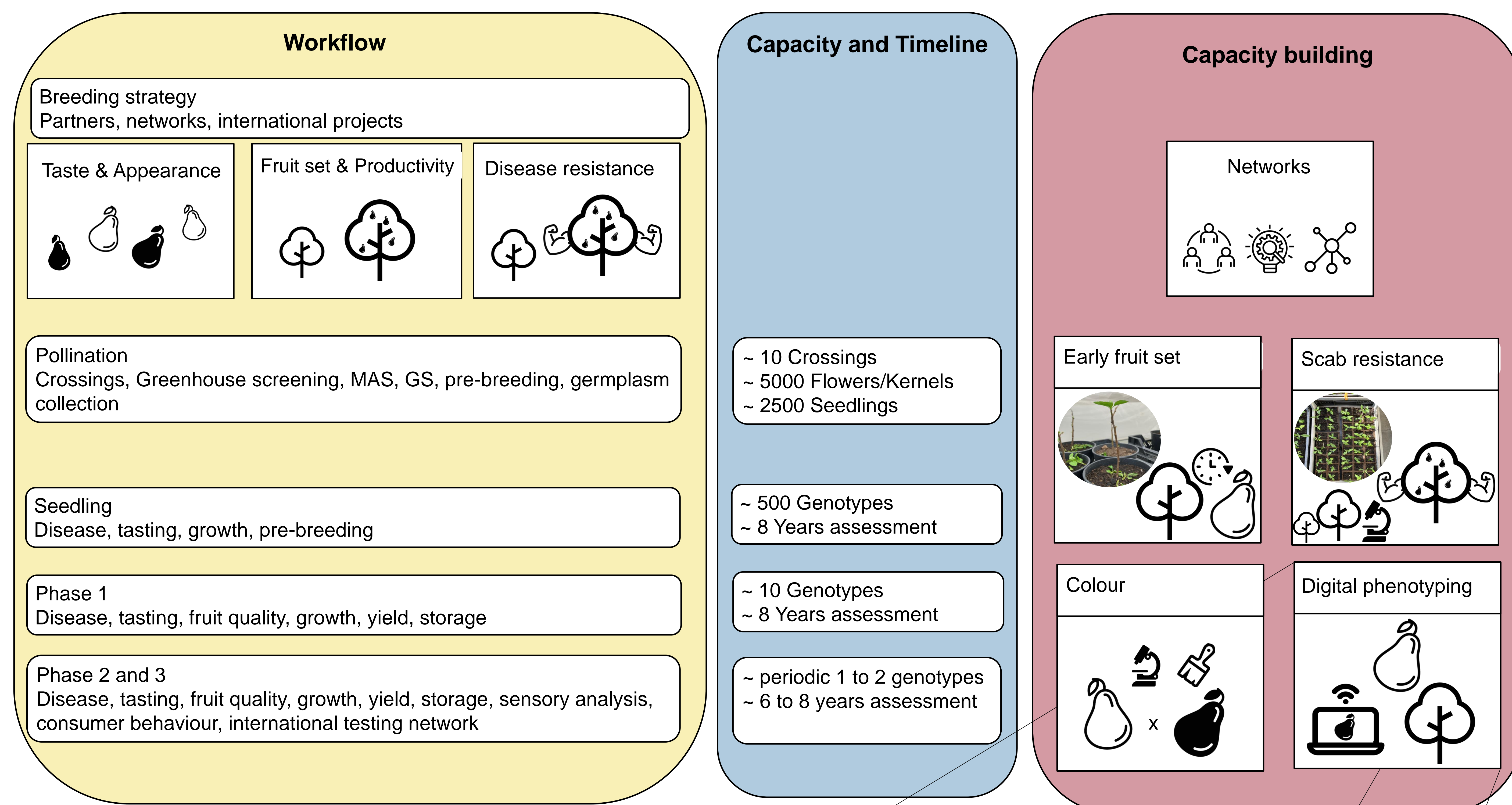
## Summary

The main objective of the Swiss pear breeding program at Agroscope is to breed new green and bi-colored cultivars with outstanding eating qualities, homogenous size, extended storage performance and shelf-life. Special attention is given to breeding lines with improved disease tolerance, which are mainly scab and fire-blight, and resilience towards climatic risks such as low and high temperatures. Preliminary work is under way using a first set of hybrids all resulting from 'CH201' crosses conducted between 2018 and 2020. This to further improve the breeding workflow at Agroscope.

## Introduction

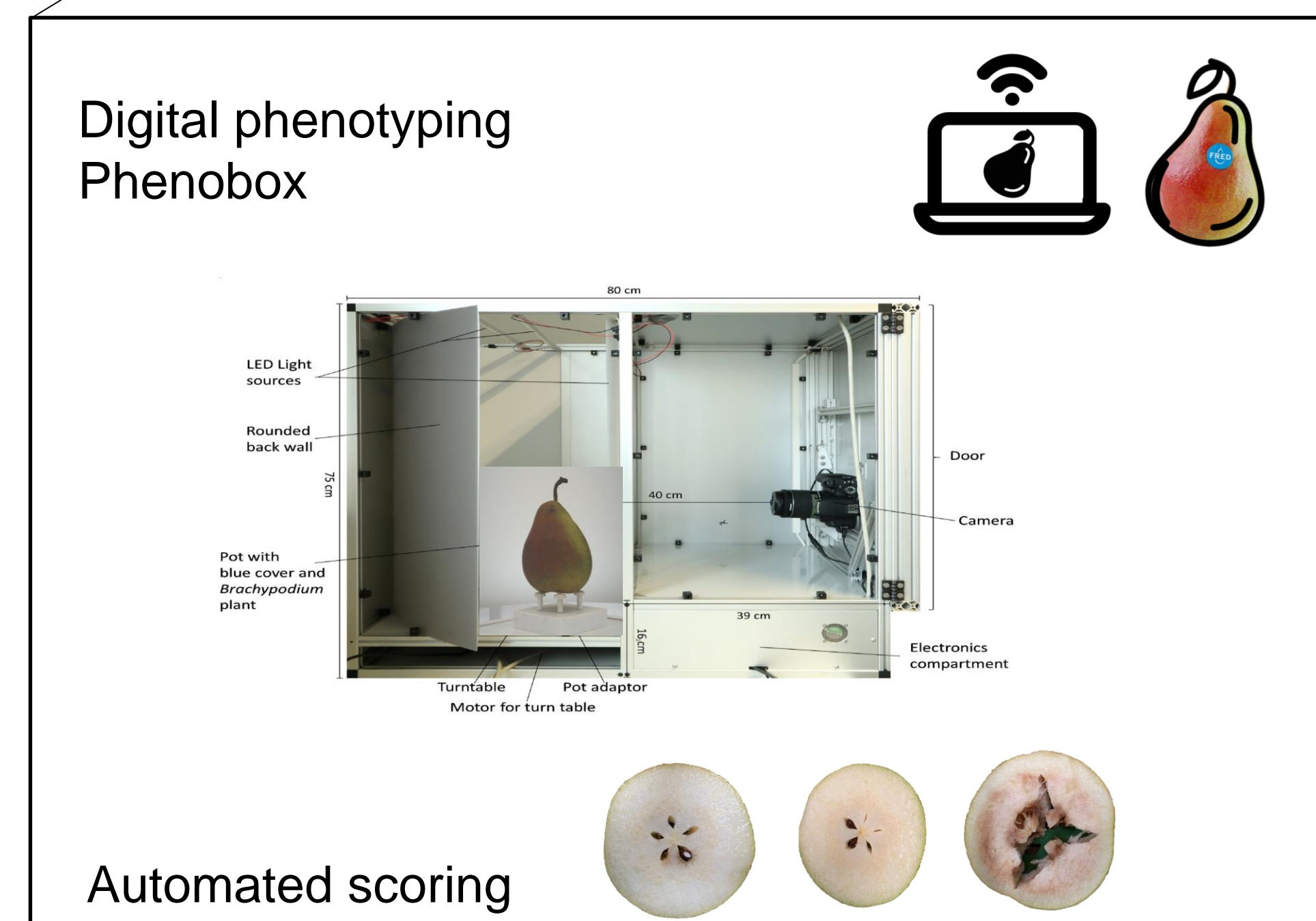
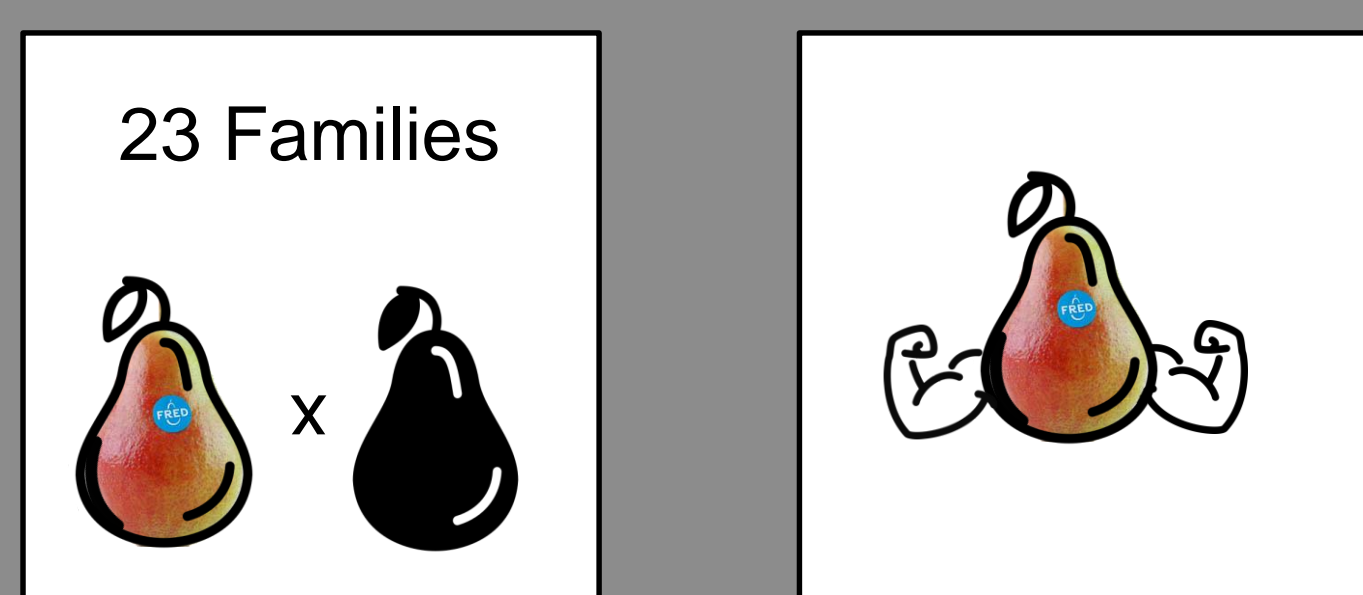
80% of the Swiss pear production is dominated by four old cultivars "Bosc" (32%), "Williams" (19%), "Conférence" (18%), and "Louise Bonne" (11%). However, the new bi-colored cultivars "Celina" and "CH201" have been on the rise since their recent launch in Switzerland, accounting for 6% and 2% respectively of the total planted surface. The "CH201" pear cultivar was selected by the Agroscope pear breeding program in Conthey, Switzerland, and released in 2018 as the trademark FRED® by VariCom. It is bi-colored, has a crisp and juicy flesh, and has been well welcomed by Swiss consumer, especially young and casual pear lovers. The Swiss pear industry needs new cultivars, just like "CH201", to increase the limited choice of cultivars with improved agronomic traits and a strong consumer acceptance.

## Pear Breeding Program at Agroscope



## Outlook

A first set of 23 families resulting from "CH201" crosses conducted between 2018-2020 as preliminary work for the new breeding program have been planted at Agroscope Conthey, Switzerland.



## References

Icons: This poster has been designed using images from [www.flaticon.com](http://www.flaticon.com).  
 Czedik-Eysenberg, A., Seitner, S., Güldener, U., Koemeda, S., Jez, J., Colombini, M. and Djamei, A. (2018), The 'PhenoBox', a flexible, automated, open-source plant phenotyping solution. *New Phytol*, 219: 808-823. <https://doi.org/10.1111/nph.15129>

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