







# Participatory organic breeding at apfel:gut e.V.

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- How do we work?
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## Förderverein zur Entwicklung und Durchführung ökologischer Obstzüchtung

Non-profit association for development and implementation of organic fruit breeding

#### Structure:

Voluntary Board (6 Persons)

Active members (9 farmers, 4 breeders, 2 advisors, 1 pomologist, 2-3 students/trainees..)

Supporting members /Sponsors (~60)





Pct.: Active Members of apfel:gut e.V., GA 2023 in Hollingstedt



2009

2011 - 2014

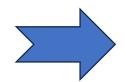
2014 <













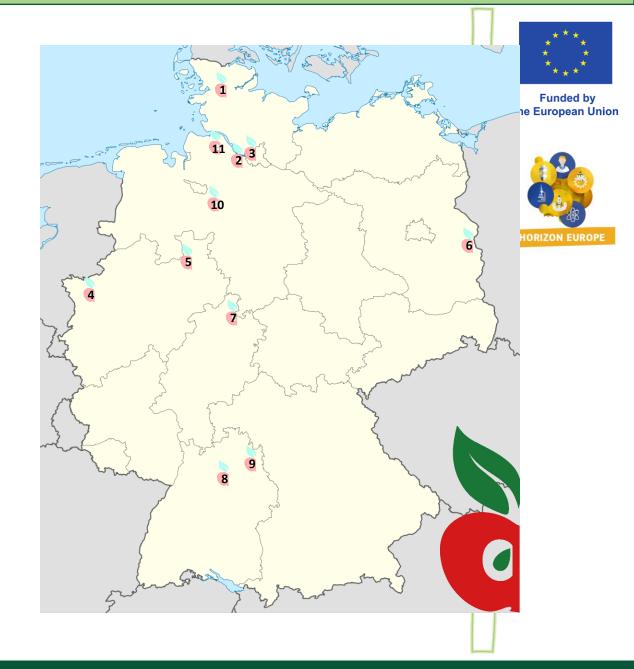




## **Breeding sites**

11 Breeding sites across Germany:

- 10 practicle farms
- 2 experimental farms (2+3, ÖON)
- Allows selection under different climatic conditions thus different biotic and abiotic challenges





## How do we work?

#### Communication:

Regular virtual meetings of active members (1/month)

2 physical meetings/Year (GA & Active Member meeting)

External Events: respective arangements

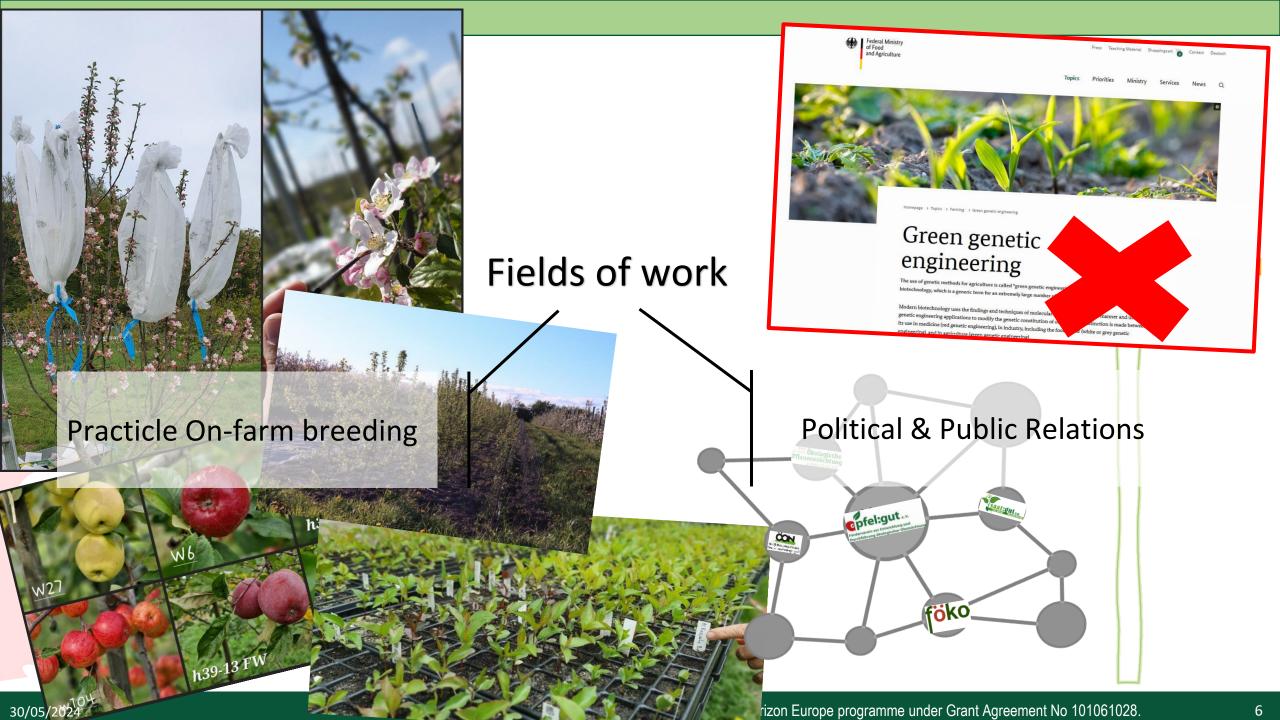
Practicle Work

2-3 "Flying" breeders for Breeding and Selection

On-Site cultivation work is done by the respective farmers



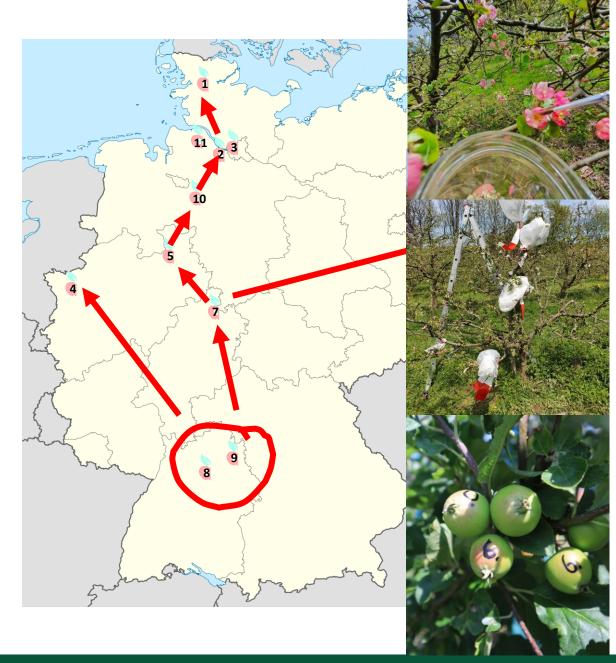






## Crossing process

- Feb: Common Planning on Combinations
- Mar: Gathering of Pollen (Freezer / Fresh collected & dried)
- > April: Start of crossings from South to north





## Breeding Proces: Overview

- Sowing of ~ 2000 seeds/year
  - ➤ Seedlings in 1<sup>st</sup> Selection-stage for 3 years
    - > 2<sup>nd</sup> Sel.-stage until fruiting or negative selection (~5-8 years)
      - > Positive selections: Propagation through partner Nursery (Mauk, Bioland/Demeter Nursery)
        - Early 3<sup>rd</sup> selection stage: grafted on standard rootstock (M9, M25) at 5-10 trees per site for further screening
          - Further pos. sel.: Initiation of variety application as an amateur variety (incl. variety naming) or forwarding for further testing stages to public testing sites under organic & IP conditions and also to voluntary practitioners





## apfel:gut varities: State of the art

- ~11.000 Seedlings in 1st stage
- ~1700 Seedlings in 2nd stage
- 3 apfel:gut varieties in ESTEBURG variety testing
- `Wanja`on 2 farms
- Wega` and B30 (Pear) on 1 farm
- 2023 KOB and LVWO for variety testing







## Further participatory approaches

- Common tastings with food retailers
- Public tastings on fairs and events
- Field days with practitioneers
- Collaboration with other breeding associations (Novafruits, Pomaculta..)
  - Knowledge exchange, visits, Material exchange...









Wanja, Goldparmäne x "X" (Landsberger Renette x Croncels),

Hollingstedt

#### **Characteristics:**

Yellow, green, a little orange towards the sun and rough, not Sooty Blotch, short pendulum, fruit drop before harvest without lightning, not very susceptible to chancre, moderately susceptible to scab.

#### **Fruit quality:**

Good aroma, sweet (12-14 Brix) and tart, juicy.

old variety optics, registered as Amateurvariety, Marketed for private gardens, variety testing, ESTEBURG, Gülzow, several hundred trees in partner orchards





Wega [Bi4-12-2] (Allurel x Seestermüher Zitronenapfel) Hollingstedt





#### Eigenschaften

 Very high-yielding, little susceptible to scab, susceptible to mildew in the south, very little susceptible to canker, robust flowering against frost

## Fruit quality:

very good taste, very tart-sweet, juicy, rough,
Testing in several apfel:gut orchards and partners
For direct selling



