

Organic Seed, **Present and Future Developments**

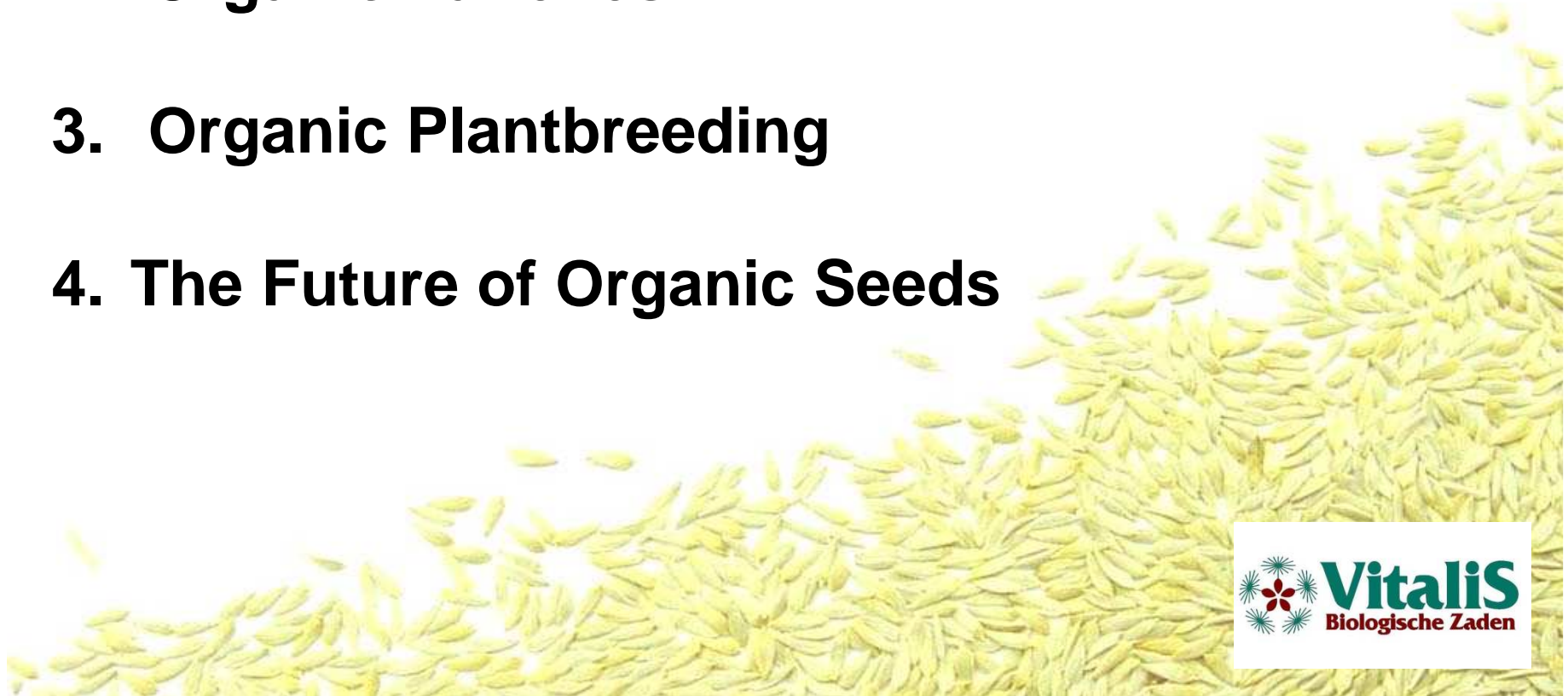
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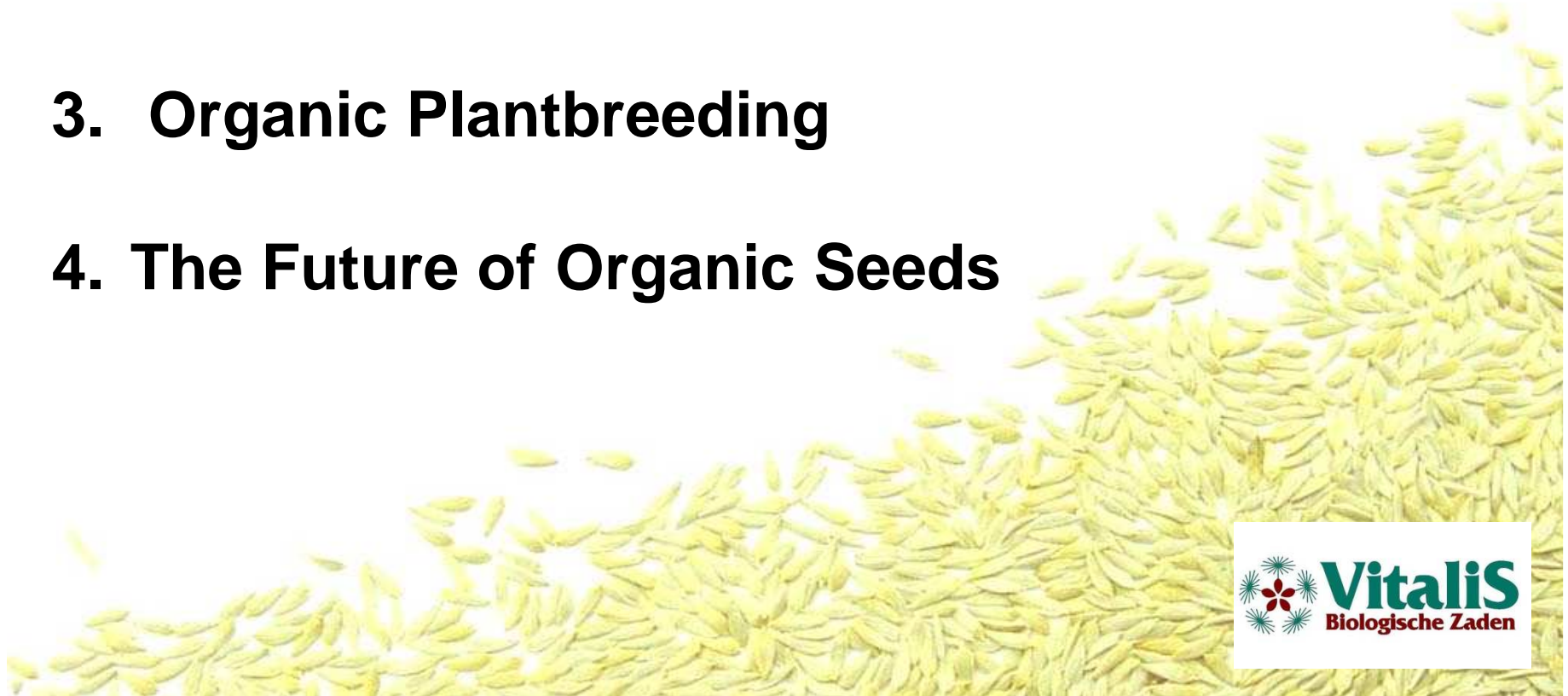


Content:

- 1. A short introduction of Vitalis**
- 2. Organic Varieties**
- 3. Organic Plantbreeding**
- 4. The Future of Organic Seeds**



1. **A short introduction of Vitalis**
2. **Organic Varieties**
3. **Organic Plantbreeding**
4. **The Future of Organic Seeds**





Vitalis Organic Seed: Established in 1995



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Mission:

To improve the organic vegetable production by providing the growers with appropriate varieties.

Activities:

Selection, production and sales of organic Vegetable- and Herb-seeds for the professional Organic grower.



Vitalis Organic Seed:

Main Sales Areas:

Europe:

Netherlands

Germany

France

England

Italy

Spain

Scandinavia.

Main products:

Lettuce

Tomato

Cucumber

Sweet Pepper

Squash/Pumpkin

Endive/Scarole

Leek

Carrot





Openfield Seedproduction (Spinache F1)



1. A short history about Vitalis

2. Organic Varieties

3. Organic Plantbreeding

4. The Future of Organic Seeds



- **Successful conventional varieties are often also much grown organically.**
- **Very good taste more important than maximal harvest.**
- **More or broader resistances very important.**
- **Distinguishable and regional varieties.**
- ***Organic Varieties respond to the needs of organic growers and consumers.***



Downy Mildew
Bremia



Susceptible

Resistant



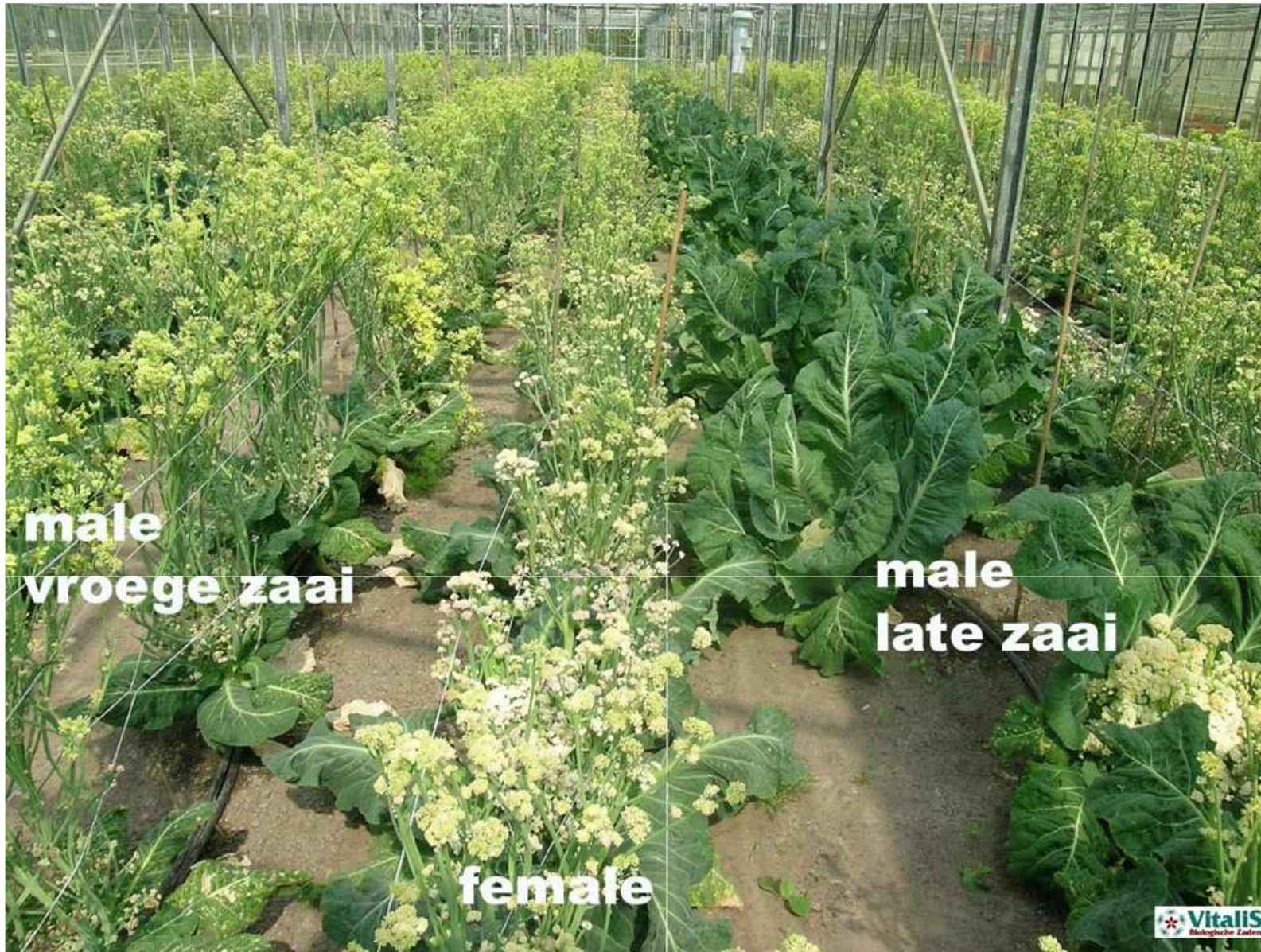
Susceptible



Field tolerance

1. A short history about Vitalis
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3. **Organic Plantbreeding**
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- **Most present conventional breeding programs are not conflicting with organic principles.**
- **Some techniques are not strategic sustainable (R-genes versus Fieldtolerance).**
- **Some techniques are not conform organic principles (CMS).**
- **Non-gmo gentech is dominating more and more conventional breeding (markers,cysgenese,etc.)**
- ***Only Organic Plantbreeding can guarantee the application of appropriate techniques.***



**male
vroege zaai**

**male
late zaai**

female



SI hybrid seedproduction Cauliflower





Tomato female line – emasculated by hand.





Tomato male line - pollen collector





Tomato female line - pollination





Hybrid seedproduction, Sweet Pepper



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- **Organic Growers can work with conventional seeds quite well, ... still.**
- **Organic Plantbreeding will be necessary and crucial in the near future, but...**
- **Organic Plantbreeding is not possible without commitment of the rest of the chain.**
- **Organic Plantbreeding starts with the production and use of Organic Seed.**
- ***The future of Organic Seed depends on initiatives in the organic movement; not from central regulations.***



Trialfield Lettuce varieties



Thank you for your attention

