Teaching Seed Saving - a guide to lecturers

Materials for 'Growing Seed Savers' in English

1. Lesson-plan

2. Terms of use of images in presentations and lectures

3. Booklet: Guide to Seed Saving (NB: Colophon with copyrights, ISBN etc.)
Guide to Seed Saving, Table 2. Recommended isolation distance

4. Hand-outs: a. Literature for seed saving
b. Risk-circle of inter-vegetable and crop wild relatives' crossing
c. Fold 4 different self-sealing seed envelopes
d. What you need to know about seed-borne diseases and pests

Slides: Basics about Seed Saving
Garden History

Hand-outs can also be included in the booklet.

Lesson-plan

Basics about seed saving

Slides ‘Basics about Seed Saving’ follow the booklet ‘Guide to Seed Saving’

1. Why become a seed saver?

- Presentation: All participants tell about their experiences with seed saving
- Why save seeds: *can be done as a brainstorm* – a slide gives important points

2. Basic plant knowledge

- The lifespan: Annuals, biennials, and perennials. *Bring real plants, if possible!*
- The structure of flowers
- Pollination
- Plant families, genus, species, varieties

3. F1 hybrid or open pollinated varieties

- What to expect from your homemade seeds?
- Genetics made simple to explain what is an F1-hybrid
- Open Polinated plants – heirloom plants: what are they, where do we find them?
- Heirloom and heritage varieties – collecting the good story.

This is an introduction to inventory. You can add your own stories and ways to collect them etc.

4. Conservation of the properties of a variety

- Which plants are easy or difficult to take seeds from with success?
- Easy and difficult plants- and what makes them difficult?
- Self-pollination?
- Unwanted cross-polination.
  Plants that can cross-polinate is also a hand-out, which could as well be included in the booklet.
- Selection criteria
- Carrots, e.g., need many plants to select from and to pollinate.
  Properties to look at according to selection criteria. *See also table 2.*

5. Selection of plants for propagation

- Important when planning the selection
- Can you eat the plant and make seeds?
- How to choose plants – and how many plants, *questions and discussion*
- Varieties worth keeping? *Questions and discussion*
- Vegetative propagation *Bring plants for examples if possible*

6. Harvest, cleaning and storing *This part is good to illustrate with practical work … also to learn the skills*

- Plant seed distribution strategies
- Seed ripening
- When to expect seeds? (annual, biannual, perennial)
- Drying seeds
- Seed cleaning techniques
- Seed storage and labelling, *there is a hand-out of how to fold bags and envelopes*
- Seed germination, best before, how to test germination %, *see also table 1*

When the participants get tired of listening:

- Go for a walk together in a garden or field to look at plants, seeds, crop wild relatives, seed distribution strategies …
- Do practical work cleaning seeds or folding bags or envelopes
- Bring books about seed saving to look in. Present the books for the participants. *There is a hand-out with English literature that can also be included in the booklet.*

What you need to know about seed-borne diseases and pests

This hand-out is a short introduction to seed-born diseases.

Garden History

Slides ‘Around the plants’ is garden history seen from a Danish perspective. We hope that it will inspire you to tell your national – and local - garden history.

1. Almost all plants we are eating came from outside

- Immigration, trade, and stealing!
- Who brought the plants? (from Neolithic to Medieval time)

2. What were plants used for?

- food, medicine, flavour
- to nourish, satiate, and balance the body *(this can lead to an explanation of humoral pathology and other former medical systems and beliefs)*

3. Plants have gradually changed to accommodate

- climate, pests, human needs
- Examples of how a plant develops from a wild to a cultivated plant
- High yields and good taste has been focus for humans

4. Vegetables were grown locally

- Development of varieties
- Agrobiodiversity was high
- Some were experts in growing and taking seeds from difficult vegetables (the Danish Amager varieties)

5. Market gardeners – the golden years 1880-1950

- Market gardeners needed good seeds – this resulted in many varieties of high quality

6. The story of today

- Very few seed companies – no Danish breeding
- Multi-national companies
- Agrobiodiversity is low
- But many ‘forgotten plants’ are still here
- Relict plants, heirloom plants, genebanks
- Towards higher agrobiodiversity - save the seeds!