

Verein zur Erhaltung und Rekultivierung von Nutzpflanzen in Brandenburg e. V.



(Association for the Preservation and Recultivation of Crops in
Brandenburg, registered society)

Making seeds of heirloom varieties available to the public



Cornelia Lehmann, Chairwoman

VERN e. V. in Greiffenberg/Uckermark



- 1996 established as non-profit organisation
- Background
 - 1993 idea to stimulate *on-farm* conservation activities in biosphere reserves (background by CBD, mab-rules...), cooperation between IPK, federal environment and agriculture ministry (mab-office) and local agencies for nature protection...
 - 1994 – 1995 recultivation of an abandoned horticultural farm in Greiffenberg by means of an employment-creation measure
 - The IPK Genebank contributed a huge amount of accessions with the aim to bring them back into use
 - 1996 formation of the association VERN

VERN e. V. in Greiffenberg/Uckermark



- Aims
 - Conserve old and rare crops
 - Improve the availability of seeds from old varieties
 - Stimulate *on-farm/in-garden* management of old varieties
 - Impart the knowledge about heirloom varieties
 - Encourage home gardeners to save their own seeds

VERN e. V. in Greiffenberg/Uckermark



- Activities
 - Maintenance of a collection of about 2000 old varieties
 - Distribution of seeds on a non-commercial basis
 - Encouragement of *on-farm* activities
 - Re-introduction of genebank accessions into use
 - Public relations and knowledge transfer
 - Cooperation in research and pilot projects with universities, regional authorities, etc.



Financing

- Budget funds
 - Membership fees (600 members, fee 30 €/year)
 - Seed and seedling distribution
 - Donations
 - Sponsoring
 - Third-party funds
 - Research or pilot projects (Federal Ministry of Food and Agriculture, BMEL)
 - Support programmes of the European Union (LEADER, Leonardo)
 - Other

Important: Voluntary services of members and friends

Selection of species to offer



- VERN offers seeds of agricultural and horticultural species
- In the 1990s, VERN started the activities without a special decision about species
- General criteria to select species to offer
 - Are there interesting varieties of the species available?
 - Is there a demand for seed of the species?
 - Are there severe problems associated with reproduction?

Multiplication of the material

- Garden in Greiffenberg
 - Propagation of about 200 varieties/year
 - 4000 m², 3 tunnel greenhouses
- Propagation of annual crops

Annuals	Species	Plants or m ² /variety
Self-pollinating	Tomato	10 plants
	Lettuce	50 – 100 plants
	Wheat	3 m ²
Cross-pollinating	Squash	20 plants
	Maize	200 plants
	Buckwheat	3 m ²



Multiplication of the material

- Propagation of biennial cross-pollinating crops

Species	Number of plants	
	1. year	2. year
Carrot	500	50
Beetroot	500	50
Brassica	100 - 200	30



Multiplication of the material

- Multiplication and variety maintenance



off-type



typical
plant

Propagation bed with 60 plants of *Lactuca sativa* 'Struwelpeter'

Multiplication of the material

- Selection work to restore varietal identity of genebank accessions may be necessary



Album Benary 1876, Tafel X



Examination of
'Erfurter Lange' (IPK BETA 42)
Zugang 1946, Donor: E. Benary
by Bundessortenamt 2013



Organisation of the distribution

- Compendium, catalogue for rare crops
 - Small seed sachets and small portion packs of seed potatoes
- Activities
 - 3 „Kartoffeltage“ in March or April
 - 3 „Tomatentage“ in May
 - Local festivals, events, exchange markets, etc.



Price and amount of material

- Prices
 - Seed sachet (2,50 €, reduced price for members 2,00 €)
 - Seedlings (tomatoes, pepper 2,50 €; other plants 2,00 €)
 - Seed potatoes (portion pack of 10 tubers 3,50 €)

- Amount of material

<h2>Abfüllmenge in den VERN-Tüten</h2>		
Arten	Menge	Beispiele
Kleinsamige Arten	½ Teelöffel	Salat, Kräuter, Tabak, Stauden-Sellerie, Zierpflanzen
Mittelgroßsamige Arten	2-3 Teelöffel	Rettich, Radieschen, Rote Beete, Gewürztagetes, Gartenmelde, Wurzelgemüse, Buchweizen, Hirse
Großsamige Arten	30 Samen	Bohnen, Erbsen, Mais, Gurken, Lupinen
Tomaten, Paprika	20-25 Samen	
Zucchini, Kürbis	10-15 Samen	
Getreide	30-50 g, je nach Art und Sorte reicht für 3-5 m ²	Weizen, Gerste, Hafer, Roggen



Seed multiplication and distribution in networks



- *On-farm* management of old cereal varieties
 - since 1994, VERN evaluated genebank accessions in cooperation with regional authorities
 - ca. 150 accessions available for VERN members
 - Farmers propagate and distribute seeds within the VERN network (no commercial seed trade)
 - Efforts to set a supply chain up with mills and bakeries
 - Network of 30 farmers cultivates old varieties on ca. 500 ha



Seed multiplication and distribution in networks



- *On-farm* management of old agricultural varieties
 - 'KULAP' (ELER) support programme since 2001
 - The federal state of Brandenburg pays subsidies to farmers for *on-farm* cultivation (total area 150 - 250 ha/year)
 - 69 varieties are eligible (list of endangered crop varieties)
 - 10 ha/variety and farm may be funded
 - 400 € for 1 ha/variety, additional hectares 200 €/ha
 - Seed propagation and maintenance breeding within the VERN network
 - Co-operation with the regional authorities for seed certification

Seed multiplication and distribution in networks

- Pilot projects to re-introduce genebank accessions into *on-farm/in-garden* management*
 - Re-introduction of old lettuce varieties into the market (2006 – 2008)
 - „*On-farm* Erhaltung von alten Gemüsesorten durch den Aufbau eines Netzwerkes“ (2012 - 2016)



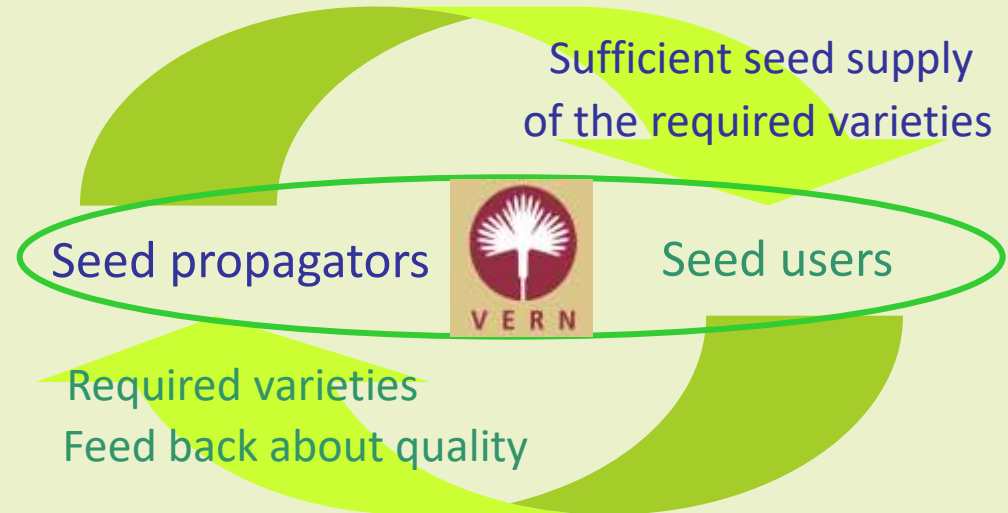
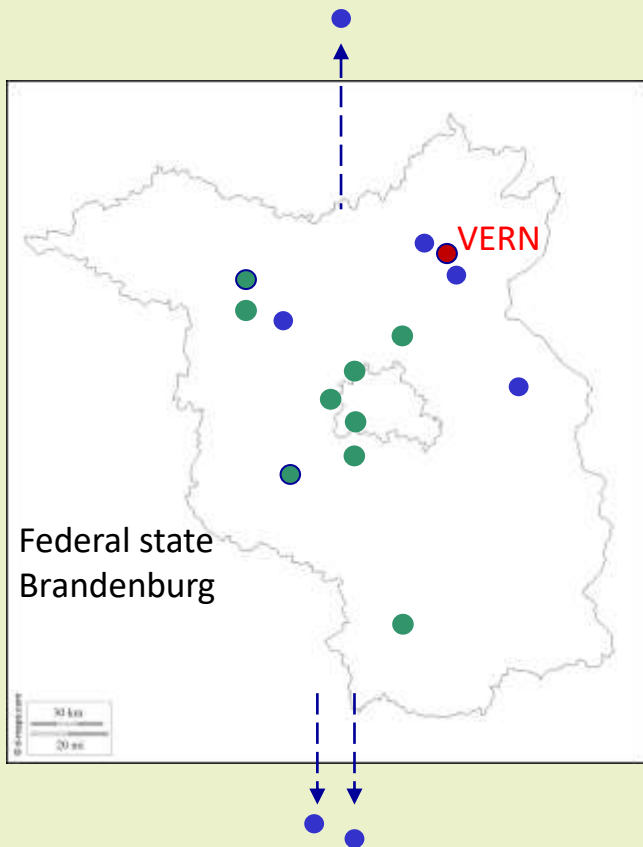
Bundessortenamt examined genebank accessions and updated variety descriptions

Farm shop offers an old lettuce variety

*Pilot projects financed by the Federal Ministry of Food and Agriculture (BMEL)

Seed multiplication and distribution in networks

- Establishment of a regional *on-farm* network



- Seed propagating gardeners
- Seed using gardeners
- Seed propagating and using gardeners

Cooperation with the seed certification authorities (Bundessortenamt, BSA)



- BSA registered 3 conservation varieties on application of VERN (1 rye and 2 oat cultivars)
- BSA is partner of the pilot project „On-farm Erhaltung von alten Gemüsesorten durch den Aufbau eines Netzwerkes“ (2012 - 2016)
- If required, members of the board of VERN may consult experts of the BSA and vice versa
- Officials of the BSA and the BMEL organised consultations concerning the seed legislation



Cooperation with the Genebank

- In the nineties, the IPK Genebank supported the efforts to establish *in-situ/on-farm* cultivation in Greiffenberg and to distribute seeds of old varieties
- The main part of the VERN collection originates from the IPK Genebank
- The IPK Genebank is partner of the pilot project „On-farm Erhaltung von alten Gemüsesorten durch den Aufbau eines Netzwerkes“ (2012 - 2016)

Conclusions

- VERN makes seed of old varieties available to the public and functions as a link between genebank and users
- Seed transfer of non registered old varieties may be organized within on-farm networks
- Heirloom or old varieties with marginal economic potential should be excluded from the EU seed legislation



Thank you for your attention



Training course for seed savers:
Selecting and planting seed bearers of a small radish variety