

Increasing Varietal Suitability and Availability of Cowpea and Forage Radish Cover Crop Seed for Northern Climates

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*Advancing sustainable
agriculture since 1988*

Soil Health Matters!



The Infiltration Test



The Slake Test



Cover Crops Support Soil Health







Field Pea + Lentil +
Oat + Winter
Brassica + Radish +
Sunflower

Daikon Radish, *Raphanus sativus*



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Daikon Radish, *Raphanus sativus*





Great crop, some problems with seed



Although a biennial, seed can be grown here!



Our Radish Study Sites

FBC evaluated 56, and then used 8





Katrina
Becker at
Stoney Acres
CSA in
Athens, WI

Further Work with Daikon Radish

- Root storage study 2014-2015
- Variety demonstrations in 2015
- Further increase and initial selections within our new breeding population
- Field days to include farmer and gardener input on variety choices and breeding selections



Cowpea, *Vigna unguiculata*



Cowpea, *Vigna unguiculata*



Cowpea, *Vigna unguiculata*



Cowpea, *Vigna unguiculata*



**Seed prices have been
as high as \$1-\$1.50/lb!**

Dry Seed Can Be Grown in the North!



96 Cowpea Varieties Screened in 2012





Seed Increase in Puerto Rico

2013 North Dakota Cowpea Trial



2013 North Dakota Cowpea Trial



Seed Increase in Puerto Rico



Seed Increase in Puerto Rico



Cowpea Seeds Back from Puerto Rico



The Cowpea Weevil



University of Nebraska Department of Entomology

Collaborator Pat Carr at Carrington



2014 North Dakota Cowpea Trial



2014 Wisconsin Cowpea Trial



2014 Wisconsin Cowpea Trial



Purple Hulled Varieties are Pretty



Some Cowpeas Matured in 2014



Some Cowpeas Matured Slowly



Cowpeas are sometimes Erect



Red Ripper is a True Cover Variety



2014 North Dakota Cowpea Trial

Participatory Evaluation of Cowpea Varieties for Northern Regions

Further Cowpea Evaluation

- Seed of eight varieties is being increased at the University of Puerto Rico Lajas Ag Experiment Station this winter
- In 2015 our partners will evaluate the eight varieties in the Dakotas and Wisconsin
- FBC plans to hold additional field days and a meeting in the fall to get farmer input concerning the choice of a variety or two to increase and sell
- We wonder about getting input from gardeners and cooks as well in case the food value of these varieties might be important for future marketing
- You are invited to take part!



THANK YOU!