Cover Crops

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Accelerating Ag Innovation and Investment

New Uses Forum 2019
The Forever Green Initiative
Developing high-efficiency agricultural systems

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March 28, 2019
Objectives

• Develop new perennial and winter annual crops
• Select crops that provide new ingredients for the food industry
• Design cropping systems that provide ecosystem services
Strategy

- Plant Breeding and Genomics
- Agronomics
- Food Science
- Commercialization
- Supply Chain Development
Strategy

New Food Ingredients  New Economic Opportunities  Ecosystem Services
New Food Ingredients

Oils

Fiber

Protein

Phytonutrients
New Economic Opportunities

- High Value Ingredients
- Green Marketing
- Innovative Food Products
- Enhance and Diversify Farmer Income
Ecosystem Services

- Clean water
- Carbon sequestration
- Pollinator habitat
- Soil health
- Erosion prevention
PERENNIAL CROPS:

- Intermediate wheatgrass “Kernza” – grain, forage
- Perennial sunflower – edible seeds, oil
- Native polyculture grassland mixtures – biomass, forage natural products
- Perennial flax – edible oil
- Kura clover – N-fixing cover crop
- Silphium – edible oil

WINTER ANNUAL CROPS:

- Pennycress – edible oil, biofuel, cover crop
- Camelina – edible oil, biofuel, cover crop
- Winter barley – food, malting barley
- Hairy vetch – N-fixing cover crop

NATIVE WOODY CROPS:

- Hazelnuts – edible oil, nuts
- Elderberry – antioxidant-rich fruit
Kernza® Intermediate Wheatgrass