

# Camelina Production

## A CSP On-Farm Pilot Project

What is Camelina?– The plant was first cultivated in Europe to produce oil for food, medicinal use and lamp oil. Today some northwestern states and in Alberta, Canada an effort is being made to grow Camelina to produce low-cost feedstock for biodiesel and a premium meal value added product as an animal feed that can be used to produce high omega-3 eggs, broilers or dairy products.

In 2008 Pennsylvania NRCS partnered with PSU to demonstrate the benefits of the crop in conservation and as an energy source.

### **This Pilot Project**

is a Conservation Stewardship Program (CSP) enhancement and consists of the planting, monitoring and publicizing of the results obtained.

The project will last two years and requires the grow of Camelina in at least one acre of land. The producer will conduct three events to publicize the project to other producers.

### **Start Date**

The pilot project needs to be scheduled to start within the first three years of the CSP contract.

### **Participant Share**

The participant is responsible for all aspects of implementation of the project.

**Flowering Camelina and the seed pods that the plant produces.**



## How To Grow Camelina

**Adaptation** - Camelina is a short-season crop (85-100 days) that is well adapted to production in the temperate climatic zones. It germinates at low temperature, and seedlings are very frost tolerant. The plant performs well under drought stress conditions and may be better suited to low rainfall regions than most other oilseed crops. It should do very well on our coarser textured or shallow, droughty soils. However, in initial trials in Pennsylvania it has not performed well on wet and poorly drained soils.

**Variety Selection**— Since limited plant breeding has been done on Camelina, few commercial varieties have been released in the United States. Montana State University recently released two new public varieties: Blaine Creek and Suneson. Blaine Creek is described as a short season, high-yield line particularly adapted to high-yield environments. It is also high in omega-3 fatty acids. Suneson is described as a midseason, average-yield line; it is typically 2-3 percent higher in oil content than Blaine Creek. Another variety, Cheyenne, from a company in Colorado, has been used successfully as well in Pennsylvania.

**Seeding**—Ideal seeding rates are 3-5 pounds of pure, live seed per acre. Camelina production should be targeted to fields with low weed pressure, since there are no herbicide options for Camelina. Seed should be drilled very shallow with a grain drill. Camelina generally has the ability to germinate with minimal rainfall and establishes quickly. It should be planted as early as possible in the spring when soil temperatures reach 38-40 ° F.

**Soil Fertility**—Fertilizer can be applied prior to planting or included with the seed if broadcasting. Camelina has generally low fertility requirements. Typical recommendations from Montana are 35-40 pounds of nitrogen (N) for expected yields of 1,200-1,500 pounds per acre and 40-50 pounds per acre if higher yields are expected. In addition 25-30 pounds of phosphorus (P) and 20 pounds of sulfur (S) per acre may be justified in some situations.

**Weed Control**— The crop is naturally competitive with weeds, and early establishment of good Camelina stands have resulted in minimal weed competition. Poast® (a postemergence grass control product) was recently labeled for Camelina and is the only herbicide labeled to date.

**Harvesting and Storage**— harvest of early-planted Camelina typically occurs in July. It can be harvested with unmodified combines and may be direct combined standing or swathed. Generally, growers should expect to take the crop standing. The crop ripens within a few days.

For more specific information on how to grow Camelina refer to Penn State University Agronomy Facts 72 entitled “Camelina Production and Potential in Pennsylvania”.

If you have questions regarding the Conservation Stewardship Program (CSP) please call the county USDA–Natural Resources Conservation Service office .