

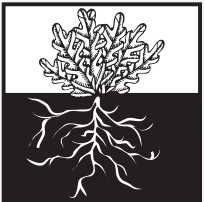
# BASIC EARTH WORKING WITH NATURE

## ENVIRONMENTAL BENEFITS



### BENEFICIAL INSECTARY

Phacelia is one of the top 20 crops for honey production. Scientific studies indicate that as much as 1,500 lbs/acre of mild white – amber colored, pleasantly aromatic honey can be produced by bees with access to Phacelia. It is also attractive to Syrphid flies, whose larvae are voracious feeders on aphids and young caterpillars. Studies show that plantings of Phacelia near sugar beet fields can reduce black bean aphid populations and increase sugar beet yields (1).



### SOIL BUILDING

Phacelia is one of the best cover crops for improving soil quality. The extensive amount of organic matter added by its root system is comparable to buckwheat.



### FERTILITY IMPROVEMENT

Phacelia produces a fibrous root system to a depth of up to 30 inches. The root mass is very effective at catching excess nitrates in the soil before they can leach into the groundwater. Phacelia is also capable of producing 3-7 tons/acre of biomass in 14 weeks, contributing 15-20 units of N/acre.

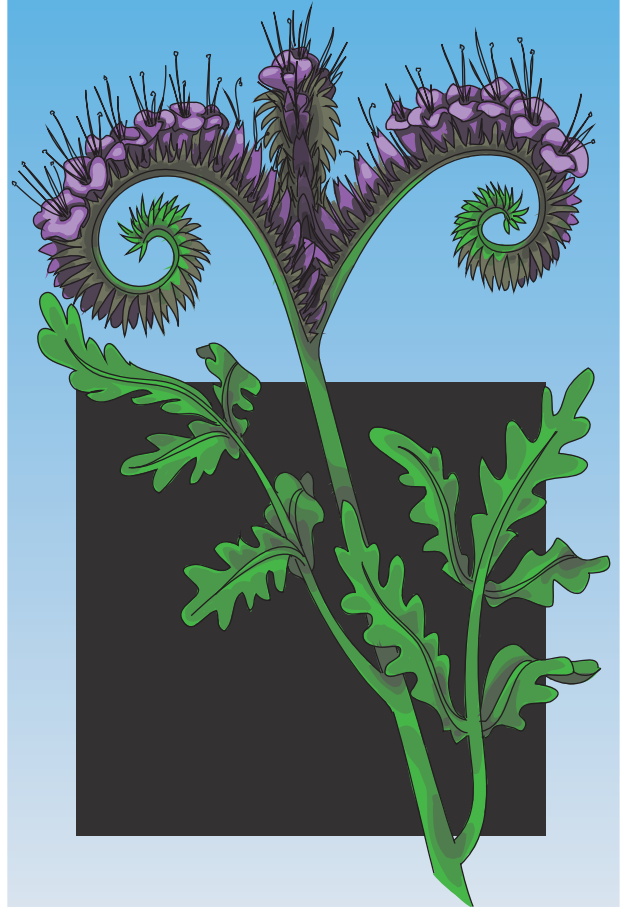


### NEMATODE CONTROL

Phacelia has shown to reduce populations of the Sugar Beet nematodes (*Heterodera schachtii*) by as much as 30% (2).

## PHACELIA

*Phacelia tanacetifolia*



Phacelia is a quick-growing, flowering plant that can reach heights of up to 4 feet. It is adapted to a wide range of soils ranging in pH from 6.4 to 8.6. Phacelia exhibits excellent cold tolerance and will continue to grow in the fall, surviving temperatures of 20°F or slightly lower. Phacelia is an excellent source of high quality nectar and pollen and as a result is excellent at increasing the population and diversity of beneficial insects.



Novel solutions for growing concerns

(1) Muller and Steudel, 1983

(2) Sengonca and Frings, 1988 and Twardowski, et. Al, 2005

## USES

When a heavy biomass residue is not required in the Spring, Phacelia is an excellent choice for a winter-killed cover crop.

Phacelia is highly attractive to honeybees and bumblebees. It is one of the top 20 honey producing flowers and remains productive for a long period of time. It is a long-day plant that requires a minimum of 13 hours of daylight to initiate flowering.

Phacelia is quick to establish and will begin flowering 6-8 weeks after emergence and will continue to flower for 8-10 weeks or as long as 13 hours of daylight are available. It is comparable to Buckwheat in many ways, but it is more tolerant of drought and cold temperatures. Plants should be mowed/incorporated into the soil when spring sown to get maximum benefit.

## PLANTING INSTRUCTIONS

	<i>MONOCULTURE</i>	<i>IN MIXES</i>
<i>SEEDING RATE:</i>	8 lbs/acre drilled	1-2 lbs/acre drilled
<i>PLANTING DEPTH:</i>	1/8 - 1/4 inch	
<i>IDEAL SOIL:</i>	Prefers well-drained soils within a pH range of 5.5 - 6.8.	

*MIXES WELL WITH: VETCH, CRIMSON CLOVER, RYEGRASS, RADISH*



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