

# BUCKWHEAT

## Overview

Buckwheat (*Fagopyrum esculentum*) is a warm season annual broadleaf plant that is not frost tolerant. The plant decomposes quickly due to its succulent stems with an upright form and a delicate fibrous root system. Germination is very rapid occurring about four days after planting, and buckwheat has a short growing season of 70 to 90 days. Thomas Jefferson saw the value of using buckwheat as a cover crop, and the same benefits hold true today.

## Benefits

### *Weed control*

Buckwheat's quick growth and establishment provide an excellent means for competing with weeds by shading and smothering.

### *Phosphorus scavenger*

Buckwheat's fibrous root system tends to be concentrated in the top 10 inches of the soil and provides an extensive surface area for taking up nutrients. Plants are very effective at scavenging phosphorus and some minor nutrients from the soil that are subsequently released for successive crops as the buckwheat residue breaks down.

### *Tolerance*

Soils with a low fertility are not a problem for growing buckwheat. Plants often wilt during hot, dry conditions but will quickly recover during cooler over-night temperatures.

### *Attracts beneficial insects*

Once flowering begins, the abundant blossoms attract beneficial insects like hover flies, honeybees, minute pirate bugs, lady beetles and predatory wasps.

## Establishment

Buckwheat should be planted in spring after the danger of frost has past. Seed should be planted at a depth of 0.5 to 1 inch deep. According to the NRCS conservation practice standard, buckwheat should be drilled at a seeding rate of 45 lbs/acre or broadcast at 60 lbs/acre. If broadcast, seed should be scattered on a firm seedbed and incorporated with light disking.



## Management and Control

Control is easily achieved by mowing or tilling, making buckwheat a good cover crop for organic rotations. To achieve optimum biomass and avoid unwanted reseeding, mow or till plants 7 to 10 days after flowering starts. Control can also be achieved by herbicides or freezing temperatures.

## Considerations

Buckwheat performs poorly on heavy, poorly drained soils and cannot tolerate flooding. Heavy rain after planting can reduce emergence, sometimes requiring reseeding.

A well-established buckwheat canopy is needed to control weeds. Weeds will grow in gaps over 10 inches, so careful preparation of the seedbed and sowing to obtain a uniform stand is recommended.

Flowering is indeterminate, so some seed can mature and shatter before the entire plant is finished flowering, therefore timing of control is important to avoid reseeding.

Buckwheat can host insect pests of vegetable crops including lygus bugs and tarnished plant bugs. Plantings should be monitored to prevent pest outbreaks in buckwheat that could move to the cash crop.

## Seed Sources

Buckwheat seed can be purchased in bulk from local farm supply stores such as MFA or can be ordered from seed companies. A few examples include Adams-Briscoe (1-877-775-7826, abseed.com), Peaceful Valley (1-888-784-1722, groworganic.com) and Johnny's Selected Seeds (1-877-564-6697, johnnyseeds.com).

## Resources

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Written by Catherine Bohnert, Horticulture Specialist. Additional guidesheets at [www.jeffersonfarm.org](http://www.jeffersonfarm.org). Copyright 2011.