



**Buckwheat**

*Fagopyrum esculentum*

**B**uckwheat is a short season annual with a delicate fibrous root system and since it establishes quickly it is useful for weed suppression and is excellent at mellowing the soil while improving aggregate stability. Classic uses for buckwheat include: ground cover after early vegetables, cover before planting strawberry beds and bringing idle land into production.<sup>i</sup> Buckwheat does well in low fertility soils. It is a scavenger of phosphorus and calcium that mineralizes rock phosphate, making these nutrients available for later crops. Residue from the succulent buckwheat plants decomposes quickly. Buckwheat uses the shortest window of opportunity of any cover crop.



*Land preparation*

A well prepared seedbed is necessary to ensure a quick start for the crop. Avoid wet spots because buckwheat will not recover from flooding. Minimal fertilizer is needed. On established vegetable ground residual nutrients are more than sufficient.

*Seeding rate*

50 lbs./acre drilled , 1/2 - 1 in. depth .  
70 lbs./acre broadcast \$15-25 per acre.

*Seeding date*

June and July. It can be planted May 20 to Aug 30 but will give less growth<sup>ii</sup>.

*Seed sources*

Birkett Mills, Lakeshore Organic Grain, Agriculver, Ernst Conservation Seed

*Maintenance*

No pesticides are needed making this crop an attractive option in the rotation schedule of organic crops. Heavy rain will reduce emergence, reseed if necessary. A well-established buckwheat canopy will completely cover the ground. Plants often wilt during hot days but quickly recover.

*Control*

Mow 35- 40 days after seeding, or incorporate 35- 45 days after seeding, to avoid volunteers<sup>iii</sup>. The right time is when the field has just turned white with flowers.

*Tips*

Do not plant into hard soil. Buckwheat will not break up hard pan.  
Flooding stops growth permanently.  
Weeds will grow in any gaps over 10 inches.  
Parasitic wasps, ladybugs and hoverflies are beneficial insects attracted to buckwheat. Harmful insects such as tarnished plant bugs and aphids are attracted as well. The good news is that aphids can serve as a food source for the beneficials.<sup>iv</sup>

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<sup>i</sup> <http://www.nysaes.cornell.edu/hort/faculty/bjorkman/buck/guide/index.html>

<sup>ii</sup> Björkman, Shail, unpublished research.

<sup>iii</sup> Björkman, Shail, unpublished research.

<sup>iv</sup> Hendrickson J. 2003. Cover Crops on the Intensive Market Farm, University of Wisconsin-Madison College of Agriculture and Life Sciences. p. 12