

**THE OHIO STATE UNIVERSITY**COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCESextension.osu.eduagmr.osu.edu

Growing Cabbage in the Home Garden

HYG-1611

Date: 05/18/2018

John Schoenhals, Extension Educator, Agriculture and Natural Resources, Williams County

Cabbage is a garden vegetable belonging to the Brassicaceae family, commonly referred to as the mustard family. Cabbage is also a “cole crop,” meaning it is a cultivated variety of the species *Brassica oleracea*. Other cole crops include broccoli, Brussels sprouts, cauliflower, collards, kale and kohlrabi.

Cabbage has been cultivated for more than 4,000 years. Once considered a pauper’s food, cabbage today is popular in dishes around the world. The vegetable is high in dietary fiber, iron, vitamin C, vitamin K, folate, manganese and other important nutrients.

Cabbage Site Requirements

Cabbage is a cool weather vegetable, growing best with average temperatures between 60 and 65 degrees F and no higher than 75 degrees F. Prolonged periods (10 days or more) of cold temperatures between 35 and 50 degrees F can lead to premature flowering. Cabbage should be grown in the spring or fall to avoid hot summer temperatures.

Cabbage grows well in fertile, well-drained, moist soils with plenty of organic matter. Mulching around the plants will help keep the ground cool and moist. Cabbage has a shallow root system, so tilling near plants may cause harm. Provide consistent and adequate water when needed; about 1 inch per week is adequate if an equal amount of rainfall does not occur.



Healthy cabbage head grown in the garden. Photo by Gerald Holmes, California Polytechnic State University at San Luis Obispo, Bugwood.org.

Soil pH should be maintained between 6.0 and 6.8 for optimum growth. This range of soil pH will maximize nutrient availability and discourage clubroot, a disease that

occurs most often when cabbage is grown in more acidic soils with a pH lower than 6.0.

Suggested Cultivars

Many cultivars suitable for Ohio conditions are available. Select cultivars based on desired head size and color, resistance to splitting, and season length. Early maturing varieties may not store well and are more prone to splitting, while longer-season varieties store more easily and are more commonly used for making sauerkraut. To view a full listing of cultivars, search online for Extension resources regarding cabbage. Common Ohio cultivars are:

- Early Maturing: 'Stone Head,' 'Charmant,' 'Regal Red' (red)
- Late Maturing: 'Bronco,' 'Blue Pak,' 'Cheers,' 'Rio Verde,' 'Red Acre' (red), 'Ruby Perfection' (red)

Planting Suggestions

Direct seeding of cabbage is difficult, so seeds should be sown indoors 6 to 8 weeks prior to the frost-free date for your area. Optimal germination temperatures are around 75 degrees F. After emergence, maintain temperatures around 60 degrees F and transplant to the garden after 4 to 6 weeks.

Like other cole crops, cabbage is frost tolerant in the spring. Cabbage can be grown as either a spring or a fall crop. For a fall crop, set out transplants in early to mid-July. Space plants 16 inches apart in the row with 30 inches between rows.



Developing cabbage plant. Photo by Jacqueline Kowalski, Ohio State University Extension.

Fertilizing

Fertilizer and lime are best applied using the results of a soil test as a guide. Contact your local OSU Extension office for information on soil testing. In the absence of a soil test, 2 to 3 pounds of 8-16-16 fertilizer applied uniformly over 100 square feet of garden area is suggested. Work the fertilizer thoroughly into the soil about 2 weeks before transplanting.

When transplanting, use a liquid starter fertilizer to encourage establishment. Apply 1 cup of starter solution to each plant, preparing the fertilizer according to label directions. A sidedress nitrogen application of about 0.75 pounds of urea (46-0-0) per 100 feet of row when plants are well-established (2 to 3 weeks after transplanting) is desirable to produce maximum yield. Most gardens do not require the addition of micronutrients such as boron, manganese or zinc unless deficiency

symptoms are observed. Do not fertilize late in the season, as this can lead to head splitting.

Pest Management

Mulches can be used for weed suppression. Hand-pull or use shallow cultivation if additional weed control becomes necessary. Be careful not to damage shallow roots when performing cultivation near the row.

Principle disease problems are blackleg, black rot, clubroot, and purple blotch. Many disease problems can be minimized by practicing crop rotation throughout the garden. Avoid planting any brassica (cauliflower, broccoli, kale, kohlrabi, Brussels sprouts, mustards, turnips, radishes, etc.) in the same area within 4 years. When irrigating, avoid overwetting foliage and water early in the day to promote leaf drying. If clubroot becomes a problem, add lime to the soil to raise the soil pH to 7.2.

Principle insect pests include the cabbage looper, cabbage worm, cabbage root maggot, aphids, slugs, and flea beetles. Caution should be exercised when applying insecticides to protect beneficial insects that may be in the area. Controlling weeds during the growing season and using row covers will help minimize damage from these insects.



Cabbage looper and damage on cabbage leaf. Photo by Alton N. Sparks, Jr., University of Georgia, Bugwood.org.



Stunting and wilting caused by clubroot disease. Photo by Gerald Holmes, California Polytechnic State University at San Luis Obispo, Bugwood.org.

Contact your local OSU Extension office for identification and control recommendations for diseases and insects on cabbage. Always read and follow all label precautions and directions.

Harvesting and Storing

As cabbage heads mature, they become prone to splitting in response to heavy rainfall, especially following dry weather. To minimize head splitting, avoid late-season fertilization, provide adequate water throughout the growing season, and harvest heads as soon as they are firm. In addition, pruning roots with a shovel on

one side of the plant, or twisting the plant after the heads have firmed, will break roots and prevent the uptake of excess water.

Cabbage can be harvested once the head is firm and is adequately sized, based on the variety and environmental conditions. Remove all loose leaves prior to storage to maintain sufficient air circulation. Cabbage can be stored in a refrigerator for several weeks or up to 5 months if temperatures are near 32 degrees F. High humidity of nearly 100 percent should be maintained.

References

- Clemson Cooperative Extension. 2015. Cabbage & Chinese Cabbage.
<http://www.clemson.edu/extension/hgic/plants/vegetables/crops/hgic1303.html> (Accessed 09-27-2017).
- Cornell University. 2016. Cornell University Vegetable Growing Guides.
<http://www.gardening.cornell.edu/homegardening/scene5fdd.html> (Accessed on 09-27-2017).
- Cornell University. 2017. Vegetable Varieties for Gardeners.
<http://gardening.cals.cornell.edu/citizen-science/> (Accessed 09-27-2017).
- Egel, D.S. et al. 2017. Midwest Vegetable Production Guide for Commercial Growers. 2017. Purdue University, West Lafayette, IN. 234 p. ag.purdue.edu/btny/midwest-vegetable-guide/Documents/2017/01_MWVegGuide_2017.pdf
- Gross, K.C. et al. 2016. The Commercial Storage of Fruits, Vegetables, and Florist and Nursery Stocks. Available online at:
<https://www.ars.usda.gov/is/np/CommercialStorage/CommercialStorageIntro.htm>
- Maynard, D.N., and G.J. Hochmuth. 2007. Knott's Handbook for Vegetable Growers (5th Ed.) John Wiley & Sons. Hoboken, NJ. 621 p. Available online at:
<http://extension.missouri.edu/sare/documents/KnottsHandbook2012.pdf>
- University of Maryland Extension. 2017. Vegetable Profiles: Cabbage.
extension.umd.edu/growit/vegetable-profiles-cabbage (Accessed 09-27-2017).

Ohioline

<https://ohioline.osu.edu>

CFAES provides research and related educational programs to clientele on a nondiscriminatory basis. For more information, visit cfaesdiversity.osu.edu. For an accessible format of this publication, visit cfaes.osu.edu/accessibility.

Copyright © 2018, The Ohio State University