

MSU Extension Publication Archive

Archive copy of publication, do not use for current recommendations. Up-to-date information about many topics can be obtained from your local Extension office.

Family Vegetable Garden Series: Use Winter Months to Plan Ahead (#14, 18, 20, and 24)

Michigan State University

Cooperative Extension Service

Nancy E. Smith and J. Lee Taylor

Department of Horticulture

May 1982

8 pages

The PDF file was provided courtesy of the Michigan State University Library

Scroll down to view the publication.

IN THE KITCHEN

LOW IN CALORIES

ASPARAGUS tastes delicious, is low in calories, and rich in vitamins A, B and C.

Cooked asparagus spears are very good with butter, hollandaise or cheese sauce. Use them in dishes made with cheese or cream sauce. Or add them to chicken casserole. Cream of asparagus soup is great, too.

For a change, try raw asparagus with your favorite dip.



SWEET STUFF

In strawberry jello, cooked chunks of RHUBARB taste a lot like strawberries — and they're a lot cheaper!

Rhubarb makes delicious pie and sauce. It's great in jello, jams and jellies. Try substituting rhubarb for apples in apple crisp or in apple-cinnamon cakes.

Remember—Don't eat the leaves!



KEYS TO SUCCESS

- Plant early in the spring.
- Get plants well established before harvesting.
- Harvest correctly.

Other bulletins in this series provide additional information on vegetable gardening.

COOPERATIVE EXTENSION SERVICE
MICHIGAN STATE UNIVERSITY

family Vegetable Garden series

EXTENSION BULLETIN E-824 (14)

Asparagus and Rhubarb

~ Garden Perennials ~

by Randall C. Heatley, Jackson Co. Ext. Hort. Agt.
and J. Lee Taylor, Dept. of Horticulture

YEAR AFTER YEAR —

Try planting asparagus and rhubarb this spring. They are perennials, which means they will come back every year.

SAVE \$\$

Asparagus is expensive to buy, and not always fresh. Why not grow your own! Once you plant it, asparagus will come up for many, many years.

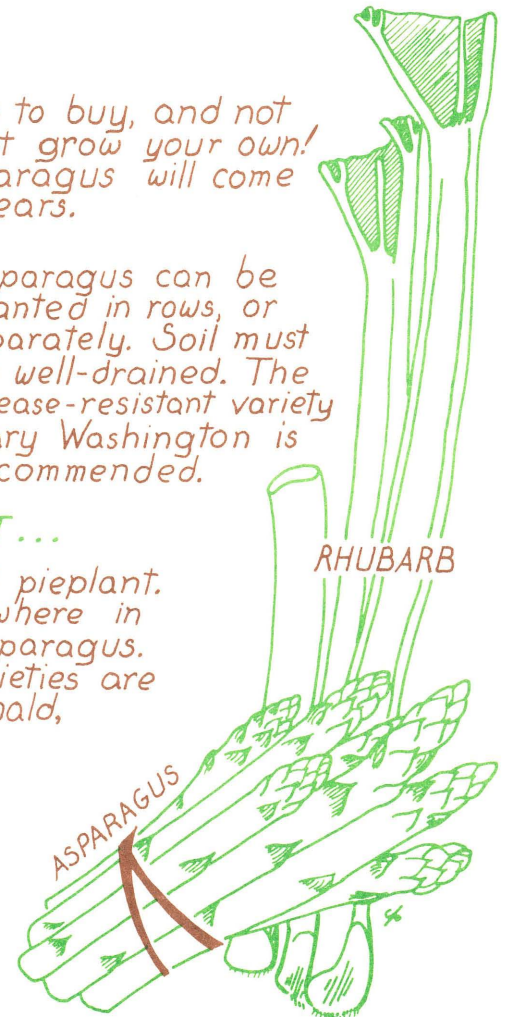


Asparagus can be planted in rows, or separately. Soil must be well-drained. The disease-resistant variety Mary Washington is recommended.

FOR DESSERT...

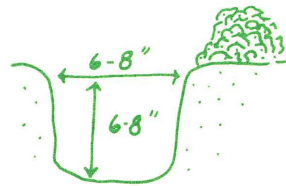
Rhubarb is also called pieplant. It will grow almost anywhere in your yard, just like asparagus. Some recommended varieties are Canada Red, MacDonald, Valentine and Victoria.

Buy asparagus and rhubarb crowns (plants 1 year old or older) at garden centers, or through seed or nursery catalogs.



GROWING ASPARAGUS

Plant crowns in the spring. Dig a trench or holes 6 to 8 in. deep.



Mix in 2 cups of 5-20-20 fertilizer per 10 ft. of row, or use 1/4 cup per plant.



Space crowns 12 to 18 in. apart, and spread out roots. Make rows 3 to 5 ft. apart.

Cover crowns with 2 in. of soil. As new shoots grow, fill in soil around them, but don't cover tips of shoots. Water well.



After the first year, fertilize plants when growth starts in spring, and again in July, at least until plants are well-established. Use 1/2 cup of 5-20-20 fertilizer per 10 ft. of row or per 10 plants.

Leave tops on plants to protect them through winter, but cut off before growth starts in spring.



HARVEST

Do not harvest asparagus the first year after planting. You may be able to harvest for a few weeks the second year if plants produce big enough spears. You may have to wait til the 3rd or 4th year for a large harvest. Do not harvest spears thinner than a pencil. Do not harvest after July 1.

Harvest spears before buds open by snapping them off or by cutting at the soil surface. Cutting below this may injure new spears coming up.

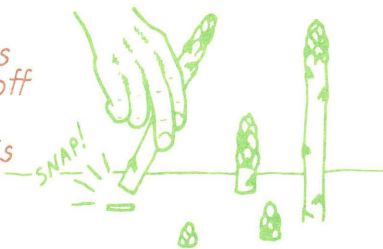
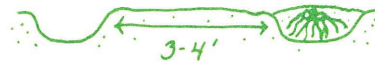


Figure 8 plants per person.

GROWING RHUBARB

Plant rhubarb crowns early in the spring. Work 1/4 cup of 5-20-20 fertilizer per crown into the soil.

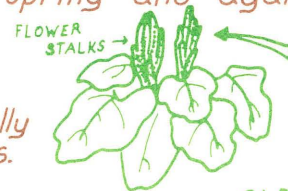


Plant so that top of crown is near soil surface. Leave 3 to 4 ft. between plants, and 4 ft. between rows.

Firm soil around roots. Leave 1 in. of loose soil over buds.

After the first year, fertilize each plant with 1/2 cup of 5-20-20 every spring and again in July.

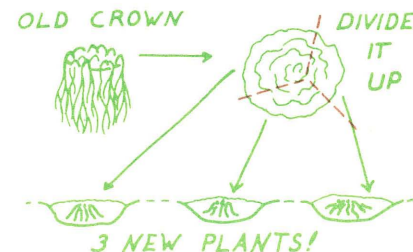
Water rhubarb in dry spells, especially the first few years.



Break off flower stalks by pulling and twisting, so more leaf stalks form.

DIVIDE THE CROWNS

If stalks get spindly in 5-10 years, fertilize more. If this doesn't help, dig up crowns. Divide into 2 to 4 equal parts. Plant these like your first plants, in early spring.



Eat only the stalks!
The leaves are poisonous!

HARVEST

Do not harvest rhubarb the first year after planting. You may be able to harvest a few stalks the 2nd year, if plants are growing very well. If they are not, wait til the 3rd or 4th year. Never remove more than 1/3 of a plant's stalks at a time. Do not harvest after July 1.



Harvest stalks when long enough. To harvest, twist the stalk while pulling it sideways. Do not cut the stalks.

One plant per person is enough.

HARVESTING AND STORAGE

- Pick when fully red or yellow and before the first frost.
- Select perfect fruits for storage in the fall.
 1. Pink ones will ripen at room temperature or can be stored a week at 55° to 65° F.
 2. Full-sized green tomatoes can be pickled or fried. Or, you can wrap them in paper when picked before frost and store them 3 to 6 weeks at 55° to 65° F. Leave stems on and check often. Throw out any that look bad. Move them to room temperature to ripen.
 3. Cherry tomato plants can be pulled up and hung in a cool place to ripen the fruit. Pick as needed.
- Store fully ripe tomatoes in the refrigerator.

INSECTS AND DISEASE

- Protect young plants from cutworms by wrapping the stem with newspaper or by paper collars buried 1 inch in the soil. Or, use an insecticide when planting.
- Plant disease-resistant varieties where possible.
- If insects or disease become a problem, see Extension Bulletin E-760(6) or your County Extension Agent for the recommended pesticide to use.



KEYS
TO
SUCCESS

- Plant recommended varieties.
- Transplant after danger of frost.
- Plant in sunny location.

Other bulletins in this series provide additional information on vegetable gardening.

MSU is an Affirmative Action/Equal Opportunity Institution. Cooperative Extension Service programs are open to all without regard to race, color, national origin, or sex. Issued in furtherance of cooperative extension work in agriculture and home economics, acts of May 8, and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Gordon E. Guyer, Director, Cooperative Extension Service, Michigan State University, E. Lansing, MI 48824. This information is for educational purposes only. Reference to commercial products or trade names does not imply endorsement by the Cooperative Extension Service or bias against those not mentioned. This bulletin becomes public property upon publication and may be reprinted verbatim as a separate or within another publication with credit to MSU. Reprinting cannot be used to endorse or advertise a commercial product or company. 2P-15M-5 82-UP Price 10 cents Single copy free.

COOPERATIVE EXTENSION SERVICE
MICHIGAN STATE UNIVERSITY

family Vegetable Garden series

EXTENSION BULLETIN E-824 (18)

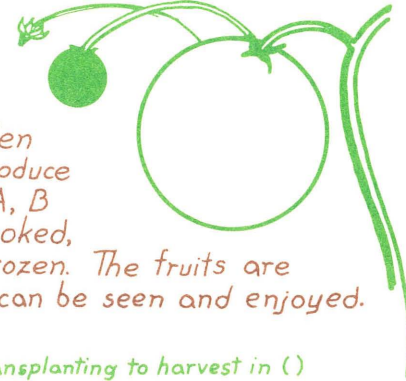
discontinued

Tomatoes

by Elizabeth C. Naegele and J. Lee Taylor
Michigan State University

mm mm GOOD!

Tomatoes are the most popular garden vegetable! They are easy to grow, produce a lot of fruit and are rich in vitamins A, B and C. They can be used fresh or cooked, in salads or sauces, or canned or frozen. The fruits are attractive, so plant them where they can be seen and enjoyed.



RECOMMENDED VARIETIES Days from transplanting to harvest in ()

- | | | | |
|--------------------|----------------------------|------------------------------------|---|
| Early: | • New Yorker (64) | Yellow: | Golden Boy (78)
+ Sunray (83) |
| | • Springset (67) | | |
| | • Red Pak (71) | | |
| Mid-season: | • Setmore (71) | Small-fruited: | Pixie (52)
Presto (60)
Small Fry (68)
Yellow Pear (70) |
| | • Jetstar (72) | (suitable for container gardening) | |
| | • Campbell (73) | | |
| | • Heinz 1350 (75) | | |
| | • Roma (76) for paste | | |
| Late: | San Marzano (78) for paste | | |
| | • Supersonic (79) | | |
| | • Burpee (80) | | |
| | + Manalucie (86) | | |
- resistant to verticillium and fusarium wilt diseases
 - only resistant to verticillium
 - + only resistant to fusarium

START EARLY

Tomatoes take a long time to grow, so buy transplants or start them early indoors (see No. 15 in this series: Starting Plants at Home). You'll probably get better plants if you buy them.



If you buy transplants:

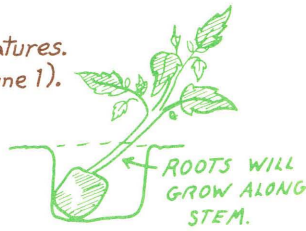
- Choose dark-green, stocky plants 6 to 10 inches tall with stems the thickness of a pencil.
- Don't buy tall, spindly plants or those with spots or yellow or curling leaves.
- Avoid plants with flowers or fruit on them.



TRANSPLANTING

Tomatoes cannot withstand cold temperatures.
Plant after the last frost (May 20-June 1).

1. Set plants 1 inch deeper than they were in containers. If tall and leggy, set deeper and on a slant.



2. Water well, preferably with a starter fertilizer solution.

3. If there are frost warnings, the small plants can be covered at night with boxes, milk cartons, etc. Remove covers during the day when it's warmer.

BASICS

Tomatoes need full sun for high yields!

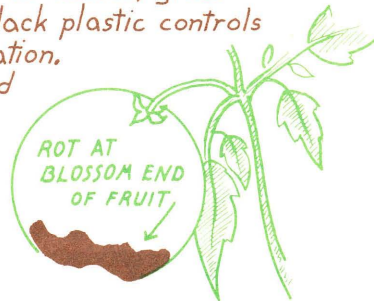


soil: Plant in well-drained soil.

fertilizer: Before planting, mix in 2 pounds (4 cups) of 5-20-20 fertilizer per 100 square feet of soil. Sprinkle a high nitrogen fertilizer 4 inches from plants after fruits begin to form.

weeding: Mulching with a 3 to 5 inch layer of leaves, grass clippings or straw or a sheet of black plastic controls weeds with less work than cultivation. Mulching also keeps soil moist and fruits clean.

water: Provide plenty of water. You can help prevent blossom end rot by keeping the soil evenly moist.



VARIETIES



- There are tomatoes for fresh eating and for paste as well as cherry-sized ones, and red and yellow colors.

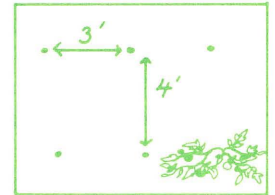
- Plant an early variety for early harvest. The midseason and late varieties taste better, so save most of your space for them.

TRAINING TOMATOES

If you let tomatoes grow naturally along the ground they are less work and produce more fruit. However, plants grown in cages or on stakes produce cleaner fruit and make harvesting easier. More plants can be grown in a limited space if they are trained.

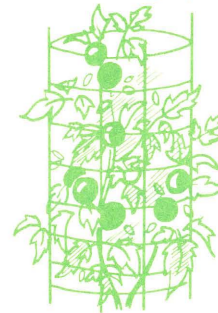
On ground

To keep fruits from rotting on ground, spread a mulch (see p. 2) around plants. Set plants 3 feet apart in rows 4 feet apart.



Caged

This is less work than staking, and yields are greater.



1. To make a cage, take a 6 x 5 foot section of 6 x 6 inch or 8 x 8 inch mesh wire. (Concrete reinforcement wire works well.)
2. Roll into a cylinder and hook ends together.
3. Remove bottom rung to make prongs that you can push into soil around plants.
4. Let plants grow up inside the cage.
5. Set plants 2 to 3 feet apart with 5 feet between rows.

Staking

This is more work than caging, but requires less space to store stakes over winter.

1. Set 6-foot stakes 10 inches deep in the soil, about 3 inches from the plant's base.
2. As the plant grows, tie stem loosely to the stake every 12 inches with pieces of cord or cloth.
3. Remove side shoots so there is one main stem.
4. Set plants 2 to 3 feet apart with 3 feet between rows.



Remove stakes and cages at the end of the season and save for next year.

CONTAINERS

Grow tomatoes in containers if you don't have much space (see No. 12 in this series: Space Saving Ideas).

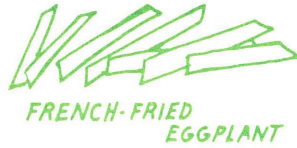


STORAGE

- Store peppers and eggplants in the refrigerator.
- You can dry sweet and hot peppers for winter use (see No. 11 in this series: *Drying and Storing Vegetables*).
- To freeze peppers, remove seeds and freeze whole or chopped.
- They can also be pickled.



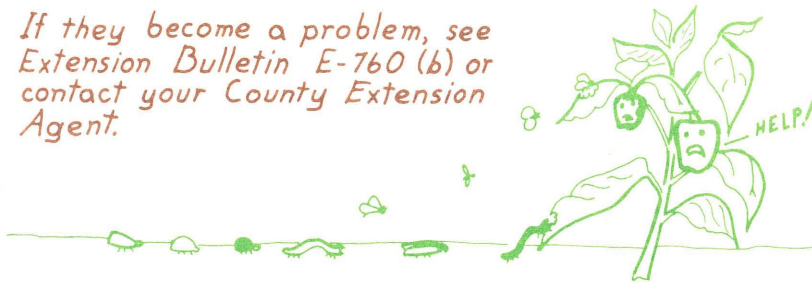
Eggplant can be frozen after it is fully cooked.



PROBLEMS

Disease: Grow resistant varieties to prevent disease. Also avoid planting peppers, eggplants, tomatoes and potatoes in the same place in which any of the others have grown because they are injured by many of the same pests which live in the soil.

Insects: If they become a problem, see *Extension Bulletin E-760 (b)* or contact your County Extension Agent.



- KEYS TO SUCCESS**
- Plant after all danger of frost.
 - Start from transplants.
 - Keep soil moist, especially during flowering.

Other bulletins in this series provide additional information on vegetable gardening.



TO FREEZE PEPPERS—



TAKE OUT SEEDS



CHOP—OR
FREEZE WHOLE

COOPERATIVE EXTENSION SERVICE
MICHIGAN STATE UNIVERSITY

family Vegetable Garden series

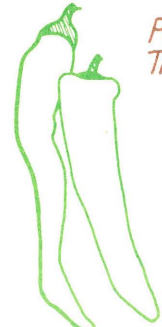
EXTENSION BULLETIN E-824 (20)

discontinued

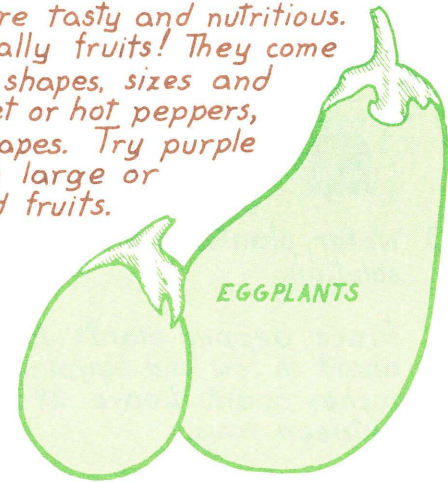
Peppers and Eggplants

by Elizabeth C. Naegele and J. Lee Taylor
Department of Horticulture

VARIETY!



PEPPERS



EGGPLANTS

Peppers and eggplants are tasty and nutritious. These "vegetables" are really fruits! They come in a variety of colors, shapes, sizes and tastes. Plant sweet or hot peppers, bell or banana shapes. Try purple eggplant with large or small-sized fruits.

FAIR WEATHER FRIENDS

Both peppers and eggplants need a long, warm growing season. Set transplants in the garden after all danger of frost (May 20 to June 1). Remember, they won't grow well when temperatures are below 50°F and are injured by the lightest frost.

RECOMMENDED VARIETIES Days from transplanting to harvest in ().

Eggplants:

Burpee Hybrid (70)
Black Magic (73)
Jersey King (75)
Classic (76)
Black Beauty (80)

Peppers: Sweet

* Canape (62)
Vinedale (62)
* Bell Boy (70)
* Midway (72)
* California Wonder (74)
* Yolo Wonder (76)
* Keystone Resistant Giant (85)

Hot

Hot Portugal (64)
Hungarian Wax (65)
Rumanian Wax (70)
Large Red Cherry (72)

* means resistant to mosaic virus of pepper.

DO NOT BUY PLANTS WITH FLOWERS OR FRUIT ON THEM BECAUSE YIELDS WILL BE REDUCED.

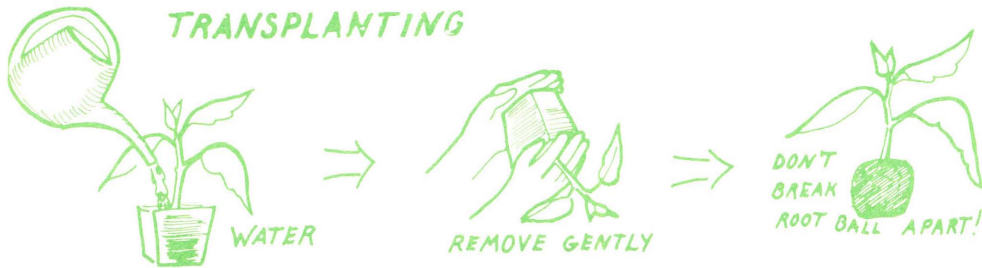
MSU is an Affirmative Action/Equal Opportunity Institution. Cooperative Extension Service programs are open to all without regard to race, color, national origin, or sex.

Issued in furtherance of cooperative extension work in agriculture and home economics, acts of May 8, and June 30, 1914, in cooperation with the U. S. Department of Agriculture. Gordon E. Guyer, Director, Cooperative Extension Service, Michigan State University, E. Lansing, MI 48824

This information is for educational purposes only. Reference to commercial products or trade names does not imply endorsement by the Cooperative Extension Service or bias against those not mentioned. This bulletin becomes public property upon publication and may be reprinted verbatim as a separate or within another publication with credit to MSU. Reprinting cannot be used to endorse or advertise a commercial product or company.

2P-10M-5 82-UP Price 10 cents. Single copy free

TRANSPLANTING



1. Be careful not to injure roots when transplanting into the garden. Transfer entire root ball from container to soil without breaking apart. To do this, water the plant thoroughly before removing from container.

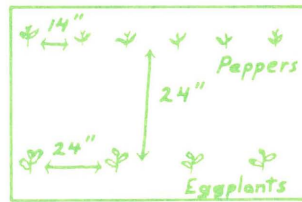


2. Set plants $\frac{1}{2}$ inch deeper in the soil than they were growing in containers. (Peat pots don't need to be removed, but pot must be completely buried.)



3. Water plants, preferably with a starter fertilizer solution.

4. Place pepper plants 14 to 18 inches apart in row and eggplants 24 to 30 inches apart. Leave 24 to 30 inches between rows.



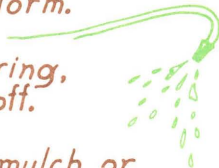
SOME BASICS

Soil — Plant peppers and eggplants in full sun and in a well-drained soil.



Fertilizer — Before planting, work in 2 pounds (4 cups) of 5-20-20 fertilizer per 100 square feet of soil. Sprinkle a high nitrogen fertilizer 4 inches from plants after fruits begin to form.

Water — Water plants, especially during flowering, to prevent blossoms from dropping off.



Weeding — Keep plants weeded, or apply a mulch or black plastic to save work and help keep moisture in soil.

CONTAINERS

Peppers and eggplants grow well in containers (5-gallon container or larger). See No. 12 in this series: Space Saving Ideas.



HARVESTING

Pick fruits when ready so new ones will form. Leave a little stem on fruits when cutting. Use shears or a knife. Pulling may injure plants.

Peppers —————

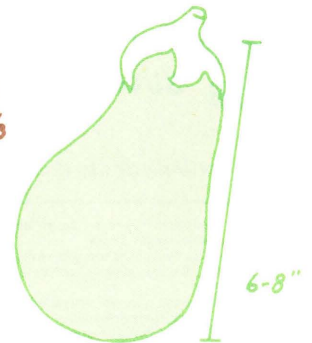
Sweet or Hot — Harvest when crisp and firm and full size.

- Pick when either green or yellow.
- Or wait till they turn red. Most peppers will turn red at maturity. At this stage, they are sweeter and more mellow.
- A few varieties change from green to yellow at maturity. Others are yellow from the start and never change color.
- If HOT peppers have not ripened before frost, pull entire plant and hang by roots in basement. Peppers will ripen on plant.



Eggplants —————

- Pick when skin is deep purple and shiny, but before it becomes dull. Harvest when fruits are about $\frac{2}{3}$ grown (about 6 to 8 inches for standard varieties). If you wait too long, seeds turn dark and bitter.



THESE COLE CROPS ARE GREENS

COLLARDS These are like cabbage, but have larger leaves and don't form a head. Unlike other cole crops, they don't mind the heat and can be planted throughout the summer. (They can also be started from transplants in spring.) Harvest the outer leaves when they are big enough to use.



KALE Grow this as a fall crop only. Harvest outer leaves just like collards. Old kale is tough and stringy.

STORAGE

Keep in refrigerator until ready to use. Cole crops can be frozen. Cabbage and kale should be fully cooked first.



INSECTS AND DISEASE

Grow disease-resistant varieties if available (see page 1). Avoid planting cole crops in the same area of the garden in which they grew last year.

If insects become a problem, see Extension Bulletin E-760 (6) or contact your County Extension Agent.



- Grow in cool weather—spring or fall.
 - Grow collards in cool or warm weather.
 - Plant kale in fall only.
- Start from transplants for a spring garden.
- Start from seed for a fall garden.
- Fertilize and keep watered.

Other bulletins in this series provide additional information on vegetable gardening.

MSU is an Affirmative Action/Equal Opportunity Institution. Cooperative Extension Service programs are open to all without regard to race, color, national origin, or sex. Issued in furtherance of cooperative extension work in agriculture and home economics, acts of May 8, and June 30, 1914, in cooperation with the U. S. Department of Agriculture. Gordon E. Guyer, Director, Cooperative Extension Service, Michigan State University, E. Lansing, MI 48824.

This information is for educational purposes only. Reference to commercial products or trade names does not imply endorsement by the Cooperative Extension Service or bias against those not mentioned. This bulletin becomes public property upon publication and may be reprinted verbatim as a separate or within another publication with credit to MSU. Reprinting cannot be used to endorse or advertise a commercial product or company.

2P-10M-5 82-UP. Price 10 cents. Single copy free.

discontinued

COOPERATIVE EXTENSION SERVICE
MICHIGAN STATE UNIVERSITY

family Vegetable Garden series

EXTENSION BULLETIN E-824 (24)

Cabbage-family Vegetables

by Robbi Austin, Ingham Co. Ext. Hort. Aide and
J. Lee Taylor, Department of Horticulture

LIKE IT COOL

Members of the cabbage family are known as "cole crops" and include cabbage, cauliflower, Brussels sprouts, broccoli, collards, kale and kohlrabi. These vegetables grow best in cool weather. They can withstand frost, and some even taste better afterwards. Grow them as a spring or fall crop.

RECOMMENDED VARIETIES

Days from transplanting to harvest in ()

Broccoli - Green Comet (55)
Spartan Early (55)
Premium Crop (58)
Waltham 29 (74)



Brussels Sprouts - Jade Cross (90)
Long Island
Improved (90)



Cabbage -
early - C-C Cross (50)
* Yellows rest. Golden Acre (63)
* Stonehead (66)

midseason - Ruby Ball (red) (68)
* Badger Market (70)
* Market Topper (73)
* Marion Market (75)
* Market Prize (76)
* Greenback (77)



late - * Badger Ballhead (98)
Chieftain Savoy (85)
Savoy King (heat resistant) (90)

Cauliflower - spring - Snow Crown (53)
Snow King (55)
Super Snowball (57)
Snowball A (59)
Snowball M (59)
fall - Snowball Imperial (58)
Self-Blanche (70)
Greenball (green head) (95)
Royal Purple (purple head) (95)



Days from seeding to harvest in ()

Kohlrabi - Early White Vienna (55)
Early Purple Vienna (60)



Collards - Vates (75)



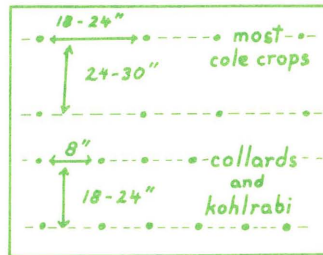
Kale - Dwarf Blue Curled (55)
Dwarf Blue Scotch (55)
Vates (55)



* means disease resistant

FOR SPRING HARVEST

1. Start cole crops (except kale) from transplants you buy or start yourself (see No. 15 in this series: Starting Plants at Home).
2. Transplant cabbage, cauliflower, broccoli, Brussels sprouts and kohlrabi April 1-20; transplant collards in late May.
3. Place plants $\frac{1}{2}$ inch deeper than they were in containers.
4. Leave 18 to 24 inches between plants in rows 24 to 30 inches apart. Set collards and kohlrabi 8 inches apart with 18 to 24 inches between rows.
5. Water well, preferably with a starter fertilizer solution.
6. Do not buy transplants with stems wider than a pencil. Large transplants go to seed more easily.



FOR FALL HARVEST

Start fall garden plants from seed sown directly in the garden May 20 to June 10.
Plant kale seeds June 20 to July 30.

- Thin cole crops which produce heads to 18 to 24 inches between plants.
- Thin kohlrabi, collards and kale to 8 inches between plants.

Vegetables should be ready to harvest in October.

THE BASICS

soil - Plant in a well-drained soil.

fertilizer - Before planting, work in 2 lbs. (4 cups) of 5-20-20 fertilizer per 100 sq. ft. of soil. Sprinkle a high nitrogen fertilizer around plants 4 to 6 weeks after transplanting (see No. 2 in this series: Start with Soil).

water - Water plants, especially during dry periods.

weeds - Keep plants weeded. Do not hoe or cultivate too deeply, or you'll injure the shallow roots.



THESE COLE CROPS PRODUCE HEADS

BROCCOLI

Cut the center head first so side shoots produce more heads. Pick broccoli when tiny buds in head are dark green and about the size of match heads - before they turn yellow and open. Leave 6 to 8 inches of stem on heads when harvesting.



BRUSSELS SPROUTS

These are best grown as a fall crop and taste better after a few light frosts. For larger sprouts, pinch out the growing point about mid-September. Pick sprouts when firm and large enough.

CABBAGE

Plant early, midseason and late varieties all at the same time for a continuous harvest all spring. Harvest heads when firm. If you wait too long, heads may split.



CAULIFLOWER

This grows best as a fall crop. To produce a white head (blanch it), pull leaves over head when it's the size of a tennis ball and tie with string or a rubber band. Harvest in 1 to 3 weeks (when 6 to 7 inches across). Heads turn yellow without blanching, but are usable. Green and purple varieties don't need blanching.

THIS COLE CROP IS A STEM

KOHLRABI

It has a short growing season and is better grown for a fall crop. Plant seeds every 2 weeks from late June to the end of July for a long harvest period. Harvest swollen stem while young and tender (no larger than a baseball). Large stems are tough and woody.

