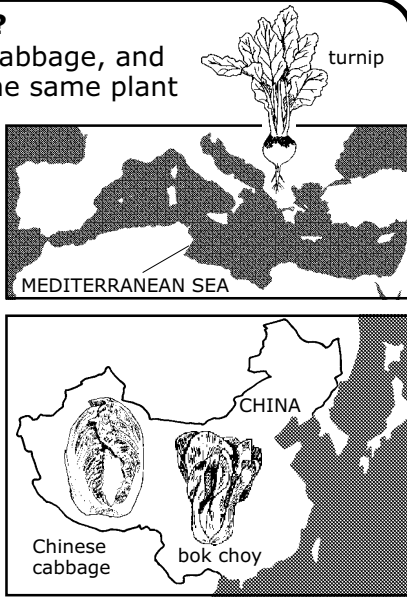


CHINESE CABBAGE AND BOK CHOY Science Page

DID YOU KNOW?

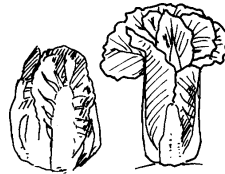
Turnips, Chinese cabbage, and bok choy are all the same plant species.

Around the Mediterranean, ancient farmers saved seeds from the plants with the largest roots. They wanted plants with large roots that could be stored for winter. In ancient China, farmers saved seeds from the plants with the fleshiest stems and leaves. After hundreds of years of selecting seeds, the species evolved into the turnip in the Mediterranean and Chinese cabbage and bok choy in China.



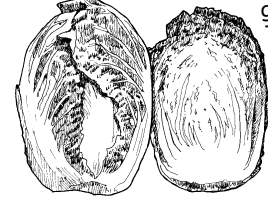
THE CHINESE CABBAGE AND BOK CHOY PLANTS

Chinese cabbage leaves are in a "head" and bok choy leaves are loosely joined together.



The heads of Chinese cabbage can have different shapes.

Chinese cabbage leaves are crinkly, and have thick, white veins. The outside leaves are green.



The inside leaves are green or yellow.

Chinese cabbage



bok choy

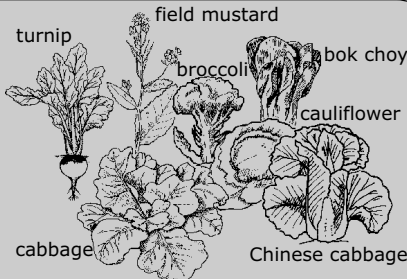
Bok choy has smooth, glossy green leaves and white stalks.

CLASSIFYING CHINESE CABBAGE AND BOK CHOY

FAMILY

Cruciferae or Brassicaceae (mustard family)

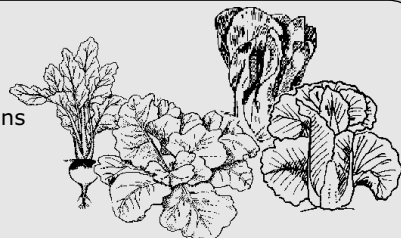
There are about 3,000 species of herbs, shrubs, and trees in this family.



GENUS

Brassica

In Latin, this means "like cabbage."



SPECIES

rapa

There are many varieties of this species, including:



turnip
B. rapa
variety *rapa*



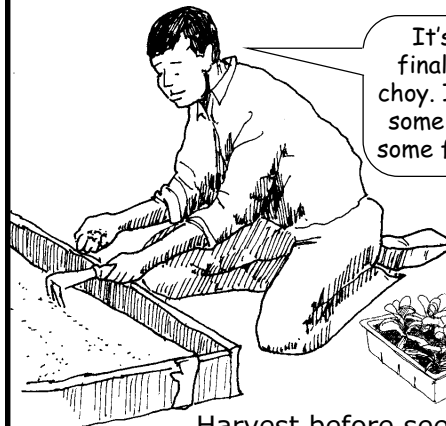
bok choy
B. rapa variety
chinensis



Chinese cabbage
B. rapa
variety *pekinensis*

GROWING AND HARVESTING CHINESE CABBAGE AND BOK CHOY

These plants do best when the weather is cool and the days are short. If days are long or temperatures too hot or too cold, then flowers form instead of leaves. In areas with cold winters and hot summers, plant in the late summer and fall. In areas with cool or warm winters, plant in winter.



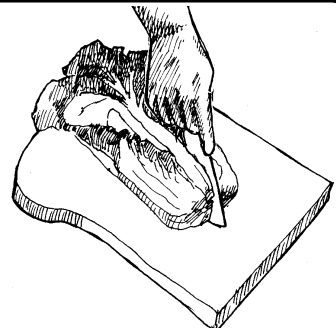
It's fall, so I can finally plant my bok choy. I'm going to grow some from seeds and some from transplants.

These plants like a rich, moist, loamy soil.

Harvest before seed stalks form. Cut close to the ground.

USES

The leaves of bok choy and Chinese cabbage are crisp and have a mild flavor. They can be used in salads, stir-fries, and soups.





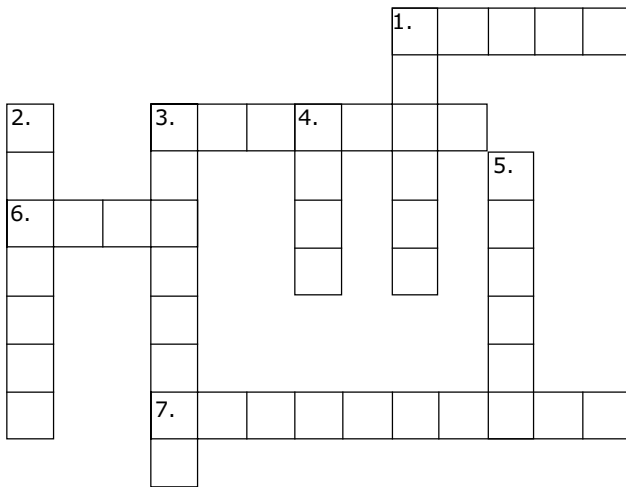
**CROSSWORD
PUZZLE**

Across

1. Chinese cabbage and bok choy are used in salads, stir-fries, and _____.
3. A variety of *Brassica rapa* that does not have leaves in a head.
6. The scientific name for Chinese cabbage is *Brassica* _____.
7. Bok choy, Chinese cabbage, turnips, and broccoli all belong to the _____ family.

Down

1. Chinese cabbage has crinkly leaves but bok choy leaves are _____.
2. A variety of *B. rapa* that is grown for its roots.
3. Chinese cabbage belongs to this genus.
4. Chinese cabbage grows best when the weather is _____.
5. If the weather is too hot or too cold, Chinese cabbage will _____.



Crossword Answers
Across: 1. soups; 3. bok choy; 6. *rapa*; 7. cruciferae.
Down: 1. smooth; 2. turnips; 3. *Brassica*; 4. cool; 5. flower.



**SPOTLIGHT
ON RESEARCH**

Growing and Marketing Chinese Vegetables in the U.S.

In China, fresh vegetables are an important part of the traditional diet. On average, each person in China eats 1/2 kilogram (about 1 pound) of vegetables per day. Traditional Chinese dishes are becoming more and more popular in the U.S. The demand for Chinese vegetables, such as Chinese cabbage and bok choy, is increasing.

Researchers at the University of Kentucky conducted experiments and marketing research for five years to find out how best to meet this increasing demand. They were trying to find out how farmers can grow and market high-quality Chinese vegetables, and make a good profit.

They found out that in Kentucky, they could rotate different Chinese vegetables, and harvest crops in spring, summer, and fall. For example, they planted bok choy in March and harvested it in June. Then they planted bitter melon and yard long beans in the same place. They harvested these two crops in September, and then planted bok choy, tai cai, or daikon in the same place and harvested them in late fall. The researchers discovered that they can grow and harvest Chinese vegetables in Kentucky at times when the crops are not available in other parts of the U.S. This means that Kentucky farmers can market these crops when there is less competition from other farmers.

Source: Jia, W., Witt, M., and Strang, J. (1996). Growing and marketing Chinese vegetables in central Kentucky. In: J. Janick (ed.), *Progress in New Crops*. ASHS Press, Arlington, VA. p. 496-500.



JOKE

Woman: I have a green thumb.
 Man: Oh, you're a good gardener?
 Woman: No, I'm a sloppy painter.



CHINESE CABBAGE STIR-FRY

Yield: 4 servings

What you need

- * 1 pound Chinese cabbage
- * 1 tablespoon sesame seeds
- * 2 tablespoons canola oil
- * 2 cloves of garlic, minced
- * 2 teaspoons ginger root, grated
- * 1 tablespoon soy sauce
- * 1 teaspoon sesame oil
- * 4 cups of cooked rice

What to do

1. Heat the oil in a wok or heavy skillet over high heat.
2. Stir-fry the garlic and ginger for about 30 seconds.
3. Add the cabbage and cook, tossing, until it just begins to wilt (about 2 minutes).
4. Stir in the soy sauce and sesame oil and sprinkle with sesame seeds.
5. Serve over rice.