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Caper

***Capparis spinosa* is a member of the Caperaceae family. No detailed information is available on varieties. Some capers have spines, other have none; both types appear to produce equally well.**

Capers are native to the Mediterranean area and the tropics. The plant, a deciduous dicot, grows about 2 feet tall and has a very deep root system. Vines are 7 to 10 feet long with shiny green oval leaves. The white or purple flowers resemble rock rose blossoms. The flowers are bisexual and have a lifespan of 24 to 36 hours. Each plant produces hundreds of flowers each season. The mature fruit is 2 to 3 inches long and ½ to ¾ inch in diameter. It starts out green, but turns purple when mature. Each fruit contains 200 to 300 seeds.

Market Information

The smaller the caper bud, the higher its quality and price. The consumer price for 7 ounces of processed, good-quality capers is close to $5.

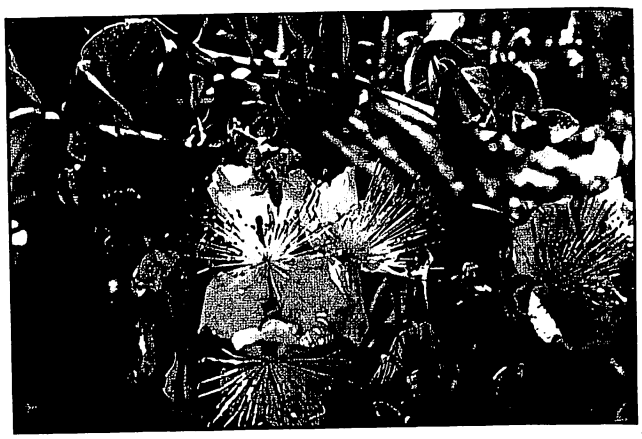
Current production. Capers are produced in Morocco, Spain, and Italy. In Greece, Cyprus, and Turkey the plant is well adapted, but is not cultivated commercially. The United States imports more than $20 million worth of processed capers each year.

Use. Capers are used as a condiment in salads and sauces, or with meat and fish. They are also used in the manufacture of cosmetics and medicines. Some *Capparis* species are poisonous. Depending upon the part of the plant that is used, capers can be considered a vegetable (the edible shoots) or an herb (the processed buds). Because of its attractive flowers and foliage, the caper plant can be used in ornamental plantings. It may be used also to control soil erosion, especially on slopes where irrigation is difficult and soil erosion is more pronounced.

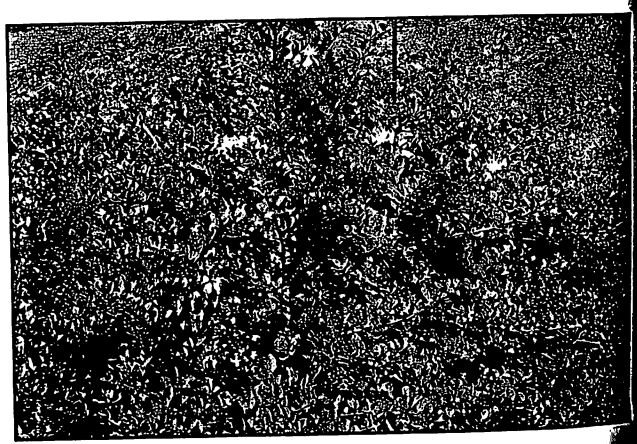
Culture

Propagation and care. The plant needs little care. It is drought resistant but requires good drainage. It has few disease and insect pest problems.

Propagation is best accomplished from roots or cuttings because of the variability in seed-propagated plants. Root the cuttings in a greenhouse for at least one year, and then plant in the field on an 8-by-8-foot grid during February or March. In the fi two summers new plants require two to three irrig tions. Older plants need less irrigation except in d years and very hot summers. Spring fertilization advisable, with irrigation after each application.



Caper flowers are insect pollinated. (Photo: D. Kontaxis)



Caper plant. (Photo: D. Kontaxis)

Seedlings are very temperamental when tra planted, and some may die. In order to reduce d loss, transplant with soil attached to the root syst and water immediately after transplanting.

Germination of caper seeds is difficult, bu following methods have resulted in 40 to 7

cent germination. First, heat some water to 110° or 115°F, and put the seeds into the warm water to soak for at least 12 hours, during which time you can allow the water to cool to room temperature. After 12 hours, discard the water, wrap the seeds in a moist towel, place them in a plastic bag, and keep them in a refrigerator for 65 to 70 days. Then take the seeds out of the refrigerator and soak them in warm water (110° to 115°F) overnight.

Plant the seeds about ¼ to ½ inch deep in a soil mix of 50–25–25 parts of UC soil, perlite, and sand, respectively (planting mix can be used instead of UC soil mix). Use 6-inch clay pots or deep flats. Water well and keep in a warm area (70° to 85°F), in partial to full sun. Do not allow the top of the soil to crust over. Keep soil moist. Germination should start within 3 or 4 weeks, and may continue for 2 to 3 months. Not all seeds will germinate at the same time.

Let the seedlings grow to 3 to 5 inches tall before transplanting. If seedlings are too crowded in the clay pot or flat do not pull them—use scissors to cut off the smaller, less-vigorous plants, leaving the root systems of the remaining seedlings undisturbed.

Transplant the seedlings to individual 1-gallon containers, using the same planting mix described above. When transplanting, disturb the root system as little as possible, keeping some original soil around each transplanted seedling. Good soil drainage is essential to prevent root rot. Pack the soil tightly around the transplanted seedling and water immediately. Cover each container with a plastic bag. Keep in a shaded spot in spring or summer or in a warm area (70° to 85°F) in winter. Keep the plastic bag in place for 1 week. At the end of the week, cut off the top of the bag so that the seedling will be exposed gradually to the natural environment. In another 10 days enlarge the opening in the plastic bag. One week later remove the bag entirely, keeping the plant in a shaded area. Keep the plants in their 1-gallon containers and then transplant them in early spring, after the last frost, when soil is workable.

Plant the capers in elevated rows. The rows should be 8 to 10 feet apart, and the plants in each row should be 8 to 10 feet apart within the row. Water frequently, but make sure that drainage is adequate and fertilize two to three times during the spring and summer months. Irrigation is essential for the first 2 years of development.

Do not prune the young plants for the first two years. Prune 3-year-old or older plants during November or December. Cut the canes back, but only to 3 or 4 inches from the crown—cutting the canes all the way to the crown may kill young plants.

Harvest and postharvest. In the spring, pruned plants develop tender new shoots that can be eaten as a vegetable. Pick the buds from mid-May to mid-August. A 2-year-old plant produces a few buds; a 3-year-old plant produces just over 2 pounds in a year; and a plant older than 4 years may produce more than 20 pounds of buds. Unopened buds are picked by hand, sorted, and pickled in brine.

Curing and packing. Sort the harvested caper buds by size: small, medium, or large. Place sorted buds in a strong brine (1¼ to 1½ lb salt per gallon of water—a salt hydrometer or salometer will show 15 to 18 percent or 60 to 72 degrees). Keep the capers in brine for 30 to 45 days. They can stay in the brine for 12 months without damage, but make sure they remain submerged. When you remove them from the brine, rinse them in running water for several minutes to remove excess salt.

Pack capers into small jars up to the shoulders of the jars. Cover the capers with an acidified solution of 1 gallon 5 percent vinegar in 2½ gallons of water and 1½ teaspoonful of salt. Leave ¼ to ½ inch headspace between the top of the liquid and the rim of the jar. Adjust lids and screw them down tight. Do not over-tighten the lids. Jars of capers in acidified brine can be left in the refrigerator for as long as 6 months, or they can be pasteurized by submersion in a hot water bath of 170° to 175°F. Once the jars are in the water bath and the water temperature returns to 170°F, process the jars for 30 minutes. Remove jars from the water bath and allow them to air-cool. The shelf life for pasteurized capers is about 1½ years at room temperature.

Pests and disease. In California, caper plants can be damaged by gray mold fungus, nematodes, and insect pests such as imported cabbageworm, black vine weevil, and flea beetle. Gophers, snails, and slugs can also cause leaf destruction.

Sources

NOTE: Some California nurseries may carry a very limited number of caper plants.

Seed Company, Cokesbury Road, Greenwood, SC 7-0001

Prepared by Demetrios G. Kontaxis.