

SNAKE GOURD

Tomato Gourd, Chachera, Chichinga, Padwal, Potlakaya, Pakupis, Tomato Elejo

Trichosanthes cucumerina (syn. *T. anguina*)

Cucurbitaceae – Gourd

ECHO® PLANT INFORMATION SHEET

Origin

It is generally believed that Snake Gourd was domesticated in India from the wild species still found in India and other parts of Southeast Asia and portions of Australia. Most gourd specialists agree that *Trichosanthes cucumerina* and *T. anguina* are the same species. One authority recommends that the name *T. anguina* be reserved for the wild species. Presently, Snake Gourd is cultivated principally in India and parts of Southeast Asia, but it also occurs in portions of Australia, Western Africa, Latin America, and the Caribbean.

Uses

Snake Gourd is grown principally for the immature fruit that can be cooked and served as a vegetable like zucchini squash.

Common Names

Cultivation

Snake Gourd is well suited to growth in the humid lowland tropics. Optimum average growth temperature is 30° - 35°C (86° - 95°F). Planting typically takes place at the beginning of the rainy season. Recommended seeding is 2 - 3 seeds per hill in rows 150 cm (5 ft) apart, the hills widely spaced, approximately 1 m (3 ft) apart, to allow room for the twining vines to grow. Seedlings appear usually within 8 - 11 days. A horizontal bamboo trellis approximately 1.5 m (5 ft) high or a similar trellis of concrete reinforcement wire of 10 cm x 10 cm (4 in x 4 in) mesh, supported by poles, is a useful support for the vines and long fruits. The vines also may be allowed to grow up poles, over thatched rooftops, or over walls. The elongate fruits should be allowed to hang down. Weights, such as small stones, sometimes are tied to the tips of the developing fruits to make the fruits grow straight. Snake Gourds normally respond favorably to fertilizer or manure additions. Avoid high nitrogen fertilizers, however, which encourage excessive vine production. Irrigation may be needed in climates with seasonal droughts. Snake Gourd flowers are white, very aromatic, and open late in the day and at night, suggesting moth pollination. Snake Gourds grown in screened greenhouses exhibit poor fruit set and may require hand pollination.

Harvesting and Seed Production

Immature fruits are ready for picking 12 - 20 days after fruit set, when they reach a length of 30 - 60 cm (1 in - 2 in). First fruit harvest normally occurs 2 - 3 months after sowing. In Nigeria, where the mature fruit pulp is used in soups, the fruits are harvested when they begin the change from green to orange red color. Watch the color change of mature fruits carefully; over ripe fruits are subject to fruit fly or rodent attacks. Snake Gourds do not keep well after harvest. They can be stored, however, for 10 - 14 days at a temperature of 16° - 17° C (59° - 60° F) at 85 - 90% relative humidity

Pests and Diseases

Leaf beetles (*Aulacophora vinula*, *Copa occidentalis* and *Lagria villosa*) and root knot nematodes (*Meloidogyne* spp.) are problem pests for Snake Gourd. Fungicidal control may be needed for downy mildew (*Pseudoperonospora cubensis*) and anthracnose (*Colletotrichum lagenarium*). Fruit soft rot (*Botryodiplodia theobromae*), causing small black spots on the end of the fruit, is reported as a possible disease problem in Nigeria.

Cooking and Nutrition

Snake Gourd may be pickled, eaten as a substitute for French beans, and added to curries. The stem tips and leaves are edible. However, boiling both before eating them is recommended to remove the unpleasant odors present in some varieties of Snake Gourd. It is an important ingredient in sambar, a lentil soup served in Southern India. In Nigeria, the sweet tasting red pulp of the mature fruits, resembling tomato, is mashed for use in soups after the seeds have been extracted. As the fruit matures, however, it becomes bitter and fibrous strands develop within it much like those found in the luffas.