# **HOT PEPPER**

Capsicum annuum Solanaceae

#### ECHO® PLANT INFORMATION SHEET

## **Description**

Hot peppers in the *Capsicum annuum* species produce edible fruit with thick walls that can be eaten green and immature or later when the color changes to red, yellow, purple, or brown and the pepper is ripe.

## Origin

Peppers are recorded as cultivated in Bolivia and Meso-America ca. 16th century.

#### **Uses**

Jalapeño and Sandia are two common varieties of hot pepper in this species. They may be eaten fresh, green, red, pickled, fully ripened, roasted, or grilled. The fruit can be added to salsa and the fresh green leaves can be eaten as greens.

### Cultivation

Peppers require a long hot season and regular watering for growth. Day temperatures should be 23-32° C (75-90° F). Peppers do not perform well in compacted, poorly-drained or weedy soil. They respond well to mulches, whether of leaves, compost or plastic. They grow well in raised beds and in containers. If seeds don't germinate well, soak them overnight in a solution of Potassium Nitrate (KNO3; also known as saltpeter or niter) 1 tsp per liter of water, before planting to break dormancy. KNO3 can be found where fertilizers are sold.

## **Harvesting and Seed Production**

These types of hot peppers are normally red when mature. The fruit may be eaten at any stage of development, although Jalapeño is normally eaten when dark green and Sandia normally when dark red. If seed is to be saved, *Capsicum annuum* varieties should not be planted in the same garden since they will cross-pollinate each other (including the sweet ones). To collect seeds, cut mature red fruits from the plant when firm and glossy. Remove seeds and dry them in a well-ventilated place. Store below 40° F (4.4° C), at the lowest possible humidity. In closed containers, pepper seeds can remain viable for 5 years.

## **Pests and Diseases**

Peppers should be rotated seasonally and should not follow another Solanaceous crop (i.e. tomatoes, potatoes, or eggplant) because the pests and diseases that affect this family often remain in the soil year after year. If aphids are a problem, check the undersides of the leaves, growing branch tips and the presence of sticky "honeydew" on the lower leaves and fruit. Use a soapy water spray or apply a suggested insecticide. Plant varieties that are resistant to tobacco mosaic disease and wash hands thoroughly before and after handling pepper plants to prevent the spread of the virus.

## **Cooking and Nutrition**

When ripe, peppers have the highest vitamin A content of any vegetable and more vitamin C than an equivalent amount of citrus. Peppers are also a good source of vitamin E. A pepper's heat is rated by the capsaicin content using Scoville Units to compare them. Jalapeños are 5,000-8,000 SHUs and Sandia are 5,000-7,000 SHUs, whereas Habaneros can be over 400,000 SHUs.