Tomato
(Solanum lycopersicum)

Characteristics:
Tomatoes grow best under temperatures of 20-27°C. Fruit setting is poor when average temperatures exceed 30°C or fall below 10°C. Tomatoes prefer a well-drained soil because they are sensitive to waterlogging. Tomatoes benefit from crop rotation. Growing tomato after paddy rice reduces the incidence of diseases and nematodes. Avoid planting tomato in a field planted the previous season with tomato, pepper, eggplant, or other solanaceous crops. These crops share some insect pest and disease problems.

Cultivation instructions:
Fill the holes of seedling trays with a medium that drains well, such as peat moss, commercial potting soil, or a potting mix prepared from soil, compost, rice hulls, vermiculite, peat moss and sand. Sow 2 seeds per hole and thin the seedlings 2-3 days after the first true leaves appear. Seedling trays should be placed on benches (avoid touching the ground to prevent infection by soil-borne diseases and vulnerability to flooding). Use 50-60 mesh netting to enclose the nursery, to exclude whiteflies and other insect pests. Transplant vigorous, stocky seedlings when they reach the 4- or 5-leaf stage. The seedlings should be thoroughly watered 12-14 hours before transplanting. Transplant the disease-free and strong seedlings into raised beds, which should be prepared with a mixture of compost and NPK fertilizers. Insert the seedling into a hole so the cotyledons appear above the surface. Press soil firmly around the roots, and water around the base of the plant to settle the soil. Recommended plant spacing is 40 cm apart. Irrigate the field as soon as possible after transplanting. Plants should be staked two to three weeks after transplanting. Indeterminate tomatoes should be pruned to allow two main stems to develop. Apply NPK fertilizer during the growth (3 and 6 weeks after transplanting) and harvesting periods (every 2-3 weeks).

Nutrition and cooking:
Fresh tomato fruits are rich in vitamins A, C, D and lycopene. Tomato can be eaten fresh or cooked.