Pests and diseases

Several fungal and bacterial diseases attack safflower. Planting of clean, disease-free seed, seed treatments and chemical spraying are recommended practices.

Infection may spread from disease spores on safflower residues therefore proper crop rotation should be observed. Water logging encourages disease spread hence field selection is important.

Harvesting, Drying and Threshing

Most varieties mature in 115 to 140 days.

- Harvest the crop when most of the foliage dries and turns brown.

- Cut the crop early in the morning when spines are soft and shattering is minimal.

- Stook in the field until well dried then feed into portable manual threshers or thresh with sticks and winnow.
**Introduction**

Safflower is a deep rooting drought tolerant oilseed crop.

The main stem is branched with 1 to 5 flower heads per branch each containing 15 to 20 seeds. Flowers are usually yellow, orange, red or white. Both spiny and spineless can be grown in Kenya.

**Economic Importance**

Safflower is a source of edible vegetable oil, livestock feed and industrial oil. It fetches a premium price worldwide due to health benefits and environmental safety.

The oil has been found useful in reduction of blood cholesterol and cures many diseases which affect women.

**Growing conditions**

Rain: 250 – 650 mm of rain.

Soils: Fertile, deep, well drained soils with neutral pH and good water holding capacity. The deep taproot enables it to utilize moisture and nutrients from below the root zone. It is tolerant to soil salinity.

Drought: The plant is able to escape drought through adjustment of maturity period to suit the available soil moisture.

**Production areas**

ASALs like Marsabit, Naivasha and Gilgil among others.

**Seedbed Preparation**

Safflower requires a firm and fine seedbed with adequate moisture for best stand establishment. Ploughing should conserve maximum soil moisture and achieve a desirable seedbed.

**Manure and Fertilizer Requirement**

Farm yard manure (FYM) or compost at 5 tons/ha should be mixed with the soil during land preparation to improve the soil moisture storage and supply additional nutrients. For optimum yields, 25kg/ha P and 50kg/ha N should be applied.

**Planting**

Time of planting should coincide with the onset of rains.

- In pure stands use 10-12 kg/ha of seed placed at 45x20 cm.

- Under low moisture conditions, pre-soak the seeds in water for 24-48 hours and dry under shade for 4 hours then treat with a fungicide before sowing.

Although sole crop safflower is profitable, it will be advantageous to intercrop with several traditional crops.

**Other attributes include:** improvement of soil structure, break crop for disease control, ornamental uses, vegetable and for fodder.

**Safflower florets**