

Solanum surattense Burm. f.

Syn. *S. xanthocarpum* Sch. & Wendl.

Fam. Solanaceae

Ayurvedic name	Kantakari
Unani name	Katai khurd
Hindi name	Choti Kateri, Ringni
English name	Wild Eggplant, Yellow - Berried Nightshade
Trade name	Kantkari
Parts used	Whole Plant



Solanum surattense

Morphological Characteristics

Branches are spreading on the ground. The plant is very prickly diffused bright green perennial herb, somewhat woody at the base. Branches are numerous, the younger ones clothed with dense stellate tomentum, prickles compressed, straight, yellow, glabrous, shining often exceeding and 1.3 cm long. Leaves are 5-10X2.5-5.7 cm, ovate or elliptic, bearing stellate hairs on both sides (especially so beneath), sometimes becoming nearly glabrous with age. Petioles are 1.3-2.5 cm long.

Floral Characteristics

Mainly flowers are axillary but some flowers are cymes and bluish-violet in colour. Pedicels are short, curved with stellate hairy. Calyx is nearly 1.3 cm long, densely hairy and prickly, tube short, globose, lobes 11 mm long, linear-lanceolate, acute and prickly outside. Corolla is purple, 2 cm long, lobes deltoid, acute, hairy outside. Filament is 1.5 mm long, glabrous, anthers 8 mm long, oblong lanceolate and opening by small pores. Ovary is ovoid, glabrous and style glabrous. Fruits are berry, 1.3-2.0 cm in diameter, yellow or white with green veins and surrounded by the enlarged calyx. Seeds are 0.25 cm in diameter, glabrous, smooth, sub-reniform and yellowish-brown.

growth. Usually, two hoeing and weeding at 20 and 45 days after transplanting are needed for an effective control of weeds, proper aeration and good growth of the plants. The crop is spreading in nature and do not allow weeds to grow at later growth stages.

- **Disease and Pest Control:** No serious pest and diseases have been observed on this crop.

Harvest Management

The plants produce flowers at 50-60 days after transplanting. Generally, this period occurs in the month of October. Fruiting starts in the month of November. The plants have indeterminate growth, meaning that flowering and fruiting continues together.

- **Crop Maturity and Harvesting:** It takes about five months from transplanting for first picking of matured berries. Complete crop harvesting can be done in the month of March. The berries are harvested before its colour turns from green to yellowish. About 2 to 3 pickings are done at 20-25 days intervals. Fruits is picked manually and kept in open for sun drying. Similarly, complete plant including roots is harvested at the end of season. It should be done before abscission of leaves starts.
- **Post-harvest Management:** The whole plant should be uprooted after giving a shallow irrigation. The berries and whole herb should be dried in sun and dry herb is packed in gunny bags and stored in cool and dark place. Seed material for next crop should be obtained from fully matured and dry berries. After cleaning, seed should be treated with any fungicide, and then packed in polythene bags and kept at cool and dark place.
- **Chemical Constituents:** Carpesterol, solanocarpine, solasonine, solamargine and β -solamargine are the chief alkaloids of Kantkari.
- **Yield and Cost of Cultivation:** An average crop of Kantkari yields about 16-20 t/ha of dry biomass (Panchang) including 500 kg berries (dried) under good management practices. After drying, 15-20% dry matter can be obtained under these conditions. Rs. 21938/- is the estimated cost of cultivation for one hectare.

Therapeutic uses

Panchang (whole herb including roots) and berries, have anthelmintic property, useful in bronchitis, asthma, fever relieving, thirst and given in urinary concretions. The leaves have good application for piles. The fruit is laxative. Fumigations with the vapour of the burning seeds of this plant are found useful for the cure of toothache.

