**Xanthium strumarium**

**DAISY FAMILY**
Asteraceae

**COMMON NAMES**
English: large cocklebur, noogoora bur, sheep bur
Cambodia: kropeatt chrouk
Malaysia: buah anjang
Thailand: kachab
Vietnam: cây ke dâu ngựa

**DESCRIPTION**
Annual, much-branched herb with erect stems (20–150 cm high) without spines; stems stout, green, brownish or reddish-brown, roughly hairy.

**Leaves:** Green, paler below, hairy on both surfaces, broadly egg-shaped to triangular (2–8 cm long), margins irregularly toothed or lobed, on long leaf stalks (2–8 cm), held alternately on stems.

**Flowers:** Green, inconspicuous, in the leaf axils.

**Fruits:** Burrs, green turning yellowish then brown as they mature (1.5–2.5 cm long), covered with hooked spines (up to 20 mm long) and two terminal beaks.

**ORIGIN**
Uncertain, but probably Central and South America.

**REASON FOR INTRODUCTION**
Bee forage and accidentally as a contaminant.

**INVADES**
Roadsides, wasteland, disturbed land, fallow land, crops, plantations, drainage ditches, savannah, water courses, lowlands, floodplains and sandy and dry riverbeds.

**IMPACTS**
Rapidly forms large stands, displacing other plant species. *X. strumarium* is a major weed of row crops such as soya beans, cotton, maize and groundnuts in many parts of the world, including North America, southern Europe, the Middle East, South Africa, India and Japan (Webster and Coble, 1997). It also has a damaging impact on rice production in South-east Asia (Waterhouse, 1993). In the USA, high-density cocklebur infestations have resulted in soya bean yield losses of as much as 80% (Stoller et al., 1987; Rushing and Oliver, 1998). Infestations can also decrease soya bean seed quality and harvesting efficiency (Ellis et al., 1998). Even low-density cocklebur infestations in cotton fields in the USA have contributed to seed yield losses of 60–90 kg per hectare, or approximately 5% (Snipes et al., 1982). Cocklebur has also caused yield losses in groundnuts of 31–39% and 88% at low and high densities, respectively, in the southern USA (Royal et al., 1997). *X. strumarium* burs lodge in animal hair and in sheep’s wool, reducing the quality and increasing treatment costs (Wapshere, 1974; Hocking and Liddle, 1986). The plants are toxic to livestock and can lead to death if eaten (Weaver and Lechowicz, 1983). Cocklebur is also an alternative host for a number of crop pests (Hocking and Liddle, 1986).