


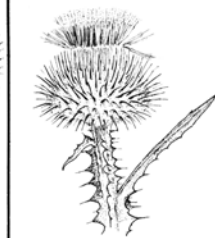





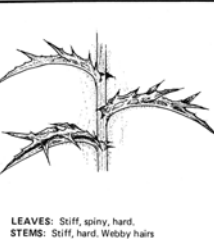


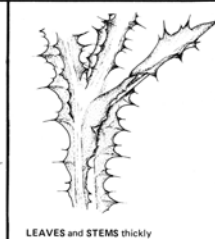


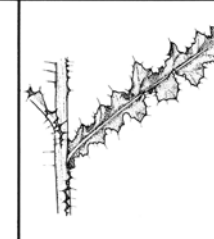

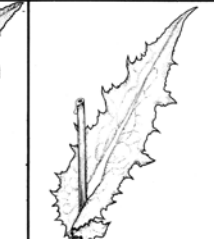



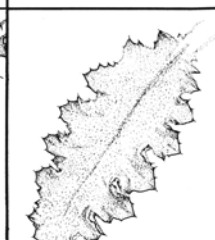
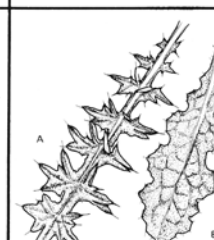
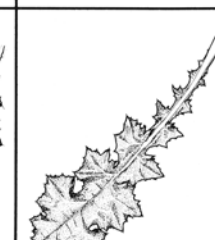
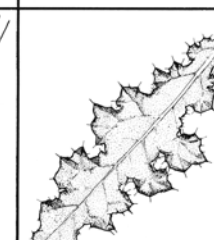

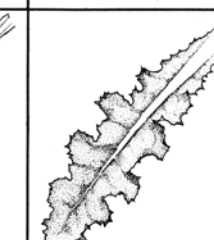


# SOME TASMANIAN THISTLES and their control in non crop situations

Issued by the Tasmanian Department of Agriculture, 1978

	SAFFRON THISTLE <i>Carthamus lanatus</i>	VARIEGATED THISTLE <i>Silybum marianum</i>	NODDING THISTLE (MUSK THISTLE) <i>Carduus nutans</i>	COTTON THISTLE <i>Onopordum acanthium</i>	SPEAR THISTLE (BLACK THISTLE) <i>Cirsium vulgare</i>	SLENDER THISTLES <i>Carduus pycnocephalus</i> <i>Carduus tenuiflorus</i>	CALIFORNIAN THISTLE <i>Cirsium arvense</i>	SOW THISTLE <i>Sonchus oleraceus</i>	PRICKLY SOW THISTLE <i>Sonchus asper</i>
FLOWERS	 <b>FLOWERS:</b> Yellow <b>BRACTS:</b> Long, stiff, hard, spiny on edges and tip.	 <b>FLOWERS:</b> Purple <b>BRACTS:</b> Long, stiff, shiny, spiny on edges and tip.	 <b>FLOWERS:</b> Purple, nodding at maturity, scented. <b>BRACTS:</b> Numerous, narrow, erect in bud, curved backwards at maturity.	 <b>FLOWERS:</b> Purple <b>BRACTS:</b> Numerous, narrow, spreading from the grey-cottony head.	 <b>FLOWERS:</b> Purple or pink. <b>BRACTS:</b> Numerous, spreading from the green head.	 <b>FLOWERS:</b> Pink or purple, the heads clustered. <b>BRACTS:</b> Few, the tips curved outwards.	 Female Male <b>FLOWERS:</b> Purple, honey scented. <b>BRACTS:</b> Soft, spineless.	 <b>FLOWERS:</b> Yellow. <b>BRACTS:</b> Soft, spineless, in few rows.	 <b>FLOWERS:</b> Yellow. <b>BRACTS:</b> Soft, spineless, in few rows.
STEMS & STEM LEAVES	 <b>LEAVES:</b> Stiff, spiny, hard. <b>STEMS:</b> Stiff, hard. Webby hairs between leaves along the stem.	 <b>LEAVES:</b> Leathery, shiny, spiny. <b>STEMS:</b> Stout, finely ribbed, without wings.	 <b>LEAVES:</b> Dull green, hairy, spiny. <b>STEMS:</b> With spiny wings.	 <b>LEAVES and STEMS</b> thickly covered in cottony hairs. Broad spiny wings extend down the stems from the leaf bases.	 <b>LEAVES:</b> Dark green, boldly lobed, spiny. <b>STEMS:</b> Hairy, with narrow spiny wings.	 <b>LEAVES:</b> Grey-green, stiffly spreading, spiny. <b>STEMS:</b> With narrow to broad spiny wings.	 <b>LEAVES:</b> Hairless, shiny, bright green with many rounded spiny lobes. <b>STEMS:</b> Smooth, with short narrow spiny wings below each leaf.	 <b>LEAVES:</b> Soft, hairless. Prickles minute and soft. <b>STEM:</b> Smooth, hollow, exuding white latex when cut.	 <b>LEAVES:</b> Soft, hairless. Prickles fairly soft. <b>STEM:</b> Smooth, hollow, exuding milky latex when cut.
BASAL OR ROSETTE LEAVES	 Stiff, yellow green to grey-green. Prickles few, stout.	 Shining, bright green with prominent white variegations.	 Has many regular lobes, all prickly, pale midvein prominent.	 Has a dense covering of white cottony hairs; broad, shallowly lobed with stout prickles.	 Early leaves as in B, shallowly lobed. Later leaves deeply and regularly lobed with long stout prickles as in A.	 Broadly lobed, the lobes at the tip widest. May have pale white outlines along veins and at base of prickles.	 Bright green, more or less shining. Broadly and roundly lobed. Prickles fine but stiff.	 Yellow-green to blue-green without prickles. Soft.	 Yellow-green to blue-green. Prickles fine but stiff.
SEEDS & SEEDLINGS	