

IDENTIFICATION.

Stems winged.

Heads large, upright, with narrow spines	..	<i>Carduus lanceolatus.</i>
Heads large, drooping, with broad spines	..	<i>Carduus nutans.</i>
Heads small, clustered	<i>Carduus pycnocephalus.</i>

Stems not winged.

Plant with creeping underground stems	..	<i>Carduus arvensis.</i>
Plants without creeping underground stems—		
Leaves very large, with white veins	..	<i>Carduus Marianus.</i>
Leaves smaller, without white veins	..	<i>Carduus eriophorus.</i>

This key is not intended to show the botanical relationships of the different thistles, but merely to provide a quick means of distinguishing them from one another. The genus *Carduus* is divided by some botanists into two genera, *Cnicus* and *Carduus* proper, the species of the former genus having feathery pappus-hairs, while those of the latter have simple pappus-hairs. By this classification two of the species, nodding thistle and winged thistle, would remain in the genus *Carduus*, the others being placed in *Cnicus*, except milk thistle, which is often separated from the rest and made to constitute the genus *Silybum*. The differences between the three genera are not important, however, and in this article all will be included under *Carduus*.

SPEAR THISTLE.

Spear thistle is a rather stout and much-branched plant, growing usually to a height of from 2 ft. to 4 ft. Being biennial, this thistle does not produce flowers till the second season, the first-year plant consisting of a stout and long, only slightly branched tap-root, bearing at its crown a rosette of spreading leaves which are strongly lobed and prickly, dark green above and whitish beneath.

The stem, which is stout at its base, though rather slender in the ultimate branches, and is everywhere hairy, is irregularly winged for most of its length. The stem leaves are unlike the radical leaves in being shorter, narrower, and more pointed, and in having fewer, narrower, and longer lobes. The heads are rather large (1 in. to 1½ in. long by about the same in diameter), erect, solitary or two or three together at the tips of the branches. The involucre is egg-shaped, and each of the numerous bracts ends in a narrow, spreading spine, those towards the base of the head being recurved. A slight cottony web is found on the involucre, but it is insignificant in comparison with that of woolly-headed thistle. The florets are purple inclining to reddish. As the achenes ripen, the involucre opens out and becomes cup-like