

Nodding Plumeless Thistle

From: Miller, James H. and Steve T. Manning. [working title] An Expanded Nonnative Invasive Plants of Southern Forests: A Field Guide for Identification and Control. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. DRAFT - August 2008

Nodding plumeless thistle (*Carduus nutans*) is a variable biennial or annual herb characterized by sharp spines on leaves, branching stems, and bracts surrounding lavender flowers that sometimes nod to one side (thus the common name) and plumed seedheads. Leafy rosettes first appear in either spring or fall, start forming a deep, hollow taproot and bolt within 6 months to 6 feet (2 m) high with mid-plant branches topped by one (to a few) composite flower heads that yield 1000s of plumed seeds per plant. Spring seedlings can produce seeds in the same year while the more common fall rosettes overwinter to produce flower stalks the next spring. Seeds are viable for greater than 10 years in the soil. Rosettes have buds that produce sprouts when disturbed.

Recommended control procedures:

Thoroughly wet all leaves with one of the following herbicides in water with a surfactant:

- Transline as a 0.5-percent solution (2 ounces per 3-gallon mix) applied during the rosette stage or prior to flowering; Garlon 3A, Milestone or a glyphosate herbicide as a 2-percent solution (8 ounces per 3-gallon mix);
- Overdrive as a 0.8-percent solution (0.3 ounces per 3 gallon mix) applied at the rosette growth stage.