

## New and Expanding Weeds in California

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Every year sees the introduction of new and the expansion of previously known noxious weeds in California. In 2010, the species discussed below have been chosen as notable.

Japanese dodder (*Cuscuta japonica*) is a vining parasite that attacks many woody plants. The plant is spread via humans (it is part of the Hmong pharmacopoeia) and birds. Although reproduction by seed has not been documented in California, partly mature seed capsules have been found on recently identified samples. Occurrences are widespread, but more than 90% have been in Sacramento County. Over 200 occurrences have been treated by CDFA so far. Host tree removal is the only known treatment.

Stinkweed (*Dittrichia graveolens*) is an annual, late-flowering, glandular herb first reported in California in 1984. It has spread so quickly along roads that it is now known in at least 26 California counties. Problems associated with this weed include inhibition of seed germination of other plants, toxicity to stock, and contact dermatitis in some people. Control is possible using glyphosate or repeated mowing.

Canary Island hypericum (*Hypericum canariense*) is a shrub to 2 m with large yellow flowers that is invading scrub habitat on coast. It is currently actively spreading in California. Control has been achieved with basal bark treatment with Garlon.

Capeweed (*Arctotheca calendula*) has long been confused with creeping capeweed (*A. prostrata*), a common nursery plant sold as a ground cover. Capeweed differs in that it is an annual (vs. perennial) with dark disk flowers (vs. yellow ray flowers). It is currently known from Marin, Humboldt, San Mateo, Merced and Stanislaus Counties. Control is difficult, but there have been recent promising results using Milestone.

Star endive (*Rhagadiolus stellatus*) is an annual herb in the chicory tribe of the daisy family (Asteraceae) that prefers partially shaded habitats (although it is a grain-field weed in the Middle East). It can be distinguished from other chicory tribe weeds, such as sow thistle (*Sonchus*) and Cretan weed (*Hedypnois*) by its distinctive fruit that resembles a 6-8-pointed star. Currently, endive daisy is known only from Napa & Sonoma Counties, but it is often dominant in understory and seems to be spreading rapidly.



Branched broomrape (*Orobanche ramosa*) that has been known as a parasite of tomatoes in California for many decades. In 2010 an old site was replanted to tomatoes and branched broomrape reappeared. The last known outbreak at this site occurred in the 1970s. This indicates long-term seed viability. As the seed is easily dispersed via footwear and field equipment, great care must be taken to prevent further spread. Control of large patches may not be possible, although soil fumigation has been used with some effect. The best control is to avoid planting host crops in known infestations.

Santa Maria feverfew (*Parthenium hysterophorus*) is a tropical annual herb. It is an important weed in Australia where it occurs in many tropical/subtropical habitats after disturbance. It is not currently established in California, but seedlings were found in a nursery greenhouse, presumably introduced via the coir component of the potting mix imported from Sri Lanka. Although most of California is not suitable for growth of this plant, it should be watched for as it is known to be toxic to stock, it inhibits germination of some crop plants, it causes contact dermatitis or pollen allergies in some people. It can be controlled via various herbicides used on broadleaf weeds.

Mexican feathergrass (*Nassella tenuissima*) is a short-lived perennial grass often used in gardens in California. It is not yet firmly established in California, but spontaneous plants in non-horticultural settings have been collected in 6 California counties.

False brome (*Brachypodium sylvaticum*) is a perennial grass in woodland in California, but it can occur in full sun in Washington and Oregon. In California, it was originally found when it was being vetted for a habitat “restoration” in redwood forest. It can be controlled with a multi-year herbicide program or by heavy grazing.

Yellow alyssum (*Alyssum murale* and *A. corsicum*) are yellow-flowered perennial members of the mustard family (Brassicaceae) from Europe. As they are metal hyperaccumulators, they were planted as possible “bio-mining” crop in Southern Oregon. They were recently discovered to have escaped into USFS land in Southern Oregon. They have a high likelihood of spread in Northern California on serpentine soils and land managers should be aware of their potential spread.

**Figure 2. Branched broomrape**



**Figure 3. Yellow alyssum**

