

CUSCUTA SPECIES - DODDER

SWEMP questions and answers from Dr. Ed Northam, Arizona Department of Agriculture

Q: Dodder is a federally listed noxious weed, an agricultural pest and also a natural component of wildland plant communities. Are all dodder species in Arizona native, or are there also introduced dodder species? Are the impacts of different dodder species on agricultural crops uniform? Are there (native) dodder species that do not impact agricultural crops?

A: Current Noxious Weed Rules list all *Cuscuta spp.* as noxious weeds which means technically all Dodder species are prohibited, including native species. One of the rulemaking changes we (Arizona Department of Agriculture) are proposing is to revise that pest designation to "non-native *Cuscuta* species".

In the mean time, if we found native dodder infesting a crop we would not enforce the noxious weed rules in that case.

All of the dodder that I have sampled during the past 3 years has been native. What we are most interested in concerning dodders is outbreaks in alfalfa, grass hay fields, seeded pastures, turf and ornamental (landscaped) sites. But, none of the non-indigenous dodders have been found by Arizona Dept. of Agriculture since I have been in Arizona.

Cuscuta indecora Choisy (big-seed alfalfa dodder) has been reported in California. Arizona Weeds (Parker, 1972) lists three species as commonly occurring weeds, including *C. campestris*, *C. indecora* and *C. umbellata*, from Coconino and Yavapai Counties southward. These species are not designated as federal noxious weeds (Code of Federal Regulations; Title 7: Agriculture; Section 360:200).

The real unknown is whether non-native dodders that infest alfalfa / grass crops will move into legumes and grasses in natural habitats; I have not found any information about this in the weed literature.

According to Rob Grumbles, UofA Extension Service in Kingman, this year has produced a large crop of dodder in the desert scrub (creosote bush) areas in west-central Mohave County between Kingman and Hoover Dam. This also happened in spring of 2001, but so far these have been outbreaks of native species that parasitize plants like mesquite, acacia, brittlebrush, sunflowers, catclaw, *Polygonum*, etc. Fall/winter moisture may be the trigger that sets up 'dodder years.'

(Ed Northam, Arizona Department of Agriculture – personal communication)