## **INVASIVE SPECIES ALERT: Stinknet**

An Eradication Priority species in the Sonoran Desert Cooperative Weed Management Area (Pima County, AZ)

This strongly-scented winter annual has proven itself to be extremely invasive in the Phoenix area. It forms dense, highly flammable infestations that release an intensely acrid smoke when burned. Stinknet crowds out winter wildflowers and other native plants. It can also trigger contact dermatitis and respiratory distress in some sensitive individuals. It is a State of Arizona <u>Class B noxious weed</u>.

**Identification**: (*Oncosiphon piluliferum;* synonym *Oncosiphon pilulifer*) Stinknet germinates between November and March in Arizona, reaching 1/2"-4' in height. Its "carrot-like" leaves have a strong, unpleasant, pungent odor. Heavy infestations can be smelled at some distance. The distinctive spherical yellow flowers appear starting as early as late January in warm years and continue flowering through April in wet years. The flowers dry out to a rusty tan color as the plant dies.

**Distribution in Pima County:** Stinknet has been reported at elevations between 1,000-4,200 feet in Arizona. In Phoenix, it tends to occur on disturbed soil in residential areas, vacant lots, soil piles, along roadsides and major highways, and between cracks in pavement and sidewalks. It can also invade and dominate undisturbed desert areas. Recent years have seen it spreading to Pima County. Vehicles, infested soils, humans, landscaping plants, and machinery play a part in this expansion. (see EDDMapS, iMapInvasives for current data)

Commonly Mistaken Plants: Pineappleweed (Matricaria discoidea)

**How you can help**: The higher rainfall in southern Arizona this last winter (2022-23) is expected to increase stinknet growth this spring. Tucson Audubon, with support from the SD-CWMA, is managing an active stinknet eradication project in the Tucson area. Please help this project by reporting sightings at <u>www.stinknet.org</u>.









## **Treatment Options for Stinknet**

METHOD	SEASON
Cultural	
<b>Prevention</b> measures are critical. Education of the public is necessary because it is present in residential and commercial areas. The plant is easily spread by people, their vehicles and materials. Education is especially important for landscapers who may be removing dead plants. People working with or around stinknet should be very careful about spreading seeds. Avoid walking in areas covered in dry plants. Decontaminate boots, pants, gloves, tools, and anything that enters stinknet areas. The seeds are tiny and easily overlooked.	Winter/Spring
Grazing. Ineffective; not palatable to livestock, and can make the problem worse.	N/A
Mechanical	
<b>Mowing/weed eating</b> are not effective. They may trigger respiratory distress and/or dermatitis in sensitive people and may spread seeds.	Winter?
Hand pulling/hula-hoeing can be effective, especially in incipient patches in dry years, before the plants set seed. The plants are difficult to identify when small, resembling wild carrots, but the pungent scent is present in all but the tiniest seedlings. The root system is relatively small; sever the plant below the growing point to guarantee death. Plan at least 2-3 years of repeated treatment.	Winter/Spring
Chemical	
Misuse of any herbicide can be harmful to the user and the environment. Always read and follow the instructions on the product label before purchasing and applying a herbicide to treat invasive plants. The label is the law.	
<b>Foliar.</b> Application of 3-4% active ingredient glyphosate on stinknet seedlings below ankle height has been effective in Pima County. Repeat applications in wet years to control plants that continue to emerge. Plants between ankle height and early flowering need an addition of half recommended rate of Diquat for effective control.	Spring
<b>Preemergent.</b> Several pre-emergents are effective against stinknet, but can cause collateral damage to native plants and are not be approved for use in residential areas. Research on this is ongoing.	

**Table:** This information above was compiled by invasive plant experts participating in the <a href="Sonoran Desert Cooperative Weed">Sonoran Desert Cooperative Weed</a>Management Areabased on the best available information as of January, 2023

## Reported Distribution and Modeled Habitat Suitability of Stinknet (Oncosiphon piluliferum) in Pima County, Arizona



## Y Lin, ASDM Feb 9, 2023

Sources: Pima County GIS; EDDMapS. 2023. Early Detection & Distribution Mapping System. The University of Georgia - Center for Invasive Species and Ecosystem Health. Available online at http://www.eddmaps.org/, last accessed Jan 24, 2023; MapInvasives: NatureServe's online data system supporting strategic invasive species management. © 2023, NatureServe. Available at http://www.imapinvasives.org. (Date accessed: Jan 30, 2023.); Jarnevich, C.S., LaRoe, J., Engelstad, P., Hays, B., Henderson, G., Williams, D., Shadwell, K., Pearse, I.S., Prevey, J.S., Sofaer, H.R., 2023, INHABIT species potential distribution across the contiguous United States (ver. 3.0, February 2023); U.S. Geological Survey data release, https://doi.org/10.5066/P9V54H5K.