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Buffalobur nightshade (*Solanum rostratum*)

One of our local PCAs (Pest Control Advisors) in Yuma, Arizona found Buffalobur nightshade last week in an artichoke field in the area.

Buffalobur is a summer annual that belongs to the Solanaceae family. One of the weeds from this family commonly seen is Silverleaf nightshade (*Solanum eleagnifolium*). Unlike Silverleaf that has a purple flower, Buffalobur has a yellow flower. Leaves are deeply lobed from half to all the way to the midrib resembling small watermelon leaves. Sometimes toothed, the leaves are alternate on the stems with star-shaped hairs and are **TOXIC TO HUMANS AND LIVESTOCK**.

Animals would have to consume up to 0.1-0.3 % of their bodyweight to have toxic effects. Goats and sheep are more resistant than cattle to the glycoalkaloid solanine, which is the toxic agent ^[3]. Its named Buffalobur for the prickly burs that got entangled to the fur of the bison. Plants can reach up to 60 cm tall ^[2].

This weed is a natural host of the Colorado Potato Beetle (*Leptinotarsa decemlineata*). It is also an alternative host of some mosaic virus affecting potato, tomatoes, and alfalfa. Additionally, it can harbor nematodes that are damaging to tomatoes ^[1].

According to the National Noxious Weed Control Board 2,4-D and Banvel are herbicides that provide complete control of this weed ^[3].

If infestations are small, it is also recommended to remove plants wearing sturdy gloves. The objective is to prevent the mature burs from releasing seeds when dehiscence occurs increasing the infestation.

Thank you for sharing your findings with the University of Arizona Vegetable IPM Team. We all appreciate the opportunity of being well-informed.



Image Courtesy of Jim Daily

References:

1. Joseph M. DiTomaso, Evelyn A. Healy (2007). Weeds of California and Other Western States. University of California, Agriculture and Natural Resources, Publication 3488. Vol 2, p. 1551.
2. Retrieved from: <https://www.britannica.com/plant/buffalo-bur>
3. Retrieved from: https://www.nwcb.wa.gov/images/weeds/BUFFALOBUR-BROCHURE_Lincoln.pdf