

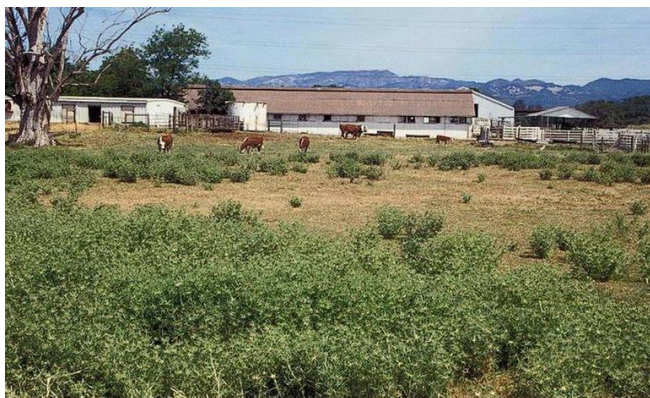


Weed of the Month: Purple Starthistle

Welcome to our "Weed of the Month" feature, designed to raise awareness about the impact of noxious invasive weeds on our environment. This month, we're focusing on Purple starthistle (*Centaurea calcitrapa*), an aggressive plant species that poses a significant threat to native ecosystems and agricultural lands.

Identification:

Purple starthistle is an annual, biennial, or perennial. It displays purple-pink flowers that are ringed with one inch long, rigid, straw-colored spines at their base. At its maturity, it can grow anywhere from two to three feet tall with highly branched green stems and leaves that are covered in fine hairs. Purple starthistle grows as a low rosette for the first year of its life. There is a similar looking specie called Iberian starthistle or Iberian knapweed (*Centaurea iberica*), which is also found in California. The distinguishing identification characteristic between the two species is found in the seeds. The Iberian starthistle seed heads have a distinct white pappus (a plume of bristles) while the Purple starthistle seed heads are mostly bare and smaller in size.



Purple starthistle
CDFA Seed Laboratory



Top Left- Purple starthistle infestation.

Middle left – Purple starthistle seed heads.

Middle right – Iberian starthistle seed heads.

Invasive Behavior:

Originating from southern Europe, Purple starthistle has become very invasive to many parts of North America. It thrives in a variety of habitats, including pasture, open forest, and riparian areas. It only reproduces by seed and is transported when attached to animals. Its bloom period ranges from the July to October months.

Bottom Left- Purple starthistle flower.

Bottom Right- Purple starthistle at adult stage.

Impact:

The presence of Purple starthistle can have serious ecological and economic consequences. The plant may produce allelopathic effects meaning that it produces biochemicals and allelochemicals that cause harm to the germination, growth, survival, and reproduction of other organisms. Its rigid spines make it unpalatable to livestock and wildlife lowering forage quality. It can also cause injury, so much in fact that it was used as a spiked weapon on the battlefield during the Middle Ages.





Control and Management:

Repetition over a three-year period is important when it comes to any form of eradication of Purple starthistle. Buried seeds can lay dormant in the soil for up to three years which is why the eradication period is so significant. Mechanical control methods include hand pulling, grubbing, or digging. Chemical control methods are most effective during the post emergence rosette stage. The application should be repeated during each season throughout the three-year period. This practice should be used judiciously to minimize impact on non-target species.



Prevention:

Preventing the spread of Purple starthistle is key to its control. Routinely inspect and maintain your property for any signs of this invader.

Be vigilant for any signs of this weed in your area and report sightings to the Sutter County Agricultural Commissioner's Office at **(530) 822-7500**.

By staying informed and taking proactive measures, we can work together to curb the spread of Purple starthistle and protect our native ecosystems. Join us next month for a new "Weed of the Month" feature, where we'll highlight another noxious invasive plant and share tips on how to address it.

Top Left-Purple starthistle rosette.

Bottom Left- Adult Purple starthistle leaves.

For more information about Purple starthistle, feel free to visit the California Invasive Plant Council website.

[https://www.cal-ipc.org/plants/profile/centaurea-calcitrapa-profile/#:~:text=Centaurea%20calcitrapa%20\(purple%20starthistle\)%20grows,Cal%20DIPC%20Rating:%20Mode rate](https://www.cal-ipc.org/plants/profile/centaurea-calcitrapa-profile/#:~:text=Centaurea%20calcitrapa%20(purple%20starthistle)%20grows,Cal%20DIPC%20Rating:%20Mode rate)

For more information about our other county programs, visit our website at:

<https://www.suttercounty.org/government/county-departments/agricultural-department>

Thank you for your dedication to preserving our environment and agricultural land!

- Sutter County Agricultural Commissioner's Office

