

BiTeRS

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Border Tick
Rickettsia Surveillance

Welcome to the BiTeRS Newsletter!

This newsletter is a place for all things tick-related in the southwestern US, as well as a way to stay in contact with program news.

Be On the Lookout for Spring Ticks

In California and Arizona, we are well on our way into spring. In our temperate regions, this means *Dermacentor* species are showing up on pets and people. In desert regions, brown dog ticks will start to increase. Collect them for ID and testing if you can!

If you are hearing reports of large numbers of ticks in your area, let us know.

Tick of the Month:

The American Dog Tick

While we used to call it *Dermacentor variabilis*, this tick now goes by the scientific name *Dermacentor similis* in western North America. Don't confuse with it with the brown dog tick, even though the names are similar. And despite its name, the American dog tick feeds on LOTS of different species! In addition to dogs, it will feed on rodents, deer, and everything in between.



This tick carries several disease-causing organisms, including *Rickettsia philippi* and the agent of tularemia. In the eastern US, it spreads *Rickettsia rickettsii* (the cause of Rocky Mountain spotted fever).

The American dog tick is recognizable by its size and scutum (shield) pattern. Adult ticks are frequently found questing on grass in rural and suburban areas in spring and summer.

BiTeRS Results

Species	Count
<i>Argas</i> spp. (soft ticks)	58
<i>D. similis</i>	131
<i>H. leporispalustris</i>	1
<i>R. sanguineus</i>	249

Of the 439 ticks received so far, 58 of them were positive for *Rickettsia*. We have identified a mix of species that may be human pathogens and some that are not thought to cause disease. Types of *Rickettsia* identified so far include:

- *R. montanensis*
- *R. raoultii*
- *R. rhipicephali*
- *R. massiliae*
- *Rickettsia* species that have not been identified. This may occur if the amount of DNA in the tick is low or if it is an unusual species.

In the BiTeRS Spotlight

Laura Backus is a veterinarian and graduate student in Epidemiology at UC Davis. In addition to managing the lab testing side of BiTeRS, she studies tick-borne zoonotic diseases. In her free time she enjoys cooking, eating, and looking for ticks anywhere and everywhere.



Lucy Li has 25+ years of experience spanning entomology and environmental health management programs. Lucy coordinates the Public Health IPM Leadership Team, a multi-disciplinary group of extension and research faculty in the University of Arizona. The goal of the team is to develop and implement priority engaged research and extension programs on public health pests statewide. The four emphasis areas within the public health IPM program are: vector (mosquito and tick) control, tribal IPM, school and housing IPM, and food safety.



Tick Training and Tick Hunters Available

Do you wish that you knew more about ticks? Does your organization or workplace have tick-related concerns? We can help! BiTeRS offers:

- Tick collection team: We come to you, collect your ticks, and test them for diseases!
- Tick education: Courses customized to your needs, location, and tick-related concerns
- Assistance setting up tick surveillance plans

Contact us to discuss options!

Questions? Comments? Want more information? Contact us at Calticks@pacvec.us (California) or AZTicks@pacvec.us (Arizona)

Visit our webpage at
<https://pacvec.us/biters/>

We're adding content regularly. What tick related info would you like to see on the website? Let us know!



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